

**Twelfth Five Year Plan
(2012–2017)
Social Sectors**

Volume III

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Volume III



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Planning Commission
Government of India

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Acronyms

AAV	Antodaya Anna Yojana	BRGF	Backward Regions Grant Fund
ABL	Activity-Based Learning	CABE	Central Advisory Board of Education
AESDCs	Adult Education & Skill Development Centres	CAGR	Compounded Annual Growth Rate
AHS	Annual Health Survey	CAL	Computer Aided Learning
AICTE	All India Council for Technical Education	CAT	Common Admission Test
AIDS	Acquired Immuno Deficiency Syndrome	CBM	Community Based Monitoring
AIEEE	All India Entrance Exam for Engineering	CBSE	Central Board of Secondary Education
AITT	All India Trade Test	CBU's	Community Based Organisations
ALIs	AIIMS like Institutions	CCD	Conservation cum Development
ALMSC	Anganwadi Level Monitoring and Support Committee	CCE	Continuous and Comprehensive Evaluation
ANM	Auxiliary Nurse & Midwife	CDS	Current Daily Status
ARUNIM	Association of Rehabilitation under National Trust Initiative of Marketing	CES	Coverage Evaluation Survey
ARWU	Academic Ranking of World Universities	CFR	Community Forest Rights
ASC	Academic Staff College	CGHS	Central Government Health Scheme
ASER	Annual Status of Education Report	CHC	Community Health Centre
ASHA	Accredited Social Health Activist	CHEB	Central Health Education Bureau
ASSOCHAM	Associated Chambers of Commerce & Industry	CIHEC	Council for Industry and Higher Education Collaboration
ATS	Apprenticeship Training Scheme	CII	Confederation of Indian Industries
AVI	Accredited Vocational Institutes	CLAT	Common Law Admission Test
AWTC	Anganwadi Training Centre	CMB	Conditional Maternity Benefit Scheme
AWW	Anganwadi Worker	COBSE	Council of Boards of School Education
BESU	Bengal Engineering and Science University	CoE	Centre of Excellence
BJRCY	Babu Jagjivan Ram Chatarvas Yojana	CPI	Consumer Price Index
BMI	Body Mass Index	CPL	Commercial Pilot Licence
BPL	Below Poverty Line	CPMT	Combined Pre Medical Entrance Test
BPO	Business Process Outsourcing	CPPE	Council for People's Participation in Education
BRC	Block Resource Centre	CRC	Cluster Resource Centre
		CSC	Common Service Centre
		CSIR	Council of Scientific and Industrial Research
		CSO	Civil Society Organisations

CSR	Corporate Social Responsibility	ER	Elected Representatives
CSS	Centrally Sponsored Scheme	ERP	Enterprise Resource Planning
CTA	Criminal Tribes Act	FDC	Fixed Dose Combination
CTC	Central Tripartite Committee	FICCI	Federation of Indian Chamber of Commerce & Industry
CTE	College of Teacher Education	FRA	Forest Rights Act
CTET	Central Teacher Eligibility Test	FRU	First Referral Unit
CUE	Centre for Universal Education	FSSA	Food Safety and Standards Act
CVD	Cardio-Vascular Diseases	FSSAI	Food Safety and Standards Authority of India
CWSN	Children With Special Needs	GAR	Gross Attendance Ratio
DALY	Disability Life Adjusted Year	GBPS	Gigabit Per Second
DAPCU	District AIDS Prevention & Control Unit	GBS	Gross Budgetary Support
DEC	Distance Education Council	GDP	Gross Domestic Product
DEI	Distance Education Institution	GER	Gross Enrolment Ratio
DFS	Double Fortified Salt	GNM	General Nursing and Midwifery
DGET	Directorate General of Employment & Training	GP	Gram Panchayats
DHR	Department of Health Research	GPI	Gender Parity Index
DIC	Design Innovation Centre	GPS	Global Positioning System
DIET	District Institute of Education and Training	GS	Gram Sabhas
DISE	District Information System of Education	GVA	Gross Value Added
DLHS	District Level Health Survey	HCR	Head Count Ratio
DNB	Diplomats of National Board	HEI	Higher Education Institution
DNT	De-notified Tribes	HFWS	Health and Family Welfare
DONER	Department of North Eastern Region	HH	House Holds
DOTS	Directly Observed Treatment – Short Course	HIS	Health Information System
DPC	District Planning Committees	HIV	Human Immunodeficiency Virus
DPEP	District Primary Education Programme	HLEG	High Level Expert Group
DRG	Diagnostic Related Group	HMIS	Health Management Information Systems
DSL	Department of Skills and Lifelong Learning	IAP	Indian Academy of Pediatrics/ Integrated Action Plan
DTH	Direct-to-Home	IASE	Institute of Advanced Studies in Education
DWS	Drinking Water Supply	IAY	Indira Awas Yojana
EAG	Empowered Action Group	IBA	Indian Banks' Association
EBB	Educationally Backward Blocks	ICAI	Institute of Cost Accounts of India
ECCE	Early Childhood Care and Education	ICDS	Integrated Child Development Services
EESC	Essential and Emergency Surgical Care	ICMR	Indian Council of Medical Research
EGS	Education Guarantee Scheme	ICT	Information and Communication Technology
EHP	Essential Health Package	IDD	Iron Deficiency Disorder
ELM	Elementary (Classes I–VIII)	IDMI	Infrastructure Development in Minority Institutions
EMR	Electronic Medical Record	IEC	Information, Education and Communication
EPC	Engineering, Procurement and Construction		

IEDSS	Inclusive Education for the Disabled at Secondary Stage	JIPMER	Jawaharlal Institute of Post Graduate Medical Education and Research
IFA	Iron Folic Acid	JKGBV	Kasturba Gandhi Balika Vidyalaya
IFR	Individual Forest Rights	JNNURM	Jawaharlal Nehru National Urban Renewal Mission
IGMSY	Indira Gandhi Matritva Sahyog Yojana	JNV	Jawahar Navodaya Vidyalaya
IGNOU	Indira Gandhi National Open University	JPC	Joint Parliamentary Committee
IIC	Inter Institutional Centre	JRF	Junior Research Fellowship
IIIT	International Institute of Information Technology	JSS	Jan Shiksha Sanstans
IIM	Indian Institute of Management	JSY	Janani Suraksha Yojana
IISER	Indian Institute of Science Education and Research	KGBV	Kasturba Gandhi Balika Vidyalaya
IIT	Indian Institute of Technology	KV	Kendriya Vidyalaya
IMCs	Institute Management Committees	KVKs	Krishi Vigyan Kendras
IMNCI	Integrated Management of Neonatal and Childhood Illness	KVY	Kaushal Vikas Yojana
IMR	Infant Mortality Rate	LEP	Learning Enhancement Programme
IMRB	International Marketing and Research Bureau	LFPR	Labour Force Participation Rate
IMS Act	Infant Milk Substitutes Act	LLIN	Long Lasting Insecticide Net
IMS	Infant Milk Substitute	LMIS	Labour Market Information System
INC	Indian Nursing Council	LMS	Learning Management System
INN	International Non-proprietary Name	LWE	Left Wing Extremism
INT	Indian Institute of Information Technology	MAEF	Maulana Azad Education Foundation
IPC	Indian Penal Code	MCDs	Minority Concentration Districts
IPERPO	Intellectual Property Education, Research and Public Outreach	MCS	Model Cluster Schools
IPHS	Indian Public Health Standard	MDG	Millennium Development Goal
IPOP	Integrated Programme for Older Persons	MDM	Mid-Day Meal
IPR	Intellectual Property Rights	MDMS	Mid-Day Meals in Schools
IRCA	Integrated Rehabilitation Centre for Addicts	MES	Modular Employable Skills
ISCED	International Standard Classification of Education	MFP	Minor Forest Produce
ISM	Indian School of Mines	MGHN	Merry Gold Health Network
IT	Information Technology	MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
ITCs	Industrial Training Centres	MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
ITIs	Industrial Training Institutes	MHFW	Ministry of Health and Family Welfare
ITPA	Immoral Trafficking Prevention Act	MHRD	Ministry of Human Resource Development
IUC	Inter University Centre	MIB	Ministry of Information and Broadcasting
IVRS	Interactive Voice Response System	MIS	Management Information System
IYCF	Infant and Young Child Feeding	MITI	Model Industrial Training Institute
JE	Japanese Encephalitis	MLA	Member of Legislative Assembly
JEE	Joint Entrance Exam	MMER	Management, Monitoring, Evaluation and Research
		MMP	Mission Mode Project
		MMR	Maternal Mortality Ratio
		MMU	Mobile Medical Unit

MoHFW	Ministry of Health & Family Welfare	NCHER	National Commission for Higher Education and Research
MoLE	Ministry of Labour & Employment	NCHRH	National Commission for Human Resources in Health
MoMA	Ministry of Minority Affairs	NCHS	National Centre for Health Statistics
MOOC	Massive Open Online Course	NCLSE	National Centre for Leadership in School Education
MoSJE	Ministry of Social Justice and Empowerment	NCRB	National Crime Records Bureau
MoTA	Ministry of Tribal Affairs	NCSC	National Commission for Scheduled Castes
MoU	Memorandum of Understanding	NCST	National Commission for Scheduled Tribes
MoWCD	Ministry of Woman & Child Development	NCTE	National Council for Teacher Education
MP	Madhya Pradesh	NCVT	National Council of Vocational Training
MPCE	Monthly Per-capita Consumption Expenditure	NDDDB	National Dairy Development Board
M.Phil	Master of Philosophy	NDIN	National Design Innovation Network
MPLADS	Member of Parliament Local Area Development Scheme	NDRDA	National Drug Regulatory and Development Authority
MPR	Ministry of Panchayati Raj	NE	North East
MS	Manila Samakhya	NEAC	National Evaluation and Assessment Committee
MSDP	Multi Sectoral Development Plan	NEGP	National e-Governance Plan
MSDP	Multi Sectoral Development Programme	NER	North Eastern Region
MSJE	Ministry of Social Justice and Empowerment	NFHS	National Family Health Survey
MSME	Ministry of Micro, Small and Medium Enterprises	NFIDA	National Fund for Innovative Development Activities
MTP	Medical Termination of Pregnancy	NFSB	National Food Security Bill
MVA	Manual Vacuum Aspiration	NGO	Non-Governmental Organisation
MYA	Ministry of Youth Affairs	NHA	National Health Accounts
MYA&S	Ministry of Youth Affairs & Sports	NHFDC	National Handicapped Finance Development Corporation
NAAC	National Assessment and Accreditation Council	NHM	National Health Mission
NAC	National Advisory Council	NHPPT	National Health Promotion and Protection Trust
NACP	National AIDS Control Programme	NHRDA	National Health Regulatory and Development Authority
NAS	National Assessment Survey	NHSRC	National Health System Resource Centre
NBA	National Board of Accreditation	NICE	National Institute of Clinical Excellence
NBCFDC	National Backward Classes Finance and Development Corporation	NIDDCP	National Iodine Deficiency Disorders Control Programme
NBHE	National Board for Health Education	NIFFT	National Institute of Foundry and Forge Technology
NBT	National Book Trust		
NBTTC	National Board for Trade Testing and Certification		
NCD	Non Communicable Disease		
NCERT	National Council of Educational Research & Training		
NCF	National Curriculum Framework		
NCFTE	National Curriculum Framework for Teacher Education		

NIHFW	National Institute of Health and Family Welfare	NSFDC	National Scheduled Castes Finance and Development Corporation
NIN	National Institute of Nutrition	NSIGSE	National Scheme of Incentive to Girls for Secondary Education
NIOS	National Institute of Open Schooling	NSKFDC	National Safai Karamcharis Finance and Development Corporation
NIPPCD	National Institute of Public Cooperation and Child Development	NSQF	National Skills Qualification Framework
NIRD	National Institute for Rural Development	NSS	National Sample Survey/Nutrition Surveillance System
NISD	National Institute of Social Defence	NSSO	National Sample Survey Organisation
NIT	National Institute of Technology	NSTFDC	National Scheduled Tribes Finance and Development Corporation
NKC	National Knowledge Commission	NT	Nomadic Tribe
NLM	National Literacy Mission	NTFs	National Training Funds
NMDFC	National Minorities Finance and Development Corporation	NTFP	Non Timber Forest Product
NME-ICT	National Mission on Education through Information and Communication Technology	NUEPA	National University of Educational Planning and Administration
NMMS	National Merit-cum-Means Scholarships	NV	Navodaya Vidyalaya
NNMB	National Nutrition Monitoring Bureau	NVEQF	National Vocational Education Qualifications Framework
NNP	National Nutrition Plan	OBCs	Other Backward Classes
NOSS	National Overseas Scholarship Scheme	ODL	Open and Distance Learning
NPAN	National Plan of Action on Nutrition	ODS	Open Design School
NPCC	National Programme Coordination Committee	OECD	Organisation for Economic Co-operation & Development
NPCDCS	National Programme for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke	OOP	Out of Pocket
NPEGEL	National Programme for Education of Girls at Elementary Level	OoSC	Out of School Children
NP-NSPE	National Programme for Nutritional Support to Primary Education	ORS	Oral Rehydration Solution
NRDWP	National Rural Drinking Water Programme	PCR Act	Protection of Civil Rights Act
NREGA	National Rural Employment Guarantee Act	PDS	Public Distribution System
NRHM	National Rural Health Mission	PEC	Punjab Engineering College
NRLM	National Rural Livelihoods Mission	PESA Act	Panchayat Extension to Scheduled Areas Act
NSDC	National Skill Development Corporation	PET	Physical Education Teacher
NSDCB	National Skill Development Coordination Board	PG	Postgraduate
		PGIMER	Post Graduate Institute of Medical Education and Research
		PHC	Primary Health Centre
		Ph.D	Doctor of Philosophy
		PIP	Project Implementation Plan
		PISA	Programme for International Student Assessment
		PLHA	People living with HIV/AIDS
		PMAGY	Pradhan Mantri Adarsh Gram Yojana

PMDT	Programmatic Management of Drug-resistant Tuberculosis	SCDC	Scheduled Caste Development Corporation
PMGSY	Pradhan Mantri Gram Sadak Yojana	SCERT	State Council of Educational Research & Training
PMS	Post Matric Scholarship	SCP	Special Component Plan
PMSSY	Pradhan Mantri Swasthya Suraksha Yojana	SCR	Student Classroom Ratio
POA Act	Prevention of Atrocities Act	SCSP	Scheduled Caste Sub Plan
PPP	Public-Private Partnership	SDCs	Skill Development Centres
PRI	Pahchayati Raj Institution	SEMIS	Secondary Education Management Information System
PS	Primary School	SFAP	Student Financial Aid Programme
PSL	Priority Sector Lending	SGSY-SP	Swarnajayanti Gram Swarozgar Yojana-Special Projects
PSSCIVE	Pandit Sunder Lai Sharma Central Institute of Vocational Education	SHGs	Self Help Groups
PSUs	Public Sector Undertakings	SHSRC	State Health System Resource Centre
PTA	Parent Teacher Association	SIA	Supplemental Immunization Activity
PTG	Primitive Tribal Groups	SIE	State Institute of Education
PTR	Pupil Teacher Ratio	SIEMAT	Slate Institute of Educational Management & Training
PVTGs	Particularly Vulnerable Tribal Groups	SIHFW	State Institute of Health and Family Welfare
PYKKA	Panchayat Yuva Krida Khel Abhiyan	SII J&K	Special Industry Initiative for Jammu & Kashmir
QMT	Quality Monitoring Tools	SJE	Social Justice and Empowerment
R&D	Research and Development	SKA	Sarva Krida Abhiyan
RCH	Reproductive and Child Health	SKP	Skill Knowledge Providers
RDA	Recommended Dietary Allowance	SMC	School Management Committee
RDK	Rapid Diagnostic Kits	SMEPWD	State Mission for Empowerment of Persons with Disabilities
RGI	Registrar General of India	SNT	Semi Nomadic Tribe
RGNCs	Rajiv Gandhi National Crèche Scheme	SOS	State Open School
RGNFS	Rajiv Gandhi National Fellowships Scheme	SPO	State Project Office
RGSEAG	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls	SPQEM	Scheme for Providing Quality Education in Madarasas
RKS	Rogi Kalyan Samitis	SRCs	Socio Religious Communities
RMP	Registered Medical Practitioner	SRF	Senior Research Fellowship
RMSA	Rashtriya Madhyamik Shiksha Abhiyan	SRI	Social and Rural Institute
R&R	Rehabilitation and Re-settlement	SRMS	Scheme for Rehabilitation of Manual Scavengers
RRTCs	Regional Resource and Training Centres	SRS	Sample Registration System
RSBY	Rashtriya Swasthya Bima Yojana	SSA	Sarva Shiksha Abhiyan
RSC	Residential School Complex	SSCs	Sector Skill Councils
RTE	Right to Education	ST	Scheduled Tribe
RUDSETI	Rural Development and Self Employment Training Institute	STDCs	State Tribal Development Corporations
SBA	Skilled Birth Attendants	STEP	Support to Training and Employment Programme for Women
SC	Scheduled Caste		
SCA	Special Central Assistance		
SCAs	State Channelizing Agencies		

STET	State Teacher Eligibility Test	UGC	University Grants Commission
STI	Sexually Transmitted Infection	UHC	Universal Health Coverage
TB	Tuberculosis	UID	Unique Identification
TBA	Traditional Birth Attendant	ULB	Urban Local Bodies
TEI	Teacher Education Index	UMDT	Uniform Multi-Drug Therapy Regimen
TEQIP	Technical Education Quality Improvement Programme	UNCRPD	United Nations Conventions on the Rights of Persons with Disabilities
TET	Teacher Eligibility Test	UNESCO	United Nations Educational, Scientific & Cultural Organisation
TFR	Total Fertility Rate	UNICEF	United Nations International Children Emergency Fund
THE	Times Higher Education	UP	Uttar Pradesh
TISS	Tata Institute of Social Sciences	UPS	Upper Primary School
TLC	Teaching and Learning Centre	UPSS	Usual Principal Subsidiary Status
TLE	Teaching Learning Equipment	USA	United States of America
TLM	Teaching Learning Material	UT	Union Territory
TNTFP	Traditional Non Timber Forest Product	VEC	Village Education Committee
TPDS	Targeted Public Distribution System	VET	Vocational Education & Training
TREAD	Trade Related Entrepreneurship Assistance and Development	VHND	Village Health and Nutrition Day
TRI	Tribal Research Institute	VHNSC	Village Health Nutrition Sanitation Committee
TRIFED	Tribal Cooperative Marketing Development Federation of India Limited	VHSND	Village Health, Sanitation and Nutrition Day
TRIPs	Trade-Related Aspects of Intellectual Property Rights	VO	Volunteer Organisations
TSC	Total Sanitation Campaign	VRCs	Vocational Rehabilitation Centres
TSP	Tribal Sub-Plan	VTPs	Vocational Training Providers
TVET	Technical and Vocational Education & Training	WCD	Women and Child Development
UEE	Universalisation of Elementary Education	WCP	Women and Child Programmes
UG	Undergraduate	WFPR	Work Force Participation Rate
		WHO	World Health Organization
		WTO	World Trade Organisation

Annexures

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Health

20.1. Health should be viewed as not merely the absence of disease but as a state of complete physical, mental and social well-being. The determinants of good health are: access to various types of health services and an individual's lifestyle choices, personal, family and social relationships. The latter are outside the scope of this Chapter. The focus in this Chapter is on the strategy to deliver preventive, curative and public health services. Other sectors that impact on good health, such as clean drinking water and sanitation are dealt with in other Chapters of the Plan.

AN OVERVIEW

20.2. At present, India's health care system consists of a mix of public and private sector providers of health services. Networks of health care facilities at the primary, secondary and tertiary level, run mainly by State Governments, provide free or very low cost medical services. There is also an extensive private health care sector, covering the entire spectrum from individual doctors and their clinics, to general hospitals and super speciality hospitals.

20.3. The system suffers from the following weaknesses:

1. *Availability* of health care services from the public and private sectors taken together is quantitatively inadequate. This is starkly evident from the data on doctors or nurses per lakh of the population. At the start of the Eleventh Plan, the number of doctors per lakh of population was only 45, whereas, the desirable number is 85 per lakh population. Similarly, the number of Nurses and

Auxiliary Nurse and Midwives (ANMs) available was only 75 per lakh population whereas the desirable number is 255. The overall shortage is exacerbated by a wide geographical variation in availability across the country. Rural areas are especially poorly served.

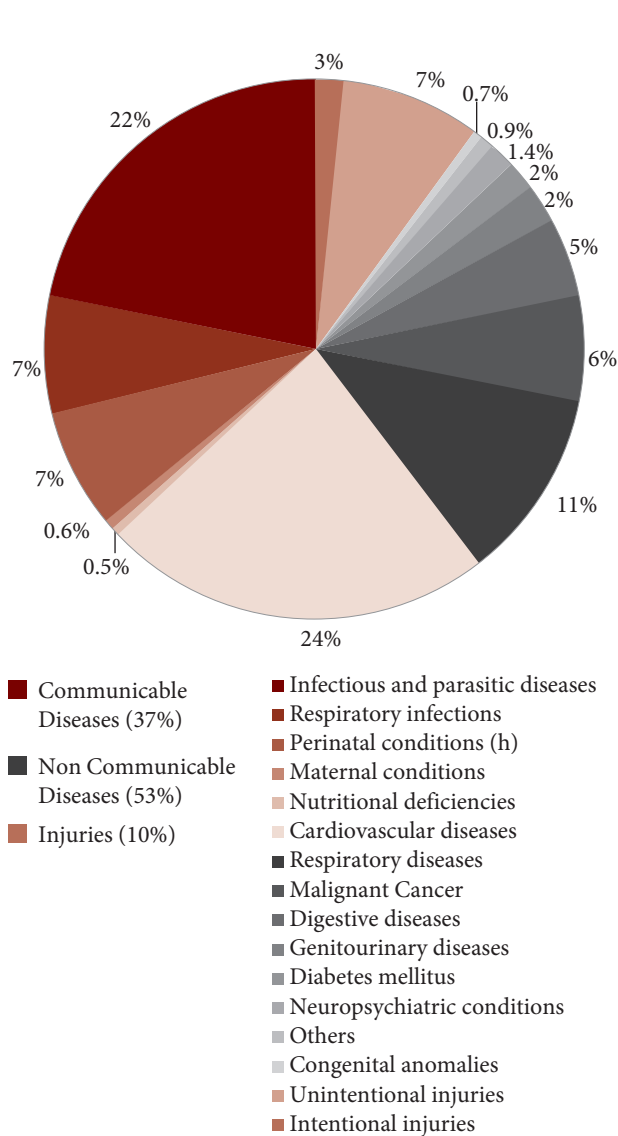
2. *Quality* of healthcare services varies considerably in both the public and private sector. Many practitioners in the private sector are actually not qualified doctors. Regulatory standards for public and private hospitals are not adequately defined and, in any case, are ineffectively enforced.
3. *Affordability* of health care is a serious problem for the vast majority of the population, especially in tertiary care. The lack of extensive and adequately funded public health services pushes large numbers of people to incur heavy out of pocket expenditures on services purchased from the private sector. Out of pocket expenditures arise even in public sector hospitals, since lack of medicines means that patients have to buy them. This results in a very high financial burden on families in case of severe illness. A large fraction of the out of pocket expenditure arises from outpatient care and purchase of medicines, which are mostly not covered even by the existing insurance schemes. In any case, the percentage of population covered by health insurance is small.
4. The problems outlined above are likely to worsen in future. Health care costs are expected to rise because, with rising life expectancy, a larger proportion of our population will become vulnerable to chronic Non Communicable Diseases (NCDs), which typically require expensive

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treatment. The public awareness of treatment possibilities is also increasing and which, in turn, increases the demand for medical care. In the years ahead, India will have to cope with health problems reflecting the dual burden of disease, that is, dealing with the rising cost of managing NCDs and injuries while still battling communicable diseases that still remain a major public

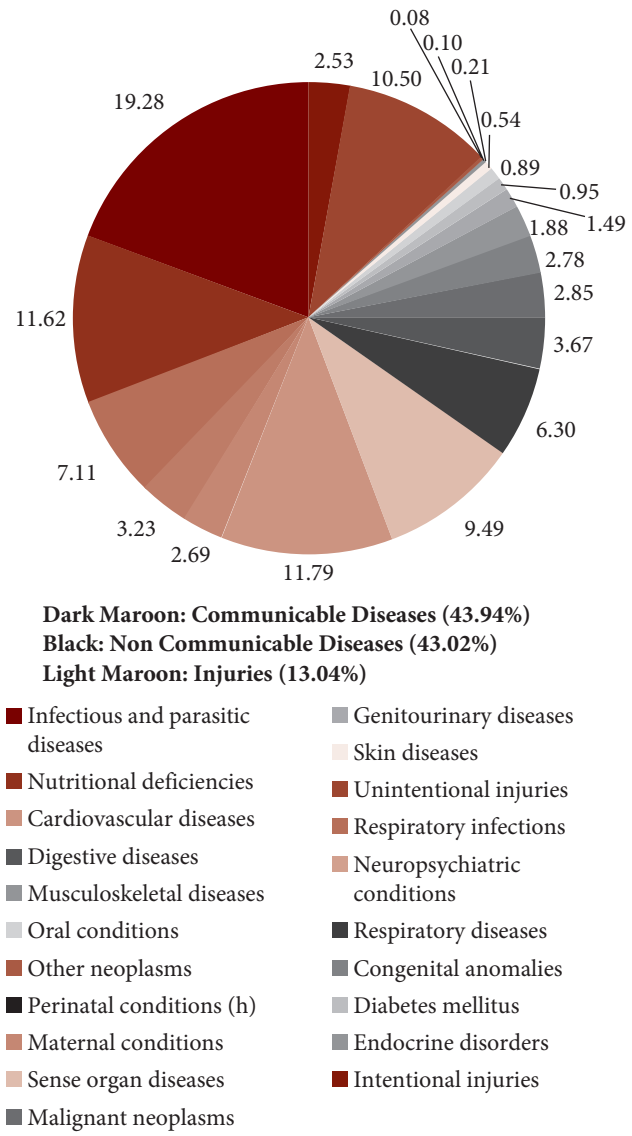
health challenge, both in terms of mortality and disability (Figures 20.1 and 20.2).

- The total expenditure on health care in India, taking both public, private and household out-of-pocket (OOP) expenditure was about 4.1 per cent of GDP in 2008–09 (National Health Accounts [NHA] 2009), which is broadly comparable to other developing countries, at similar



Source: Mortality and Burden of Disease Estimates for WHO Member States in 2008.

FIGURE 20.1: Disease Burden of India, 2008 (Estimated number of deaths by cause)



Source: Global Burden of Disease Estimates for WHO Member States 2009.

FIGURE 20.2: Disability Adjusted Life Years in India, 2009 (Estimated percentage of DALY by cause)

levels of per capita income. However, the public expenditure on health was only about 27 per cent of the total in 2008–09 (NHA, 2009), which is very low by any standard. Public expenditure on Core Health (both plan and non-plan and taking the Centre and States together) was about 0.93 per cent of GDP in 2007–08. It has increased to about 1.04 per cent during 2011–12. It needs to increase much more over the next decade.

20.4. The enormity of the challenge in health was realised when the Eleventh Plan was formulated and an effort was made to increase Central Plan expenditures on health. The increase in Central expenditures has not been fully matched by a comparable increase in State Government expenditures (Table 20.3). The Twelfth Plan proposes to take corrective action by incentivising States.

20.5. As an input into formulating the Twelfth Plan strategy, it has relied on the High Level Expert Group (HLEG) set up by the Planning Commission to define a comprehensive strategy for health for the Twelfth Five Year Plan. The Group's report is accessible on the web site of the Planning Commission. In addition, wide consultations have been held with stakeholders and through Working Groups and Steering Groups. Based on the HLEG report and after extensive consultations within and outside the Government, as well as a close review of the actual performance of the sector during the Eleventh Plan period, a new strategy for health is being spelt out in the Twelfth Plan towards rolling out Universal Health Coverage—a process that will span several years. The consensus among stakeholders is that the magnitude of the challenge is such that a viable and longer term architecture for health can be put in place only over two or even three Plan periods. However, a start must be made towards achieving the long term goal immediately.

REVIEW OF ELEVENTH PLAN PERFORMANCE

20.6. A review of the health outcome of the Eleventh Plan and of NRHM is constrained by lack of end-line data on most indicators. Analysis of available data reveals that though there has been progress, except

on child-sex ratio, the goals have not been fully met. Despite efforts through the flagship of NRHM, wide disparity in attainments across states outlines the need for contextual strategies.

1. *Maternal Mortality Ratio (MMR)* which measures number of women of reproductive age (15–49 years) dying due to maternal causes per 1,00,000 live births, is a sensitive indicator of the quality of the health care system. The decline in MMR during the 2004–06 to 2007–09 of 5.8 per cent per year (that is, 254 to 212) has been comparable to that in the preceding period (a fall of 5.5 per cent per year from 301, over 2001–03 to 2004–06). MMR of 212 (2007–09) is well short of the Eleventh Plan goal of 100. Besides Kerala (81), two more States namely Tamil Nadu (97) and Maharashtra (104) have realised MDG target of 109 in 2007–09, while Andhra Pradesh (134), West Bengal (145), Gujarat (148) and Haryana (153) are in closer proximity. A major burden of MMR is in EAG states, where the average MMR was 308 in 2007–09 (SRS), and continues to remain high as per the recent Annual Health Survey (2010–11). These are Assam (381), Bihar (305), Jharkhand (278), MP (310), Chhattisgarh (275), Odisha (277), Rajasthan (331), Uttar Pradesh (345) and Uttarakhand (188). Suboptimal performance in EAG states points to gaps in Ante-Natal Care, skilled birth attendance and Emergency Obstetrical care and to draw lessons from maternal death reviews.
2. *Infant Mortality Rate (IMR)*, death of children before the age of one year per 1,000 live births, is a sensitive indicator of the health and nutritional status of population. IMR fell by 5 per cent per year over the 2006–11 period, an improvement over the 3 per cent decline per year in the preceding five years, but short of the target of 28. The decline in IMR has accelerated, but is short of the required pace. While seven states have achieved the target, IMR is still high in MP, Odisha, UP, Assam, and Rajasthan.
3. *Total Fertility Rate (TFR)*, which measures the number of children born to a woman during her entire reproductive period, fell by 2.8 per cent per annum over the 2006–10 period from 2.8 to

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2.5, which is faster than the decline of 2 per cent per year in the preceding five years, but short of the Eleventh Plan goal of 2.1. Replacement level TFR, namely 2.1, has been attained by nine states. High fertility remains a problem in seven States, namely Bihar (CBR 2011 27.7; TFR 2010 3.7), Uttar Pradesh (27.8; 3.5), Madhya Pradesh (26.9; 3.2), Rajasthan (26.2; 3.1), Jharkhand (25.0; 3.0), Chhattisgarh (24.9; 2.8) and Assam (22.8; 2.5). Reasons are early marriage, close spacing of births, high unmet need and lack of skilled contraceptive services. Low couple protection rate (40.4 per cent Family Welfare Statistics in India, 2011) and a high unmet need for contraception (20.5 per cent) in 2007–08 point to gaps in service delivery.

4. On the goal of raising *child sex ratio*, there has been a reversal. All States and UTs except Punjab, Haryana, Himachal Pradesh, Gujarat, Tamil Nadu, Mizoram, Andaman and Nicobar Islands and Chandigarh have witnessed a decrease in the child sex ratio (0–6 years) in the 2001–11 decade.
5. Progress on goals on reducing *malnutrition* and *anaemia* cannot be assessed for want of updated data, but localised surveys indicated that the status has not improved.

FINANCING FOR HEALTH

20.7. During the Eleventh Plan funding for health by Central Government has increased to 2.5 times and

of States to 2.14 times that in Tenth Plan, to add up to 1.04 per cent of GDP in 2011–12. When broader determinants of health (drinking water and sanitation, ICDS and Mid-Day Meal) are added, the total public spending on health in Eleventh Plan comes to 1.97 per cent of GDP (Tables 20.2 and 20.3).

20.8. An analysis of performance reveals achievements and gaps. These follow.

INFRASTRUCTURE

20.9. There has been an increase in number of public health facilities over the 2007–11 period—Sub-Centres by 2 per cent, PHC by 6 per cent, CHC by 16 per cent and District Hospitals by 45 per cent. Yet shortfalls remain, 20 per cent for Sub-Centres, 24 per cent for PHCs and 37 per cent for CHCs, particularly in Bihar, Jharkhand, Madhya Pradesh and Uttar Pradesh. Though most CHCs and 34 per cent Primary Health Centres (PHCs) have been upgraded and operationalised as 24 × 7 facilities and First Referral Units (FRU) have doubled, yet the commitment of Eleventh Plan to make all public facilities meet IPHS norms, and to provide Emergency Obstetric Care at all CHCs have not been achieved. Access to safe abortion services is not available in all CHCs, a gap which is contributing to maternal mortality. Though Mobile Medical Units (MMUs) have been deployed in 449 districts of the country, their outreach medical services are not adequate for the need.

TABLE 20.1
Eleventh Plan Monitorable Goals and Achievements

S. No.	Eleventh Plan Monitorable Target	Baseline Level	Recent Status
1	Reducing Maternal Mortality Ratio (MMR) to 100 per 100000 live births.	254 (SRS, 2004–06)	212 (SRS, 2007–09)
2	Reducing Infant Mortality Rate (IMR) to 28 per 1000 live births.	57 (SRS, 2006)	44 (SRS, 2011)
3	Reducing Total Fertility Rate (TFR) to 2.1.	2.8 (SRS, 2006)	2.5 (SRS, 2010)
4	Reducing malnutrition among children of age group 0–3 to half its level.	40.4 (NFHS, 2005–06)	No recent data available
5	Reducing anaemia among women and girls by 50%.	55.3 (NFHS, 2005–06)	No recent data available
6	Raising the sex ratio for age group 0–6 to 935	927 (Census, 2001)	914 (census, 2011)

TABLE 20.2
Allocation and Spending by Ministry of Health in Eleventh Plan

(Figures in ₹ Crore)

Department	Eleventh Plan Allocation	Eleventh Plan release	Eleventh Plan Expenditure	% Expenditure to Release
HFW	1,25,923	87,460	83,407	95.4%
Of which under NRHM	89,478	68,064	66,127	97.2%
AYUSH	3,988	3,083	2,994	97.1%
DHR	4,496	1,938	1,870	96.5%
AIDS Control	5,728	1,500	1,305	87.0%
Total	1,40,135	93,981	89,576	95.3%

Note: Outlay for the new departments of DHR and AIDS Control was transferred from Department of HFW.

TABLE 20.3
Funding for Health in Eleventh Plan: Core and Broad Health Components

(Figures in ₹ Crore)

Year	Centre Core Health	States Core Health	% GDP Core Health			% GDP (Broad Health)		
			Centre	States	Total	Centre	States	Total
X Plan	47,077	1,07,046	0.29%	0.65%	0.94%	0.56%	1.18%	1.74%
2007-08	16,055	30,536	0.32%	0.61%	0.93%	0.71%	1.17%	1.89%
2008-09	19,604	36,346	0.35%	0.65%	0.99%	0.75%	1.22%	1.98%
2009-10	25,652	44,748	0.40%	0.69%	1.09%	0.78%	1.24%	2.02%
2010-11	27,466	55,955	0.36%	0.73%	1.09%	0.75%	1.27%	2.02%
2011-12	30,587	62,343	0.34%	0.70%	1.04%	0.74%	1.19%	1.94%
XI Plan	1,19,364	2,29,928	0.35%	0.68%	1.04%	0.75%	1.22%	1.97%

Note: Core health includes health care expenditure of central ministries (MoHFW, Labour on RSBY and so on) on health; Broad health includes Drinking Water and Sanitation, Mid-Day Meal and ICDS (Plan and non-Plan).

HEALTH PERSONNEL

20.10. ASHAs positioned under NRHM have been successful in promoting awareness of obstetric and child care services in the community. Better training for ASHA and timely payment of incentive have come out as gaps in evaluations. Despite considerable improvement in health personnel in position (ANM 27 per cent, nurses 119 per cent, doctors 16 per cent, specialists 36 per cent, pharmacists 38 per cent), gap between staff in position and staff required at the end of the Plan was 52 per cent for ANM and nurses, 76 per cent for doctors, 88 per cent for specialists and 58 per cent for pharmacists. These shortages are attributed to delays in recruitment and to postings not being based on work-load or sanctions. Public health cadre as envisioned in the Eleventh Plan to manage NRHM is not yet in place. Similarly, lack of

sound HR management policies results in irrational distribution of available human resource and sub-optimal motivation.

TRAINING CAPACITY

20.11. Setting up of 6 AIIMS like institutes and up-gradation of 13 medical colleges has been taken up under Pradhan Mantri Swasthya Suraksha Yojana (PMSSY). Seventy-two State Government medical colleges have been taken up for strengthening to enhance their capacity for PG training. Huge gaps, however, remain in training capacity for all category of health personnel.

COMMUNITY INVOLVEMENT

20.12. Though Rogi Kalyan Samitis (RKS) are in position in most public facilities, monthly Village

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Health and Nutrition Days are held in most villages, Jan Sunwais (public hearings) and Common Review Missions have been held yet, their potential in terms of empowering communities, improving accountability and responsiveness of public health facilities is yet to be fully realised.

SERVICE DELIVERY

1. To reduce maternal and infant mortality, institutional deliveries are being promoted by providing cash assistance to pregnant women under Janani Suraksha Yojana (JSY). Though institutional deliveries have increased in rural (39.7 to 68 per cent) and urban areas (79 per cent to 85 per cent) over the 2005–09 period, low levels of full Ante-Natal care (22.8 in rural, and 26.1 in urban in 2009, CES) and quality of care are areas of concern.
2. Full immunisation in children has improved from 54.5 per cent in 2005 (CES) to 61 per cent in 2009 (CES) during the Eleventh Plan. Additions to the Universal Immunization Program include Hepatitis B, Japanese Encephalitis (JE) vaccine in endemic districts, and Pentavalent vaccine, which is a combination vaccine against Diphtheria, Pertussis, Tetanus, Hepatitis B and Haemophilus influenza B. There has been no reported case of polio during 2011. Immunisation cover is far from universal as envisioned in Eleventh Plan, and remains particularly low in UP (41 per cent), MP (43 per cent), Bihar (49 per cent), Rajasthan (54 per cent), Gujarat (57 per cent) and Chhattisgarh (57 per cent), Assam (59 per cent) and Jharkhand (60 per cent). In contrast, some States like Goa (88 per cent), Sikkim (85 per cent), Punjab (84 per cent) and Kerala (82 per cent) have achieved high level of immunisation coverage. Home Based Neonatal Care (HBNC) through ASHAs has been promoted to improve new born care practices in the community and to enable early detection and referral. Continued high rates of child mortality suggest that the public health system has not been very effective in promoting healthy practices as breastfeeding, use of ORS and preventive and care seeking behaviours.
3. Despite improvements in infrastructure, and personnel deployed, evaluation has reported that

utilisation of public facilities for chronic disease remains low in UP (45 per cent), MP (63 per cent) and Jharkhand (70 per cent) as compared to Tamil Nadu (94 per cent) reflecting poor quality of service.

4. To reduce fertility, increasing age of marriage, spacing of births, access to a basket of contraceptive services are some of the possible innovations that need to be tried.
5. The Eleventh Plan commitment of providing access to essential drugs at public facilities has not been realised. This reflects in continued high out-of-pocket expenditure on health care, as suggested by some local surveys.

GOVERNANCE OF PUBLIC HEALTH SYSTEM

20.13. The *Eleventh Plan* had suggested Governance reforms in public health system, such as performance linked incentives, devolution of powers and functions to local health care institutions and making them responsible for the health of the people living in a defined geographical area. NRHM's strategy of decentralisation, PRI involvement, integration of vertical programmes, inter-sectoral convergence and Health Systems Strengthening have been partially achieved. Despite efforts, lack of capacity and adequate flexibility in programmes forestall effective local level planning and execution based on local disease priorities. Professional procurement agencies on the lines of Tamil Nadu are still not in place at the Centre and most States making the process fragmented, with little forecasting or use of the power of monopsony. Wide variation in the performance of health facilities across states have been reported with Tamil Nadu topping and UP and MP at the bottom, pointing to the need for learning from best practices within the country through state level initiatives.

DISEASE CONTROL PROGRAMMES

1. National Vector Borne Disease Control Programme encourages states to take measures, as disease management, integrated vector management and supportive interventions like behaviour change communication, for the prevention and control of diseases like Malaria, Dengue, Chikungunya, Japanese Encephalitis (JE), Lymphatic Filariasis and Kala-azar. India bears

a high proportion of the global burden of TB (21 per cent), leprosy (56 per cent) and lymphatic filariasis (40 per cent). Though there has been progress in the Eleventh Plan in reducing rate of new infections, case load and death from these diseases, a robust surveillance system at the community level is lacking and considerable hidden and residual disease burden remains. Multi-drug resistance to TB is being increasingly recognised. Gaps in infectious disease control programmes relate to testing services in all PHCs, active engagement with private providers, prescribing standard treatment, restricting over-the-counter sale of anti TB drugs, and timely referral through a continuum of care.

2. Among the NCDs, Cardiovascular Diseases (CVD) account for 24 per cent of mortality followed by Respiratory Disease, and malignant cancers. During the Eleventh Five Year Plan National Programme for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was initiated in 100 selected districts in 21 states. So far, 87 lakh people have been screened for diabetes and hypertension, out of which 6.5 per cent are suspected to be diabetic and 7.7 per cent are suspected to be suffering from hypertension. Despite enhanced allocations for the National Mental Health Programme, it has lagged behind due to non-availability of qualified mental health professionals at district and sub-district levels. Training of non-physician mental health professionals and implementation of community based mental health programmes are needed to reduce the rising burden of mental health disorders. NCD programmes need to be integrated within NRHM to provide preventive, testing, care and referral services.

REGULATION

20.14. The Food Safety and Standards Act (FSSA), 2006 came into force from 5.8.2011 and replaced multiple food laws, standard setting bodies and enforcement agencies with one integrated food law. The Government of India has enacted the Clinical Establishments (Registration and Regulation) Act, 2010 for Registration and Regulation of Clinical

Establishments. The Government of India has notified important amendments in rules under the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994, including amendment to Rule 11 (2) of the PC and PNDT Rules, 1996 to provide for confiscation of unregistered machines and regulating the use of portable ultrasound equipment and services offered by mobile clinics. The Transplantation of Human Organs Act, 1994 has been amended to make the process of organ donation and reception more streamlined and mal-practice free. Quality and reach of regulation are major issues.

HMIS

20.15. During the Eleventh Plan, a web based Health Management Information System (HMIS) application software has been developed and made operational for online data capture at district and sub-district levels on RCH service delivery indicators. The data captured is scanty, restricted to public facilities and is not always used for programme planning or monitoring.

AIDS CONTROL

20.16. Against a target to halt and reverse the HIV/AIDS epidemic in India, there has been a reduction of new HIV infections in the country by 57 per cent. Still, an estimated 20.9 lakh people were living with HIV/AIDS (PLHA) in 2011. The programme includes Targeted Interventions focused on High Risk Groups and Bridge populations, Link Workers Scheme, Integrated Counselling and Testing Services, Community Care, Support and Treatment Centres, Information, Education, and Communication (IEC) and condom promotion. Gaps in the programme include low rate of coverage of Anti-Retroviral Therapy among infected adults and children, low levels of opioid substitution therapy among injection drug users (3 per cent), testing of pregnant women for HIV and Syphilis (23 per cent) and low Anti-Retroviral coverage for preventing mother to child transmission. There is scope for greater integration with NRHM to avoid duplication of efforts, as in reaching non-high risk groups and distribution of condoms.

INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY (AYUSH)

20.17. Against the Eleventh Plan objective of ‘mainstreaming AYUSH systems to actively supplement the efforts of the allopathic system’, 40 per cent PHCs, 65 per cent CHCs and 69 per cent District hospitals have co-located AYUSH facilities. Though considerable progress has been made in documenting identity and quality standards of herbal medicines, scientific validation of AYUSH principles, remedies and therapies has not progressed. Similarly, though the National Medicinal Plants Board has supported many projects for conservation, cultivation and storage of medicinal plants, only 20 per cent of the 178 major medicinal plant species traded as raw drugs are largely sourced from cultivation. Nine AYUSH industry clusters through Special Purpose Vehicle having common facility centres for manufacture and testing of AYUSH medicines are being set up in eight States. While AYUSH sector has considerable infrastructure, it remains under-utilised.

HEALTH RESEARCH

20.18. The newly established department of Health Research, and Indian Council of Medical Research (ICMR) have piloted several innovations, including an on-line Clinical Trials Registry, Uniform Multi-drug Therapy Regimen (UMDT) for Leprosy, and lymphatic filariasis, kits for improved diagnosis of malaria, dengue fever, TB (including drug resistant), cholera, Chlamydia infection. Leptospirosis; and development of indigenous H1N1 vaccine. Yet, health research in India has yet to make a major impact on the health challenges facing the country. The reasons are that ICMR has focused on biomedical research, especially in communicable diseases, while gaps in health attainments are largely due to behavioural factors, inadequate attention to prevention and fragile health systems.

TWELFTH PLAN STRATEGY

20.19. The Twelfth Plan seeks to strengthen initiatives taken in the Eleventh Plan to expand the reach of health care and work towards the long term objective of establishing a system of Universal Health Coverage (UHC) in the country. This means

that each individual would have assured access to a defined essential range of medicines and treatment at an affordable price, which should be entirely free for a large percentage of the population. Inevitably, the list of assured services will have to be limited by budgetary constraints. But the objective should be to expand coverage steadily over time.

20.20. Based on the recommendations of the HLEG and other stakeholder consultations, it is possible to outline the key elements of the strategy that should be followed in the Twelfth Plan. These elements should be seen as a part of a longer term plan to move towards UHC, which is a process that will unfold over two or three Plan periods.

1. There must be substantial expansion and strengthening of the public sector health care system if we are to meet the health needs of rural and even urban areas. The bulk of the population today relies upon private sector health providers, paying amounts which they cannot afford, because of the inadequate reach of the public sector. While the private sector can continue to operate for those who can afford it, an expansion of good quality affordable public sector care is essential. As supply in the public sector increases, it will cause a shift towards public sector providers freeing the vulnerable population from dependence on high cost and often unreachable private sector health care.
2. Health sector expenditure by the Centre and States, both Plan and Non Plan, will have to be substantially increased by the end of the Twelfth Plan. It has already increased from 0.94 per cent of GDP in the Tenth Plan to 1.04 per cent in the Eleventh Plan (Table 20.3). The provision of clean drinking water and sanitation as one of the principal factors in the control of diseases is well established from the history of industrialised countries and it should have high priority in health related resource allocation. The percentage for this broader definition of health sector related resources needs to be increased to 2.5 per cent by the end of the Twelfth Plan. Since expenditure on health by the State Governments is about twice the expenditures by the Centre,

the overall targets for public sector health expenditure can only be achieved if, along with the Centre, State Governments expand their health budgets appropriately. A suitable mechanism should therefore be designed to incentivise an increase in State Government spending.

3. Financial and managerial systems will be re-designed to ensure more efficient utilisation of available resources, and to achieve better health outcomes. Coordinated delivery of services within and across sectors, delegation matched with accountability, fostering a spirit of innovation are some of the measures proposed to ensure that 'more can be done from less for more' for better health outcomes.
4. Efforts would be made to find a workable way of encouraging cooperation between the public and private sector in achieving health goals. This would include contracting in of services for gap filling, and also various forms of effectively regulated and managed PPP, while also ensuring that there is no compromise in terms of standards of delivery and that the incentive structure does not undermine health care objectives.
5. The present Rashtriya Swasthya Bima Yojana (RSBY) which provides 'cash less' in-patient treatment for eligible beneficiaries through an insurance based system will need to be reformed to enable access to a continuum of comprehensive primary, secondary and tertiary care. The coverage of RSBY was initially limited to the BPL population but, was subsequently expanded to other categories. It should be the objective of the Twelfth Plan to use the platform and existing mechanisms of RSBY to cover the entire population below the poverty line. In planning health care structures for the future, it is desirable to move away from a 'fee-for-service' mechanism for the reasons outlined by the HLEG, to address the issue of fragmentation of services that works to the detriment of preventive and primary care and also to reduce the scope for fraud and induced demand.
6. Availability of skilled human resources remains a key constraint in expanding health service delivery. A mere expansion of financial resources devoted to health will not deliver results if health personnel are not available. A large expansion of medical schools, nursing colleges, and so on, is therefore necessary and public sector medical schools must play a major role in the process. Since the present distribution of such colleges is geographically very uneven, a special effort will be made to expand medical education in States which are at present under-served. In addition, a massive effort will be made to recruit and train paramedical and community level health workers.
7. An important lesson from the Eleventh Plan is that the multiplicity of Central Sector and Centrally Sponsored Schemes addressing individual diseases, or funding activities or institutions, prevents a holistic health-systems-approach, leads to duplication and redundancies, and makes coordinated delivery difficult. This multiplicity also constrains the flexibility of States to make need based plans or deploy their resources in the most efficient manner. As a result, new programmes cannot take off and old ones do not reach their maximum potential. The way forward is to focus on strengthening the pillars of the health system, so that it can prevent, detect and manage each of the unique challenges that different parts of the country face.
8. A series of prescription drugs reforms, promotion of essential, generic medicines, and making these universally available free of cost to all patients in public facilities as a part of the Essential Health Package will be a priority.
9. Effective regulation in medical practice, public health, food and drugs is essential to safeguard people against risks, and unethical practices. This is especially so given the information gaps in the health sector which make it difficult for individuals to make reasoned choices.
10. The health system in the Twelfth Plan will continue to have a mix of public and private service providers. The public sector health services need to be strengthened to deliver both public health related and clinical services. The public and private sectors also need to coordinate for delivery of a continuum of care. A strong regulatory

system would supervise the quality of services delivered. Standard treatment guidelines should form the basis of clinical care across public and private sectors, with adequate monitoring by the regulatory bodies to improve quality and control the cost of care.

INCLUSIVE AGENDA FOR HEALTH

20.21. In order to ensure that all the services in the Twelfth Plan are provided with special attention to the needs of marginalised sections of the population the following will be emphasised in the Twelfth Plan.

20.22. Access to services: Barriers to access would be recognised and overcome especially for the disadvantaged and people located far from facilities. Medical and public health facilities would be accessible to the differently-abled. They would be gender sensitive and child friendly. Information on health would be accessible to the visually impaired and to all caregivers; especially to those who look after autistic and mentally challenged persons. Hospitals would have facilities for the hearing impaired. Among marginalised groups, the SC and ST populations, and minorities, the doubly disadvantaged such as the Particularly Vulnerable Tribal Groups (PVTGs), the De-notified and Nomadic Tribes, the Musahars and the internally displaced must be given special attention while making provisions for, setting up and renovating Sub-Centres and Anganwadis.

20.23. Special services: Special services should be made available for the vulnerable and disadvantaged groups. For example, counselling of victims of mental trauma in areas of conflict, or the supply and fitting of aids for the differently-abled are some examples of special services for certain categories of users. As there are other segments of the population which are also vulnerable, the list should be open-ended.

20.24. Monitoring and evaluation systems: Routine monitoring and concurrent impact evaluations should collect disaggregated information on disadvantaged segments of the population. This is to assess the ease with which they access services and their impact, as also to understand how they compare to the general population.

20.25. Representation in community fora: Wherever community-level fora exist or are being planned for, such as Rogi Kalyan Samitis, VHSNC, representation of the marginalised should be mandatory. Also, every Village Health Sanitation and Nutrition Committee would strive to have 50 per cent representation of women.

20.26. Training of health and rehabilitation professionals should incorporate knowledge of disability rights, as also the skills to deal with differences in perspectives and expectations between members of disadvantaged segments and the general population that may arise out of different experiences. All health related training institutes must have a comprehensive policy to make their educational programmes friendly for the differently-abled. This should also include sensitisation of faculty, staff and trainees.

TOWARDS UNIVERSAL HEALTH COVERAGE

20.27. The Twelfth Plan strategy outlined is a first step in moving toward Universal Health Care (UHC). All over the world, the provision of some form of universal health coverage is regarded as a basic component of social security. There are different ways of achieving this objective and country experiences vary. We need to ensure much broader coverage of health services to provide essential health care and we need to do it through a system which is appropriate to our needs and within our financial capability.

HLEG'S RECOMMENDATIONS

20.28. The High Level Expert Group has defined UHC as follows: 'Ensuring equitable access for all Indian citizens in any part of the country, regardless of income level, social status, gender, caste or religion, to affordable, accountable and appropriate, assured quality health services (promotive, preventive, curative and rehabilitative) as well as services addressing wider determinants of health delivered to individuals and populations, with the Government being the guarantor and enabler, although not necessarily the only provider of health and related services.'

20.29. This definition affirms that the system must be available for all who want it, though some, typically

the upper income groups, may opt out. For operational purposes, it is necessary to define with greater precision, the coverage of assured services, especially in terms of entitlement for in-patient treatment and to define the specific mechanism through which the service will be delivered. The extent of the coverage offered in terms of the range of treatments covered will obviously be constrained by finances available, though it can be expected to expand over time. The HLEG has recommended the prioritisation of primary health care, while ensuring that the Essential Health Package (EHP) includes essential services at all levels of care.

20.30. The HLEG has examined different ways in which UHC could be delivered without any cash payment by the beneficiaries. At one end, we can have a purely public delivery of services from public sector service providers using private sector only to supplement critical gaps, and whose costs are covered by budgetary funds. At the other end, we can have a system where defined services are delivered by service providers charging a fee for service, with payment to the providers being made by State funded medical insurance, with no payment to be made by the patient. The HLEG has also recommended: ‘State governments should consider experimenting with arrangements where the state and district purchase care from an integrated network of combined primary, secondary and tertiary care providers. These provider networks should be regulated by the government so that they meet the rules and requirements for delivering cost effective, accountable and quality health care. Such an integrated provider entity should receive funds to achieve negotiated predetermined health outcomes for the population being covered. This entity would bear financial risks and rewards and be required to deliver on health care and wellness objectives. Ideally, the strengthened District Hospital should be the leader of this provider network’ (Recommendation 3.1.10).

20.31. The main recommendations of the HLEG are outlined in Box 20.1.

UHC MODELS AROUND THE WORLD

20.32. While many countries subscribe to the objective of UHC there is a great deal of variety in how this objective is achieved. Many countries have adopted a tax-financed model, while others have adopted an insurance based model. Some countries deliver care through salaried public providers; others have adopted capitation as the preferred model for payment for out-patient care, and fee-for-service for in-patient care. A summary of the UHC models in some countries follows.

Canada

20.33. *Medicare* is a regionally administered universal public insurance programme, publicly financed through Federal and Provincial tax revenue. Out-patient services are provided through private providers. All Secondary and Tertiary care services are provided by private and non-profit providers. Primary care payment is mostly ‘Fee for Service’ with some alternatives (for example, capitation). In-patient service payment is through global budget (case-based payment in some provinces) which does not include physician’s cost.

New Zealand

20.34. *National Health Service* is publicly financed through general tax revenue. Outpatient services are provided through private providers. Secondary and Tertiary care services are mostly provided by public, some private providers. Primary care payment is a mix of ‘Capitation’ and ‘Fee for Service’. In-patient service payment is through global budget and case-based payment, which includes physician’s cost.

Germany

20.35. *Statutory Health Insurance* is funded by 180 ‘sickness funds’. Outpatient services are provided through private providers. Secondary and Tertiary care services are provided by public (50 per cent), private non-profit (33 per cent) and private for-profit (17 per cent) providers. Primary care payment is ‘Fee for Service’. In-patient service payment is through global budget and case-based payment, which includes physician’s cost.

Box 20.1
Recommendations of High Level Expert Group on Universal Health Coverage

1. *Health Financing and Financial Protection:* Government should increase public expenditure on health from the current level of 1.2 per cent of GDP to at least 2.5 per cent by the end of the Twelfth Plan, and to at least 3 per cent of GDP by 2022. General taxation should be used as the principal source of healthcare financing, not levying sector specific taxes. Specific purpose transfers should be introduced to equalise the levels of per capita public spending on health across different states. Expenditures on primary healthcare should account for at least 70 per cent of all healthcare expenditure. The technical and other capacities developed by the Ministry of Labour for the RSBY should be leveraged as the core of UHC operations—and transferred to the Ministry of Health and Family Welfare.
2. *Access to Medicines, Vaccines and Technology:* Price controls and price regulation, especially on essential drugs, should be enforced. The Essential Drugs List should be revised and expanded, and rational use of drugs ensured. Public sector should be strengthened to protect the capacity of domestic drug and vaccines industry to meet national needs. Safeguards provided by Indian patents law and the TRIPS Agreement against the country's ability to produce essential drugs should be protected. MoHFW should be empowered to strengthen the drug regulatory system.
3. *Human Resources for Health:* Institutes of Family Welfare should be strengthened and Regional Faculty Development Centres should be selectively developed to enhance the availability of adequately trained faculty and faculty-sharing across institutions. District Health Knowledge Institutes, a dedicated training system for Community Health Workers, State Health Science Universities and a National Council for Human Resources in Health (NCHRH) should be established.
4. *Health Service Norms:* A National Health Package should be developed that offers, as part of the entitlement of every citizen, essential health services at different levels of the healthcare delivery system. There should be equitable access to health facilities in urban areas by rationalising services and focusing particularly on the health needs of the urban poor.
5. *Management and Institutional Reforms:* All India and State level Public Health Service Cadres and a specialised State level Health Systems Management Cadre should be introduced in order to give greater attention to Public Health and also to strengthen the management of the UHC system. The establishment of a National Health Regulatory and Development Authority (NHRDA) a, National Drug Regulatory and Development Authority (NDRDA) and a, National Health Promotion and Protection Trust (NHPPT) is also recommended.
6. *Community Participation and Citizen Engagement:* Existing Village Health Committees should be transformed into participatory Health Councils.
7. *Gender and Health:* There is a need to improve access to health services for women, girls and other vulnerable genders (going beyond maternal and child health).

England

20.36. *National Health Service* is publicly financed through general tax revenue. Outpatient services are provided through both public and private providers. Secondary and Tertiary care services are mostly provided by public, some private providers. Primary care payment is mostly a mix of capitation and pay for performance for private providers, and salaries for public providers. In-patient service payment is through global budget and case-based payment, which includes physician's cost.

Thailand

20.37. *Universal Health Coverage Scheme* is financed through general tax revenues paid to local contracting units on the basis of population size. Outpatient services are provided through both public and

private providers. Secondary and Tertiary care services are provided by public and private providers. Primary care payment is by risk-adjusted capitation. In-patient service payment is through Diagnostic Related Group (DRG) based capped global budget, and fixed rate fees for some services.

Sri Lanka

20.38. *Universal Health Coverage Scheme* is tax-financed and Government operated. Outpatient services are provided through public providers. Secondary and Tertiary care services are provided by both public and private providers. Primary care payment is by Fee for Service. In-patient service payment is through Fee for Service for Public Hospital and Capitation for Private Hospitals.

Mexico

20.39. *Seguro Popular Insurance Scheme* is financed through Federal and State general tax revenues and member's contributions through premiums from informal sector, and progressive contribution from enrolled families. Outpatient services are provided through both public and limited contracting in of private providers. Secondary and Tertiary care services are usually provided by private providers. Primary care payment is a mix of 'Capitation' and 'Fee for Service'. In-patient service payment is through DRG although such payments take place on an ad-hoc, non-systematic basis.

20.40. The evidence from countries that have attempted to move towards UHC points to the critical importance of initial conditions in terms of both what is necessary and what is feasible, in attempting to meet the objectives of improving coverage, expanding access, controlling cost, raising quality, and strengthening accountability.

20.41. In our system, the initial conditions include a large but severely underfunded public sector, a growing but high cost private sector, with serious issues of inadequate quality and coverage in both, and an ineffective regulation.

20.42. In moving forward, there are two key questions:

1. How to combine public and private providers effectively for meeting UHC goals in a manner that avoids perverse incentives, reduces provider induced demand, and that meets the key objectives specified above?
2. How to integrate different types and levels of services—public health and clinical; preventive and promotive interventions along with primary, secondary, and tertiary clinical care—so that continuum of care is assured? Inadequate prevention and inappropriate utilisation of secondary or tertiary care, when primary care should suffice, would result in much higher cost of care.

20.43. Global evidence from different countries' experiences gives us some pointers to answering these questions:

1. A mix of public and private services is the reality of most countries. In order to make this mix work, a strong regulatory framework is essential to ensure that the UHC programme is most effective in controlling cost, reducing provider-induced demand, and ensuring quality.
2. Provider payment mechanisms, in themselves, are not magic bullets, and there are limits to what they can do. Capitation-based networks can reduce disincentives to continuity of care, but by themselves, they will not guarantee it. For this, there have to be, in addition, improvements in service delivery, improvements in human resources and related regulatory development and enforcement.
3. Further, there is a need to build up institutions of citizens' participation, in order to strengthen accountability and complement what the regulatory architecture seeks to do.

20.44. It must be noted that even developed countries have taken decades to evolve networks that can implement alternative models of UHC. Many countries are opting for 'coordinated care' models where primary, secondary and tertiary care is delivered as an integrated framework with the participation of both public and private sector. The need is first to strengthen our public health infrastructure at all levels. It could be supplemented by private service providers as well as Public Private Partnerships (PPPs). Our endeavour, in the long run, is to move towards an organised system of UHC. We should also learn from the service contracting arrangements initiated through RSBY and other State level initiatives.

20.45. In order to achieve health goals, UHC must build on universal access to services that are determinants of health, such as safe drinking water and sanitation, wholesome nutrition, basic education, safe housing and hygienic environment. To aim at achieving UHC without ensuring access to the determinants of health would be a strategic mistake, and plainly unworkable. Therefore, it may be necessary to realise the goal of UHC in two parallel steps: the first, would be clinical services at different levels, defined in an Essential Health Package (EHP), which the Government would finance and ensure provision

through the public health system, supplemented by contracted-in private providers whenever required to fill in critical gaps; second the universal provision of high impact, preventive and public health interventions which the Government would universally provide within the Twelfth Five Year plan (Box 20.2). The UHC would take two plan periods for realisation, but a move in terms of pilots and incremental coverage can begin in the Twelfth Plan itself.

20.46. Roadmap: The present health care delivery system needs reform to ensure better utilisation of resources and health outcomes. The building blocks of the reform in the Twelfth Plan would be as follows. Health Services will be delivered with seamless integration between Primary, Secondary and Tertiary sectors. The Primary Health Care will be strengthened to deliver both preventive, public health and curative, clinical services. Publicly funded health care would predominantly be delivered by public providers. The primary health care providers within the network will act as the gateway to secondary

and tertiary care facilities in the network. Private sector will be contracted in only for critical gap filling. In areas where both public and private contracted in providers co-exist, patients shall have a choice in selecting their provider. Networks of such integrated facilities at different levels will be encouraged to provide a continuum of care, universally accessible and affordable services with the District Hospital as the nodal point. No fee of any kind would be levied on primary health care services with the primary source of financing being from general taxation/public exchequer. Details of the roadmap shall be worked out by the States through UHC pilots after considering global experience and current local structures.

20.47. UHC Models: Various options for financing and organisation of delivery of services need to be carefully explored. Cashless delivery of an Essential Health Package (EHP) to all ought to be the basic deliverable in all models. Since out-patient care and medicines are major elements of household's out-of-pocket and catastrophic expenditure on health,

Box 20.2

Illustrative List of Preventive and Public Health Interventions Funded and Provided by Government

1. Full Immunisation among children under three years of age, and pregnant women
2. Full antenatal, natal and post natal care
3. Skilled birth attendance with a facility for meeting need for emergency obstetric care
4. Iron and Folic acid supplementation for children, adolescent girls and pregnant women
5. Regular treatment of intestinal worms, especially in children and reproductive age women
6. Universal use of iodine and iron fortified salt
7. Vitamin A supplementation for children aged 9 to 59 months
8. Access to a basket of contraceptives, and safe abortion services
9. Preventive and promotive health educational services, including information on hygiene, hand-washing, dental hygiene, use of potable drinking water, avoidance of tobacco, alcohol, high calorie diet and obesity, need for regular physical exercise, use of helmets on two-wheelers and seat belts; advice on initiation of breastfeeding within one hour of birth and exclusively up to six months of age, and complimentary feeding thereafter, adolescent sexual health, awareness about RTI/STI; need for screening for NCDs and common cancers for those at risk
10. Home based newborn care, and encouragement for exclusive breastfeeding till six months of age
11. Community based care for sick children, with referral of cases requiring higher levels of care
12. HIV testing and counselling during antenatal care
13. Free drugs to pregnant HIV positive mothers to prevent mother to child transmission of HIV
14. Malaria prophylaxis, using Long Lasting Insecticide Treated Nets (LLIN), diagnosis using Rapid Diagnostic Kits (RDKit) and appropriate treatment
15. School check-up of health and wellness, followed by advice, and treatment if necessary
16. Management of diarrhoea, especially in children, using Oral Rehydration Solution (ORS)
17. Diagnosis and treatment of Tuberculosis, Leprosy including Drug and Multi-Drug Resistant cases.
18. Vaccines for hepatitis B and C for high risk groups
19. Patient transport systems including emergency response ambulance services of the 'dial 108' model

ambulatory EHP would be a priority and every UHC model would include systems for full and free access to essential generic medicines, through linkages with Government pharmacies (for public providers) and Jan Aushadhi outlets (for all). Since the frequency of use of services, nature of service delivery and cost of services are fundamentally different for out-patient (ambulatory) and in-patient care, and to obviate the possibility of substitution of primary care by secondary and tertiary care, cost of ambulatory care would need to be earmarked in each UHC pilot. An effective health information network that could be accessed by all service providers and patients (for their own records) would enable the continuum of care. All models could learn from the platform developed by RSBY in terms of beneficiary coverage, facility enrolment and prevention of fraud.

20.48. States may be encouraged and partially funded to run at least one, but up to three UHC pilots in districts through the 'Incentive Pool' under NHM. Individual States, in consultation with the MoHFW, expert groups and institutions may finalise the details of the pilot models before roll out. The pilots could explore different models for providing universal access to an EHP, including those by using public facilities in that area after being suitably strengthened, empowered and networked, and a combination of public and private facility networks. The pilot models must demonstrate the comparative advantages and costs of different approaches to UHC that would be appropriate for the level of development and the socio economic context of that state. Medical colleges can be asked to devise rigorous evaluation designs for testing the cost-effectiveness, patient's satisfaction and change in household's out-of-pocket expenses.

20.49. However, before rolling out UHC on pilot mode, preparations for the following items need to be initiated:

1. Frame a national, core Essential Health Package for out-patient and in-patient care for uniform adoption in pilots. It is possible to expand the package of services under RSBY into an EHP, with the vision of replacing an insurance based

system with a tax funded UHC system, over a period of time.

2. The State Health Society should be empowered with requisite resources and its capacity built to administer the coverage.
3. Prepare the UHC Plan as a part of the District Health Action Plan of NHM for the pilot districts and identify the additional items to be covered for EHP.
4. Frame and ensure compliance with Standard Treatment and Referral Guidelines.
5. Strengthen the State and District programme management units to implement the EHP.
6. A robust and effective Health Management Information System which, in the best case scenario, tracks every health encounter and would enable assessment of performance and help in allocating resources to facilities.
7. Register all resident families in the area covered.
8. Build an effective system of community involvement in planning, management, oversight and accountability.
9. Build an effective community oversight and grievance redressal system through active involvement of Local Self-Government Agencies and Civil Society.
10. Develop and strengthen Monitoring and Independent Evaluation Mechanisms.

OUTCOME INDICATORS FOR TWELFTH PLAN

20.50. The Twelfth Plan must work towards national health outcome goals, which target health indicators. The national health goals, which would be aggregates of State wise goals (Table 20.4), are the following:

1. *Reduction of Infant Mortality Rate (IMR) to 25:* At the recent rate of decline of 5 per cent per year, India is projected to have an IMR of 36 by 2015 and 32 by 2017. An achievement of the MDG of reducing IMR to 27 by 2015 would require further acceleration of this historical rate of decline. If this accelerated rate is sustained, the country can achieve an IMR of 25 by 2017.
2. *Reduction of Maternal Mortality Ratio (MMR) to 100:* At the recent rate of decline of 5.8 per cent per annum India is projected to have an MMR

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TABLE 20.4
State-Wise Targets on IMR and MMR in Twelfth Plan

Sl. No	Name of the States/UTs	Recent Status			Target for Twelfth Plan		
		IMR	MMR	Anaemia	IMR	MMR	Anaemia
India		44	212	55.3	25	100	28
1	Andhra Pradesh	43	134	62.9	25	61	31
2	Arunachal Pradesh	32	NA	50.6	19	-	25
3	Assam	55	390	69.5	32	177	35
4	Bihar	44	261	67.4	26	119	34
5	Chhattisgarh	48	269	57.5	28	122	28
6	Goa	11	NA	38	6	-	19
7	Gujarat	41	148	55.3	24	67	28
8	Haryana	44	153	56.1	26	65	28
9	Himachal Pradesh	38	NA	43.3	22	-	22
10	Jammu & Kashmir	41	NA	52.1	24	-	26
11	Jharkhand	39	261	69.5	23	109	35
12	Karnataka	35	178	51.5	15	80	26
13	Kerala	12	81	32.8	6	37	16
14	Madhya Pradesh	59	269	56	34	122	28
15	Manipur	11	NA	35.7	6	-	18
16	Maharashtra	25	104	48.4	15	47	24
17	Meghalaya	52	NA	47.2	30	-	24
18	Mizoram	34	NA	38.6	20	-	19
19	Nagaland	21	NA	NA	12	-	-
20	Odisha	57	258	61.2	33	117	31
21	Punjab	30	172	38	16	78	19
22	Rajasthan	52	318	53.1	30	145	27
23	Sikkim	26	NA	60	15	-	28
24	Tamil Nadu	22	97	53.2	13	44	27
25	Tripura	29	NA	65.1	17	-	33
26	Uttar Pradesh	57	359	49.9	32	163	20
27	Uttarakhand	36	359	55.2	21	163	28
28	West Bengal	32	145	63.2	11	66	32
29	Andaman & Nicobar Islands	23	NA	NA	12	-	-
30	Delhi	28	NA	44.3	15	-	22
31	Chandigarh	20	NA	NA	12	-	-
32	Dadra & Nagar Haweli	35	NA	NA	20	-	-
33	Daman & Diu	22	NA	NA	13	-	-
34	Lakshadweep	24	NA	NA	14	-	-
35	Puducherry	19	NA	NA	11	-	-

Note: States which have opted for targets more ambitious than on pro-rate basis are coloured maroon.

of 139 by 2015 and 123 by 2017. An achievement of the Millennium Development Goal (MDG) of reducing MMR to 109 by 2015 would require an acceleration of this historical rate of decline. At this accelerated rate of decline, the country can achieve an MMR of 100 by 2017.

3. *Reduction of Total Fertility Rate (TFR) to 2.1:* India is on track for the achievement of a TFR target of 2.1 by 2017, which is necessary to achieve net replacement level of unity, and realise the long cherished goal of the National Health Policy, 1983 and National Population Policy of 2000.
4. *Prevention, and reduction of under-nutrition in children under 3 years to half of NFHS-3 (2005–06) levels:* Underweight children are at an increased risk of mortality and morbidity. At the current rate of decline, the prevalence of underweight children is expected to be 29 per cent by 2015, and 27 per cent by 2017. An achievement of the MDG of reducing undernourished children under 3 years to 26 per cent by 2015 would require an acceleration of this historical rate of decline. The country needs to achieve a reduction in below 3 year child under-nutrition to half of 2005–06 (NFHS) levels by 2017. This particular health outcome has a very direct bearing on the broader commitment to security of life, as do MMR, IMR, anaemia and child sex ratio.
5. *Prevention and reduction of anaemia among women aged 15–49 years to 28 per cent:* Anaemia, an underlying determinant of maternal mortality and low birth weight, is preventable and treatable by a very simple intervention. The prevalence of anaemia needs to be steeply reduced to 28 per cent by the end of the Twelfth Plan.
6. *Raising child sex ratio in the 0–6 year age group from 914 to 950:* Like anaemia, child sex ratio is another important indicator which has been showing a deteriorating trend, and needs to be targeted for priority attention.
7. *Prevention and reduction of burden of Communicable and Non-Communicable diseases (including mental illnesses) and injuries:* State wise and national targets for each of these conditions will be set by the Ministry of Health and Family Welfare (MoHFW) as robust systems are put in

place to measure their burden. Broadly, the goals of communicable diseases shall be as indicated in Table 20.5.

8. *Reduction of poor households' out-of-pocket expenditure:* Out-of-pocket expenditure on health care is a burden on poor families, leads to impoverishment and is a regressive system of financing. Increase in public health spending to 1.87 per cent of GDP by the end of the Twelfth Plan, cost-free access to essential medicines in public facilities, regulatory measures proposed in the Twelfth Plan are likely to lead to increase in share of public spending. The Twelfth Plan measures will also aim to reduce out-of-pocket spending as a proportion of private spending on health.

FINANCING FOR HEALTH

20.51. In the Twelfth Plan, general tax revenues would be the principle source of finance for publicly delivered health services supplemented by partnerships with the private sector and, contribution by corporates as a part of their Corporate Social Responsibility. A designated sin tax to finance a part

TABLE 20.5
National Health Goals for Communicable Diseases

Disease	Twelfth Plan Goal
Tuberculosis	Reduce annual incidence and mortality by half
Leprosy	Reduce prevalence to <1/10000 population and incidence to zero in all districts
Malaria	Annual Malaria Incidence of <1/1000
Filariasis	<1 per cent microfilaria prevalence in all districts
Dengue	Sustaining case fatality rate of <1 per cent
Chikungunya	Containment of outbreaks
Japanese Encephalitis	Reduction in mortality by 30 per cent
Kala-azar	Elimination by 2015, that is, <1 case per 10000 population in all blocks
HIV/AIDS	Reduce new infections to zero and provide comprehensive care and support to all persons living with HIV/AIDS and treatment services for all those who require it.

TABLE 20.6
Budget Support for Departments of MoHFW in
Twelfth Plan (2012–17)

(Figures in ₹ Crores)

Budget Support for Central Departments in Eleventh Plan (2007–12) and Twelfth Plan (2012–17) Projections (₹ Crores)			
Department of MoHFW	Eleventh Plan Expenditure	Twelfth Plan Outlay	% Increase
Department of Health and Family Welfare	83,407	2,68,551	322%
Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH)	2,994	10,044	335%
Department of Health Research	1,870	10,029	536%
Aids Control	1,305	11,394	873%
Total MoHFW	89,576	3,00,018	335%

of the health budget can lead to reduced consumption of these harmful items (as tobacco and alcohol) and could be considered.

20.52. For financing the Twelfth Plan the projections envisage increasing total public funding, plan and non-plan, on core health from 1.04 per cent of GDP in 2011–12 to 1.87 per cent of GDP by the end of the Twelfth Plan. In such an event, the funding in the Central Plan would increase to 3 times the Eleventh Plan levels involving an annual increase by 34 per cent (Table 20.6). With the incentive measures proposed, States' total funding, Plan and Non-plan, on Health is expected to increase to three times the Eleventh Plan levels involving a similar annual increase. The Central and State funding for Health, as a proportion of total public sector health funding will remain at 2011–12 levels of 33 per cent and 67 per cent respectively.

20.53. When viewed in the perspective of the broader health sector, which includes schemes of Ministries other than Health aimed at improving the health status of people, namely Drinking Water and Sanitation, Mid-day Meal and Integrated Child

Development Services Scheme the total Government expenditure as a proportion of GDP in the Twelfth Plan is likely to increase from 1.94 per cent of GDP in the last year of the Eleventh Plan to 3.04 per cent in the corresponding year of the Twelfth Plan.

FUNDING AS AN INSTRUMENT OF INCENTIVE AND REFORM

20.54. In the Twelfth Plan, a paradigm shift is envisaged in Central Government funding to ensure that sufficient amounts are made available and, further that they leverage a comparable effort from the States. In the Approach Paper to the Twelfth Plan, it was stated that we should aim at raising the total expenditure on health in the Centre and the States (including both Plan and Non-Plan) to 2.5 per cent of GDP by the end of the Twelfth Plan period. Accordingly, the allocations proposed for the Twelfth Plan makes Health a priority and will allow Central Plan expenditure to expand by about 34 per cent per year. Since the expenditure by the States is double the expenditure by the Centre, it is necessary to ensure that the States match the effort. If this is achieved, the total expenditure of the Centre and the States on Core Health would rise to about 1.87 per cent of GDP at the end of the Twelfth Plan period.

20.55. A key objective is to ensure that the States increase their expenditure on health at the same rate as the Centre. This may become possible if the transfer to the States is made conditional upon a higher expenditure by the States on health. States would be eligible to receive assistance through an incentive grant on the lines being recommended for all Centrally Sponsored Schemes. They would be eligible if they maintain their health expenditure (Plan and Non-Plan) as a proportion of their budget at the base level (average of last three years) at the minimum, and also prepare a State wide health sector plan based on District Health plans. The incentive grant could be operated as an instrument of equity between states, where both performance and need is recognised in making allocative decisions. The details of the proposed arrangement will be worked out by the Ministry of Health and Family Welfare in consultation with Planning Commission.

20.56. Flexibility in Central funding for States may be built in so that States take the lead in devising plans suited to their health needs. The proposal for a flexi fund to the States is being recommended for all Centrally Sponsored Schemes in the Twelfth Plan. Accordingly, in the health sector, within the broad national parameters, States would have the flexibility to plan and implement their own Health Action Plans. A fixed portion of National Health Mission funds could be earmarked to States and UTs, using an objective formula based on the total population and health lag of the State; these baseline funds would be allotted and made known to the States. A sector-wide Memorandum of Understanding (MoU) between the State and Central Government may formalise mutual commitments and provide strategic direction for health sector reforms.

OTHER MODELS OF FINANCING

20.57. Public-Private Partnerships: PPPs offer an opportunity to tap the material, human and managerial resources of the private sector for public good. But experience with PPP has shown that Government's capacity to negotiate and manage it is not effective. Without effective regulatory mechanisms, fulfillment of contractual obligations suffers from weak oversight and monitoring. It is necessary, as the HLEG has argued, to move away from ad hoc PPPs to well negotiated and managed contracts that are regulated effectively keeping foremost the health of the 'aam-admi'. Health has been included with other infrastructure sectors which are eligible for Viability Gap Funding up to a ceiling of 20 per cent of total project costs under a PPP scheme. As a result, private sector could propose and commission projects, such as hospitals and medical colleges outside metropolitan areas, which are not remunerative per se, and claim up to 20 per cent of the project cost as grant from the Government. Some models of PPP in healthcare covering Primary Health Care, Diagnostic services, Hospitals which are currently being implemented in the States are illustrated in Box 20.3. These can be considered wherever appropriate for replication and upscaling.

20.58. PPP arrangements should address issues of compliance with regulatory requirements,

observance of Standard Treatment Guidelines and delivery of affordable care. An additional model for consideration is the Not-for-profit Public Private Partnership (NPPP) being followed in the International Institute of Information Technology (IIIT), which have been set up as fully autonomous institutions, with partnership of the Ministry of Human Resource Development, Governments of respective States and industry members. PPP and Not-for-Profit PPP models can be considered in order to expand capacities for tertiary care in the Twelfth Plan.

20.59. Resource generation by facilities and Colleges: Given the gap in need and availability of tertiary care facilities and to ensure maximisation of benefits from limited public funds, public facilities should be encouraged to part-finance their recurring costs by mobilising contributions (including under Corporate Social Responsibility) and Internal Extra-Budgetary Resources. Under the recently drafted Companies Bill, the Government has proposed that companies should earmark 2 per cent of their average profits of the preceding three years for Corporate Social Responsibility (CSR) activities. CSR is mandatory for Central Public Sector Enterprises, the guidelines of which issued by the Department of Public Enterprises include health service as one of the eligible components. To avail of this opportunity, all publicly funded health care facilities would be allowed to receive donations, and funding from companies under their Corporate Social Responsibility head. Adequate safeguards have to be built in so as to ensure 'no-frills funding' and that donations are not used to influence the policies or practices of healthcare facilities in any way. All medical colleges should be encouraged to develop their own corpus to attain financial flexibility over a period of time. Tamil Nadu has issued guidelines to authorise Medical Officers in charge of particular healthcare facilities to enter into MoUs with interested persons to receive contributions for capital or recurrent expenditure in the provision and maintenance of facilities. On available models for self-generation of revenues, the option for cross-subsidy in line with the Aravind eye care system based in Tamil Nadu could also be explored. Tertiary care

Box 20.3
Public–Private Partnerships (PPP) in Health Sector

Tertiary Care: Rajiv Gandhi Super-speciality Hospital, Raichur, Karnataka

Contracting Arrangements: Government of Karnataka and Apollo Hospitals

Type of Partnership: Joint Venture (Management Contract)

Services: Provides super-speciality clinical care services and management of Hospital. Free Out-patient services for BPL patients.

Rural Health Care Delivery and management of PHCs

Contracting Arrangements: Karuna Trust and Government of Arunachal Pradesh

Type of Partnership: Contracting in

Services: Manages 11 PHC's, provides health care facilities to the local population.

Labs, Drug Supply and Diagnostic Services: Hindlabs

Contracting Arrangements: MoHFW and HLL Life Care Ltd

Type of Partnership: Contracting in

Services: A novel initiative, delivers high end diagnostic services at CGHS rates

Health Insurance: Community Health Insurance Scheme

Contracting Arrangements: Karuna Trust, National Insurance Co. and Government of Karnataka

Type of Partnership: Joint Venture

Services: A community health insurance scheme to improve the access and utilisation of health services

Outreach/Health Delivery: Mobile Health Service in Sunderban, W. Bengal

Contracting Arrangements: Government of West Bengal and Non-profit NGO

Type of Partnership: Contracting in (Joint Venture)

Services: Mobile boat based health services and access to health services in remote areas

RCH Services: Merry Gold Health Network (MGHN) and SAMBHAV Voucher Scheme in UP

Contracting Arrangements: Joint endeavour of Government of India and USAID through UP SIFPSA

Type of Partnership: Social Franchising network and Voucher system

Services: Provide FP/RCH services through accredited private providers

facilities would have an incentive to generate revenues if they are allowed flexibility in the utilisation of self-generated resources within broad policy parameters laid down by the Government.

RASHTRIYA SWASTHYA BIMA YOJANA (RSBY)

20.60. Health insurance is a common form of medical protection all over the world and until the Eleventh Plan, it was available only to government employees, workers in the organised sector; private health insurance has been in operation for several years, but its coverage has been limited. The percentage of the total population estimated to be covered under these schemes was only 16 per cent. The poor did not have any insurance for in-patient care. The

'Rashtriya Swasthya Bima Yojana' (RSBY), introduced in 2007, was designed to meet the health insurance needs of the poor.

20.61. RSBY provides for 'cash-less', smart card based health insurance cover of ₹30,000 per annum to each enrolled family, comprising up to five individuals. The beneficiary family pays only ₹30 per annum as registration/renewal fee. The scheme covers hospitalisation expenses (Out-patient expenses are not covered), including maternity benefit, and pre-existing diseases. A transportation cost of ₹100 per visit is also paid. The premium payable to insurance agencies is funded by Central and State Governments in a 75:25 ratio, which is relaxed to 90:10 for the

North-East region and Jammu and Kashmir. The maximum premium by the Central Government is limited to ₹750 per insured family per year.

20.62. RSBY was originally limited to Below Poverty Line (BPL) families but was later extended to building and other construction workers, MGNREGA beneficiaries, street vendors, beedi workers, and domestic workers. The scheme is currently being implemented in 24 States/UTs. About 3.3 crore families have been covered as on date and 43 lakh persons have availed hospitalisation under the scheme till November 2012.

20.63. Key feature of RSBY is that it provides for private health service providers to be included in the system, if they meet certain standards and agree to provide cash-less treatment which is reimbursed by the insurance company. This has the advantage of giving patients a choice between alternative service providers where such alternatives are available. Several State Governments (such as those of Andhra Pradesh and Tamil Nadu) have introduced their own health insurance schemes, which often have a more generous total cover.

20.64. A general problem with any 'fee for service' payment system financed by an insurance mechanism is that it creates an incentive for unnecessary treatment, which in due course raises costs and premiums. There is some evidence that this is happening and it is necessary to devise corrective steps to minimise it. Some groups oppose insurance schemes per se on these grounds, but that is not realistic. The beneficiary is able to choose from alternative care givers covered by a common insurance scheme. Experience with the RSBY, and with the other State-specific insurance schemes, needs to be thoroughly studied so that suitable corrective measures can be introduced before integrating these schemes into a framework of Universal Health Coverage (UHC). The shortcomings of RSBY noted so far include high transaction costs due to insurance intermediaries, inability to control provider induced demand, and lack of coverage for primary health and out patient care. Fragmentation of different levels of care can lead to an upward escalation towards the secondary level of patients who should preferably

be handled at the primary or even preventive stages. The RSBY also does not take into account state specific variations in disease profiles and health needs.

Innovative Payment Methods to Improve Outcomes

20.65. The weakness of line item budget payment methods for public facilities is well documented. More responsive resource allocation is a challenge for the Government. Investments in public facilities will translate into better access, coverage, quality of care and superior health outcomes only if these facilities and their personnel perform their expected tasks in a responsive manner. Payment methods could be used as one of the instruments to improve public sector performance. For example, managers and health personnel in public sector facilities could be paid bonus for achieving higher coverage of services as measured by reduction in the use of private sector services in the coverage area (unless these are contracted in by the Government); they can be paid further incentives for delivering preventive care services effectively and achieving measurable health outcomes in their respective areas. UHC pilots to be rolled out by States could experiment with different methods of organisation and delivery of services, and payment systems so that resources allocated are able to generate better health outcomes.

Health Care for Government Employees

20.66. There is a proposal for introduction of a health insurance scheme for the Central Government employees and pensioners on a pan-India basis, with special focus on pensioners living in non-CGHS areas. The proposal is to make this scheme voluntary cum contributory for serving employees and pensioners. However, it is proposed to be made compulsory for the new entrants in Government service.

HEALTH AND MEDICAL REGULATION

20.67. Regulations for food, drugs and the medical profession requires lead action by the Central Government not only because these subjects fall under the Concurrent List in the Constitution, but also because the lack of consistency and well enforced standards hugely impacts the common citizen and diminishes health outcomes. Keeping in

view the need to place authority and accountability together, the proposed Public Health Cadre in States would be expected to be the single point for enforcement of all health related regulations.

20.68. There is also an urgent need to strengthen the regulatory systems in the States, where most of the implementation rests. This would entail the strengthening of and establishment of testing labs and capacity building of functionaries. Such proposals will be part-funded under the National Health Mission (NHM). Regulation can be made affordable and effective by encouraging self-regulation, and entrusting responsibility to Public Health officers.

DRUG REGULATION

20.69. E-governance systems that inter-connect all licensing and registration offices and laboratories, GPS based sample collection systems and online applications for licensing would be introduced. A repository of approved formulations at both State and national levels would be developed. The drug administration system would build capacity in training, and encourage self regulation.

20.70. The MoHFW would ensure that irrational Fixed Dose Combinations (FDCs) and hazardous drugs are weeded out in a time bound manner.

20.71. Pharmaco-vigilance, post-marketing surveillance, Adverse Drug Response Monitoring, quality control, testing and re-evaluation of registered products would be accorded priority under drug regulation.

20.72. Use of generic names or the International Non-proprietary Name (INN) would be made compulsory and encouraged at all stages of Government procurement, distribution, prescription and use, as it contributes to a sound system of procurement and distribution, drug information and rational use at every level of the health care system. Established brand manufacturers would be encouraged to bid for Government procurement, but should provide medicines in non-proprietary names.

20.73. The Drugs and Cosmetics Act would be amended to include medical devices incorporating provisions for their risk-based classification, clinical trials, conformity assessments and penalties. As recommended by the Mashelkar Committee, a Central Drug Authority needs to be set up. This authority would review the issuance of licenses for manufacture and sale of drugs. Once this Authority is in place, suitable strengthening of its infrastructure and laboratories would be done. The Government would mandate that labels on drugs and food fully disclose all its ingredients.

20.74. Strengthening of existing, and creation of new drug testing laboratories is essential to ensure the quality of drugs being produced in India, whether they are used for domestic distribution or for export to other countries.

20.75. A National List of Essential Medicines would be made operational with the introduction of Standard Treatment Guidelines, including for AYUSH. It would be printed and supplied to all facilities at regular intervals. These guidelines would incorporate generic prescriptions. Implementation of Standard Treatment Guidelines in the public and private sectors is a priority to address drug resistance, promote rational prescriptions and use of drugs, and contain health care costs.

20.76. Pharmaceutical marketing and aggressive promotion also contributes to irrational use. There is a need for a mandatory code for identifying and penalising unethical promotion on the part of Pharma companies. Mandated disclosure by Pharmaceutical companies of the expenditure incurred on drug promotion, ghost writing in promotion of pharma products to attract disqualification of the author and penalty on the company, and vetting of drug related material in Continuing Medical Education would be considered. To avoid medical conflicts of interest, legislation requiring drug companies to disclose payments made to doctors for research, consulting, lectures, travel and entertainment would also be considered.

20.77. MoHFW would encourage public and patient education in the appropriate use of drugs, particularly antibiotics and antimicrobials, since it would benefit individual patients and public health.

20.78. Institutional frameworks for regulation of clinical research and trials to ensure safety of research subjects will be a priority. In addition, efficient assessment and approval of new technologies, drugs and devices would also be done. The process of approval and introduction of new medical technologies, and devices, would be notified. India still has to safeguard itself from TRIPS plus provisions which will evergreen patents for more than 20 years. Safeguards like compulsory licensing, parallel imports, and so on, need to be adopted to protect nation's public health.

FOOD REGULATION

20.79. The newly established Food Safety and Standards Authority of India (FSSAI) would strive to improve transparency in its functioning and decision making. Bio-safety would be an integral part of any risk assessment being undertaken by FSSAI.

20.80. Food surveys would be carried out regularly and their results made public. An annual report on state of food safety would be published.

20.81. Policies to promote production and consumption of healthy food would be developed. Sale and consumption of unhealthy food would be discouraged in general and in schools in particular. Public information campaigns to create awareness on food safety matters will be launched.

20.82. An appropriate module on food safety and bio-safety will be introduced in the Medical and Nursing curriculum.

REGULATION OF MEDICAL PRACTICE

20.83. The provisions for registration and regulation of clinical establishments would be implemented effectively; all clinical establishments would also be networked on the Health Information System, and mandated to share data on nationally required parameters. The Government would

consider mandating evidence based and cost-effective clinical protocols of care, which all providers would be obliged to follow. It would endeavour to gradually move towards a regime where clinical decision-making would be routinely subjected to prescription audits to confirm compliance. The rights of patients to obtain rational treatment of good quality at reasonable cost would be protected. Professional councils and faculty in medical colleges shall be encouraged to undertake prescription audits to assess extent of compliance with Standard Treatment Guidelines for identifying violations of guidelines and taking appropriate action. There is a need to revise and strengthen the existing regulatory mechanism for medical practice to prevent wilful negligence and malpractice. Grievance redressal mechanisms would be put in place.

20.84. Since there are no legislations on registration of clinical establishments in many States, and the ones existing (as in States of Andhra Pradesh, Maharashtra, Delhi, Madhya Pradesh, Manipur, Nagaland, Odisha, Punjab and West Bengal) have major gaps, all States will be persuaded to adopt the Central Act under Clause (1) of Article 252 of the Constitution.

20.85. An appropriate regulatory mechanism would be considered to ensure compulsory rural service by medical graduates. Concurrently, a set of monetary and non-monetary incentives would be built up to encourage doctors and allied health cadres to serve in rural areas.

20.86. Effective enforcement of the provisions of Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act and relentless public awareness measures would be put in place. A concerted societal conscientisation and communication campaign would be launched to create value for the girl child and women, along with affirmative action for girls. Local Self Government Institutions, specially the newly elected women panchayat and urban local body members, would be mobilised to change deeply entrenched behaviours and mind-sets about the girl child. Panchayats and urban local bodies which are able to achieve a reversal of the

falling trend in child sex ratio would be recognised and awarded, along the lines of the Nirmal Gram Puraskar.

NATIONAL LEVEL TERTIARY CARE INSTITUTIONS

20.87. A single Central Sector Scheme on 'National Level Tertiary Care Institutions' will fund up-gradation of existing medical colleges and converting tertiary care facilities of the Central Government across different departments into teaching institutions.

20.88. In the Twelfth Five Year Plan a concerted effort needs to be made to confer greater autonomy to the existing Tertiary Care Institution and Hospitals. They need to be delegated greater administrative and financial powers and need to be empowered to function as effective Board managed entities (see Box 20.4).

20.89. In the Central Government sector, more AIIMS like Institutions (ALIs) will be established during the Twelfth Plan period in addition to the eight already approved. These would be completed and made operational during the Plan period. They will serve as composite centres for continued professional education, and multi-skilling of health workers.

20.90. The existing teaching institutions will be strengthened to provide leadership in research and practice on different medical conditions, and research themes. Priorities include Cancer, Arthritis and musculo-skeletal diseases, Child Health, Diabetes, Mental Health and Neuro Sciences, Geriatrics, Biomedical and Bioengineering, Hospital and Health Care Administration, Nursing Education and Research, Information Technology and Tele-Medicine and Complementary Medicine.

20.91. Centres of Excellence need to be created for training public health professionals in epidemiology, entomology and microbiology for effective disease surveillance and disease outbreak investigations and for effectively responding to outbreaks, epidemics and disasters, and also for AYUSH.

20.92. A continuous stream of qualified teachers would be required for serving in the new teaching institutions proposed. Apex institutions of learning like AIIMS, Post Graduate Institute of Medical Education and Research (PGIMER) and Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER) will be geared to build capacity in regional and State teaching institutions for training of trainers.

20.93. A new category of mid-level health-workers named Community Health Officers, could be developed for primary health care. These workers would be trained after Class XII for a three year period to become competent to provide essential preventive and primary care and implement public health activities at sub-centre level. Details of their functions, qualifications, designations, placement and career tracks within the health system need to be worked out. This new category offers an opportunity to break through professional silos, develop competencies that draw upon different but complementary streams of knowledge and help generate employment while meeting health needs of under-served populations. These Community Health Officers would be groomed to discharge public health functions.

20.94. Simultaneously, programmes for Continuing Medical Education would be strengthened and expanded. Agencies such as the National Academy

Box 20.4

Institute of Liver and Biliary Sciences, Delhi: A Model of Autonomy and Sustainable Financing

The Institute is a super specialty medical institute under Government of NCT Delhi that seeks to provide quality tertiary health care. Its services: are free for BPL card holders of Delhi, and charges for other classes are competitive. Its business model aims at attaining efficiency and self sustenance.

The Institute is governed by a Society in an autonomus manner, which aims to combine the skills and structure of academic Universities, clinical and research acumen of the super-specialists and the managerial skills of the corporate world.

of Medical Sciences can play a useful role in providing good quality teaching material and also help in its dissemination, by using the National Knowledge Network.

20.95. Good health planning requires high quality data on estimates of supply and demand of various categories of health workers. Accurate data on the number, specialisation, distribution, status of practice of health professionals in the country is, however, not available. Professional Councils in respective States and at the national level should therefore, continually update their records on Human Resources, trying to take into account the extent of internal and international migration. The MoHFW would exercise due vigilance to ensure this.

20.96. Licensing of medical professionals with a view to control the entry of unqualified persons into the market is governed by various laws. The National Commission for Human Resources and Health (NCHRH) would be created as an overarching regulatory body for medical education and allied health sciences with the dual purpose of reforming the current regulatory framework and enhancing the supply of skilled human resource in the health sector. The proposed Commission would subsume many functions of the existing councils, namely Medical Council of India, Dental Council of India, Nursing Council of India and Pharmacy Council of India. The proposed NCHRH would also constitute a National Board for Health Education (NBHE) and a National Evaluation and Assessment Committee (NEAC) with a mandate to prescribe minimum standards for health education, and developing and maintaining a system of accreditation of health educational institutes respectively. Apart from this, a National Council has also been proposed to be set up under NCHRH to inter alia ensure ethical standards among medical professionals. The NCHRH is expected to assess the demand and availability to plan for the creation of the right mix of human resource in health.

INFORMATION TECHNOLOGY IN HEALTH

20.97. Information Technology can be used in at least four different ways to improve health care and systems:

1. Support public health decision making for better management of health programmes and health systems at all levels
2. Support to service providers for better quality of care and follow up
3. Provision of quality services in remote locations through Tele-medicine
4. Supporting education, and continued learning in medicine and health

20.98. A composite HIS, when fully operational, would incorporate the following:

1. Universal registration of births, deaths and cause of death. Maternal and infant death reviews.
2. Nutritional surveillance, particularly among women in the reproductive age group and children under six years of age.
3. Disease surveillance based on reporting by service providers and clinical laboratories (public and private) to detect and act on disease outbreaks and epidemics.
4. Out-patient and in-patient information through Electronic Medical Records (EMR) to reduce response time in emergencies and improve general hospital administration.
5. Data on Human Resource within the public and private health system
6. Financial management in the public health system to streamline resource allocation and transfers, and accounting and payments to facilities, providers and beneficiaries. Ultimately, it would enable timely compilation of the National Health Accounts on an annual basis.
7. A national repository of teaching modules, case records for different medical conditions in textual and audio-visual formats for use by teaching faculty, students and practitioners for Continuing Medical Education.

8. Tele-medicine and consultation support to doctors at primary and secondary facilities from specialists at tertiary centres.
9. Nation-wide registries of clinical establishments, manufacturing units, drug-testing laboratories, licensed drugs and approved clinical trials to support regulatory functions of Government.
10. Access of public to their own health information and medical records, while preserving confidentiality of data.
11. Programme Monitoring support for National Health Programmes to help identify programme gaps.

20.99. To achieve these goals, computer with internet connectivity would be ensured in every PHC and all higher level health facilities in this Plan period. Connectivity can be extended to sub-centres either through computers or through cell phones, depending on their state of readiness and the skill-set of their functionaries. All District hospitals would be linked by tele-medicine channels to leading tertiary care centres, and all intra-District hospitals would be linked to the District hospital and optionally to higher centres.

20.100. The role of the MoHFW would be to lay IT system standards, and define indicators which would be openly shared. States will be funded for their initiatives in this field at primary or secondary levels through the National Health Mission. Health surveys would be annually conducted to generate district level information on health status, which will also serve to verify the accuracy of routine health information system

NATIONAL HEALTH MISSION (NHM)

20.101. The Prime Minister in his Independence Day speech, 2012 had declared: 'After the success of the National Rural health Mission, we now want to expand the scope of health services in our towns also. The National Rural Health Mission will be converted into a National Health Mission (NHM) which would cover all villages and towns in the country.'

20.102. The gains of the flagship programme of NRHM will be strengthened under the umbrella of NHM which will have universal coverage. The focus on covering rural areas and rural population will continue.

20.103. A major component of NHM is proposed to be a Scheme for providing primary health care to the urban poor, particularly those residing in slums. Modalities and institutional mechanisms for roll-out of this scheme are being worked out by the Ministry of Health and Family Welfare in consultation with Planning Commission. NHM would give the States greater flexibility to make multi-year plans for systems strengthening, and addressing threats to health in both rural and urban areas through interventions at Primary, Secondary and Tertiary levels of care. The roles and responsibilities of the Centre and States in the health sector would be made operational through instruments such as State specific and Sector-wide Memoranda of Understanding (MoU). The MoU mechanism is a tool for collective priority setting, involves agreement on measurable outcomes and their relative weight, allows flexibility in implementation and accountability based on objective assessment and incentivisation of performance.

20.104. The targets in the MoU would be finalised through a consultative process so that there is a consensus. The MoU will cover the entire health sector, be subject to rigorous monitoring, and linked to a performance based appraisal and incentive system. The MoU would include important policy reforms, which may not necessarily have budgetary implications such as regulation, HR policies, inter-sectoral convergence, use of generic medicines. The MoU can have a set of obligatory parameters, state specific optional parameters and reform parameters. The MoU will follow the log frame approach in setting inputs, outputs, outcomes and impact goals for the districts and States. System-wide MoUs between Centre and States would allow a lot of flexibility to the latter to develop their own strategies and plans for delivery of services, while committing the States to quantitative, verifiable and mutually agreed upon outputs and outcomes.

20.105. In addition to the Common Review Mission, a methodology of external concurrent evaluation would be finalised and put in place to assess the progress in MoU goals. These reports will be placed before the Mission Steering Group at the national level and before the Governing Body of the State and district health societies. All major programme components would be evaluated as part of operational research and programme evaluation.

20.106. The National Health Mission will incorporate the following core principles.

CORE PRINCIPLES

Universal Coverage

20.107. The NHM shall extend all over the country, both in urban and rural areas and promote universal access to a continuum of cashless, health services from primary to tertiary care. Separate strategies shall be followed for the urban areas, using opportunities such as easier access to secondary and tertiary facilities, and better transport and telecommunication services. There is greater scope for contracting arrangements with the private sector in urban areas, to fill gaps in strengthened public facilities. Area specific NHM plans shall address the challenges unique to their areas such as overcrowding, poor sanitation, pollution, traffic injuries, higher rates of crime and risky personal behaviour in urban areas.

Achieving Quality Standards

20.108. The IPHS standards will be revised to incorporate standards of care and service to be offered at each level of health care facility. Standards would include the complete range of conditions, covering emergency, RCH, prevention and management of Communicable and Non-Communicable diseases incorporating essential medicines, and Essential and Emergency Surgical Care (EESC).

20.109. All government and publicly financed private health care facilities would be expected to achieve and maintain these standards. An in-house quality management system will be built into the design of each facility, which will regularly measure its quality achievements. Facilities will be provided

with an incentive, which they can share with their teams, to achieve and improve their quality rating. The service and quality standards shall be defined, made consistent with requirements under the Clinical Establishments Act, and performance of each registered facility made public, and periodically ranked. The work of quality monitoring will be suitably institutionalised.

20.110. To enable access to quality diagnostic facilities, pooling of resources available with different agencies, their up-gradation wherever needed, outsourcing and in-sourcing strategies would be adopted.

20.111. The objective would be to achieve a minimum norm of 500 beds per 10 lakh population in an average district. Approximately 300 beds could be at the level of District Hospitals and the remaining distributed judiciously at the CHC level. Where needed, private sector services also may be contracted in to supplement the services provided by the public sector. The sanction of new facilities other than sub-centres should be undertaken only when mapping of access demonstrates the need for new facilities to improve accessibility.

20.112. States would be encouraged to put in place systems for Emergency Medical Referral to bridge the gaps in access to health facilities and need for transport in the event of an emergency. Standards for these services will specify the time taken to transport patients from the location to designated health facilities, and these standards shall be evaluated and followed. The possibility of positioning such referral with the response teams of Fire-Fighting Departments, as is the practice in many developed nations, should be explored. These facilities, once operational, would also help in managing disasters, in terms of early response, search and rescue, emergency care and rehabilitation.

20.113. For ensuring access to health care among under-served populations, the existing Mobile Medical units would be expanded to have a presence in each CHC. Mobile Medical Units may also be dedicated to certain areas, which have moving populations. For example, boat clinics of C-NES in Assam

provide curative and emergency care for the population residing in islands and flood plains of the State.

Continuum of Care

20.114. A continuum of care across health facilities helps manage health problems more effectively at the lowest level. For example, if medical colleges, district hospitals, CHCs, PHCs and sub-centres in an area are networked, then the most common disease conditions can be assessed, prevented and managed at appropriate levels. It will avoid fragmentation of care, strengthen primary health care, reduce unnecessary load on secondary and tertiary facilities and assure efficient referral and follow up services. Continuum of care can lead to improvements in quality and patient satisfaction. Such linkages would be built in the Twelfth Plan so that all health care facilities in a region are organically linked with each other, with medical colleges providing the broad vision, leadership and opportunities for skill up-gradation. The potential offered by tele-medicine for remote diagnostics, monitoring and case management needs to be fully realised. Appropriate faculty at the medical college can be given responsibility for training, advising and monitoring the delivery of services in facilities within their allotted jurisdiction. The resources saved in avoiding duplication could

be used to universalise the upgrading of standards of health facilities and teaching colleges.

Decentralised Planning

20.115. A key element of the new NHM is that it would provide considerable flexibility to States and Districts to plan for measures to promote health and address the health problems that they face (Box 20.5). The NHM guidelines could provide flexibility to States and districts to plan for results.

20.116. New health facilities would not be set up on a rigid, population based norm, but would aim to be accessible to populations in remote locations and within a defined time period. The need for new facilities of each category would thus be assessed by the districts and States using a 'time to care' approach. This will be done based on a host of contributing factors, including geographic spread of population, nature of terrain, availability of health care facility in the vicinity and availability of transport network. For example, a travel time of 30 minutes to reach a primary healthcare facility, and a total of two hours to reach a FRU could be a reasonable goal. As for staffing, the healthcare facilities should have a basic core staff, with provisions for additional hands in response to an increase in case load, or the range of services

Box 20.5

Flexibility and Decentralised Planning: Key Elements of National Health Mission

1. The guidelines of NHM would be indicative and within broad parameters leave the decision on prioritisation of requirements to the best judgement of the States and Districts. Each District would develop, through effective public participation, a multi-year Health Action Plan for prevention, service delivery and systems management. These plans would become the basis for resource allocation and be made public to enable social audits of the progress made towards the goals. The implementation of these plans would involve the local community. The outcomes of these plans would be subject to Community Based Monitoring (CBM).
2. Health Action Plans at District level and below will aim at convergent delivery of services in an integrated manner to the last beneficiary. The District Health Plans would factor in all determinants of health, and assign roles to each agency for achieving convergence. For instance, these plans can leverage the mid-day meal programme for addressing issues of school child malnutrition and anaemia. Joint training of AWWs and ASHAs would be promoted to build camaraderie and clarity on mutual roles and responsibilities. Anganwadi Centres could be used as base stations for ASHAs, and upgraded into health posts for the delivery of essential health services.
3. Innovations in service delivery to improve coverage, quality of care, health outcomes and reduce costs would be encouraged, and recognised.
4. The sector-wide health plans prepared by the States should incorporate all dispensations of health and health care, and all sources of funding. For instance, medical education, AYUSH, AIDS control, Health Research, convergence with ICDS and Drinking Water and Sanitation would find space in the state health plans.

provided. Indian Public Health Standards (IPHS) would be revised accordingly. Individual States can choose from a range of staffing options, including those suggested by the Working Group on NRHM and by the HLEG, both options will be included in the Central funding envelop. Such flexibility to States in location, size and staffing of the health care facilities would ensure optimum utilisation of existing resources, and infrastructure. Every Panchayat and urban municipal ward should have at least one sub-centre. The sub-centre's package of assured services, and consequent staffing will vary according to the epidemiological and health systems contexts.

PRIORITY SERVICES

Access to Essential Medicines in All Public Facilities

20.117. Availability of essential medicines in public sector health facilities free of cost is critical to achieve affordable health care for the bulk of the population. This is the area which provides the speediest scope for improved service delivery in return for allocation of sufficient resources. A set of measures including revision and expansion of the Essential Drugs List, ensuring the rational use of drugs, strengthening the drug regulatory system, and supporting the setting up of national and state drug supply logistics corporations is being recommended as core components. States would be encouraged to plan and partially fund universal access to essential drugs and diagnostic services in all government health care facilities. Drug supply would be linked to centralised procurement at state level to ensure uniform drug quality and cost minimisation by removing intermediaries.

20.118. The provision of essential medicines free of cost must be backed by logistic arrangements to procure generic medicines from suppliers of repute that match pre-qualifying standards. The MoU instrument shall be used to encourage States to adopt the TNMSC model, for professional management of procurement, storage and logistics. Support to rational and generic drug prescription for the private sector requires a different approach. This can be achieved through expansion of the existing Jan Aushadhi stores in all sub-divisions and blocks.

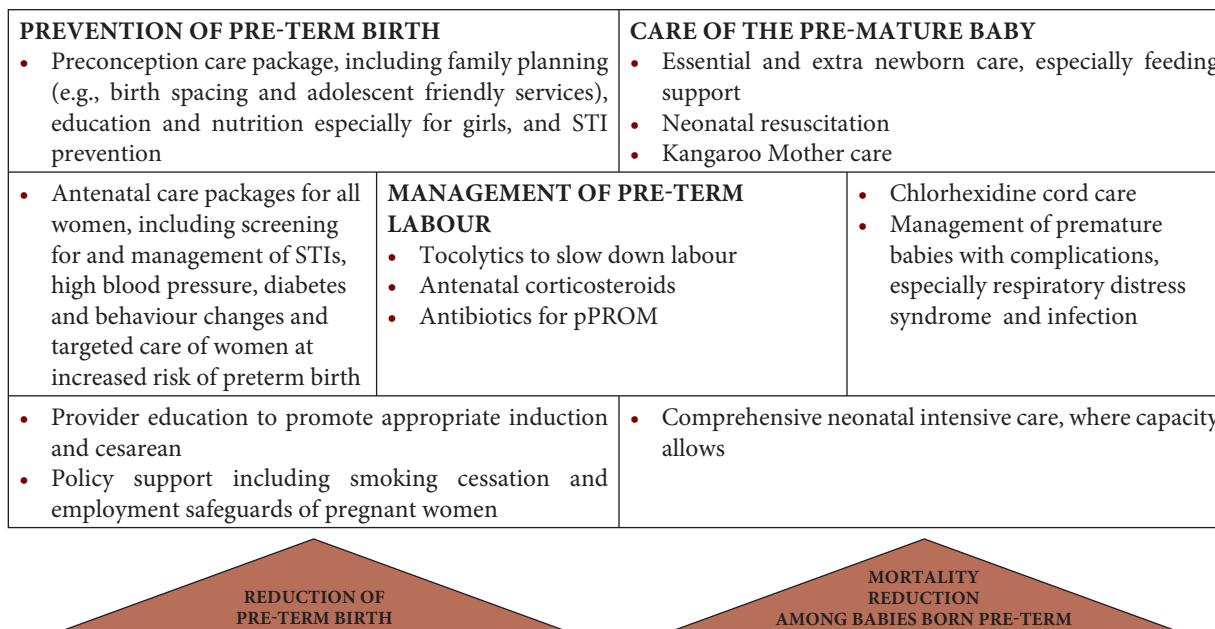
These stores could be linked to centralised procurement at state level.

Strategy for Maternal and Child Health

20.119. Maternal and child health care will continue to be a major focus, especially given the inadequate progress in reducing IMR and MMR. Programme monitoring needs to track experiences and outcomes of women rather than only disbursement of cash. Training being provided to the Skilled Birth Attendants (SBA) needs to be evaluated independently. Plans need to be made for rational posting of those SBAs who have received this training, so as to reach the maximum population with skilled attendance at birth. Appropriate area-specific interventions will be made such as equipping Traditional Birth Attendants (TBAs)/dais for safe deliveries, (especially in remote and inaccessible areas) universalising access to the SBA over a period of time, and prioritising better access to emergency obstetric care (both public and private) within a two-hour travel time in cases of complications. The quality of care being provided in routine institutional deliveries needs to be carefully monitored and accessible grievance redressal mechanisms put in place.

20.120. Simple strategies for prevention of pre-term births, and reducing deaths among pre-term babies can make a difference in survival and health of children during the critical first month of life. These will be built into protocols for health workers and standards for health facilities (Figure 20.3).

20.121. Home-based newborn care, drawing on validated models, such as that of Gadchiroli in Maharashtra, and focused efforts to encourage breastfeeding and safe infant and child feeding practices will be promoted. While emphasis on early breastfeeding is a part of Accredited Social Health Activists' (ASHAs) training, special training on neonatal care for community and facility-level health functionaries will result in a faster reduction in IMR. The findings of Maternal Death Reviews and Infant death audits will be used to fill gaps in health systems, in skills and service provision. Control and management of diseases like malaria, TB and HIV/AIDS, and conditions like hypertension and gestational



Source: Born too Soon: Global Action Report on Pre-term births, WHO 2012; pPROM: Premature Rupture of Membrane.

FIGURE 20.3: Strategies to Prevent Pre-Term Births and Manage Pre-Term Babies

diabetes which are directly related to maternal mortality would be integrated with RCH service delivery.

20.122. AYUSH doctors, wherever feasible, would be given SBA, RCH and IMNCI training and their services will be used in meeting unmet needs. This will increase the availability of trained human resource for better outreach of child and maternal health services.

Universal Immunisation Coverage

20.123. The goal of ensuring universal coverage of routine immunisation through campaigns in districts throughout the country is now within reach and will be achieved by the end of the Twelfth Plan. Registered Medical Practitioners (RMPs) will be used in this effort, wherever feasible. There is need for expanding the use of available vaccines for various preventable diseases through an evidence based approach. The existing alternate vaccine delivery mechanism through mobile immunisation services for outreach work will be upgraded. Other disease specific recommended strategies will also be adopted; such as, in the case of measles, periodic Supplemental Immunization Activities (SIAs), that

is, mass vaccination campaigns aimed at immunising 100 per cent of a predefined population within several days or weeks, introduction of a routine second dose in high prevalence states, laboratory-supported surveillance, and appropriate management of measles cases. Public awareness of the benefits of immunisation will be built, so that they demand the services. Effective implementation of the Mother and Child Tracking system and Mother and Child Protection Card jointly issued by the MoHFW and the MoWCD would be used in capturing immunisation data better. Electricity supply will be ensured, especially at places where cold chains are maintained.

Family Welfare

20.124. The experience of Indonesia and Japan shows that, as compared to limiting methods, emphasis on family spacing methods like IUCD and male condoms has had a better impact in meeting the unmet needs of couples. A recent study has estimated that meeting unmet contraception needs could cut maternal deaths by one-third. There is, therefore, a need for much more attention to spacing methods such as, long term IUCD. IUCD insertion

on fixed days by ANMs (under supervision of LHV for new ANMs) would be encouraged. Availability of MTP by Manual Vacuum Aspiration (MVA) technique and medical abortions will be ensured at fixed points where Mini-Laparotomy is planned to be provided. Services and contraceptive devices would be made easily accessible. This would be achieved through strategies including social marketing, contracting and engaging private providers. Post-partum contraception methods like insertion of IUD which are popular in countries like China, Mexico, and Egypt and male sterilisation would be promoted while ensuring adherence to internationally accepted safety standards.

Communicable Disease Control

20.125. State and District specific action plans will incorporate status and strategies for TB control, with universal and assured access to quality DOTS services. PMDT services will be included in the standards of care and made available in all districts for comprehensively tackling the challenge of drug-resistant TB.

20.126. An increasing incidence of vector borne diseases like malaria, dengue and chikungunya in urban, peri-urban and rural areas because of expanding urbanisation, deficient water and solid waste management has been reported. To control this, the emphasis would be on avoidance of mosquito breeding conditions in homes and workplaces and minimising human-mosquito contact. The spread of zoonotic diseases will also be prevented by strengthening integrated surveillance of transmission between wildlife, close bred veterinary populations and human communities.

20.127. Improved entomological surveillance for source reduction, strengthening and expanding diagnostic services, strengthening case management through standard guidelines, enhanced community participation and inter-sectoral collaboration, enactment and enforcement of civic and building by-laws would be encouraged. Anti-microbial resistance will be closely monitored through effective surveillance, and enforcement of guidelines on the sale and prescription of antibiotics.

20.128. There would also be a thrust on identified geographic areas where the problems are most severe. The strategies employed would be disease management including early case detection and prompt treatment, strengthening of referral services, integrated vector management, use of Long Lasting Insecticidal Nets (LLIN) and larvivorous fishes. Other interventions including behaviour change communication will also be undertaken.

Prevention and Control of Non-Communicable Diseases

20.129. For the escalating threat of NCDs like cardiovascular diseases, diabetes, cancers and chronic respiratory diseases which are emerging as major killers, a package of policy interventions would be taken up. These include raising taxes on tobacco, enforcing bans on tobacco consumption in electronic media, counselling for quitting tobacco, early detection and effective control of high blood pressure and diabetes, screening for common and treatable cancers; and salt reduction in processed foods (Table 20.7).

20.130. Care for the elderly would focus on promoting healthy lifestyles, encouraging care within families, linking strengths of Indian Systems of Medicine with Modern Systems of Medicine in rejuvenation therapies, and preferential attention in all public facilities.

20.131. Problems relating to mental health, especially in conflict zones would be managed with sensitivity at the community level, through better training of community workers and primary care teams, and through education of care givers.

Focus on Public Health

20.132. Insufficient focus on public health is a major weakness of the system and must be urgently corrected. Effective public health management requires a certain degree of expertise. There is an urgent real need for a dedicated Public Health cadre (with support teams comprising of epidemiologists, entomologists, public health nurses, inspectors and male Multi-Purpose Workers) backed by appropriate regulation at the state level. At present, only Tamil Nadu has a dedicated public health cadre. In other

TABLE 20.7
Interventions to Combat Non-Communicable Diseases (NCDs)

Non-Communicable Disease (NCD)	Interventions
1. Tobacco control	Raise taxes on tobacco Clean indoor air legislation Tobacco advertising ban <ul style="list-style-type: none"> • Information and labelling • Brief advice to help quit tobacco • Counselling to quit
2. CVD prevention	Salt reduction in processed food via voluntary agreement with industry, and/or via legislation Health education through mass media Treatment for high Blood pressure, cholesterol and education
3. Diabetes and complications	Health education on diet and physical activity Diabetes detection and management in primary health care Intensive glycaemic control Retinopathy screening and photocoagulation Neuropathy screening and preventive foot care
4. Cancer	Screening for cervical, breast and oral cancer Strengthening of cancer therapy in District Hospitals
5. Dental Caries	Education on oral health and hygiene; reducing dietary sugars; water fluoridation
6. General measures	<ul style="list-style-type: none"> • Promote physical activity in schools and society • Restrict marketing of and access to food products high in salt, sugar or unhealthy fats • Targeted early detection and diagnosis using inexpensive technologies

Note: The list is illustrative only.

States, the erstwhile Public Health cadre has been merged with the regular medical cadre. The choice of having a separate Directorate of Public Health on the lines of Tamil Nadu or incorporating it suitably in the existing set-up will be left to the judgement of States.

20.133. A centrally recruited, professionally trained and constitutionally protected service on the lines of All-India services would be the preferred model for the Public Health Service. A second option would be to have separate public health cadres at Centre and States.

20.134. The Centre and States would develop good quality training programmes for public health functionaries, including the suggested new cadre of public health officers.

20.135. Public health officials should be made responsible for the health of all people residing in their assigned areas or jurisdictions, including migrants. Their responsibilities would, thus, not

be limited to only those who visit or use the health facilities, but would require them to actively reach out and impact health outcomes in their respective catchment areas. An implication of such an approach would be that all data generated in the facility would be analysed in terms of the denominator, that is, the total population at risk in the jurisdiction of that facility. Public health officials should also be deployed in Municipal areas to assist the Urban Local Bodies in maintaining public health.

20.136. The National Centre for Disease Control (formerly National Institute of Communicable Diseases) shall function as the apex public health institute for providing surveillance, prevention and control of all diseases of public health importance. The upgradation of NCDC covers physical infrastructure including public health labs and additional trained human resource. It is also proposed that NCDC branches will be opened/strengthened in State Headquarters to provide timely technical assistance to the State health authorities in routine disease surveillance and in addressing epidemic-prone diseases.

20.137. Even though the subject of Public Health falls in the State list, a draft Model Public Health legislation has been prepared by the MoHFW, which could serve as a useful reference for States in framing their own Public Health Acts. The experience of Tamil Nadu in prevention of diseases and promotion of health through a Public Health Cadre, and the regulatory mechanism using Public Health Legislation deserve emulation. Also required are systems to implement those Acts, and mechanisms to motivate and involve the community in ensuring that provisions are complied with. One aspect of community-based monitoring could be to conduct public health audits in States, including in major cities and publicise the results to help build public pressure to improve conditions and bridge capacity gaps where needed. The indicators for such audits could include faecal contamination of water, vector density, food safety and safe disposal of solid and liquid wastes.

20.138. While safety measures at the workplace are necessary for the safety of workers and adjoining residents, and must be enforced, the workplace also presents an opportunity to introduce and practice promotive behaviour, such as a healthy diet and exercise. Ban on consumption of tobacco in public places is a progressive legislation, but it needs effective enforcement. Regular screening of workers for occupational diseases should be introduced. The regulations relating to workplace safety can be enforced more effectively if there is greater coordination between District health and labour authorities.

20.139. Institutions like schools, workplaces and prisons provide opportunities for preventive health check-ups, regular and group exercises, early detection of disease and for dissemination of information on lifestyle choices, yoga, exercise and healthy living. Thus, regular health status and competency check-ups, including laboratory investigations, of children in schools, employees in workplaces and prisoners in jails would be done, with the Government health machinery taking responsibility for public institutions. Age old principles of healthy living and prevention, including those documented in AYUSH texts would be popularised during such health check-ups. Employees and workers will be informed of the

ill-effects of sedentary lifestyle, and encouraged to increase physical activity.

20.140. Employees and their families, in large and medium industries of the organised sector can also form an excellent sentinel surveillance system, especially for risk factors of NCDs, incidence of diseases and health care costs as they are linked to organised intra-mural health services or reimbursement systems which maintain regular records. An 'organised sector' surveillance system (such as one involving the Indian Railways network and PSUs) can be established, at relatively low cost and also support work-site based programmes, health promotion and early care seeking.

Behaviour Change Communication

20.141. The state of peoples' health is dependent on living habits that are partly determined by individual behaviour choices. The existing campaigns urging the avoidance of harmful behaviours such as use of tobacco, alcohol and drugs, advocating the use of helmets and seat belts, valuing the girl child, shunning of sex-selective abortions, adoption of the small family norm would be further strengthened. Home-based newborn care, exclusive and continued breastfeeding are time tested and proven strategies to promote child health and survival, and need to be encouraged on a priority basis. Mass media campaigns on mental illness should be launched, to reduce the stigma, promote early care seeking and encourage family members to be supportive and sensitive.

20.142. Electronic (including 'new' media) and print media can play a critical role in informing and empowering communities and individuals on issues relating to health and quality of life. This includes using mobile telephones, multimedia tools as well as Community Radio Stations to achieve this objective. While regulation of the media falls outside the domain of the MoHFW, there is a need to encourage the media to carry messages that make healthy living popular, and to avoid the display of unhealthy behaviour like smoking. Since there are several media-dark areas where the NCD disease burden is increasing, innovative state specific Behaviour

Change Communication strategies would also be required apart from electronic and print media.

20.143. The MoHFW would also champion measures like legislation, regulation and fiscal measures to reduce the exposure of citizens to health risks. An existing agency of the MoHFW, Central Health Education Bureau (CHEB), shall be assigned the responsibility of undertaking and guiding Health Promotion all over the country. In this task, it will use the health promotion Portal for dissemination of information. The CHEB shall involve multi-sectoral actors, conduct health impact assessment and will be developed as the Institute of Health Promotion.

20.144. Teaching self-care to patients and care givers of chronic diseases not only empowers them to manage their condition, but can also make a significant difference to long term health outcomes. NGOs can play a very active role in such campaigns, as the success of BRAC, Bangladesh in reducing infant mortality by promoting use of Oral Rehydration Solution has shown.

INSTRUMENTS FOR SERVICE DELIVERY

Effective Governance Structures

20.145. The broad and flexible governance structure of the National Health Mission would be used to seek willing participation of all sectoral agencies, and civil society in identifying risks and planning for their mitigation, and integrated delivery of quality services. States would be advised to converge the existing governance structures for social sector programmes, such as drinking water and sanitation, ICDS, AIDS control and NRHM at all levels, pool financial and human resource under the leadership of local PRI bodies and make multi-sectoral social plans to collectively address the challenges.

20.146. The existing National Programme Coordination Committee (NPCC) of NRHM will be expanded to serve the National Health Mission. It will be made more representative of all social sectors, sub-sectors within the health sector, and include expertise on monitoring and independent evaluation. All the four

Secretaries of the MoHFW will be on this committee, which will be chaired by Secretary Health, and can also serve as a forum for coordination within the Ministry.

20.147. Gaps in the management capacity at the state level need to be addressed. States will be encouraged to set up efficiently functioning agencies/cells for procurement and logistics, recruitment and placement of human resource, human resource management, design, construction and upkeep of health care buildings, use of Information Technology, Financial management, transport systems, standards setting and quality control, monitoring and evaluation of process and outcomes. States shall be advised to expand the roles and responsibilities of Medical Officers in charge of public health facilities to cover all determinants of health, with a focus on improving national health outcome indicators. Their territorial jurisdiction should be made co-terminus with the developmental machinery, as Rural Development Blocks.

20.148. States can empower facility managers with more financial and hiring powers so that they can take quick decisions on service related local issues. The Rogi Kalyan Samiti model of facility autonomy launched under NRHM would be expanded to enable investment in facility upkeep and expansion, or even filling temporary HR gaps. Enhanced autonomy would have to be matched by greater accountability for the management of the facility for timely and quality care, and availability of essential drugs. This will also need stringent regulation to ensure that mismanagement of funds, drugs and equipments does not happen.

20.149. In order to promote sound HR management policies across the states, the Central Government would design model management systems incorporating improved methods for recruitment, retention and performance, incentive-based structures, career tracks for professional advancement based on competence. These guidelines could include strategies suggested in Box 20.6.

Accountability for Outcomes

20.150. In order to ensure that plans and pronouncements do not remain on paper, a system of accountability shall be built at all levels, namely Central Government reporting to the Parliament on items which are its business, States reporting on service delivery and system reforms commitments undertaken through the MoU system, district health societies reporting to States, facility managers reporting on health outcomes of those seeking care, and territorial health managers reporting on health outcomes in their area. Accountability shall be matched with authority and delegation; the MoHFW shall frame model accountability guidelines which will suggest a framework for accountability to the local community, requirement for documentation of unit cost of care, transparency in operations and sharing of information with all stakeholders.

Health Delivery Systems

20.151. Trained and competent human capital is the foundation of an effective health system. Without adequate human resources, additional expenditure on health will not lead to additional services and will only bid up wages. In this context it is important for the Twelfth Plan to embark on a clear strategy to expand the supply of appropriately trained health workers to support health care objectives being targeted.

20.152. Effectively functioning health systems depend on human resource, which range from medical, AYUSH and dental graduates and specialists, graduate and auxiliary nurses, pharmacists to other allied health professionals. The production of human resource in health is a time consuming process, taking as long as nine years for a specialist, to eighteen months for an ANM. The current availability of health personnel in the country (Table 20.8) is below the minimum requirement of 250 per lakh of population (*Human Resources for Health: Overcoming the Crisis*, 2004, Joint Learning Initiative, page 23). Given the existing production capacity, we can expect an availability of 354 health workers by 2017. It is generally accepted that the doctor to nurse ratio should be at least 1:3 for the team to perform optimally. This ratio is currently 1:1.6 and is expected to improve to 1:2.4 by end of Twelfth Plan if no new colleges are started. These numbers regarding total availability mask the fact that there is substantial regional variation in the distribution of doctors and nurses, because of which we should plan for a total availability which is significantly higher than the recommended minimum. The basic data on the availability and rate of new additions is summarised in Table 20.8.

20.153. We need to take up a large scale expansion in teaching capacity in this plan so the situation improves towards the end of this plan, and reaches

Box 20.6

Suggested Items in Model HR Guidelines

- Quality standards for facilities should be taken as guiding principle for sanctioning posts, which would indicate the maximum staff that can be posted. In case a facility does not attract expected case-loads, the staff may be rationalised.
- Recruitment should be decentralised with a quicker turnaround time and preference must be given to residents of the region of proposed deployment.
- Fair and transparent system of postings and timely promotions.
- Financial and non-financial incentives (like preferential eligibility for post graduate courses, promotions, subsequent choice of postings, reimbursement of children's school fee) would be suggested to States for adoption, for performance and service in remote areas.
- Measures to reduce professional isolation by preferential access to continuing medical education and skill up-gradation programmes, as well as back-up support on tele-medicine (Internet or mobile based) and by networking of professionals working in similar circumstances.
- Measures to reduce social isolation by investing in processes that bring community and providers closer together.
- Completion of training of ASHAs and retraining of the existing cadre of workers as Male Multi-Purpose Workers, AWW and ANMs, to make them relevant to local needs, and for their own upward mobility.

optimal levels by the end of Thirteenth Plan. If we adopt a goal of 500 health workers per lakh population by the end of Thirteenth Plan, we would need an additional 240 medical colleges, 500 General Nursing and Midwifery (GNM)/nursing colleges and 970 ANMs training institutes. If work on these new teaching institutions begins from the 2013–14 annual plan, and is completed by the end of the Twelfth Plan, the flow of nurses and ANMs would begin within this plan, while doctors from these institutions would be available only from the beginning of the Thirteenth Plan. The ratio of doctors to nurses will then rise from 1:1.6 in 2012 to 1:2.8 in 2017 and reach 1:3 in 2022.

20.154. The projected availability of HR in health during the Twelfth Plan is given in Figure 20.4. A density of 398 workers per lakh would be well achieved by 2017, and 509 by 2021.

Expansion of Teaching Facilities

20.155. The Government shall take the lead role in creating teaching capacity in health, while private sector colleges would also be allowed. Initiatives would be taken to upgrade existing District hospitals and CHCs into knowledge centres, where medical, nursing and para-medical teaching and refresher courses can be held side-by-side with patient care. States shall be encouraged to take this up through the incentive fund of the NHM. The existing state level teaching institutions such as the State Institutes of Health and Family Welfare would also be strengthened. Simultaneously, the existing Government medical colleges and central Government institutions would be strengthened so that the seats could be increased to the maximum level of 250. Efforts to support the existing institutions to create more Post-graduate seats would continue. The long term goal would be to build at least one training centre in

TABLE 20.8
Availability of HR during Eleventh Plan and Projections for Twelfth Plan

Category	Enrolled and Available (2011–12)			Annual Capacity	Expected Availability by 2017		Desirable Density	Colleges Required	Available if Colleges Created		
	Enrolled	Available	Density	Nos.	Total	Density			2017	2021	
Physicians	9,22,177	6,91,633	57	42,570	8,48,616	65	11,11,554	85	240	67	85
AYUSH	7,12,121	5,34,091	44	30,000	6,42,386	49	6,40,778	49	0	51	54
Dentists	1,17,827	88,370	7	24,410	1,93,797	15	1,96,157	15	0	16	21
Nurses/ GNM	12,38,874	7,43,324	61	1,78,339	15,08,684	115	22,23,107	170	500	129	170
ANM	6,03,131	3,61,879	30	38,290	5,16,090	39	11,11,554	85	970	60	85
Pharmacist	6,57,230	4,92,923	41	1,00,000	9,18,276	70	9,15,397	70	0	76	95
Total			241			354		474		398	509
Nurse/ ANM: Doctor Ratio			1.6			2.4		3.0		2.8	3.0

Notes: Density: Per Lakh Population

Current availability based on attrition @ 25 per cent (Physicians, AYUSH, Pharmacists and Dentists), 40 per cent for Nurses and ANM.

Except for New ANM schools all other colleges will be phased as follows: 50 per cent by 2013, 40 per cent by 2014 and 10 per cent by 2015. ANM schools will be phased as follows 50 per cent by 2014 and 50 per cent by 2015.

New colleges have been assumed to have a capacity of 250 (physicians), 100 (AYUSH, Dentist, Nurses/GN, Pharmacist) and 80 (ANM, bi-annual batch of 40).

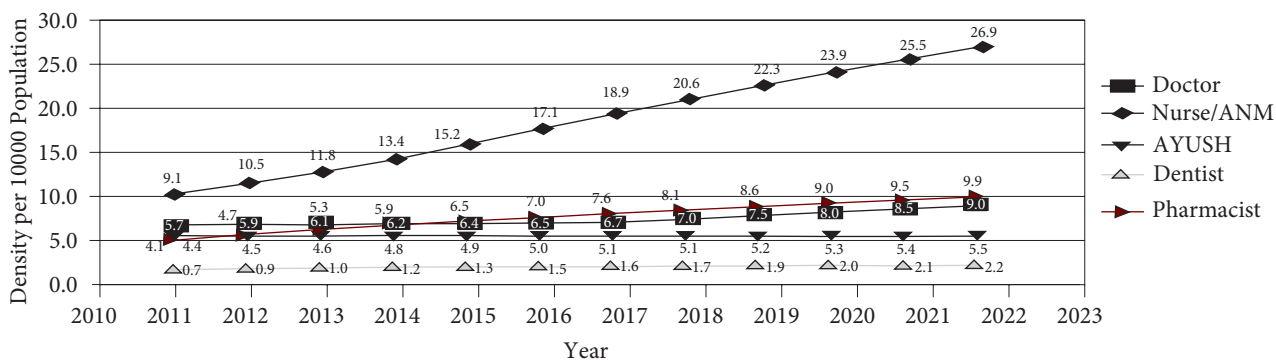


FIGURE 20.4: Projected HRH Capacity Expansion in the Twelfth Plan

each District, and one para-medical training centre in each sub-division/block.

20.156. District hospitals which cannot be converted to teaching institutions, can be accredited with the National Board of Examinations for training Post-Graduate candidates in the Diplomate of National Board (DNB) programme, in courses such as Family Medicine. This is a low cost measure which will help increase production of specialists, bring professionalism and also help improve standards of patient care in district hospitals.

20.157. Centres of Excellence for Nursing and Allied Health Sciences also need to be established in every State. These Centres would impart higher education in specialised fields, offer continued professional education and have provisions for faculty development and research. Centres for paramedical education would be set up in 149 Government medical colleges, in addition to initiating paramedical institutions in 26 States. Initiatives already taken to upgrade and strengthen the existing Nursing Schools into Colleges of Nursing would continue. Establishment of ANM/GNM schools in under-served areas would also be accorded priority. A road-map would be prepared for strengthening of pre-service, mid-wifery training and career development.

20.158. In the Pharmacy sector, strengthening and up-gradation of Pharmacy Colleges and setting up of Colleges of pharmacy attached to Government medical colleges would be initiated, wherever possible.

20.159. There are other categories of skilled health-workers, such as Physician assistants, who increase the productivity of the medical team, and should be encouraged. In the context of hospitals, a survey by FICCI in June 2011 has identified five skill-sets that need immediate attention, namely Dialysis Technician, Operation Theatre/Anaesthesia Technician, Paramedic, Lab Technician, Patient Care Coordinator cum Medical Transcriptionist. The profession of midwifery will be revived, and provided training and legal authority to serve as autonomous medical practitioners for primary maternity care, such as in the Netherlands, so that skilled birth attendance is universalised. The proposed District knowledge Centres would create sufficient teaching capacity for such newer categories of health workers.

20.160. A peculiar feature of India's healthcare system is the presence of a large number of non-qualified practitioners, such as traditional birth attendants (dais), compounders and RMPs. As per law, they are neither authorised to practice Medicine, nor to prescribe drugs. Nonetheless, they work everywhere in the country and address a huge unfulfilled demand for ambulatory care, particularly in rural areas. The challenge is to get them into the formal system. The plan recommends giving these practitioners, depending on their qualifications and experience, an opportunity to get trained and integrate them into the health work-force in suitable capacities by mutual consent.

20.161. Another opportunity lies in utilising the services of AYUSH graduates for providing primary

care. There are two pre-requisites before this can be done—first by amendment of the legal framework to authorise the practice of modern medicine for primary care by practitioners of Indian Systems of Medicine; and secondly by supplementing skills of AYUSH graduates by imparting training in modern Medicine through bridge courses. High professional standards of eligibility for, and qualifying in the bridge courses should be laid down so that the quality of such primary care integrated physicians remains high. States like Tamil Nadu and recently Maharashtra have shown the lead in this regard. Associations of allopathic practitioners are generally opposed to AYUSH practitioners being allowed to prescribe allopathic medicines; they will have to be persuaded to yield in the national interest of serving the masses, particularly the rural population and the urban poor. Suitably trained, AYUSH graduates can provide primary health care, and help fill in the human resource gaps in rural areas.

20.162. The NHM will encourage the States to modify the designation and job profiles of human resource created under various central and externally funded programmes into generic, multi-functional categories whose services can be used as per local need.

Community Participation and PRI Involvement

20.163. Government health facilities at the level of blocks and below can become more responsive to population needs if funds are devolved to the Panchayati Raj Institutions (Village Council or its equivalent in the Scheduled Areas), and these institutions made responsible for improving public health outcomes in their area. States should formalise the roles and authority of Local Self-Government bodies in securing convergence so that these bodies become stakeholders for sustainable improvements in health standards. The States would be advised to make Village Health, Sanitation and Nutrition Committees as the guiding and operational arms of the Panchayats in advancing the social agenda.

20.164. Health Action Plan for service delivery, systems management and prevention would be formulated through effective public participation to ensure

relevance to local needs and to enable enhanced accountability and public oversight.

20.165. Greater efforts at community involvement in planning, delivery, monitoring and evaluation of health services would be made using established strategies from NRHM like community based monitoring, citizens' charters, patients' rights, social audits, public hearings and grievance redressal mechanisms. Newly elected members of PRIs, especially women members, need support as they grow into their new roles. NGOs have an important role in strengthening capacity. An integrated curriculum will be drawn up to facilitate this process. NGOs can play a key role in providing support to VHSNCs and PRIs in capacity building, planning for convergent service delivery and more effective community based monitoring. Recognition and instituting awards for achievers along the lines of Nirmal Gram Puraskar under the Total Sanitation Campaign will be one way of incentivisation.

Strengthening Health Systems

20.166. A major objective of enhanced funding, flexibility to and incentivisation of States is to build health systems. Some of the components of health systems strengthening for which States shall be encouraged are listed in Table 20.9.

NATIONAL AIDS CONTROL ORGANISATION

20.167. The programme strategy would be two-pronged: intensification of interventions for high risk groups and bridge populations, and integration of prevention (including mother to child transmission), testing, counselling and treatment services among the general population, including pregnant women, with the routine RCH programme. To achieve mainstreaming of services, the State AIDS Control Societies and District AIDS Prevention and Control Unit (DAPCU) will be linked with the National Health Mission structure at these levels. To build a multi-dimensional reporting system, the information systems on health systems, and AIDS control shall be synergised.

TABLE 20.9
Illustrative List of Health Systems Strengthening in States

Health System Elements	Suggested Health System Strengthening Activities by States
1. Effective Public Health Administration	<p>Enact and Enforce Public Health Act</p> <p>Put in place a <i>Public Health cadre</i>, whose members shall be responsible for detecting public health problems within their jurisdiction, framing strategy for its correction and implementing it</p> <p>Develop and deploy a <i>Health Management Cadre</i>, for providing management support to public health programmes and hospital administration</p> <p>Mandatory practice of Clinical Treatment Guidelines and prescription of generic medicines listed in the National List of Essential Medicines in all Government facilities</p> <p>Mandatory test audit of medical prescriptions by faculty of medical colleges</p> <p>Improve governance through stronger oversight mechanisms that include citizen participation, social audit and greater transparency</p> <p>Develop an effective and responsive grievance redress system</p> <p>Frame policies for, and provide services so as to achieve the goals of the National Population Policy (2000).</p>
2. Health Financing	<p>Increased expenditure on Health Sector</p> <p>Prioritise strengthening of Primary Health Care in state budgets</p>
3. Health Regulation	<p>Extend and enforce Central Clinical Establishment Act</p> <p>Empower Public Health functionaries under relevant laws namely Pre-conception and Pre-natal Diagnostic Techniques Act, Food Safety Standard Act, and Drugs and Cosmetics Acts</p>
4. Develop Human Resource for Health	<p>Develop District Hospitals and Community Health Centres (CHCs) into Medical and para-medical training institutions with improved quality of training</p> <p>Organise bridge Courses for AYUSH graduates and legally empower them to practice as Primary Health care physicians</p> <p>Encourage career progression of ASHA and AWW into ANM, and assure career tracks for competency-based professional advancement of nurses</p>
5. Health Information Systems	<p>Build a Health Information System by networking of all health service providers, establishing state level disease surveillance systems, universal registration of births and deaths to give accurate picture of health of the population</p>
6. Convergence and Stewardship	<p>Assess Health impact of policies and activities of departments other than health</p> <p>Main-streaming of AYUSH into NHM</p> <p>Main-streaming of STI and HIV prevention and treatment up to district levels into NHM</p> <p>Main-streaming of all disease control programmes into NHM</p> <p>Empower Panchayats with funds, functions and functionaries to play a meaningful role in bringing convergence in the social sector</p> <p>Achieve inter-sectoral coordination at Block, District and State levels by using the mission structure of NHM</p> <p>Create and support systems for grievance redressal</p> <p>Synergise the working of ASHA and AWW by declaring AWC as the convergence station for all village level NHM and ICDS personnel, and Sub-centre as the HQ of ICDS supervisors</p> <p>Ensure that only double fortified salt (Iron-Iodine) is used in ICDS Scheme, Mid-Day Meal and sold through Public Distribution System</p>
7. Health Services	<p>Master plan for ensuring each district is able to provide assured set of services to all its residents</p> <p>Road-map for achieving Indian Public Health Standards at all facilities</p> <p>Public health care facilities are provided financial and administrative autonomy</p> <p>Develop an effective grievance redress system</p>
8. Ensure access to Medicines, Vaccines and Diagnostics	<p>Create a Special Purpose Vehicle to procure, store and distribute medicines, vaccines and diagnostics through an open, tender based procurement</p> <p>Mandate availability of drugs under the National List of Essential Medicines in all health facilities</p> <p>Strengthen state level drug regulation</p> <p>Ensure Jan Aushadhi stores in all Block Headquarters</p>

20.168. The primary goal of NACP during Twelfth Plan will be to accelerate the process of reversal and further strengthen the epidemic response in India through a well-defined, integration process. The programme will be further strengthened and programme management capacities decentralised to state and district levels. NACP-IV will remain a prevention oriented plan with adequate coverage of HIV care in the context of the concentrated epidemic situation in India. NACP will synergise with other national programmes and align with the overall Twelfth Five Year Plan goals of inclusive growth and development. The key priorities of NACP-IV will be as follows:

- Preventing new infections by sustaining the reach of current interventions and effectively addressing emerging epidemics.
- Preventing Patent-to-Child Transmission
- Focusing on IEC strategies for behaviour change, demand-generation for HIV services among those at risk and awareness among general population
- Providing comprehensive care, support and treatment to people with infection
- Reducing stigma and discrimination through greater involvement of HIV affected persons
- Ensuring effective use of strategic information at all levels
- Building capacities of NGO and civil society partners, especially in states of emerging epidemics
- Integrating HIV services with the health system in a phased manner
- Mainstreaming HIV/AIDS activities with all key central and state level Ministries/departments and leveraging resources of the respective departments
- Leveraging social protection and insurance mechanisms

STRATEGIES FOR NACP-IV

1. Intensifying and consolidating prevention services with a focus on (i) high-risk groups and vulnerable population and (ii) general population;
2. Expanding IEC services for (i) general population and (ii) high-risk groups with a focus on behaviour change and demand generation;

3. Increasing access and promoting comprehensive care, support and treatment;
4. Building capacities at national stage, district and facility levels and
5. Strengthening Strategic Information Management Systems

INDIAN SYSTEMS OF MEDICINE AND HOMOEOPATHY SERVICES (AYUSH)

20.169. Practice and promotion of AYUSH in the States would be carried out under the broad umbrella of the National Health Mission. A revamped National Programme Coordination Committee of the National Health Mission with Secretaries of all the departments under the MoHFW, and chaired by Secretary Health, would provide the funding and programme guidance for convergence and mainstreaming of AYUSH in the health care system.

20.170. States would be encouraged to integrate AYUSH facilities, and provide AYUSH services in all facilities offering treatment in modern systems of medicine. The goal is to ensure that all Government health care facilities offer suitable AYUSH services as per laid down standards.

20.171. In addition, the concept of AYUSH Gram will be promoted, wherein one village per block will be selected for implementation of integrated primary care protocols of AYUSH and modern system of medicine. In these villages, herbal medicinal gardens will be supported, regular Yoga camps will be organised, preferably through PRI institutions and youth clubs, and the community provided basic knowledge on hygiene, promotion of health and prevention of diseases.

STRENGTHENING AYUSH

20.172. The strengths of Indian Systems of Medicine and Homoeopathy, if suitably used, can help advance the goals of the Twelfth Plan. AYUSH systems would be main-streamed using their areas of strengths namely in preventive and promotive health care, diseases and health conditions relating to women and children, older persons, NCDs, mental ailments, stress management, palliative care, rehabilitation and health promotion.

20.173. Every element of health system strengthening and development, particularly use of IT, is equally applicable to AYUSH systems and institutional capacity development and would be pursued. What follows are additional measures and institutional capacity development tailored to unique opportunities and requirements of AYUSH systems.

RESEARCH

20.174. The National Health Policy of 2002 set an objective, which involved a re-orientation and prioritisation of research to validate AYUSH therapies and drugs that address chronic and life style-related emerging diseases. Cross-disciplinary research and practice requires standardisation of terminologies of classical therapies, and development of Standard and Integrated Treatment Protocols. These would be developed based on core competencies and inherent strengths of each system, and comparative efficacy studies. National Health Programmes shall use such composite protocols.

20.175. To take this ambitious research agenda forward, all five Research Councils of AYUSH will pool resources, particularly human resource, clinical facilities and information, to avoid duplication. For this to happen on an institutionalised basis, a common governance structure for the five Research Councils would be put in place.

20.176. The documentation of traditional knowledge associated with medicinal plants is very important not only to preserve it for posterity but also to contest bio-piracy and bio-prospecting. This will be continued.

HUMAN RESOURCES DEVELOPMENT

20.177. Cross-disciplinary learning between modern and AYUSH systems at the post-graduate level would be encouraged. Details of modification in syllabi that would be required at the undergraduate level, in order to make such cross-disciplinary learning possible, would be worked out by a team of experts from the different Professional Councils. Collaboration between AYUSH teaching colleges and with medical colleges for mutual learning would be encouraged. AYUSH Chairs in Medical Colleges of the country would be encouraged to provide the necessary

technical expertise to jointly take up research, teaching and patient care. Orientation of medical students and doctors about basic concepts, applications and scientific developments of AYUSH in order to dispel ignorance and foster cross-system referral would be encouraged. Relevant AYUSH modules would therefore be incorporated into medical, nursing and pharmacy course curricula and in the CME programme for medical practitioners.

PRACTICE AND PROMOTION OF AYUSH

20.178. The Department of AYUSH would develop standards for facilities at the primary, secondary and tertiary levels as a part of IPHS; Standard Treatment Guidelines and a Model Drugs List of AYUSH drugs for community health workers will be developed. All primary, secondary and tertiary care institutions under the MoHFW, State Health Departments and other Ministries like Railways, Labour, Home Affairs and so on, would create facilities to provide AYUSH services of appropriate standards.

20.179. As longevity increases, geriatrics as a discipline would need greater attention. AYUSH therapies have strengths in restoration and rejuvenation. To bring together the best of care for the elderly that AYUSH systems have to offer, and to develop it further using modern scientific methods, a National Institute on Geriatrics (through AYUSH) will be set up.

20.180. In view of the growing incidence of metabolic and lifestyle diseases like diabetes and hypertension and considering the strengths of AYUSH systems in their prevention and treatment, a National Institute on Metabolic and Lifestyle Diseases will be established.

20.181. In view of the growing problem of drug abuse, and increase in use of tobacco, and the potential of AYUSH therapies and practices, particularly of Yoga, for disease prevention and health promotion, a National Institute for Drug and Tobacco De-addiction will be established. Each of the three national institutes would be equipped with post-graduate education and research facilities and house advanced hospital facilities in all disciplines of

medicine. These institutes would conduct and promote interdisciplinary research in their area, advance frontiers of knowledge on prevention and condition management, teach and promote evidence-based use of AYUSH systems, and are expected to emerge over time as global centres of research, care and education.

Regulation and Quality Control

20.182. Systems for quality certification of raw materials, accreditation of educational programmes, health services and manufacturing units and products would be promoted in the Twelfth Plan. This would achieve both minimum standards through regulations and laws, as well as, excellence through a voluntary scheme of accreditation. The existing practice of a common legislation, and regulatory systems for AYUSH and modern medicines would be further strengthened, with mandated representation of AYUSH experts at all levels. Modernisation of pharmaceutical technology, in order to standardise the use of natural resources and production processes that are used by AYUSH, will be taken up as a priority in the Twelfth Plan period.

HEALTH RESEARCH

20.183. Given the lag in progress on health indicators in the country, need for accelerated progress and optimal use of limited resources, DHR should strategically move in a direction which brings forth actionable evidence in a time bound manner for quick translation to address national health needs. In setting its priority areas, DHR would be guided by the disease profile in the country, burden of disease, and the possibility of cost-effective intervention.

20.184. The strategy for health research in the Twelfth Plan would be the following:

20.185. *Address national health priorities:* The key outcome of the efforts of DHR would be to generate intellectual capital, which may have a public health impact. DHR would, therefore, prioritise its research to find cost-effective solutions for health priorities and health system issues facing the country, namely:

1. Maternal and child nutrition, health and survival;
2. High fertility in parts of the country;

3. Low child sex ratio and discrimination against the girl child;
4. Prevention, early detection, treatment, rehabilitation to reduce burden of diseases—communicable, non-communicable (including mental illnesses) and injuries (especially road traffic related), congenital malformation and disorders of sex development;
5. Sustainable health financing aimed at reducing household's out-of-pocket expenditure;
6. HIS covering universal vital registration, community based monitoring, disease surveillance and hospital based information systems for prevention, treatment and teaching;
7. Measures to address social determinants of health and inequity, particularly among marginalised populations;
8. Suggest and regularly update Standard Treatment Guidelines which are both necessary and cost-effective for wider adoption;
9. Public Health systems and their strengthening; and
10. Health regulation, particularly on ethical issues in research.

20.186. Existing institutes of ICMR will be re-organised, strengthened and new centres set up in deficit areas to achieve the above listed goals.

20.187. *Build Research Coordination Framework:* Though DHR is the empowered Department on medical and health research, many organisations are engaged in research on related topics, namely the Ministry of Environment and Forest, Departments of Health and Family Welfare, AYUSH, AIDS control, Space, Science and Technology, Biotechnology, Agricultural Research; agencies like ICAR, DSIR, CSIR, NDMA, DRDO and the National Knowledge Network. DHR would play a lead role in research involving human health, bringing all the concerned organisations on one platform to facilitate mutual discussion, resource pooling and prioritisation, and avoid duplication, to find innovative solutions to national priorities in a timely manner. It would also take the lead in suggesting institutional structures, like mutual representation in each others' decision-making and scientific bodies, and 'coordinating

structures' so that consultation and collaboration become a norm rather than an exception. Efficient mechanisms for selection, promotion, development, assessment and evaluation of affordable technologies would be established. DHR would bring together basic, translational and clinical investigators, networks, professional societies and industry to facilitate development of programmes and research projects. DHR would establish a mechanism for coordination between academia and the industry, with a preference for multidisciplinary approaches.

20.188. To address the need for operations research on impediments in delivery of services, DHR will explore the possibility of stationing multi-disciplinary research teams within the NHM structure at different levels, so that practical, relevant and area specific solutions to problems are suggested to programme managers. To address the gaps in critical areas such as Health Information Systems, National Health Accounts and Public Health delivery DHR will dedicate national centres to these needs, and position specialised teams alongside operational managers.

20.189. *Autonomy coupled with accountability in research:* The elements of an efficient research system are clear enunciation of goals, sufficient resources with flexibility to raise extra-budgetary funds, functional autonomy, accountability and incentives for performance. DHR would work to observe these principles in its research institutes so that each one of them develops into a centre of excellence in its allotted field.

20.190. *Efficient research governance, regulatory and evaluation framework:* DHR would also put in place appropriate regulations, guidelines, authorities and structures to strengthen ethics-based research governance and to protect the interests of research subjects especially, in clinical trials. DHR would prepare guidelines on, among others, Stem Cell Research and Therapy, Assisted Reproductive Technologies incorporating rights of egg donors; Ethical Guidelines for Biomedical Research involving human subjects, Ethical Guidelines for Conducting Research on Mental Illness or Cognitive Impairment, Compensation to Participants for Research Related

Injury in India and Bio-banking. DHR would also develop mechanisms to evaluate health research undertaken by various scientific departments including ICMR. DHR would put in place mechanisms for benchmarking and accreditation of health research institutions. The criteria for accreditation of research institutes would be based on the intellectual capital generated and its public health impact.

20.191. *Nurture development of research centres and labs:* In addition to the development of centres in deficit and strategic areas, DHR would identify and fund the development of existing medical colleges and research centres into specialised subject areas, which may become capable of conducting cross-cutting, multidisciplinary and translational researches. Similarly, DHR would fund up-gradations of existing Government labs to increase the capacity for diagnosis of viral and other infectious diseases at the national, regional and District levels. A national list of diagnostic facilities shall be centrally maintained to help guide decisions on creation of and up gradation of laboratory facilities. DHR would also build capacity of States and other institutions on the periphery for solving various clinical and public health problems.

20.192. *Utilise available research capacity by promoting extra-mural research:* Extramural programmes, under which grants are competitively awarded on selected topics, would be expanded to help tap talent in medical colleges, tertiary hospitals, health universities and public health institutions. DHR would aim to increase the share of extramural funding in its research budget from the current 33 per cent to 50 per cent by the end of Twelfth Plan. It may also commission 'problem-solving research', following the Open Source Drug Discovery model of CSIR, but would need to subject it to strict scrutiny for outcomes. Translational Research would be promoted so that research findings can be translated into better health status in the country.

20.193. *Human Resource Development:* Investments would be made in producing qualified researchers, by improving career opportunities for young researchers and providing good initial support in

the form of start-up grants. Additionally, fellowships for training researchers in identified advanced fields, scholarships at the PG level, Young Researcher Programmes to encourage young students, mid-career research fellowships for faculty development at medical colleges are some ways to ensure a steady flow of committed researchers. DHR will explore, in consultation with concerned regulatory authorities, the possibility of introducing a stream of research professionals in medical colleges who would have avenues for professional advancement equal to those of teaching faculty. DHR will utilise the potential of Information Technology to standardise research methodology courses, and train students in academic institutions through distance learning.

20.194. Cost-effectiveness studies to frame Clinical Treatment Guidelines: On the lines of the UK's National Institute of Clinical Excellence (NICE), DHR would develop expertise to assess available therapies and technologies for their cost-effectiveness and essentiality, and formulate and update, on a regular basis, the Standard Treatment Guidelines, and suggest inclusion of new drugs and vaccines into the public health system. The formulation of the Guidelines must, of course, incorporate the best available evidence, including in AYUSH systems, and prevalence of anti-microbial drug-resistance in order to suggest treatment protocols for regular clinical practice. Standard Treatment Guidelines developed by Army Medical Corps can also be referred to. The justification for housing the proposed institute outside the Department of Health, but within the Ministry, is to provide it an element of objectivity and independence from practitioners, and to avoid conflict of interest.

CONVERGENCE ACROSS SECTORS FOR BETTER OUTCOMES

20.195. The impact of policies and programmes of non-health sectors on health remains invisible for long periods. It is, therefore, necessary to take proactive steps to determine the health impact of existing and new policies in sectors which have a bearing on the health of population. The MoHFW would constitute a dedicated 'Health Impact Cell' to conduct such an analysis, and its views would be taken into

consideration before framing or modifying policies of non-health Ministries which can potentially impact public health. The proposed 'Health Impact Cell' in the MoHFW would also perform Monitoring and Surveillance functions in order to continuously gather information on health impacts of policies and programmes of key non-health Departments. It can harmonise the programme data obtained from the sectors/non-health Ministries with the health impact reports received from the field, such as on water and sanitation related disease outbreaks, and determine gaps in policies as well as in programme implementation. Various sectors would share data, particularly those that are relevant to health outcomes, with the proposed cell. The proposed cell would also be equipped to serve early warnings and coordinate responses to health related emergencies and natural disasters.

CONVERGENT ACTION ON NUTRITION

20.196. The Ministry of health would build institutional arrangements with the Ministry of Women and Child development so that convergent delivery of services under ICDS becomes the norm. A national policy on promoting healthy diets, and regulating extent of salts, and trans fats in foods is required. Double fortification of salt with iron and iodine presents a cost-effective and feasible strategy to prevent two of the key nutritional deficiencies in our country. While the Food and Nutrition Board under the Ministry of Women and Child Development is expected to take the lead, all health workers would be sensitised so that they are able to disseminate knowledge on nutrition and healthy living.

ANGANWADI CENTRE AS THE CONVERGENCE HUB

20.197. Nutritional issues call for multi-stakeholder strategies, including informing communities on how to maximise nutritional benefits from locally available foods, food fortification and micro-nutrient supplementation. States shall be encouraged through the sector-wide MoUs to observe Village Health and Nutrition Days in complete convergence mode (Box 20.7) and ensure that Anganwadi Centres become the hub for all health related services.

Box 20.7**Convergence: Village Health and Nutrition Day in North Tripura**

The Village Health and Nutrition Day (VHND) organised in North Tripura district in a complete convergence mode secured it the Prime Minister's award for excellence in Public administration for 2010–11.

A monthly VHND is to be organised in every village through inter-sectoral convergence and community involvement with the Anganwadi Centre as the hub for service provision. It is an effective platform for providing first-contact primary health care. The Village Health, Sanitation and Nutrition Committees are expected to be the organiser with participation of ASHA, ANM, AWW and the PRI representatives.

As per *NRHM guidelines*, the services to be provided on VHND include registration of all pregnant women, Ante-Natal Checkup, Vitamin A administration and vaccination of all eligible children, weighing of children, plotting of weights on cards and suitable management, administration of drugs to TB patients, provision of contraceptives (condoms and oral) to all eligible couples as per their choice, supplementary nutrition to underweight children, community awareness generation, identification of cases needing special attention.

Special and *additional features* in North Tripura were the following:

- Organisation of a health mela in a transparent and participative manner; extensive publicity through sign-boards and in-person contact for the event
- Pooling of funds from different departments, and clear delineation of roles
- Leadership role of headmasters of schools in training and health education
- Convergence of service providers of health, ICDS, rural development, panchayat, drinking water,, district disability rehabilitation centre, education and adult literacy
- Additional services provided include disability certificates, wheel chairs to the disabled, medicines and water purification tablets. doctor's consultation, testing of eye, dental and for HIV, Strong cultural orientation to the event by including local songs, dances, drama, quizzes, sports events, healthy baby shows
- The mid-day meal and ICDS were served together; with a community meal
- Intense training of functionaries
- Effective monitoring, record keeping and display of data on web site

Outcomes: A quantum jump in detection of cases of various diseases and health problems, fewer deaths due to fever, malaria, diarrhoea, lowering of MMR and IMR while immunisation coverage improved, identification of malnourished children, initiation of their treatment and periodical monitoring.

Lesson: Effectively organised VHSND can lead to awareness in the community on health issues, effective utilisation of services on health, and its determinants.

MAIN-STREAMING DISASTER MANAGEMENT

20.198. The Ministry of Health shall in its policies and programmes give due consideration to the elements of disaster management, namely Mitigation, Preparedness, Response and Recovery. At all stages of disaster management, active engagement of local communities shall be the ensured.

CONVERGENCE WITHIN DEPARTMENTS OF MINISTRY OF HEALTH

20.199. Given the fact that many health conditions often co-exist and exacerbate each other with poor nutritional status as the underlying factor,

therapies under different systems of medicine can synergistically improve health status, and need for evidence based decision making and practice, all the four departments of health which are engaged in their allocated domains can act synergistically to address the key national health needs. A coordinated delivery of national programmes at the grass-root level can increase outreach and help better manage programmes. Frontline health workers, and Government health facilities for primary care can be developed as single points of contact for all local residents in meeting their entire range of health care needs.

CONCLUSION

20.200. The Twelfth Plan faces a colossal task of putting in place a basic architecture for health security for the nation. It must build on what has been achieved through the NRHM and expand it into a comprehensive NHM. Since the primary responsibility for health care rests with the States, the strategy needs to effectively incentivise State Governments to do what is needed to improve the public health care

system while regulating the private health care system, so that together they can work towards addressing the management of delivery of preventive, promotive, curative and rehabilitatory health interventions. This is not a task that can be completed within one Plan period. It will certainly span two or three Plan periods, to put the basic health infrastructure in place.

Education

INTRODUCTION

21.1. Education is the most important lever for social, economic and political transformation. A well-educated population, equipped with the relevant knowledge, attitudes and skills is essential for economic and social development in the twenty-first century. Education is the most potent tool for socio-economic mobility and a key instrument for building an equitable and just society. Education provides skills and competencies for economic well-being. Education strengthens democracy by imparting to citizens the tools needed to fully participate in the governance process. Education also acts as an integrative force in society, imparting values that foster social cohesion and national identity. Recognising the importance of education in national development, the Twelfth Plan places an unprecedented focus on the expansion of education, on significantly improving the quality of education imparted and on ensuring that educational opportunities are available to all segments of the society.

21.2. Recognising the importance of education, public spending on education increased rapidly during the Eleventh Plan period. Education expenditure as a percentage of gross domestic product (GDP) rose from 3.3 per cent in 2004–05 to over 4 per cent in 2011–12. Per capita public expenditure on education increased from ₹888 in 2004–05 to ₹2,985 in 2011–12. The bulk of public spending on education is incurred by the State Governments and their spending grew at a robust rate of 19.6 per cent per year during the Eleventh Plan. Central spending on education increased even faster at 25 per cent per year during

the same period. Aggregate public spending on education during the Eleventh Plan period is estimated at ₹12,44,797 crore for both the Centre and States taken together. Of this, 35 per cent was accounted for by Plan expenditure and 65 per cent by non-Plan expenditure. About 43 per cent of the public expenditure on education was incurred for elementary education, 25 per cent for secondary education and the balance 32 per cent for higher education. About half of the Central Government's expenditure was incurred for higher education and the remaining for elementary (39 per cent) and secondary (12 per cent) education. In the State sector, about 75 per cent of education expenditure is for school education, of which 44 per cent is on elementary education and 30 per cent on secondary education.

21.3. The following sections of this chapter provide details of the strategy and initiatives for school education and literacy and then for higher education. Issues related to skill development that have close linkages to education are dealt with in Chapter 3 along with a discussion on employment.

SCHOOL EDUCATION AND LITERACY

21.4. The country has made significant progress in improving access to education in recent years. The mean years of schooling of the working population (those over 15 years old) increased from 4.19 years in 2000 to 5.12 years in 2010. Enrolment of children at the primary education stage has now reached near-universal levels. The growth of enrolment in secondary education accelerated from 4.3 per cent per year during the 1990s to 6.27 per cent per year in

the decade ending 2009–10. Youth literacy increased from 60 per cent in 1983 to 91 per cent in 2009–10 and adult literacy improved from 64.8 per cent in 2001 to 74 per cent in 2011.

21.5. A good progress has also been made in bridging the equity gap in education. India's educational inequality, measured in terms of the *Gini co-efficient*¹ for number of years of education, has decreased from 0.71 in 1983 to 0.49 in 2010, indicating a large reduction in inequality. The gender gap in elementary education has declined with the female/male ratio for years of education and literacy reaching over 90 per cent in 2009–10. A significant reduction in socio-economic inequality in access to education and a narrowing of the gap between SCs/STs and other social groups has been achieved.

Challenges

21.6. Despite many gains during the Eleventh Plan, education in India faces several challenges. The country's mean years of schooling at 5.12 years is well below the other emerging market economies such as China (8.17 years) and Brazil (7.54 years) and significantly below the average for all developing countries (7.09 years). A matter of particular concern is the steep dropout rate after the elementary level. The sharp drop-off in enrolment at the middle school level and the increasing enrolment gap from elementary to higher secondary suggests that the gains at the elementary level have not yet impacted the school sector as a whole. Disadvantaged groups are worse off with the dropout rates for SCs and STs higher than the national average.

21.7. While enrolment levels at the elementary level are generally high, studies of student attendance show that there is considerable variation across States in the percentage of enrolled students who are attending school on any given day during the school year. Of particular concern is that some of the most educationally backward States (Uttar Pradesh [UP], Bihar, Madhya Pradesh [MP] and Jharkhand) have the lowest student attendance rates (below 60 per cent). In the Twelfth Plan, there is a need for a clear shift in strategy from a focus on inputs and increasing access and enrolment to teaching–learning process

and its improvement in order to ensure adequate appropriate learning outcomes. In this context, States need to set up transparent and reliable systems for tracking attendance in a meaningful way and work on effective strategies for boosting attendance and sustaining high levels of attendance throughout the school year.

21.8. While there has been a decline in the percentage of out-of-school children (OoSC) across gender and social categories, Muslim, scheduled caste (SC) and scheduled tribe (ST) children need greater and focused attention. The number of OoSC who are physically or mentally challenged remains a cause for concern. The proportion of disabled out-of-school children in 2005 was 34.19 per cent and remained unchanged at 34.12 per cent in 2009. It is important to note that the maximum number of OoSC are those with mental disabilities (48 per cent), followed by children with speech disabilities (37 per cent). Neither the school system nor any other institutional mechanism is equipped to address the challenging needs of mentally disabled children who are most disadvantaged both socially and educationally in the system.

21.9. There has been a substantial increase in the availability of teachers at elementary level during the past few years and if all the teacher posts sanctioned under both Sarva Shiksha Abhiyan (SSA) and State budgets are filled, the pupil–teacher ratio (PTR) at the national level will almost be 27:1. The challenge, however, lies in correcting the imbalance in teacher deployment. The number of schools that do not comply with the Right to Education (RTE) norms for the required PTR is fairly high. School-wise analysis based on District Information System for Education (DISE) 2009–10 indicates that 46 per cent of primary and 34 per cent of upper primary schools have poor PTRs. Another serious challenge is the presence of teachers without professional qualifications approved by the National Council of Teacher Education (NCTE), as is required under the RTE Act. There are about 8.1 lakh untrained teachers in the country with four States—Bihar, UP, Jharkhand and West Bengal—accounting for 72 per cent of them.

21.10. Under SSA, the country has seen massive infrastructure development at the school level. Apart from opening over 3 lakh new schools, SSA has also provided basic facilities in existing schools. The average student–classroom ratio (SCR) which was 39 in 2005–06 has come down to 32 in 2009–10. There are still a large number of schools which do not have these minimum facilities. Only 4.8 per cent government schools have all nine facilities stipulated in the RTE Act, approximately one-third of the total schools have up to seven facilities, and about 30 per cent schools do not have even five of these facilities. Keeping in view the RTE stipulations, these facilities have to be provided in all schools in a time-bound manner.

21.11. The biggest concern in elementary education is the poor level of student learning—both scholastic and co-scholastic/non-cognitive. Evidence suggests that learning outcomes for children in Indian schools are far below corresponding class levels in other countries, and that the learning trajectories for children who remain in school are almost flat. Clearly, the additional time spent by students in school as they move from one class to another is not translating into much improvement in learning levels.

21.12. At the heart of the issue of quality are the weak teaching processes and transactions between teachers and learners that are neither child-friendly nor adopt child-centred approach to curriculum. The capacity, motivation and accountability of teachers to deliver quality education with significant and measurable improvements in learning outcomes of students need to be critically and urgently addressed. Similar challenges of quality of learning also exist at the secondary and higher education levels. Dropout rates in secondary and higher education continue to be high, especially for socially excluded and economically marginalised groups of learners.

21.13. Despite higher levels of enrolment at all levels of education, and a massive increase in physical infrastructure, the value added by formal education is still weak. Poor quality of education resulting in weak learning outcomes at each stage of education is the central challenge facing the Indian education

sector today. This is particularly disturbing since both macro- and micro-level evidence suggests that what matters for both national economic growth as well as individuals' ability to participate in this growth process is not the total years of education as much as the quality of education and value-addition for each successive year in school as represented by continuously improving learning outcomes and skills. Improving learning outcomes is crucial for inclusive growth and, therefore, a major focus of the Twelfth Plan will be on measuring and improving learning outcomes for all children, with a clear recognition that increasing inputs (number of schools, classrooms, teachers and so on) will by themselves not be enough to ensure quality education for all children.

Strategies

21.14. The Twelfth Plan needs to address these challenges in an integrated and holistic manner. The focus needs to be on meeting the residual needs of access with sharper focus on the needs of the disadvantaged social groups and the difficult-to-reach areas; improving the school infrastructure in keeping with the RTE stipulations; increasing enrolment at the upper primary and secondary school levels; lowering dropout rates across the board; and, broad-based improvement in the quality of education with special emphasis on improving *learning outcomes*. The four main priorities for education policy have been access, equity, quality and governance. The Twelfth Plan will continue to prioritise these four areas, but will place the greatest emphasis on improving learning outcomes at all levels.

21.15. It is critical for the country to make secondary education much more job-relevant through skills training within the schools. For this, higher investments will need to be made to equip secondary schools with teachers/trainers who have technical skills, and equipment (such as workshops, machines, computer equipment) that can be used to impart technical and vocational skills. In countries such as South Korea and Australia, 25–40 per cent of high school students opt for vocational courses, making them job-ready once they finish Grade 12. The vocational credits they earn in secondary schools are

recognised by the general education system and a high proportion of these students return to universities to pursue a college degree at a later stage.

Access

21.16. The challenge of access is no longer one of enrolments at the primary level, but one of increasing attendance, reducing dropouts and increasing enrolments at the secondary level. These challenges will have to be tackled through a multi-pronged strategy that should include: (i) a realistic assessment of the problems of the most vulnerable categories of children; (ii) measures to help schools meet the required PTR, classroom and other infrastructure norms (since they impact the retention of children); (iii) improving management systems for better tracking and monitoring of school functioning; (iv) a focus on improvements in teaching-learning processes; and (v) on developing schools as inclusive learning spaces. Improving learning outcomes at the upper primary level is a critical requirement for improving enrolment levels in secondary schools. A big part of the increase in secondary enrolment has to come from students who are better prepared to benefit from secondary education and, therefore, are able to continue their education rather than drop out. This will require increasing the effectiveness of teaching models at both the primary and the secondary levels.

Equity

21.17. While discussing the issue of social access and equity, the tendency is to confine it to broad categories like SC, ST, Muslims, girls and so on. But these are not homogenous groups. Social realities are far too complex and there are groups within these groups, which for different reasons are more disadvantaged than the category as a whole. In order to fully meet the goal of universal access, the Twelfth Plan will need to remove barriers to access arising out of such social and economic realities. Special focus would be to ensure educational access in civil strife-affected areas and in context of rising urbanisation. While the gaps in average enrolments between disadvantaged groups and the general population have decreased, there is still a considerably large gap in learning levels with historically disadvantaged and economically

weaker children having significantly lower learning outcomes. These gaps exist at the point of entry into the school system and continue to grow over time. Large and growing learning gaps threaten the equity gains achieved on the enrolment front because children with lower levels of learning are more likely to drop out. Therefore, it is essential to bridge gaps in learning levels at an early stage if the equity goals of the Twelfth Plan are to be met effectively.

21.18. Given the complex and chronic nature of inequality and exclusion, the strategies adopted so far have tended to be somewhat isolated, fragmented and devoid of institutional support. As a result, the many forms that exclusion takes, and the different ways in which it is manifested, have not been sufficiently addressed across the landscape of access, participation, retention, achievement and completion of elementary education. This makes exclusion the single most important challenge in universalising elementary education. The Twelfth Plan will, therefore, address the issue of equity as integral to the whole gamut of elementary education, moving away from an incentives-and-provisions-based approach to a rights and entitlements approach.

Quality

21.19. Improvement of the quality of education is strongly linked to the quality of physical space, textual materials, classroom processes, academic support to the teachers, assessment procedures and community involvement. All these areas will continue to receive support during the Twelfth Plan period. While adequate inputs and infrastructure are necessary for the proper functioning of schools, inputs will not automatically translate into effective teaching-learning processes or satisfactory learning outcomes. Therefore, the Twelfth Plan will treat improving school inputs as just the starting point in improving educational quality, and will take a more comprehensive view for building a strong systemic focus on teacher capacity, improving school leadership/management, strengthening academic support system, better community and parents' participation, measuring and improving learning outcomes in a continuous manner. Focus would be on provision for child-friendly schools and systems in teaching

and learning processes as well as in improved water, sanitation, hygiene and midday meal practices. Considerable resources will be invested to not only provide high-quality independent measures of student learning levels and trajectories over time, but also resources for large-scale instructional changes that will lead to improvement in classroom transactions leading to better learning outcomes.

Governance

21.20. Several studies have reported the challenges in education governance exemplified by teacher absence, delayed fund flows to schools and administrative capabilities at the school level. Studies have also found that improved measurement and management of teacher performance has a significant positive impact on student learning outcomes. Specific and targeted measures of student learning along with measures to hold teachers, schools and school systems accountable for these learning outcomes will go a long way in improving governance by orienting the education system towards outcomes. The Twelfth Plan will prioritise and invest in improving educational leadership and management at the district, block and school levels, with a focus on making better use of data and governing the education system with the objective of improving learning outcomes at all levels of schooling.

21.21. While there is a broad range of challenges facing education in the country, a focus on learning

outcomes is a unifying theme of the Twelfth Plan. Addressing the problem of quality will simultaneously address many of the other challenges. This is not to say that inputs and resources do not matter, but focusing on learning outcomes will also help to ensure that these inputs and resources are provided and utilised in a manner where they have the greatest impact. Research from around the world highlights the importance of early childhood education, and suggests that high-quality early childhood education may have the highest long-term returns in terms of improved human development. The Twelfth Plan will therefore place a high priority on universalising pre-school education and improving school preparedness—especially for historically and economically disadvantaged children. More broadly, the approach of the Twelfth Plan for school education will be to define and measure outcomes, and allocate resources in ways that maximise progress towards achieving these outcomes.

21.22. The Twelfth Plan strategies need to respond to these challenges and drive towards achieving the outcome targets laid out for the Plan (see Box 21.1). The six core elements of the driving principles and strategy for the Twelfth Plan are:

1. All stages of education need to be viewed in an integrated manner, through the perspective of lifelong learning and education;

Box 21.1 Targets for the Twelfth Plan

1. Ensure universal access and, in keeping with letter and spirit of the RTE Act, provide good-quality free and compulsory education to all children in the age group of 6 to 14 years;
2. Improve attendance and reduce dropout rates at the elementary level to below 10 per cent and lower the percentage of OoSC at the elementary level to below 2 per cent for all socio-economic and minority groups and in all States;
3. Increase enrolments at higher levels of education and raise the Gross Enrolment Ratio (GER) at the secondary level to over 90 per cent, at the Senior Secondary level to over 65 per cent;
4. Raise the overall literacy rate to over 80 per cent and reduce the gender gap in literacy to less than 10 per cent;
5. Provide at least one year of well-supported/well-resourced pre-school education in primary schools to all children, particularly those in educationally backward blocks (EBBs); and
6. Improve learning outcomes that are measured, monitored and reported independently at all levels of school education with a special focus on ensuring that all children master basic reading and numeracy skills by class 2 and skills of critical thinking, expression and problem solving by class 5.

2. Strengthening the quality of teaching–learning processes requires comprehensive concerted large-scale efforts with simultaneous attention to how these processes translate into better outcomes;
3. Motivation, capacity and accountability of teachers for improving learning outcomes at all levels must be focused upon;
4. Governance of educational institutions requires an institutional focus on quality based on principles of autonomy, accountability and performance; this may involve fundamentally re-defining the recruitment criteria, eligibility of teachers and merit-based processes of recruitment in these institutions;
5. Within a common national legal and policy framework, innovations and diversity of approaches will be encouraged in matters of curricula, pedagogies and community engagements in order to respond to the diversity of learner groups, regional/social contexts and various stages/forms of institutional and human development in the educational sector; and
6. It is imperative to strengthen the monitoring and accountability mechanisms of stakeholders in school education including community and parents as envisaged under the RTE Act.

21.23. The following subsections provide details of strategy and initiatives for elementary education and then secondary education. This is followed by a section on issues that cut across school education such as the use of technology, teacher education, governance and school leadership, followed by a section on adult education.

ELEMENTARY EDUCATION

21.24. Elementary Education comprising primary (Class I–V) and upper primary (Class VI–VIII) forms the foundation of the education pyramid. Unless this foundation is strengthened, it will not be feasible to achieve the goal of universal access to *quality education* for all. A major achievement in recent years has been the establishment of Constitutional and legal underpinnings for achieving universal elementary education. The *Right of Children to Free and Compulsory Education (RTE) Act, 2009*, became operative on 1 April 2010.

REVIEW OF THE ELEVENTH PLAN

21.25. With the RTE Act, 2009, becoming operational from 1 April 2010, the vision and strategies of the ongoing SSA were harmonised with the RTE mandate and the programme norms were revised accordingly. Financial outlays were enhanced and the changes approved to the annual work plans to enable government schools to become RTE Act compliant.

Enrolments

21.26. Against an estimated child population of 192 million in the 6–14 age group, 195 million children were enrolled at the elementary stage in 2009–10. The GER² increased from 111.2 per cent in 2006–07 to 115 per cent in 2009–10 and the Net Enrolment Ratio (NER)³ improved significantly from 92.7 per cent to 98 per cent during this period. The GERs for SCs and STs range between 130 per cent and 140 per cent at the national level and, in some States, these are nearly double that of eligible age group children. GER in excess of 100 per cent at the primary stage indicates presence of overage and underage children in the schools, and reflects the delayed provision of access to schooling and lack of pre-schooling facilities, particularly in rural areas.

21.27. Girls account for the majority (5.3 million) of the additional enrolment of 7.21 million children between 2006–07 and 2009–10. More than half of them (53 per cent) belong to SCs and STs. Three initiatives of the Eleventh Plan helped to increase the enrolment of girls. These included (i) setting up of 3,600 Kasturba Gandhi Balika Vidyalayas in 27 States and Union Territories (UTs), (ii) establishment of 7,000 Early Childhood Care Centres in EBBs and (iii) implementation of Mahila Samakhya programme in ten States.

21.28. The GER at upper primary level is low, even though it improved by 11.8 per cent in the four years between 2006–07 and 2009–10. At 62 per cent the NER at upper primary level is also a cause for concern. This varies from 47 per cent in UP and 53.1 per cent in Bihar to 91 per cent in Tamil Nadu and 83 per cent in Himachal Pradesh.⁴ It is evident that although a larger number of children are entering the educational system, all of them are not

progressing through the system and this progression is uneven across the States.

21.29. A large number of children are still OoS. Of the 8.1 million OoSC in the country in 2009, UP (34 per cent), Bihar (17 per cent), Rajasthan (12 per cent) and West Bengal (9 per cent) account for 72 per cent.⁵ Although surveys have reported a decline in the proportion of OoSC to the corresponding child population of various communities such as SCs, STs and Muslims,⁶ these estimates need to be taken with caution, keeping in mind the steep decline in absolute numbers of OoSC reported in the corresponding period. A recent study for rural India places the proportion of children not enrolled in schools at 3.5 per cent.⁷ However, in a few States like Rajasthan and UP, the percentage of OoS girls in the age group of 11–14 years is as high as 8.9 per cent and 9.7 per cent, respectively.⁸

21.30. The Eleventh Plan had targeted a reduction in dropout rates from 50 per cent to 20 per cent at the elementary stage. Even though there has been some reduction, progress has not been satisfactory and the national average is still as high as 42.39 per cent. The dropout rates for SC and ST children at 51.25 per cent and 57.58 per cent, respectively, are much higher than that for non-SC/ST children at 37.22 per cent. This clearly suggests the challenge of school retention of children from vulnerable communities.

21.31. Having achieved near-universal enrolment at the lower primary level, it is critical to turn the focus on the poor levels of learning outcomes achieved by children who complete five years of primary schooling. Several independently conducted national studies including the ASER (2005 to 2011) and the School Learning Study (2010) have reported very low levels of learning among Indian school children. The ASER 2011 findings illustrate that over half the children in class V are unable to read even at class II level. In the recent Organisation for Economic Co-operation and Development–Programme for International Student Assessment (OECD–PISA) study, India has been placed at the tail-end in international comparisons rating (PISA-2009+). These results underscore the

fact that quality of education should be the key focus of attention in the Twelfth Plan. Improving learning outcomes, with a focus on supplemental instruction for disadvantaged children, will directly contribute to the objective of reducing dropouts, because evidence suggests that children who fall behind grade-appropriate learning levels are significantly more likely to drop out. The structure of enrolments in elementary education shows that about 80 per cent of children are enrolled in government and government-aided institutions; therefore, the focus on quality improvement in elementary education has to be on government institutions.

21.32. Some progress has been made in preparing children better for primary education. Pre-school enrolment has more than doubled from 21 per cent in 2005 to 47 per cent in 2010.⁹ More recent ASER data (2010) indicates that 83.6 per cent of 3- to 6-year-olds in rural areas are enrolled in some preschool programme mostly in Integrated Child Development Services (ICDS) centres, including those in private pre-schools. The quality issues of pre-primary education in Anganwadi need serious review.

21.33. During the Eleventh Plan, the Sarva Shiksha Abhiyan (SSA) was the flagship programme for impacting elementary education, but the following major Central Government schemes and programmes were also implemented: National Programme of Nutritional Support to Primary Education (NP-NSPE; commonly known as the Mid-Day Meal Scheme), Teacher Education Scheme; Mahila Samakhya; Schemes for Providing Quality Education in Madrasas (SPQEM) and Infrastructure Development in Minority Institutions (IDMI).

SARVA SHIKSHA ABHIYAN (SSA)

21.34. The SSA is implemented as India's main programme for universalisation of elementary education (UEE). Its overall goals include universal access and retention, bridging of gender and social gaps in enrolment levels and enhancement of learning levels of all children. The SSA has merged components of the National Programme for Education of Girls at Elementary Level (NPEGEL) and the residential school scheme, Kasturba Gandhi Balika Vidyalaya

(KGBV), that have focus on girls' education. The approved outlay for SSA in the Eleventh Plan was ₹71,000 crore. Against this, an amount of ₹77,586 crore was released to the States. Details of cumulative progress made under the SSA up to 2011–12 are given in Table 21.1.

TABLE 21.1
Cumulative Progress under SSA up to 2011–12

S. No.	Item	Sanctions
1	Opening of New Schools	2,09,914
2	Opening of New Upper Primary Schools	1,73,969
3	Construction of Primary Schools	1,92,392
4	Construction of Upper Primary Schools	1,05,562
5	Construction of Additional Classrooms	16,03,789
6	Toilets	5,83,529
7	Drinking Water facilities	2,23,086
8	Teachers	19,65,207

Source: Ministry of HRD.

21.35. Though there was notable success in expanding capacity and enrolments during the Eleventh Plan, the challenge of raising quality standards still remains. Although the number of elementary schools has increased to 13.04 lakh, many schools lack the basic infrastructure facilities required under the RTE Act. For example, the retention of girls in school remains difficult given that over 63 per cent of rural schools have no usable toilet facilities for them.¹⁰ If the envisaged convergence of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Total Sanitation Programme (TSP) and Drinking Water Supply (DWS) Mission materialises, some of these infrastructural shortcomings could be mitigated. While bridging infrastructure gaps may be achievable, it will be far more challenging to bridge learning gaps.

TWELFTH PLAN STRATEGY

21.36. The overarching goal of the Twelfth Plan is to enrol OoSC, reduce dropouts and improve learning outcomes across the elementary school years. In order to enrol OoSC, strengthening of institutional capacity, developing an appropriate statistical base, harmonising the definition of OoSC and finally

identification and mainstreaming of all children into age-appropriate class would be needed. Reduction in dropout rates is closely linked to quality. There is a need for a system-wide effort to move the focus of all activity in elementary education from schooling to learning. This entails a shift at every level, macro and micro, whether in planning, resource allocation and implementation or measurement of processes and practices that is designed to achieve significant, substantial and continuous improvement in children's learning outcomes. The entire process of education should be firmly anchored to the notion that every child must be in school and learning well.

21.37. A major focus of the Twelfth Plan will be on implementing the objectives of the RTE Act and aligning the government policies and practices with the overall goal of providing quality schooling for all children until the age of 14 years. The States that have seven-year elementary education cycle (four years of primary education and three years of upper primary education) have begun to realign to eight-year cycle. During the Twelfth Plan this would be implemented throughout the country. All the States have notified State-specific rules under the Act. Pursuant to the RTE Act, notifications of teacher qualifications under section 23 of the RTE Act and the prescription of a Teacher Eligibility Test (TET) by the NCTE have also been issued.

21.38. Clear articulation of learning goals is the critical first step in this process. National learning standards must be developed on the basis of which States should be encouraged to define, in simple terms, meaningful learning goals to be achieved at the end of each class or set of classes. Resources will have to be devoted to developing concrete, achievable measures of student learning at the State and national level. Articulation and expression, team work, critical thinking and problem solving are important skills to be learned, alongside basic literacy and numeracy. The meaning of literacy and numeracy should not be traditional, but keep in mind, reading, and math literacy as defined by PISA/OECD countries contextualised for Indian conditions. Teachers and administrators should be reoriented to ensure that they understand and imbibe the values of critical thinking,

problem solving and expression. The National Curriculum Framework 2005 (NCF-2005) and its accompanying 22 focus group reports form the basis for curriculum revival and improved learning outcomes in the country. The formulations of NCF-2005 need to be converted into tangible teaching-learning materials, classroom transactions and assessment systems in every State of the country. The creation of improved textbooks by the National Council of Educational Research and Training (NCERT) after NCF-2005, used mostly by schools affiliated with the Central Board of Secondary Education (CBSE), needs to be emulated in every State to cover all the children of the country.

21.39. Once basic goals are clearly articulated, all aspects of the elementary education system (such as methods of teaching-learning, use of materials, grouping for effective instruction, optimal use of time, daily instructional time and number of days of teaching, measurement of progress, capacity building and ongoing support for teachers and administrators) will need to be strongly aligned to the achievement of the learning goals. System-level administrators at various levels need to ensure that the activities of the system at every level are aligned to the stated goals. Periodic reviews (at least annually) need to be conducted to track progress and refine and rework strategies to reach the stated goals.

21.40. The elementary education system needs to focus on two major tasks. First, children entering school should be prepared and should learn basics by the time they complete class 2 or 3. Second, the proportion of children who are lagging behind in higher grades (class 3, 4 and 5 and also in upper primary) acquire required levels of competencies. There is strong evidence that for children whose home language is different from the textbook language with no supplemental parental guidance at home, problems of 'coping' eliminate them from the system earlier on by class 3. A great deal of attention needs to be paid to such linguistically determined barriers in the passage of children from lower to higher classes. There is a need to develop primers for bridging the home language to the school language from pre-school to

class 1 and 2, which is a very effective mechanism to ensure child motivation and 'coping' ability to deal with school texts. Besides, a strong foundational learning support needs to be immediately given to children in class 3–5, and 6–8 who have not even achieved basic skills to negotiate the curriculum of upper primary or secondary schooling to which they will transit. The methodology of Comprehensive and Continuous Evaluation (CCE) mandated by the RTE Act once properly implemented can go a long way in tackling this issue.

21.41. To make sure that all the children make progress towards the learning goals, new and innovative strategies will have to be tried in terms of teaching-learning and consequently in preparing and supporting teachers. The overall strategy for elementary education in the Twelfth Plan is summarised in Box 21.2.

TWELFTH PLAN INITIATIVES

21.42. SSA will continue to be the *flagship* programme for developing elementary education during the Twelfth Plan for realising the rights to elementary education for each and every child. There would be four strategic areas under SSA during the Twelfth Plan. These are: (i) strong focus on learning outcomes; (ii) addressing residual access and equity gaps; (iii) focus on teacher and education leadership; (iv) linkages with other sectors and programmes. These are described in the following sections.

I. Strong Focus on Learning Outcomes

21.43. Quality in education is inherently dependent on the following six aspects: (i) curriculum and learning objectives, (ii) learning materials, (iii) pedagogic processes, (iv) classroom assessment frameworks, (v) teacher support in the classrooms, and (vi) school leadership and management development. A new framework for curriculum is needed at regular intervals in order to take cognizance of the developing issues in society and how to address them. A variety of learning packages should be developed at State and district levels, with adequate provision for cluster- and school-level modifications to aid the teacher and provide increased choice. As

Box 21.2
Twelfth Plan Strategy for Elementary Education

1. Shift from a project-based approach of SSA to a unified RTE-based governance system for UEE;
2. Address residual access and equity gaps in elementary education by adopting special measures to ensure regular attendance of children in schools and devising special strategy to tackle the problem of dropping out before completing the full cycle of elementary schooling;
3. Integrate pre-school education with primary schooling in order to lay a strong foundation for learning during primary school;
4. Prioritise education quality with a system-wide focus on learning outcomes that are assessed through classroom-based CCE independently measured, monitored and reported at the block/district/State levels;
5. Focus on early grade supplemental instruction to ensure that all children achieve the defined age-/class-specific learning levels by the end of class 2;
6. Articulate clear learning goals that have to be achieved by the end of each class or set of classes. These goals should be understood by parents and teachers;
7. Improve teacher training with an emphasis on effective pedagogy given the realities of Indian classrooms such as multi-age, multi-grade and multi-level contexts. Also, make teachers' professional development a needs-driven process as opposed to top-down decision wherein curriculum design and delivery is centrally driven;
8. Invest in both top-down administrative oversight and bottom-up community-driven monitoring of schools;
9. Focus on strengthening practices of good governance in all schools and related institutions that ensure performance-based internal and external accountability for teachers and administrators at all levels and also ensure holistic assessment-driven development of schools;
10. Invest in strengthening ongoing and continuous field-based systems of academic support to schools and teachers and in strengthening district and block-level capacity for better management and leadership;
11. Support States to set learning goals and invest in independent monitoring of outcomes, but provide States with substantial autonomy in how to achieve these goals, and provide additional results-based financing to States who show the most improvement in educational outcomes;
12. Provide a supportive environment for evaluation of innovative practices, and sharing of best practices across States and districts;
13. Support States towards motivation, capacity development and accountability of community and parents for ensuring regular attendance and quality education; and
14. Ensure convergence with panchayats, Community-Based Organisations (CBOs) and other sectors at school level.

education is concerned with all-round development of the child (physical, socio-emotional along with cognitive), all aspects need to be assessed rather than only academic achievement. During the Twelfth Plan, however, there will be a system-wide focus on holistic development of children by improving learning outcomes and other non-scholastic areas. Learning enhancement programme (LEP) under the SSA would be continued in the Twelfth Plan, for which specific zones of operation should be identified by the concerned State/District authorities. Every year, States need to articulate the learning goals that are being targeted and the strategies (methods, materials, models and measurement) that will be used to reach those goals. Institutional assessment/accreditation of the elementary schools will be introduced in the Twelfth Plan, and possibly made mandatory from the Thirteenth Plan onwards.

(A) Strong Focus on Early Years in School

21.44. Research on the impact of PTR on student learning suggests that a low PTR matters most at younger ages, when children are being socialised into the process of learning, and less so in older classes. Thus, it may make sense to supplement the requirements under the RTE, for communities to hire multiple community-based teachers on contract to focus on improving school preparedness and basic literacy and numeracy for pre-school children. In addition, class I should receive special attention in the Twelfth Plan period. Ideally, the strongest or most experienced teacher in the school should be assigned to this class. States must develop a process to identify specialist teachers of early/initial primary education and design specific professional development and academic support programmes for them. If the foundations are strong and solid in class I, many of the

later problems that children encounter—both academically and non-academically—would be reduced. Special training needs to be provided each year to the teachers who will work with class I. Countries like Finland, Sweden and Denmark, who top the PISA tests have demonstrated that equity can considerably help to improve overall learning outcomes, through mixed and inclusive classrooms, that do not segregate the so-called ‘bright’ and ‘slow learners’, or children from different social, ethnic or other differences. Students who had attended pre-primary tend to perform better than those who have not. These approaches need to be emulated in our classrooms too so that the classrooms of the country resonate with the diversity of our country, and help improve learning outcomes as the Scandinavian school systems have shown.

(B) Review of School Textbooks

21.45. School textbooks should be reviewed by NCERT/State Council of Educational Research and Training (SCERT) to be made more engaging yet simple and interesting. Review of textbooks must always be accompanied by special development of teachers to use these books effectively. Learning levels expected of children as seen in textbooks should be aligned to the overall learning goals—keeping in mind that the goals and standards should be achievable by majority of the children. Work-books should accompany textbooks for mathematics, science and languages. The textbook should be supplemented by learning facilitation manuals for teachers for improving classroom transaction. All government schools should be provided with electricity and facilities for computer-aided learning on a large scale. Private sector resources should also be enlisted for content development based on curriculum and syllabi.

(C) Enhancing Facilities in Schools

21.46. A programme for Information and Communication Technology (ICT) in elementary schools will replace the erstwhile Computer-Aided Learning (CAL) under SSA. This would include provision of networked computers, accessories and an Internet connection in a phased manner. A variety of software tools and pedagogically appropriate e-content in local languages will be sourced or developed to serve the school curriculum. The focus will be to

enable students and teachers to access wide variety of resources available in the digital format, and digital resources that are seamlessly integrated in classroom processes. Efforts will be made to adopt energy-efficient, cost-effective ICT solutions, which increase the number of access points in each school enabling more and more children to use the facility more frequently. Appropriate mechanisms to maintain the infrastructure and protect it from breakdowns will be ensured. ICT should also be used to network teachers and schools in a specific geography—this would enhance collaborative teaching and learning. The RTE Act mandates provision of laboratory and library facilities in schools. SSA funding would be made available for this purpose particularly to cater to children from the disadvantaged groups.

(D) Research for Quality Improvement

21.47. Priority will be given to research projects concerned with quality-related issues, including, for example, assessing States’ curriculum in the light of NCF-2005, students’ learning outcomes, students’ and teachers’ attendance rates, effectiveness of teacher training, efficacy of textbooks and other TLMs, quality of academic supervision provided by Block Resource Centres (BRCs)/Cluster Resource Centres (CRCs)/District Institutes of Education and Training (DIETs), discriminatory practices in schools, teaching–learning in classrooms, implementation of CCE in schools, role of School Management Committees (SMCs) in school management; estimating OoSC; status and effectiveness of Special training centres, completion rate/dropout rate and transition rate; and so on.

(E) Pre-Primary Education

21.48. Every primary school would be facilitated to have a pre-primary section to provide pre-primary education with a school readiness programme for at least one year for children in the age group of four to six years. The concept of ‘early learning units’ would be introduced which would bring together the pre-primary and early primary grades into an integrated unit. The implementation would be phased out and by the end of the Twelfth Plan, about 50 per cent of the schools would have pre-primary classes. Educationally lagging States/Districts/Blocks should be covered on priority basis. For this, pre-school

education would be included under SSA/RTE as a separate component with a specific budget line. NCTE would lay down standard qualifications and adapt its TET guidelines to accommodate teachers of this Early Learning Stage, that is, pre-primary and Grades 1 and 2. A few States have planned Anganwadi in primary schools. Pre-service teacher preparation curriculum needs to be enhanced to address needs of pre-primary children. Pre-Service Teacher Education in the area of Early Childhood Education must be significantly strengthened. Selected universities and institutions must be specifically encouraged to run rigorous exemplar Early Childhood Teacher Education programmes. There is a huge dearth of other specialists in this area—developmental psychologists, curriculum developers for early childhood education and so on. Similar programmes in these areas too need to be designed and implemented. Short-term certified refresher programmes for in-service early childhood teachers and Anganwadi workers (this could also include teachers of early primary classes) must be designed and implemented by identified organisations.

21.49. The RTE Act has provided for pre-primary education for underprivileged children enrolled in private schools in 25 per cent earmarked seats. States should also be free to obtain services from reputed private-aided and unaided institutions/NGOs and to compensate them on a cost recovery basis for these services. Communities can also be empowered and provided the financial resources to hire one or more educated local young men and women (meeting minimum qualifications) on a contractual basis for dedicated pre-school instruction. Broadly, from planning to implementation, this pre-school year should be well resourced and supported. Currently, there is an overlap with ICDS in so far as pre-primary education is concerned. A strategy could be developed for gradual shift of the pre-primary year from the purview of ICDS to the primary schools. The nutrition component of ICDS in any case gets addressed through midday meal. Thus, in the third and fourth year, children go to the Anganwadi centres for early childhood education and in the fifth year, children attend pre-primary classes in regular schools that would have adequate provision for the

same. This would help to improve retention at the primary stage.

(F) Moving From Grade-Level to Ability-Level Teaching–Learning

21.50. Recent research in the country and abroad underlines the need for teaching children from the level that they are and taking them to the level that they need to be. This requires a substantial rethinking of the age–grade instructional pattern by which the education system is organised. In the last decade there have been several promising approaches to break away from this mould in order to enhance and accelerate children’s learning. Such approaches have been tried on scale in the government and also by non-governmental organisations (NGOs). However, barring the effort of some NGOs, none others have been rigorously evaluated. The main government effort in this direction is activity-based learning (ABL) or multi-grade multi-level learning (MGML) that is reaching more than 3 million children. Three States—Andhra Pradesh, Karnataka and Tamil Nadu—have expanded the programme to all schools in their States. This method promotes child-friendly learning and assessment methods that enable children to be ‘free from fear and anxiety’ and in promoting social inclusion among children in the classroom situations. Systemic reforms are needed to ensure its sustainability, including its integration with curriculum/textbooks, pre-service teacher education, sustainability across leadership changes. There is a need for an objective evaluation of these efforts along with other initiatives that are child friendly, effective in multi-grade, multi-ability situations before scaling up in the country.

(G) Promote State-Level/Local-Level Innovation

21.51. Across the country, there are several promising approaches to improve teaching–learning at the elementary stage. These need to be explored in greater depth to understand the basic elements of their functioning and their impact on learning outcomes. Among others, these include ABL initiated by the Government of Tamil Nadu, Gujarat government’s innovative Gunotsav programme, and Punjab government’s Purrho Punjab initiative. Among efforts initiated by non-government bodies (often

working in collaboration with State Governments), among others, there is the Pratham Read India programme, the Hoshangabad Science Teaching Programme and Prashika of Eklavya, and other initiatives undertaken by UNICEF, Azim Premji Foundation, Tata Institute of Social Sciences and Shiv Nadar Foundation. These are all promising interventions that can be scaled up further during the Twelfth Plan in order to achieve explicit focus on learning outcomes.

(H) Child-Friendly Assessment

21.52. The RTE Act mandates that a system of Continuous and Comprehensive Evaluation should be put in place to enable the teacher to be continuously guided by the child's response and participation in classroom activities. Support will, therefore, be provided to enable teachers to maintain child-wise portfolios, incorporating a record of children's work and progress—as an integral part of their teaching–learning process. Teacher Training programme will include training on systems for CCE. Since a majority of children in Indian schools are not at grade level, adequate flexibility needs to be provided in the CCE framework and in its implementation to identify and to address the needs of such children. In fact, teacher education institutes must be mandated to use (not just teach) CCE during the pre-service teacher preparation programmes.

21.53. Regular and accurate reports of student learning and progress should be provided to parents, along with encouragement and guidance for parents on how to support their child's educational progress. It is important to de-stigmatise falling behind ('failing'). Every child (and parent) needs to be assured that learning basic skills is well within his/her reach, and if he/she is not learning, it is a failure of the system rather than that of the child. 'Assessment of learning' and 'assessment for learning' are two aspects of education representing accountability and improvement. One cannot be emphasised over the other and neither can be sacrificed in favour of the other. While the teacher needs to 'assess for learning', the administrators and the parents of the children need 'assessment of learning'. In the spirit of these aspects, teachers must be supported to use

these 'learning reports' to modify their classroom/teaching–learning approaches.

(I) Measuring Learning

21.54. Considerable efforts and resources are needed to develop independent and objective and achievable measures of student learning at the school, block, district and State levels that approach the issue with an understanding of the linguistic complexities while formulating their testing methods. It is expected that better measurement and reporting of outcomes will play a strong catalysing role in making State, district and block-level education administrators focus more on improving education quality as measured by student mastery of achieving the defined grade-wise learning outcomes. States should be encouraged to define transparent, meaningful and simple learning levels to be achieved at the end of class 2, 5 and 8. Mechanisms must be put in place to ensure that schools neither 'teach these external tests' nor use these for punitive measures.

(J) Learning from International Experience

21.55. There are also several international initiatives that have recognised the centrality of moving from focus on enrolment to learning outcomes. United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Centre for Universal Education (CUE) at the Brookings Institution have recently set up a 'Learning Metrics Task Force' to investigate the feasibility of identifying common learning goals to improve learning opportunities and outcomes for children and youth. India should both learn from these international efforts, where possible, and more importantly, play a leading role in defining and implementing these standards, since it has the largest primary school education system in the world and also has the world's largest number of children who do not meet basic learning levels.

II. Address Residual Access and Equity Gaps

21.56. Special efforts are needed in the Twelfth Plan for those children who are still not in school or who need sustained attention for remaining linked to school. Here the focus has to be on every child in school and learning well. So efforts must include strategies for effective and sustained mainstreaming

with accelerated learning strategies built in as part of the mainstreaming strategy. Special focus would be on targeting OoSC, girls and socially excluded groups in specific locations.

(A) Targeting Out-of-School Children

21.57. In order to achieve universal elementary education in a planned and time-bound manner, better targeting of uncovered and under-covered children is necessary. Concerted and flexible efforts are needed to reach out to all OoSC, including children with special needs (CWSN) and street children. Bridging the social and gender gaps in enrolment with regard to SCs, STs and minority girls should receive special attention. Residential programmes for the 11–14 age group need continued support as do the efforts to ensure sustained mainstreaming into the regular school system. The option of open schooling needs to be strengthened so that rural labour, artisans and others in petty jobs in villages and urban slums achieve some learning equivalency in order to enable them to continue in community polytechnics, part-time community colleges, Jan Shikshan Sansthan (JSS) and accredited Skill Knowledge Providers (SKPs) to pursue secondary education and acquire upgraded vocational skills. Those who have dropped out before completing the elementary stage need opportunities for education and certification in a flexible manner. Helping such children (those who have been left out or left behind) to accelerate to the learning levels of their counterparts in school has to be an important part of the strategy for mainstreaming. Hence, the identification of OoSC should include an assessment of current ability to read and to do arithmetic, comprehension, critical thinking, problem solving as well as their ability to express themselves. Teachers would require special training for ‘accelerated learning’ of OoSC to be mainstreamed into age-appropriate class. States would need guidance for this.

(B) Provision of Residential Schools

21.58. Residential schools are particularly useful to reach out to children from vulnerable sections of society. The RTE-enabled SSA envisages the provision of residential schools for children in areas of civil strife, children of migrating populations and

tribal children. Special thrust is needed for children at risk that include orphans, run-away platform children, Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) patients, children of sex workers, and so on. It also requires that transport/escorts be provided for children in areas of civil strife, for children with disabilities, and for children of the most marginalised ST and SC groups. Residential schooling opportunities are also excellent for accelerating learning among children. Residential facilities for children should be provided by: (i) redeploying existing government/local body buildings and underutilised schools, (ii) constructing new buildings where redeploying existing buildings is not possible. New buildings will be as per KGBV norms and school playgrounds will be developed in convergence with Sarva Krida Abhiyan (SKA).

(C) Focus on SC/ST Children

21.59. At least 5 per cent of existing Government elementary schools in all EBBs with more than 50 per cent tribal population would be converted into residential school complexes (RSCs) having provisions for pre-school (non-residential), primary and middle schools. There should be provision of seasonal hostel facilities for children of migrating families both at the place of origin and of migration in urban and rural areas. These hostels will follow norms set out in the KGBV scheme. In EBBs with over 50 per cent tribal population, government schools would be converted into RSCs and seasonal hostels for migrating tribal children. A few State Governments, such as that of Andhra Pradesh, have integrated *Ashram* schools (regular residential schools) under the RTE-harmonised SSA. Other States should follow the same approach. Further, convergence with the Ministry of Tribal Affairs for all *Ashram shalas* should be forged to achieve adequate PTR and infrastructure/facilities/Teaching–Learning Equipment (TLE) as per the RTE norms. Special support would be needed to ensure retention and improved learning for children from SC communities that are socially, economically and educationally deprived and discriminated. These efforts need to converge with the programmes of the Ministry of Social Justice and Empowerment (MSJ&E). There is a need to review and revise curriculum addressing caste-based

exclusion and promoting inclusion. Interventions for SCs include (i) process-based interventions such as curricular review to include discussion on caste-based discrimination in textual material; (ii) residential schools run with assistance from the MSJ&E to conform to the RTE norms; (iii) convergence on pre-matric scholarships and incentives provided by MSJ&E; (iv) partnerships with Dalit Civil Society Organisations (CSOs) for support of Dalit children. As discussed in the previous sections, it is important to plan for improvement of learning of children from disadvantaged backgrounds. It is only when the special efforts and provisions translate into learning gains that such children have a real chance to complete and go beyond elementary education.

(D) Special Provision for Children with Special Needs (CWSN)

21.60. For CWSN, efforts will include identification, educational placement in general schools, school readiness programmes, provision of aids and appliances, development and production of Braille books and construction of ramps and disabled-friendly toilets. Considering the complexities and enormity of the work involved in developing appropriate curricula, NGOs and competent private entities with relevant experience and ability to work in this area should become natural partners in implementation of this aspect of the RTE Act. Such children would need individualised educational plan, for which community mobilisation, parental training and peer sensitisation would be necessary. Engagement of resource teachers and volunteers/caregivers to cater to their needs would also be needed. States must work closely with the Rehabilitation Council of India on this—it is important not to duplicate efforts especially where teacher development in this area is concerned.

(E) Special Focus for Education of Girls

21.61. Promoting girl's education is a critical issue. During the Twelfth Plan not only efforts will be made to enable girls to keep pace with boys, but girls' education will be viewed from the perspective spelt out in the National Policy on Education 1986/92 which states that education should be a transformative force, build women's self-confidence and improve their position in society. Interventions

in the Twelfth Plan will be guided by the principle that gender equality in elementary education is both a quality issue and an equity issue. Special focus needs to be placed on developing gender-sensitive curricula, pedagogical practices, teacher training and evaluation. Schools should be developed to be inclusive and safe places. Specific modules on issues such as sexual harassment and violence will need to be developed and integrated into the teacher training design. Other specific initiatives to improve girls' education include:

1. Strengthening and expansion of KGBVs to provide one more KGBV in EBBs, with special focus on wards with high migration rates in urban and semi-urban areas, and EBBs with a high concentration of SC, ST and Muslim populations.
2. NPEGEL programme to include running Bridging Centres, developing MCS as Model Schools for gender, equity and quality integration, development of MCS library to include digital content, including audio visual resources, development of bridging modules and manuals and training of SMCs on gender and equity issues.
3. Mahila Samakhya would be continued as an independent programme with full operational and programme autonomy and a National Resource Centre, with strong State-level or regional units would be set up to strengthen this programme (see 21.84 and 21.85 for details).

21.62. Overall, the interventions with regard to girls' education would be aligned to the 'National Vision for Girls' Education in India: Road-map to 2015' which was developed last year at State and national level through partnership between SSA, Mahila Samakhya and civil society with the support of UNICEF with the aim of ensuring increased and more targeted investments for girls' education through strengthened systems for local service delivery which ensure gender equality in basic education.

(G) Focus on Educationally Backward Minorities

21.63. Even though there has been significant improvement in enrolment and retention of Muslim children in elementary education, the gap between Muslims and non-Muslims continues to be high.

During the Twelfth Plan, the unit of earmarking, targeting and monitoring of interventions for Muslim children would be changed from District to Block. SPQEM and IDMI could be merged. Urdu would be offered as an optional language in schools located in Muslim-dominated areas, along with its attendant requirements like teacher training, TLMs and so on. There seems to be some overlapping activities with the Multi-Sectoral Development Plan (MSDP) of the Ministry of Minorities Affairs and the support extended on a 'first come first serve' basis by the Ministry of Human Resources Development (MHRD). The specific activities of minority institutions supported under the MHRD schemes should be part of the larger district plan prepared for minorities, particularly with regard to the convergent infrastructure approach which is recommended.

21.64. The Central Government has been implementing the *SPQEM* to encourage traditional institutions like madrasas and *maktabs* to modernise their curriculum by giving financial assistance to introduce science, mathematics, social studies, Hindi and English in their curriculum so that academic proficiency for classes I–XII is attainable for children studying in these institutions. This has enabled Muslim children to transit to higher studies and also ensured quality standards similar to the national education system. The States of UP, MP, Andhra Pradesh, Tripura and Jharkhand have been supported with teachers, book banks, science kits, computer laboratories and teacher training for madrasa teachers teaching modern subjects in about 1,000 madrasas. The *Scheme for Infrastructure Development of Private Aided/Unaided Minority Institutions (IDMI)* facilitates education of minorities by augmenting and strengthening of infrastructure

in minority schools and expanding facilities for formal education of minority children. Over 100 minority institutions have been assisted during the Eleventh Plan Period. Both these schemes need to be continued in the Twelfth Plan with larger outlays and wider coverage of minority institutions. There is a need to ensure that all efforts for inclusion also result in improved learning outcomes for children from educationally backward communities which is essential for sustained mainstreaming of such children and their continued progress through the education system.

(H) Focused Efforts in Urban Areas

21.65. Along with growth in urban population, urban poverty has increased, as large numbers of families migrate to urban habitations in search of livelihoods. Greater attention needs to be paid to enhancing the access to elementary education by children of urban poor families. Innovative partnerships with urban local bodies are the key to enhancing access and improving learning outcomes (see Box 21.3). Allotment of land and buildings for new schools and extension of existing schools needs to be facilitated. The requirement that schools earmark 25 per cent of their admission for children from disadvantaged groups and weaker sections will require support for related costs: uniforms, bags, books and bridging and supplementary support. SSA norms would need to be revised to provide for financial support to the State for reimbursement of cost to private unaided schools against such admissions and also for other costs mentioned above. In order to cater to the high population density in urban areas, the norms for establishment of new schools in urban areas with high population density should be based on number of children being served per school rather

Box 21.3 **School Excellence Programme—Mumbai**

1. Programme taken up by the Mumbai municipal authorities with technical support of UNICEF to enhance learning outcomes of urban slum children in Mumbai municipal schools targeting 5,00,000 children across 1,327 schools.
2. Involved systematic tracking of school and children, baseline assessment of learning levels of children, development of pedagogy and training of teachers in more inclusive and interactive teaching and learning process, training of headmasters on school leadership and partnership development.
3. Multiple partners involved included the State Bank of India, Tata Consultancy Services, McKinsey as well as several reputed CSOs including Naandi Foundation and Rishi Valley.

than distance. Migration brings huge challenges for children—regular/typical school programmes will not work. States must be encouraged to use specific approaches which have been tried and established as useful.

III. Focus on Teachers and Education Leadership

21.66. Competence of teachers and their motivation is crucial for improving the quality. This would require a number of initiatives towards (i) addressing teacher shortages, particularly through new and rigorous approaches to imparting teaching certifications, (ii) improving the quality of pre-service teacher education, (iii) improving the quality of in-service teacher professional development and options for their upward career mobility with special attention to para-teachers in many States, (iv) enhancing the status of teaching as a profession and improving teachers' motivation to teach well and their accountability for ensuring learning outcomes, (v) improving the quality of teacher educators. It is important to align all ongoing teacher capacity and capability building exercises to the achievement of improved learning outcomes.

21.67. Teachers need to be adequately prepared to deal with the realities of their schools. In many areas, particularly rural areas, there are multi-age, multi-grade and multi-ability classrooms. This would require special competencies amongst teachers to not only have the necessary subject knowledge, but a repertoire of pedagogical approaches and techniques that help them to teach effectively to improve learning outcomes for a diverse group of children. For improving teacher competence, quality of teacher training and the rigor of teaching certification have to be considerably enhanced. Motivating teachers is more difficult. Teachers usually get motivated when they are supported to achieve attainable learning goals for their students, and are recognised and rewarded for the same. The issue of teachers is critical and needs focus; hence, it is discussed separately later in the chapter after secondary education. Similarly, the issues of governance and leadership development, building community partnership and parental engagement, educational leadership and

institutionalising a system of school mentoring are common in elementary and secondary education sectors and are dealt later in the chapter.

IV. Linkages with Other Sectors

21.68. In order to achieve targeted outcomes for elementary education, there is a need to bring in resources and knowledge from related sectors. Several States, particularly those that have acute school infrastructure gaps, will face limitation of funds to implement the RTE Act. A pragmatic approach to meet the goals with limited resources is through convergence with schemes like Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Appropriate revision in the MGNREGA guidelines would be required to bring about such convergence. Decentralised implementation would ensure that local bodies take up these works on a priority basis and ensure full access to elementary education in a convergent manner.

21.69. The Twelfth Plan target for civil works is given in Table 21.2. School buildings being meaningful assets, particularly in rural areas, additional support could come from Member of Parliament Local Area Development Scheme (MPLADS) and Member of the Legislative Assembly (MLA) funds as well. A few States are already utilising funds under Integrated Action Plan (IAP) and Backward Regions Grant Fund (BRGF) for strengthening school infrastructure. Besides, there is a need to tap funds from philanthropy for accelerated infrastructure building. One creative way is to allow donors to name

TABLE 21.2
Civil Works under SSA in the Twelfth Plan

Items	Number	Estimated Cost (₹ in Cr)
1. New School Buildings	67,010	7,685
2. Residential Schools	10,500	10,500
3. Additional Classrooms	4,98,560	19,942
4. DWS	62,366	468
5. Toilets	3,43,013	2,884
6. KGBVs and so on	3,598	3,692
Total		45,171

Source: Ministry of HRD.

buildings or rooms or install plaques, or other such commemorative features (such as naming a scholarship scheme after a benefactor).

Develop Partnerships with the Community-Based Organisations (CBOs)

21.70. A Council for People's Participation in Education (CPPE) will be set up as a registered autonomous body for institutionalising the partnership through well-defined structures involving both government and voluntary agencies on a regular basis. In addition to processing proposals for funding support for educational projects, such partnerships will provide technical support, facilitate peer interaction amongst practising groups and provide resources and technical persons on a continuous basis. CPPE will be a permanent structure, funded by the government, with functional autonomy but working in consultation with the Central and State Governments.

Integration of Sports and Physical Education

21.71. Physical education, games and sports should be made an integral part of the curriculum and daily routine in schools for the holistic development of children. Provision of infrastructure for these activities should also be made in the Twelfth Plan in convergence with SKA, the principal scheme for broad basing of sports and developing a sports culture in the country. The Schedule to the RTE Act mandates that all schools shall be provided play material, games and sports equipment. Since many urban schools have inadequate facilities of sports on their own, other neighbourhood schools with such facilities in the public and private sectors and also municipal parks and public play fields should be opened up for children of such schools during school hours on nominal maintenance costs. Building on innovative approaches undertaken during the Eleventh Plan, teachers must also be trained to lead quality and inclusive physical education sessions as part of both their pre-service and in-service training.

Integration of Arts in Education

21.72. Visual and performing arts are a critical part of school education and also provide space for children with different abilities. Arts are a powerful tool in the teaching learning process. It enables children

to express ideas, emotions and thoughts freely, to comprehend and build perspectives. Children experience joy, sense of freedom in the process of learning when they have the opportunity to explore, to imagine, visualise, observe through their senses, to participate and communicate. It enhances interest as children connect arts with all subjects and with their daily lives. Art also has a cognitive component; it makes us think, reflect, hypothesise, perceive, comprehend and create. Institutions like the National Centre for Performing Arts and the National School of Drama along with the Central academies should contribute significantly to the inclusion of arts in the school curriculum and its implementation.

Increased Role of the Private Sector

21.73. Private providers (including NGOs and non-profits) can play an important role in elementary education. Their legitimate role in expanding elementary education needs to be recognised and a flexible approach needs to be adopted to encourage them to invest in the sector. The current licensing and regulatory restrictions in the sector could be eased and a single window approach should be adopted so that the process of opening new schools by private providers is streamlined. It is also important that the regulations be flexible and context-dependent—care needs to be taken so that schools that are serving disadvantaged populations effectively do not get shut down. A few States have already adopted a more flexible approach in this regard in framing State rules. In all, private players would be encouraged to set up more schools, provided they are committed to, and held accountable for, providing high-quality education and are transparent in their operations.

FUNDING PATTERN

21.74. Government has revised the fund-sharing pattern between the Central and State Governments for implementation of the modified SSA programme, which is now fixed in the 65:35 ratio. The fund-sharing pattern for the States in the NER, however, continues to be in the ratio of 90:10. While the revised fund-sharing pattern may be adequate for most States, some States that are educationally disadvantaged with low levels of literacy, grossly inadequate school infrastructure and difficult terrain face

a heavy financial burden to meet the RTE mandate and norms. A big push is called for to enable these States to come at par with other States. This is crucial to achieve national and international goals under the Millennium Development Goals (MDG). Over time, financing of SSA has to be made more sustainable. Since the grants available based on the Thirteenth Finance Commission recommendations for elementary education for the States would extend up to 2015, the new funding pattern (50:50) would be deferred until the beginning of the Thirteenth Plan. Central assistance to the States in terms of per child norms and performance-based financing would gradually be built in along with results-based management. States and institutions which perform well should be incentivised with untied funds. Educational spending should be equitable and more efficient. More pragmatic tax concessions should be devised to encourage private investment in education.

IMPLEMENTATION, MONITORING AND EVALUATION

21.75. The focus in the Twelfth Plan is to address the weaknesses in implementation that have been a major constraint in achieving the goals of previous Plans. Implementation needs to take into account local conditions, it would therefore be desirable to give States (and even districts) a lot of autonomy. Consequently, the approach in this Plan would be to provide clear goals and direction to States and education departments, provide considerable operational autonomy to States on how to achieve these goals, and invest in strong and independent monitoring of outcomes by the Central Government.

21.76. In implementation, equal emphasis would be placed on provision of inputs for quality education (infrastructure, teachers, training, enrolment and other inputs) as well as ensuring that these inputs translate into improved processes (attendance, instructional time) and outcomes (retention, learning outcomes, equity). States will be encouraged to innovate and experiment with ways of achieving these outcomes effectively. Innovations can cover a very broad range of areas—some of which may include methods for systematic assessment of student learning, improved teacher training, innovative

pedagogies in the classroom including those that leverage technology in the classroom, supplemental instruction for first-generation learners, methods for improving teacher motivation and effectiveness, and methods for leveraging resources from third parties for improving education. States may also become partners with appropriate third parties to provide key capabilities that may help these goals. States will be encouraged to carefully document and evaluate these initiatives and to share best practices with other States and with the Centre.

21.77. To encourage innovation and sharing of best practices, the Plan will provide a certain amount of untied 'flexi' funds to the States and also provide additional amounts of 'results-based' financing. States in turn will be encouraged to invest in district-level leadership and provide autonomy and resources to districts and encourage capacity building at the district level to monitor and improve education outcomes. To support this endeavour, the Plan will also dedicate resources to high-quality independent measurement and monitoring of learning outcomes (along the lines of the Annual Health Survey). The annual reporting of learning outcomes at State, district and block levels can in turn be used to encourage a mission-like focus on improving education outcomes in the Twelfth Plan.

21.78. A key challenge for e-monitoring is the absence of high-quality data that is updated on a frequent and reliable basis. Infrastructure such as the Unique Identification (UID) could be deployed to keep track of student enrolment, attendance, and dropouts, and biometric authentication could also be deployed to improve teacher attendance. Modern cell phone-based technologies may prove to be a promising way of empowering communities to report real-time data on school performance metrics such as teacher attendance, student attendance, availability of midday meals and so on. Technology platforms such as mobile phones and tablet personal computers (PCs) can also be used for rapid diagnostic testing of student learning, analysis of common mistakes and areas of misunderstanding, and dynamic testing based on performance on initial questions. Several non-profit and third-party organisations are

working on building such applications, and States/districts will be encouraged to experiment with such methods for improved real-time data collection on the performance of the education system.

21.79. Finally, it is worth noting that the evidence base for effective policymaking in elementary education is quite limited—especially in crucial areas such as the effectiveness of different types of pedagogy, the effectiveness of using technology within the classroom, the optimal ways to organise children of different initial learning levels in a classroom, and handling multi-grade teaching more generally. The Twelfth Plan will place a high priority on improving research and the evidence base for policymaking, and will provide both funds as well as strong encouragement to States to take up high-quality research studies on primary education in India in partnership with universities and reputed individual researchers. Each State should be encouraged to earmark and spend adequate funds for independent measurement of learning outcomes. While each State may adopt different ways of doing it, some broad central guidelines may be desirable.

MID-DAY MEAL SCHEME (MDMS)

21.80. In keeping with the Constitutional provisions to raise the level of nutrition of children and enable them to develop in a healthy manner, the NP-NSPE was launched as a Centrally sponsored scheme in 1995. Commonly referred to as MDMS, this was expected to enhance enrolment, retention, attendance of children in schools apart from improving their nutritional levels. This was extended to upper primary (classes VI to VIII) children in 3,479 EBBs in 2007 and then universalised at the elementary level in the year 2008. The scheme is implemented through the States/UTs. MDMS is managed and implemented by School Management/Village Education Committees, Panchayati Raj Institutions, and Self-Help Groups. MDMS now includes madrasas and *maktabs* supported under the SSA as well as children under the National Child Labour Projects. A detailed survey of implementation of intended nutritional values including calorific value, protein inclusion, additional nutritional supplements and vitamins, as detailed in the scheme, needs to be carried out to

ensure that the nutrition scheme is implemented in both spirit and letter.

Coverage

21.81. MDMS covered 7.18 crore primary school children and 3.36 crore upper primary school children in 2010–11. The coverage of children in the States of Bihar (43 per cent), UP (57 per cent) and Jharkhand (58 per cent) is below the national average of 72 per cent, whereas it is well above the national average in Chhattisgarh (83 per cent) and Odisha (82 per cent). Based on the Annual Work Plan and Budget of the States/UTs for the year 2012–13, the district-wise performance of the MDMS in all the States/UTs has been analysed and the poor performing districts (144) have been identified for focused attention. Of the poor performing districts, 17 are in areas affected by the Left Wing Extremism (LWE); 11 in the North Eastern States (Tripura—3, Meghalaya—4, Assam—4); 17 in tribal districts, and 13 in the hilly areas (Uttarakhand—4, J&K—9).

21.82. During the Twelfth Plan, MDMS will be expanded to cover pre-primary schooling in a progressive manner, private unaided schools, particularly in the SC/ST and minority-concentrated areas, and poor children admitted in neighbourhood private schools against the 25 per cent earmarked seats as per provisions of the RTE Act. While expanding the coverage, fiscal incentives like tax exemptions may be considered to encourage private participation in the scheme. Partnerships with panchayats and municipalities, as well as with other NGOs and government agencies may be developed to ensure good-quality, nutritious and regular supply of food to all children. The guidelines revised in 2009 require supply of cooked food. For this, funding for construction of kitchen-cum-store for proper storage of foodgrains and preparation of meal in hygienic environment is being provided. This would be implemented throughout the country and capacity-building initiatives would be taken up for this. Full convergence of the MDMS with the school health programme would be ensured during the Twelfth Plan to benefit from synergy in two programmes. Over a period of time, this will provide good longitudinal data on the impact of MDMS.

Monitoring and Evaluation

21.83. There are several concerns in implementation of the MDMS, namely, wide variations in enrolment, attendance and actual coverage of children, mismatch of foodgrains and cash fund utilisation, lack of controls over the quantity and quality of meals, irregular and uncertain supply of meals, and poor quality of grains in certain States. In order to address these concerns, the monitoring system under MDMS would be made more effective during the Twelfth Plan. An MIS portal for monitoring of the scheme has already been launched. All the States/UTs are now feeding data into the portal and annual data for 2.7 lakh schools have already been fed into the portal. The MIS would be integrated with Interactive Voice Response System to capture the information on daily basis and monitor the Scheme on real time basis. The MIS would enable the States/UTs and Central Government to plan the visits to the poorly performing area of the respective States. It will also be used as a mechanism for social audit as the data fed into the system through the IVRS would also be sent back to SMC members for verification. This will enhance transparency and accountability in the implementation of the MDMS and enhance the overall effectiveness of the Scheme. Such independent evaluations would be strengthened during the Twelfth Plan.

MAHILA SAMAKHYA (MS)

21.84. Mahila Samakhya (MS) launched in 1988–89 is being implemented in 10 States across 105 districts, 495 blocks (including 233 EBBs) and 33,577 villages and has special focus on the EBBs. Successive evaluations have acknowledged Mahila Samakhya as a unique process-oriented programme which has demonstrated ways of empowering rural poor and marginalised women and thereby enabling their effective participation in the public domain and in educational and learning processes. Through sustained perspective building and training of field staff, it has been possible to keep the focus of MS programme on most marginalised women. Of the 10.5 lakh women that were covered until the end of the Eleventh Plan, 36.74 per cent are SC, 16.33 per cent ST, 27.47 per cent OBC, 9.13 per cent Muslim and only 10.38 per cent are women from the general categories.

21.85. Continuance of Mahila Samakhya during the Twelfth Plan is crucial due to current thrust on inclusive education through the RTE-SSA. The large pool of trained women associated with MS would be used to achieve goals of the RTE, namely, equity and equality in and through education. Once the external funding is completely utilised, the programme would be brought under RTE-harmonised SSA with 100 per cent internal funding. A National Resource Centre with strong State level or regional units would be set up to bring MS programme's varied insights on women's empowerment, learning, agency, girls' education and institution-building to address gender barriers into the mainstream. The programme itself would be strengthened and expanded both in its coverage as well as scope/role during the Twelfth Plan.

SECONDARY AND HIGHER SECONDARY EDUCATION

21.86. With a dramatic growth in elementary education enrolments and improvements in retention and transition rates in recent years, particularly amongst the more disadvantaged groups, there is an increasing pressure on the secondary schools to admit more students. With the enforcement of RTE Act and further improvement in retention and transition rates, demand for secondary schooling will grow rapidly in the coming years. Meeting this demand is critical for three reasons. First, the secondary education fulfils large manpower needs of the semi-organised and the organised sectors of the economy. Second, it is the supply chain for higher education. And, finally, it caters to the needs of teachers for primary schooling. Low participation rates and poor quality at the secondary stage are a bottleneck in improving both the higher education participation and the schooling at the elementary stage.

21.87. Further, there are both social and economic benefits of secondary schooling. While there are clear improvements in health, gender equality and living conditions with secondary education, investments in secondary schooling have high marginal rates of return. Thus, the country needs to move towards universalisation of opportunity to attend secondary schooling of adequate quality. With enrolment in elementary education reaching near universal levels,

there would be an opportunity to move towards universal access to secondary education. The current GER for the combined secondary and senior secondary stages (Classes IX–XII) in 2009–10 at about 50 per cent is woefully low. Thus, the capacity of the secondary schooling system has to be expanded significantly. There are very large inequalities in access to secondary education, by income, gender, social group and geography. The average quality of secondary education is very low. Thus, urgent efforts are needed to improve its quality. The challenge is to dramatically improve access, equity and quality of secondary education simultaneously.

21.88. India has a long tradition of partnership between the public and private sectors in secondary education. There are four types of schools: (i) government—established by State Governments (as well as some Centrally established institutions); (ii) local body—established by elected local government bodies; (iii) aided schools—private schools that receive State Government grants-in-aid; and (iv) private unaided schools. Most of the growth of secondary schools in the private sector in the last two decades has occurred among unaided schools (25 per cent of schools). About 60 per cent of schools are now aided or unaided. It is essential, therefore, that the private sector’s capabilities and potential are tapped

through innovative public–private partnerships, while concurrently stepping up public investment by the Central and State Governments at the secondary level. And given that the presence of private schools varies considerably across States, context-specific solutions need to be promoted.

21.89. While private provision in secondary education should be fostered wherever feasible, the government will have to take the prime responsibility to provide access to disadvantaged sections and to bridge the rural/urban, regional, gender and social group gaps. Simultaneously, government must invest in teacher education and accountability, curriculum reform, quality assurance, examinations reform, national assessment capabilities and management information systems, which will require time and significant institutional capacity building to succeed at a national scale.

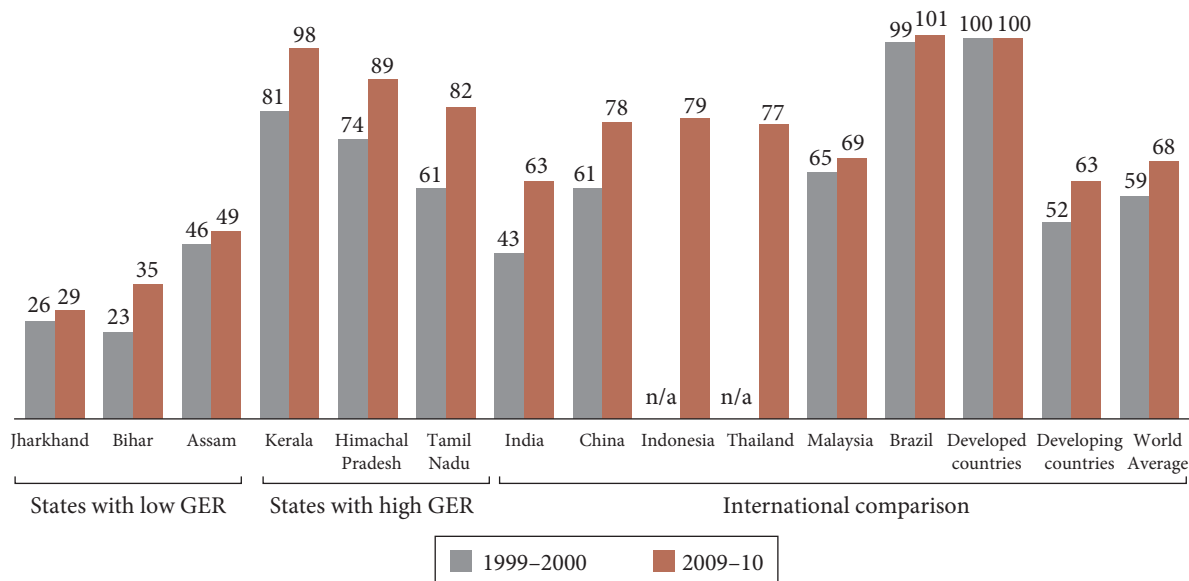
ENROLMENTS

21.90. GERs at the secondary (Class IX–X) and senior secondary (Class XI–XII) levels are 62.7 per cent and 35.9 per cent, respectively, leading to a combined GER for Class IX–XII at a considerably low 49.3 per cent (see Table 21.3). The significant dip in GERs from secondary to senior secondary level for all categories is driven by a number of factors including

TABLE 21.3
GER for Secondary Education by Social Groups (2009–10)

	SCs	STs	Non-SCs/STs	Overall
Secondary Level				
Boys	71.19	54.24	67.02	66.65
Girls	63.50	44.22	58.97	58.45
Total	67.58	49.41	63.13	62.71
Senior Secondary Level				
Boys	37.42	31.36	39.17	38.31
Girls	33.48	22.32	34.39	33.31
Total	35.60	26.91	36.88	35.92
Both Secondary and Senior Secondary Level				
Boys	54.52	43.45	52.86	52.39
Girls	48.86	33.68	46.54	45.86
Total	51.88	38.70	49.82	49.26

Source: Selected Education Statistics, Ministry of HRD, 2009–10.



Source: Selected Education Statistics, Ministry of HRD, 2009–10, EFA-GMR-2011 and UIS.

FIGURE 21.1: GER for Secondary Education: By States/Select Countries
(High/Low GER States and International Comparisons)

general lack of access, paucity of public schools, high cost of private senior secondary education and poor quality of education, along with the very important factor of high opportunity cost of deferred entry into the workforce. India's GER at the secondary level is close to that of the average for all developing countries (63 per cent), but substantially lower than that of emerging economies like China, Indonesia, Thailand and Brazil (see Figure 21.1).

21.91. Enrolments of the SCs—both boys and girls—have improved significantly in recent years and now compares favourably with the non-SC/scheduled tribe categories. This has been possible with government support for hostels, scholarships and other forms of financial aid combined with increased access to secondary education, particularly in urban and semi-urban slum areas. However, despite similar efforts, the GER for STs continues to be significantly low at the secondary level. This may be attributed to low transition rates from the elementary to the secondary level as well as access related challenges in disadvantaged locations—both of which are accentuated for girls.

21.92. Within the relatively low GER at the secondary level, there are wide regional and inter-State variations. Among the major States, secondary-level GERs are as low as 29 per cent in Jharkhand and 35 per cent in Bihar and as high as 89 per cent in Himachal Pradesh and 98 per cent in Kerala, as compared to the national level (62.7 per cent). At the Senior Secondary level, the GER ranges from being very low at 6.5 per cent in Jharkhand and 13 per cent in Assam and quite high at 60 per cent in Haryana and 69 per cent in Himachal Pradesh. In addition, in some States like Rajasthan and MP, the gender gap in GER is as wide as 20 per cent.

21.93. In India, only 5 per cent of the population of 19–24 age group has acquired some sort of skills through vocational education, while the corresponding figure for Korea is as high as 96 per cent. The National Knowledge Commission has recommended expansion and re-designing of vocational education and improvement of its quality. The mid-term appraisal of the Eleventh Plan emphasised the need for curriculum revision in vocational education, appropriate certification by accrediting

agencies, horizontal and vertical mobility with multiple entry/exit possibilities and linkage with industry for employment opportunities. The National Skill Development Mission has also recognised the demand for employment-oriented vocational education programmes with provision for hands-on training. In order to reap the benefits of the demographic dividend, it is critical to align vocational education within the composite framework of secondary schooling. Thus, more efforts are needed for vocational education at the secondary stage.

GOVERNMENT SPENDING

21.94. Public expenditure on secondary education has increased from ₹35,806 crore in 2007–08 to ₹94,183 crore in 2011–12, leading to an increase in its share as a percentage of GDP from 0.78 per cent to 1.05 per cent. Per capita expenditure on secondary education has gone up from ₹315 to ₹784 during this period. The Central Government's expenditure has gone up from ₹2,578 crore in 2007–08 to ₹13,278 crore in 2011–12, a five-fold increase. There is significant private expenditure as well. The average private expenditure on secondary education in private schools is as high as ₹893 per month as compared to only ₹275 per month in Government Schools.¹¹ This difference is primarily due to high tuition fees in private schools.

21.95. During the Eleventh Plan, the Central Plan outlay for secondary education was ₹54,945 crore. Against this, an amount of ₹17,723 crore (or 32.26 per cent of the outlay) was actually spent. Elaborate consultation process with stakeholders including the State Governments preceded launch of the new schemes, resulting in sub-optimal utilisation of planned resources in the first three years of implementation. However, in the last two years of the Eleventh Plan period, the Ministry was fully geared to implement schemes rapidly, but only limited resources were made available.

REVIEW OF THE ELEVENTH PLAN

Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

21.96. Secondary schooling received a major thrust during the Eleventh Plan with the Central

Government support for it increasing several fold. The Rashtriya Madhyamik Shiksha Abhiyan, a Centrally sponsored scheme with a funding pattern of 75:25 between Centre and States (90:10 for Special Category and NE States), was launched in 2009–10.

21.97. The major objectives of the RMSA are to (i) raise the minimum level of education to class X and universalise access to secondary education; (ii) ensure good-quality secondary education with focus on Science, Mathematics and English; and (iii) reduce the gender, social and regional gaps in enrolments, dropouts and improving retention. The interventions supported under RMSA included (i) upgrading of upper primary schools to secondary schools; (ii) strengthening of existing secondary schools; (iii) providing additional classrooms, science laboratories, libraries, computer rooms, art, craft and culture rooms, toilet blocks and water facilities in schools; (iv) providing in-service training of teachers; and (v) providing for major repairs of school buildings and residential quarters for teachers. Despite being launched in the third year of Plan, there was good progress under the RMSA during the Eleventh Plan (see Table 21.4). Against a target of enrolling an additional 3.2 million students, 2.4 million additional students were enrolled in secondary schools during the Eleventh Plan period.

Other Schemes

21.98. In addition to the RMSA, the following five Centrally sponsored schemes were launched during the Eleventh Plan: (i) setting up of model schools; (ii) setting up girls' hostels in secondary and senior secondary schools; (iii) National Scheme of Incentive to Girls for Secondary Education (NSIGSE); (iv) Inclusive Education for the Disabled at the Secondary Stage (IEDSS); and (v) National Meritcum-Means Scholarship scheme (NMMS). In addition, the ongoing scheme of ICT in Schools was revised. The targets and achievements under these schemes are given in Table 21.5. In addition, the scheme of vocational stream at the +2 stage that was launched in 1988 and revised in 1992–93 was continued after further revision as approved in 2011. Despite massive infrastructure of 21,000 Sections in over 10,000 schools for vocational streams catering

TABLE 21.4
RMSA: Achievement in the Eleventh Plan

Sl. No.	Items	Target	Achievement (Approved)
1	Sanction of New Schools	11,188	9,636
2	Strengthening of existing Schools	44,000	34,311
3	Additional Classrooms	88,500	49,356
4	Additional Teachers	1,79,000	59,000
5	In-Service Training for All Teachers	100 per cent	100 per cent
6	Annual Grants to Schools	Full coverage	75,394
7	Minor Repair to Schools	Full coverage	62,221

Source: Department of School Education and Literacy, Govt. of India.

TABLE 21.5
Centrally Sponsored Schemes for Secondary Education
Target/Achievements in the Eleventh Plan

Sl. No.	Schemes	Start Year	Target	Achievement
1.	Model Schools	2009–10	3,500	1,940
	(a) EBB (KV Template)			
	(b) Non-EBB (PPP Mode)	2012–13	2,500	–
2.	Girls' hostels	2008–09	3,479	958
3.	Inclusive Education for Disabled at the Secondary Stage			
	(a) Beneficiaries (in lakh)	2009–10	–	10.76
	(b) School Covered (in lakh)	2009–10	–	2.18
4.	NSIGSE (in lakh)	2008–09	–	12.60
5.	NMMS (in lakh)	2008–09	4.0	1.04
6.	ICT in Schools			
	(a) School covered (nos.)	2009–10 (Revised)	–	90,209
	(b) Smart Schools (nos.)	2009–10 (Revised)	150	63

Source: Department of School Education and Literacy, MHRD, Govt. of India.

to over 1 million students, only about 4.8 per cent of all students are enrolled in the vocational streams against a target of covering 25 per cent of such students.

21.99. There are 1,740 schools (Kendriya Vidyalayas—1,092, Jawahar Navodaya Vidyalayas—586 and Central Tibetan Schools—62) with an enrolment of about 13 lakh students that are directly under the Central Government. These schools usually outperform other schools both academically and otherwise and hence there is demand for more such schools all over the country. During the Eleventh Plan, over 100

new schools were set up. In addition, there are Sainik Schools and Eklavya Residential Schools under Ministry of Defence and Ministry of Tribal Welfare under the Central Government, respectively.

21.100. The apex bodies in school education, National University of Educational Planning and Administration (NEUPA) for policy, planning and data collection, National Council of Education Research and Training (NCERT) for curriculum design, and developing textbooks and teaching-learning materials for school education, Central Board of Secondary Education (CBSE) for affiliation,

examination and assessment and National Institute for Open Schooling (NIOS) were very active during the Eleventh Plan and played a key role in school education reforms.

TWELFTH PLAN STRATEGY

21.101. The Twelfth Plan's objective for secondary education is to make quality education available, accessible and affordable to the target population in the age group of 14–18 years. Given this general objective, the following targets (see Box 21.4 below) will need to be achieved during the Plan period:

Box 21.4 Secondary Education: Twelfth Plan Goals

1. Achieve near-universal enrolment in secondary education, with the GER exceeding 90 per cent by 2017;
2. Raise the GER at the higher secondary level to 65 per cent by 2017;
3. Reduce Dropout rate to less than 25 per cent by 2017;
4. Ensure quality secondary education with relevant skills including basic competency in mathematics, science, languages and communication;
5. Implement common curricula and syllabi of nationally acceptable standards for Science, Maths and English in all schools in the country.
6. Develop life skills including skills of critical and constructive thinking, use of ICT, organisation and leadership, and community services.

21.102. Key elements of the strategy to achieve these objectives include: (i) consolidation and optimum use of existing resources; (ii) facilitating private growth, (iii) improving quality, (iv) focus on teacher availability and teacher training, (v) ICT integration in education and (vi) renewed focus on vocational education at the secondary level. Each of these elements is briefly described below.

Consolidation and Expansion

21.103. Strategies for universal secondary education must be based on population projection of the secondary education age group. There have been some projection exercises for some States on secondary age group population and demand for secondary education depending upon population growth rate and rate of transition from elementary to secondary education corrected by dropout factor. Some States

are already stagnating, some will reach the peak by 2016–17, some will stabilise only by 2025. Micro-planning for secondary education is hence necessary with proper future projections. Each State may devise a 10-year perspective plan for school education that would cover the period till the end of the Fourteenth Plan.

21.104. Enrolment in more than one-third of the secondary schools in the country is less than 80 students per school. The numbers of such schools are about 40,000 and 16,000 in rural and urban areas, respectively. About one-half of the rural schools are government funded. Secondary and higher secondary schools must be viable and large enough to benefit from investment on quality. The fact is that it is much harder to have good-quality education in very small schools with few teachers. The consolidation in secondary education will be achieved by (i) creating more and more composite schools from grades 1 to 12; (ii) upgrading primary schools into elementary schools in phases to fulfil the commitments of RTE-universal elementary education; (iii) upgrading every third elementary school to a secondary school; (iv) upgrading every fourth Secondary School to a Higher Secondary School by adding additional classrooms, laboratories, strengthening libraries and sports and games facilities and teachers. The cost of additional classrooms and facilities will be far less than establishing new schools. New schools will be set up only in un-served areas. Provision of transport, especially in rural areas, will be made for schools to avoid school dropout, especially among girls and economically weaker sections due to non-availability of schools within 'walking distance'. The transport facility will be more cost-effective and socially acceptable than setting up hostels. Nonetheless, hostel facilities would be provided in these schools on a priority basis in order to make them operationally viable in terms of teacher deployment and provision of other infrastructure facilities. In the unaided private sector, there are about 25,000 schools operating with enrolments of less than 80 pupils, per school. Efforts are required to utilise the surplus intake capacity in these schools to meet additional demand for secondary education. There are about 14,000 such schools located in rural

areas. These schools may also be incentivised to cater to the educational needs of disadvantaged groups in their neighbourhoods.

21.105. Several institutions of higher education have vast tracts of unutilised or underutilised land. Model schools/JNVs/KVs could be set up in such places. The public sector should also concentrate on opening new secondary schools in un-served and difficult areas where availability of land is not a major constraint. Second shift operations in schools in thickly populated areas and urban slums should also be evaluated. Overall, the strategy should be on consolidation by better use of existing land, infrastructure and physical facilities through resource-mapping and leveraging private and non-governmental expertise and resources to improve the quality of education.

Facilitating Private Growth

21.106. The role of the private sector in secondary schooling can be further strengthened through right policies, proper regulation, innovative public-private partnerships and a variety of demand-side financing measures that improve accountability and enhance parental choice, thereby achieving all three objectives of access, quality and equity in secondary education. This would require easing of entry barriers with dismantling of multiple licensing systems and procedures and the State Governments should revisit norms including requirement of land for setting up institutions. Many States have school land norms laid down in the 1960s and 1970s which need to be immediately revisited. A single window approach needs to be adopted to facilitate barrier free entry of private institutions including online monitoring of application status for setting up of new schools. Suitable taxation and land policies are needed to encourage expansion of secondary schools in the private sector, along with concessional loans for NGOs, trusts and registered societies for building new schools or improving the infrastructure of existing schools. Most of the publicly funded schools that have been in existence for some time have large open spaces, particularly those in rural areas. Most of these old school buildings require repair and upgradation and, in several cases, reconstruction. SSA and RMSA do not fund the reconstruction of old schools.

Some portion of the land area could be evaluated to be leased out to private schools under contractual obligation of the lessor for reconstruction of existing government school building. The contractual agreement should provide for access of government school children to laboratory, library and common playfield facilities of the private partner in the same campus.

21.107. Many schools in the country that were initially started as private schools through local initiatives have become government grant-in-aid schools. This system encourages local participation and fills the gap that exists in interior areas. Devising a good regulatory mechanism designed to ensure quality will be a preferable option over governments setting up their own schools and operating with very low levels of enrolments. Encouraging private unaided schools would cater only to the population which can pay, unless there is a policy of cross subsidisation of fees so that certain percentage of children from the poorer sections of the society can also be accommodated for free or at subsidised tuition fees. There is no ceiling on their intake capacity but resource constraints could come in the way of expansion. Institutional funding for expansion of school infrastructure is essential for accelerated growth of secondary education. This is also an important opportunity which should be seized to link new funding to the performance of institutions in achieving certain objectives, such as graduation of students, academic improvement and retention of disadvantaged groups.

21.108. There is an urgent need to focus on Economically Backward Blocks (EBB) to reach the learning population from marginalised groups and provide them access to secondary education. Public Private Partnerships in secondary education should be fostered wherever feasible. In private schools, a mechanism could be devised to fund enrolment of disadvantaged children with reasonable cost per child norms. For this to happen, three elements are essential: (i) funding facilities for investible resources for additional infrastructure development of recognised schools; (ii) proper accreditation of schools for ensuring quality education; (iii) revisiting of

rules and regulations infringing upon autonomy of schools, including prescription of teachers' salary for private schools. If minimum prescribed standards and norms are met for school infrastructure and qualified teachers with CTET/STET eligibility are deployed, the market should be left to determine the compensation structure for the faculty and staff.

Improving Quality

21.109. No recent, reliable, large-scale learning assessments at the secondary level exist. However, small-scale standardised assessments of student achievement in mathematics at the secondary and senior secondary level in two States (Rajasthan and Odisha) suggest that the quality of instruction and learning is very low at the secondary level. There are multiple factors for low levels of learning. Schools play a very important role in determining nearly half of student achievement. Thus, in the Twelfth Plan, all secondary and higher secondary schools would be made to conform to minimum standards in facilities and quality. This will require a greater role for the Central Government in supporting the States, particularly those lagging in secondary education. The focus should be on building the capacity of schools in terms of knowledge and skills, autonomy and accountability structures, and allocation of untied grants for undertaking school improvement measures for imparting quality education. Local capacities would be strengthened at the school level giving them the ability to 'think and innovate'.

21.110. In secondary schooling, there is too much emphasis on rote learning and insufficient development of conceptual understanding and higher order thinking skills. There is insufficient quality assurance and accountability mechanisms in place, while capacity and quality of pre-service and in-service training of teachers is low. The issues of curriculum, examinations reforms, school leadership, assessment and accreditation would also have to be addressed.

Curriculum Renewal

21.111. The outdated curricula and syllabi in the educational system need a complete overhaul. There is a need for periodic revision of curricula and for reforms in the examination system. Directorates

of School Education, State Boards of Secondary Education, Resource Institutions like NCERT, SCERTs, SIEs and such other institutions should be strengthened as part of RMSA/Teacher Education schemes so that these institutions lend credible support services and undertake effective periodic monitoring and concurrent evaluations. While the rate of funding for MMER (Management, Monitoring, Evaluation and Research) will be suitably raised under RMSA, its current skewed distribution across the States should be revised with minimum funding ensured for smaller States/UTs. National programmes on curriculum renewal, school-based Continuous and Comprehensive Evaluation (CCE), innovation and related institution-building would be launched during the Twelfth Plan. Each State has multiple agencies, that is, SCERTs, SIEs, Education Boards, SPOs, Directorates and so on, which have more or less the same objective of imparting quality education to all and improving the education system but they lack synergy. There is an urgent need to establish effective linkages amongst them for achieving the desired results.

Examination Reforms

21.112. Examination reforms that would focus on problem-solving, critical thinking and reasoning skills and decrease the emphasis on rote memorisation are critical to improving quality at the secondary level. Such reforms have the potential to change the teaching-learning processes inside the classrooms and have direct relation to improving learning outcomes. In recent years, CBSE has introduced wide-ranging examination reforms in 13,000 schools affiliated to it (see Box 21.5). During the Twelfth Plan, other Boards would be facilitated to emulate these reforms.

SCHOOL BOARDS FOR ACADEMIC TRANSFORMATION

21.113. Exceptions apart, currently, all School Boards function exclusively as examining bodies. During the Twelfth Plan, the School Boards should be enabled to take up leadership for reforms in the school system. They must remodel themselves in such a way that they have strong academic and IT divisions closely coordinating with examination

Box 21.5 CBSE Examination Reforms

Class X Board Examination has been made optional from the year 2011 for students studying in CBSE's Secondary Schools and who do not wish to move out of the CBSE system after Class X.

Continuous and Comprehensive Evaluation (CCE) has been strengthened in all CBSE-affiliated schools from October 2009 onwards in Class IX, wherein both scholastic and co-scholastic areas, including life skills of the students, are assessed on an ongoing basis for their holistic development.

In order to bring greater objectivity in reporting of performance and to reduce stress and undesirable competition, a system of grading in place of marks has been introduced.

and administration divisions for academic transformation and capacity building. They should take upon themselves the role of capacity building of the school principals, headmasters, teachers and even parents. Quality initiatives taken up by some School Boards like the CBSE should be promoted as national programmes. Among the important initiatives are producing quality-assured digital content in local language and encouraging teachers to create their own content and upload on a common web portal, provisioning affordable ICT facilities in classrooms, ICT-integrated education supported by LMS, Continuous and Comprehensive Evaluation for reducing stress on students through adopting scientific techniques of evaluation, School Quality Assessment and Accreditation for Social Accountability, and such others. All State boards must be encouraged and supported wherever necessary for implementing these quality interventions. CoBSE shall catalyse this development. The voluntary association of School Boards and CoBSE needs to be strengthened and made much more effective. Most School Boards are financially sound and may not need additional funding.

Development of School Leadership

21.114. Programme of Leadership Development in School Education will act as the vehicle to empower and drive critical education reforms through intensive and interdisciplinary curricular experiences, active exchange of ideas, adoption of an interactive pedagogical approach that promotes team work and collaboration; creation of opportunities for professional development of leaders in school education; identification and nurturing of talent within and

outside the school system to take up leadership; and establishment of a network of institutions to impart leadership education. The programme will have two-tier institutional arrangement with a National Centre for Leadership in School Education and Leadership Academies in selected Institutions of Higher Learning. NUEPA through the National Centre for Leadership in School Education (NCLSE) will be entrusted with the responsibility of coordinating the work of the Leadership Academies located in different Institutes of Higher Learning.

School Quality Assessment and Accreditation

21.115. A School Quality Assessment and Accreditation System would be established to cover all aspects of school functioning, including scholastic and co-scholastic domains, physical infrastructure, faculty management, school leadership, learning outcomes and satisfaction of pupils and their parents/guardians. This system should be in sync with similar accreditation systems in advanced countries and in CBSE-affiliated schools. Examination reforms are needed to promote the acquisition of analytical and thinking skills amongst students rather than emphasising rote learning. The Government is already committed to developing a national assessment survey at grade X, which could lead the way to new forms of learning assessment, and which will enable cross-State comparisons of performance to be made. Schools should be encouraged to work towards achieving average international standards and this effort should be led by the Centrally funded KVs and JNVs, which would function as exemplars. There are half-a-dozen States with GERs above the world average.

21.116. Orientation and capacity-building programmes need to be organised for officials of school boards, teachers, principals and school administrators on a massive scale for effective implementation of NCF and RTE. Close collaboration is needed between SCERTs and school boards for organising workshops for teachers and educators for strengthening skills in teaching-learning and assessments. Involvement of grass-roots teachers drawn from schools including KVs and JNVs for preparation or adaptation of NCERT textbooks should also be promoted. Continued benchmarking against international performance is essential to measure India's progress. The outcomes for this system of assessment and accreditation must be made public so as to promote greater accountability of secondary schools.

School Mentoring

21.117. The Government will reach out to private schools with a reputation for quality and standards to ask them to support government schools in their neighbourhoods to improve quality. Partnerships will be forged for sharing their infrastructure and academic facilities with neighbourhood schools for teacher training and empanelment of certified resource persons. The Centrally funded KVs and NVs could become hubs for inter-school activities so as to catalyse improvement in other publicly funded schools in the area. This is especially true in the case of science and mathematics education, organising joint school seminars and educational exhibitions and running bridge courses in English. Well-functioning schools under the State Governments and private schools could also become hubs for inter-school activities.

Teacher and Training

21.118. Teacher training for secondary education was launched in the Eleventh Plan but the approach so far has been mechanical and limited to training teachers to help students score high marks in national board exams so as to raise school averages with very little focus on developing thinking, application skills, attitudes and values. The Twelfth Plan will promote professional cadre development in education and will empower educators to develop effective tools for promoting and gauging creative

problem solving and ideation in the classroom setting. Research scholars in the field of education in Universities/Colleges should be brought in to conduct seminars, classes and tutorials and should be compensated over and above their fellowships.

21.119. Significant shortages of secondary school teachers exist, especially in the critical subjects of mathematics, science and foreign languages. A major recruitment effort is needed. Curricular reform can also promote more efficient use of teachers. Moreover, new and flexible ways of encouraging people to come into or return to the teaching profession are needed; with an emphasis on identifying those with relevant competencies rather than those who have certain qualifications. National Mission on Teachers and Teaching should address issues of teachers at the secondary stage in a comprehensive manner.

Renewed Focus on Vocational Education

21.120. Recognising the fact that younger children learn and acquire skills faster, skills training of elementary nature, for example, manipulating simple instruments at the elementary level, and pre-vocational courses as an alternative to work education would be offered in Class IX and X. Students who take these pre-vocational options could be encouraged and facilitated to take up advanced vocational subjects at the higher secondary level. In addition, vertical mobility options for students taking vocational courses should be available at the undergraduate and postgraduate level. For high-quality vocational education at school level to evolve and grow in the country, there is a need to train and equip teachers on a continuous basis with the latest skills and pedagogy techniques in vocational education.

21.121. The vocational curriculum needs to be integrated and closely aligned with the academic curriculum and should contain modules on various generic and specific vocational skills for which industry should be involved. There should be an emphasis on development of generic and multiple skills so that trainees/students may respond to changes in technology and market demands. The revised scheme of vocationalisation of secondary education should be

revisited based on the pilots that have been undertaken to test and to ensure that it is aligned with the new qualifications framework and industry-led sector skill councils, so that vocationalisation does not become an expensive dead end for students. Given the different economic contexts across the country, system of monitoring and evaluation of the scheme must be strengthened.

TWELFTH PLAN INITIATIVES

Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

21.122. During the Twelfth Plan, RMSA will be made a single comprehensive scheme to address issues of coverage and quality in secondary education. This should be gradually extended to the higher secondary stage and should cover all government and government-aided schools. There are several Centrally sponsored schemes that benefit secondary school students of different categories and background. These are:

1. Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
2. Model Schools Scheme
3. Girls Hostel Scheme
4. ICT @ Schools
5. Inclusive Education for Disabled at Secondary Stage
6. Scheme of Vocational Education
7. National Means-cum Merit Scholarship Scheme
8. National Incentive to Girls
9. Appointment of Language Teachers

21.123. While the RMSA is a large scheme, others are comparatively smaller schemes. For convergence and improved efficiency, the smaller schemes shall be merged into RMSA. This should be done without losing focus on the objectives, goals and targets of any of the existing schemes. In following the example of RTE, RMSA shall develop and/or adopt/adapt national norms of secondary schooling for universalisation of secondary education. This will be required to ensure minimum quality of schooling. Significant issues to be addressed within the RMSA framework include construction of residential facilities for boys and girls, revising civil works norms to State schedule of rates, review of school infrastructure, coverage

of aided schools and higher secondary schools, provision of untied funds for innovation and so on. In addition, the RMSA framework should focus on promoting better-quality education against clear-cut benchmarks and enable States, districts and schools to respond flexibly to their specific needs.

21.124. The RMSA should continue with the current funding pattern in the Twelfth Plan period. RMSA should have inter-State allocation criteria for equitable distribution of Central assistance so that educationally backward States are not denied their legitimate share, while advanced States take additional advantage due to prior preparation. The RMSA should gradually move towards funding States on per child cost basis/norms which would incentivise enrolment, retention and completion, and thus move away from inputs-based funding to outcome-based decision-making.

21.125. The RMSA will make provisions for residential schools/hostels for boys and girls in existing schools to enhance access and participation of children from hilly and sparsely populated areas and from districts afflicted with civil strife as well as support OoSC as per guidelines developed by NIOS. It would include provision for schools without buildings and relax ceiling on civil works for infrastructure-deficient States with adoption of State Schedule of Rates for civil works. Provision should be made for ramps and at least one toilet for CWSN.

21.126. Science and Maths education would need special attention during the Twelfth Plan. Poor science and maths education (and English) accounts for 80 per cent of total students who fail in Tenth Board Examination. The transition rate from X to XI in Science is very small as indicated by less than 12 per cent share of students in UG Science stream. This low enrolment in science stream at higher secondary level and poor-quality education is a constraint in development of scientific manpower in the country. Under RMSA, a special component will be created to identify scientific talents at the secondary level and to strengthen science and mathematics education; teachers will be trained and retrained on modern methods of science education.

21.127. Physical education and games and sports would be made an integral part of the curriculum in schools for the holistic development of youth. Minimum infrastructure and consumables will be made available under RMSA in convergence with MYA&S (Ministry of Youth Affairs and Sports) schemes to all government and government-aided schools. School playgrounds of NVs and KVs will be opened up to neighbourhood schools. Local bodies would be impressed upon to extend support in earmarking open fields, sports stadia and community playgrounds for neighbourhood schools in urban areas, as many private schools and even some publicly funded schools do not have playgrounds within school campuses in many cities and towns. Such schools will be encouraged to adopt alternative sports and games activities that support physical development and nurturing of kinaesthetic intelligence. Appointment of additional Physical Education Teachers (PETs) would be funded under RMSA.

21.128. In an effort to ensure coordination and efficient implementation across a range of secondary education programmes, RMSA will become the umbrella programme and four other schemes would be subsumed under it during the Twelfth Plan. These are:

1. ICT@Schools will be integrated with RMSA to provide greater flexibility, enable optimal utilisation of resources and yield better results.
2. Inclusive Education for Disabled at Secondary Stage (IEDSS) scheme will be subsumed under RMSA and will cover children with blindness, low vision, leprosy cured, hearing impairment, locomotor disabilities, mental retardation, mental illness, autism and cerebral palsy. Coordination of the scheme with other programmes will be emphasised.
3. Girls' Hostel for Students of Secondary and Higher Secondary Schools will be subsumed under RMSA. The scheme also provides for a PG teacher as warden to support residents in scholastic assignments and boost their confidence.
4. The Scheme of Vocational Education will be subsumed under RMSA without any modification in the existing fund-sharing pattern and

will be implemented from the secondary stage onward.

21.129. The National Scheme of Incentive to Girls for Secondary Education will be continued as separate scheme. Schemes that are based on specific proposals from the States could easily be integrated within the composite RMSA. MHRD could provide financial assistance to the State/UTs for (i) appointment and training of Hindi teachers in non-Hindi-speaking States/UTs; (ii) appointment of Urdu teachers and grant of honorarium for teaching Urdu; (iii) appointment of teachers of Modern Indian Language (other than Hindi) in Hindi-speaking States/UTs; (iv) appointment of Urdu Teachers in any locality where more than 25 per cent are from Urdu language-speaking group.

Vocational Education

21.130. Vocational education at the secondary stage provides for diversification of educational opportunities so as to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provides an alternative for those pursuing higher education. Hence, it is important and would be implemented from class IX onwards, unlike the present provision for its implementation from class XI, and would be subsumed under RMSA. Vocational Education courses will be based on national occupation standard brought out by the Sector Skill Councils (SSCs) that determine the minimum levels of competencies for various vocations. Academic qualifications would be assessed and certified by educational bodies and vocational skills would be assessed and certified by respective SSCs.

21.131. In the Twelfth Plan, a mechanism would be created for convergence of vocational courses offered by various ministries, private initiatives and vocational education institutions, and use schools as the outlet for vocational education of young people. A comprehensive repertoire of vocational courses, duration of each course, equipment and facilities, costs and agencies will be developed. Like Germany and many other industrialised countries, the repertoire should have modular courses, which allow exit and entry into the job market and further.

21.132. The process for revamping of the scheme of vocational education at the higher secondary stage has already been initiated. This is now aligned with NVEQF (National Vocational Education Qualifications Framework) to create clear educational pathways from school to higher education level and provide more options to students to choose vocational modules depending on their aptitude and economic requirements. The revised scheme has been designed to address the weaknesses identified in the current system of vocational education. The salient components of the revised scheme include (i) strengthening of existing schools imparting vocational education; (ii) establishing new schools; (iii) in-service teacher training of seven days for existing teachers; (iv) 30-day induction course for new teachers and (v) support to private schools in PPP mode and support to NGOs for carrying out innovative practices. Competency-based modules will be developed for each individual vocational course. It will be mandatory for schools to revise their curricula every three years to ensure that it is guided by the needs of the industry. A separate Pilot programme within the National Vocational Education Qualifications Framework has been launched in Haryana. Assam, West Bengal and Karnataka are also in the process of launching a pilot. Based on the learning from the pilot, this would be scaled up in the Twelfth Plan. An MIS and web portal on vocational education will be set up to share best practices and experiences. Haryana has launched a pilot for introducing vocational education under NVEQF in 40 pilot schools in eight districts (see Box 21.6).

21.133. Based on the learning from the pilot(s), a possible road map could be to expand the coverage of vocational education from 2013–14 to about 400 schools in Haryana. The number of courses offered could be increased from 8 to 10 and pilots be started during 2013–14 in all States which show interest. States which manage the pilot successfully could expand the coverage in year 2014–15 to about ten times the number of schools covered under pilot. A nodal resource centre could be created at the national level to support the State Governments.

21.134. Students pursuing vocational courses at +2 level would be provided facilities for apprenticeship training under the Apprenticeship Act. While skill formation has to be mainstreamed in the formal education system right from class IX onwards, skill creation outside the formal education system needs coordinated action and innovative approaches. A VE cell has been established within the CBSE. The States would also be encouraged and supported to set up similar cells in the State Boards and encourage students to take vocational courses along with academic courses either as combination subjects or additional subjects, and allow credit accumulation and transfer on the pattern of CBSE-NIOS collaboration. The National and State Boards would draw up a detailed scheme of evaluation with respective SSCs to enable competency-based assessment of students. As the course design and TLM development get decentralised, PSSCIVE, the expert central institution, should be elevated for quality assurance in vocational education.

Box 21.6 **Pilot Project on Vocational Education under NVEQF**

- Each of the pilot schools offers two vocational subjects out of IT/ITes, Retail, Automobile and Security. These would be started from Class 9 and Class 11.
- The Curriculum has been designed by the respective Sector Skills Councils (SSCs) under NSDC. The content has been created by PSSCIVE, CBSE and Wadhvani foundation.
- Teachers have been recruited on contract basis, and have undergone training in pedagogy and domain skills. Principals of schools have undergone orientation.
- Each school has a vocational coordinator to create and nurture linkages of local industry and business with the school and its students. They will also facilitate guest lectures, industry visits and placements.
- Assessment will be done by Board of School Education Haryana and assessors of respective SSCs.

21.135. PSSCIVE in collaboration and partnership with State Boards/CBSE/Experts will develop exemplar competency-based curricula with inputs from industry, business organisation, agricultural initiatives for contextualisation and localisation of content by States. Competency-based curricula will be adopted/adapted by Central/State Boards of Education. Each curriculum will have to meet national standards for competencies and other applicable norms set by SSCs.

21.136. Vocational education at the secondary level would be aligned with skills training under the Ministry of Labour through Industrial Training Centres and modular training programmes as well as short-term training provided through National Skills Development Corporation (NSDC). Skills training under the JSS and NGO schemes of Adult Education programmes would be aligned with the framework for vocational education at the secondary level. In order to roll out these skills programmes, a massive effort would be needed for professional development of school leadership, master faculty trainers, inspectors, test evaluators and counsellors. Appropriate institutional arrangements with linkage to NSDC for capacity development for professional certification and accreditation systems for institutions should also be put in place.

Model Schools

21.137. During the first three years of the Twelfth Plan, 2,500 Model Schools in PPP mode would be rolled out in non-EBBs in a phased manner. Instead of setting up of a new organisation to oversee implementation of Model Schools, it is preferable that the additional responsibility is given to KV Sangathan so that the new schools can benchmark the format of KVs. However, the number of Model Schools being substantially large, as compared to existing KVs, the Sangathan needs to be considerably strengthened with resources and their role with regard to Model Schools should be clearly defined. It should also be ensured that these Model Schools indeed serve as exemplars in their blocks and carry out specific activities to share their best practices with other government schools in their vicinity.

National Means-Cum-Merit Scholarship

21.138. This scheme will be continued in the Twelfth Plan to award 1,00,000 scholarships each year, at class IX stage. The scheme should have reached a targeted coverage of 4 lakh scholarship by 2011–12. Reasons for poor performance of the scheme should be studied and remedial action taken. The States in which the number of candidates selected is low in comparison with the quota allotted to them may require remedial classes for students. There is a need for wider publicity for the scheme to generate awareness. There are several NGOs, Foundations and Corporate organisations which offer merit-cum-means scholarship to students in schools. To avoid duplication and avoidable waste of resources, a database of all such agencies will be developed; similarly, a database of all beneficiaries will be created so that scholars can be traced for evaluation of the scheme and for improving its effectiveness.

Schools under the Central Government

21.139. During the Twelfth Plan, an additional 500 KVs and 378 JNVs, including 27 for uncovered districts and 2 special NVs in Manipur, will be set up. The intake capacity will be expanded from 80 to 160 students per class and 10 Science Magnet schools will be set up within or in close proximity to the institutions of higher education and other scientific research institutions. The charter of KVs and NVs will be revisited and their scope expanded including provisions for economically weaker section enrolments. About one-third of enrolments could be allowed for wards of non-Central Government employees.

21.140. The Twelfth Plan will work towards shaping KVs and JNVs into pace setting schools with specific activities such as acting as Smart Schools. To begin with, about 500 KVs and 500 NVs covering all States will commence pace setting activities by extending their facilities after school hours to students of neighbouring State/UT Government schools. The KVs/NVs could use outsourcing model for innovative programmes including training of students for participation in international assessments and allow the use of their premises for the purpose. Arts Departments will be established in KVs to achieve

excellence in co-scholastic areas such as visual and performing arts.

21.141. The KVs/NVs will also be able to avail funding for additional sports activities from the schemes of Urban Sports Infrastructure/PYKKA under the Ministry of Youth Affairs and Sports. Rural KV/NVs will allow rural youths to utilise their facilities after school hours. Neighbouring school children will be allowed enrolment in NCC/NSS/Scouts and Guides/Judo/Karate/Yoga/Archery and so on in KVs/NVs. These schools will be hubs for the National Physical Fitness Programme to be launched during the Twelfth Plan with 100 per cent Central Assistance. These new initiatives of KVs/NVs, including hiring of personnel for providing coaching and other recurring expenses, will be supported with budgetary provisions to cover about 20,000 children per year.

21.142. All facilities, provisions, and quality initiatives stipulated for JNVs shall be made available to Eklatya and Sainik Schools, which are residential schools. The respective Ministries would be required to provide financial resources for these initiatives. MHRD will coordinate with other ministries and wherever necessary shall provide academic inputs. Similar coordination would also be required with Atomic Energy Education Society.

21.143. The Twelfth Plan will strengthen the infrastructure facilities for NIOS and 16 State Open Schools (SOS) under RMSA in order to improve the outreach of open schooling programmes with special focus on skill development and vocationalisation, particularly in the educationally backward districts of the country. An enrolment target of 25 lakh students has been set for NIOS/SOS. The Accredited Vocational Institutes (AVIs) under NIOS will be evaluated and rated before expansion. Examination reforms will be carried out so that year-round facilities are made available for open schooling.

RESEARCH, MONITORING AND EVALUATION

21.144. There are three areas that require urgent attention with regard to secondary education, namely, Curriculum Reform, Reform in Assessment and Examination and Reform in Pre-service and

In-service teacher education. These three areas require in-depth studies, impact studies as well as action researches. A proper system of documentation for researches and best and innovative practices in secondary education needs to be evolved at various levels. Moreover, researches must not be limited to only providing research reports; there is also a need to evolve a mechanism for sharing of these researches with various stakeholders including curriculum developers and policymakers.

21.145. A panel of agencies both at the national and State levels will be put in place to carry out third-party appraisals and evaluations of ongoing schemes by identifying sectors/sub-sectors and developing appropriate tools for evaluation. There is a need to involve national-level institutions to build the capacity of teacher educators and resource persons in States/UTs and help them to evolve a mechanism for monitoring the introduction of the interventions in the classroom process which have been provided during the training programmes. Resource and Responsibility centres at national, State, district and sub-district levels for enhancing the quality of secondary education would be put in place.

21.146. A school-based Annual Information System, called SEMIS, is already in place to collect data on physical infrastructure and facilities, availability of teachers, enrolment and academic performance of students, professional development of teachers, and so on. This needs to be strengthened. A number of quality indicators could be generated for different levels that will reflect the wholesome educational scenario of the respective State. This will also promote micro-planning and the preparation of annual work plans for a district/State. Unified System of Data Collection for School Education Statistics would be put in place in the Twelfth Plan.

USE OF TECHNOLOGY IN EDUCATION

21.147. Most of the secondary schools have limited availability of computer facilities. This constrains the students from acquiring ICT-related skills essential in the knowledge economy and limits teachers' ability to upgrade their subject-matter knowledge and students' ability to access essential learning

materials. ICT can potentially make significant difference in improving quality. The National Policy of ICT in School Education envisions and provides for the development of a holistic framework of ICT support in the school system. Mission Mode Project (MMP) on School Education is now under the National e-Governance Plan (NeGP). This would enable comprehensive technology enablement of the school education sector. More specifically, this would cover:

1. Developing ICT skills of all heads of schools, teachers, non-teaching staff and students;
2. Creating a repository of quality-assured digital contents in English, Hindi and regional languages in all subjects especially in science and mathematics;
3. Training and encouraging teachers to develop and use e-content;
4. Creating provisions for ICT in classrooms or portable facilities like a netbook/laptop/iPad and a projector with rechargeable battery, and implement ICT-integrated education;
5. Enabling provision of ICT-integrated examination and e-governance at the institutional and systemic level including setting up of education portal(s).

21.148. The MMP also envisions extensive use of technology to ensure delivery of services to students, teachers, autonomous institutions and partners on an 'anytime-anywhere' basis by leveraging the Common Service Centres (CSC) established up to the village level across the country. This along with the policy on ICT in School Education will enable a holistic and coordinated attempt to optimally use and leverage technology to achieve quality and efficiency in all of the interventions under various schemes.

21.149. There would be special focus on Aadhaar linkage of teachers and students databases with a view to remove ghosts, fakes, duplicates and cleaning up databases. This linkage coupled with effective analytics can help in addressing accountability, traceability and measurement-related challenges. It could also be used for tracking students and teachers

attendance, tracking deployment, training programme attended by teachers, their skills/capability areas and so on. Using this targeted deployment plan, skill development programme could be developed. Tagging records of students with those of teachers can help build accountability of teachers. In long run, this may also provide pointers to interventions (made at teachers' improvement areas) that have had a higher impact on improving learning outcomes. Aadhaar seeding would be used in tackling scholarship funds misuse. Recently, Andhra Pradesh has used it to identify fake student enrolments, same student enrolments in multiple colleges/courses, same faculty teaching in a large number of institutions. Aadhaar-enabled payment system could be used for transferring and managing scholarship payments.

TEACHER EDUCATION

21.150. There is a large number of teacher vacancies in the school system. An estimated 12.58 lakh (5.64 lakh old and 6.94 lakh newly sanctioned under SSA) vacancies exist at the elementary level. These are mainly accounted for by six States: UP (3.12 lakh), Bihar (2.62 lakh), West Bengal (1.81 lakh), MP (0.89 lakh), Chhattisgarh (0.62 lakh) and Rajasthan (0.51 lakh). Several States in the North, East and North-Eastern regions have an acute problem of untrained teachers. Therefore, pre-service and in-service training of teachers needs to be mounted on a mission mode during the Twelfth Plan. In particular, modular teacher training programmes should be developed so that para-teachers can attend training courses during the summer and winter vacations and get formally qualified over a three- to five-year period. In-service training using technology and innovative delivery methods could address the problem of poor quality of existing teachers.

21.151. In order to address the issue of availability and quality of teachers for the school system, each State must maintain a detailed district-wise database of teachers, teacher educators and teacher education institutions. National professional standards for teachers and teacher educators must be evolved. These must be used as a basis for designing pre-service and in-service training programmes and their performance assessment processes for professional

development. A system of teacher performance appraisal and feedback needs to be put in place as a tool for their development and empowerment and not as punitive measures. These systems are directly linked to improved classroom teaching and student learning. Rational deployment of teachers and objective and transparent policies for their transfers and placements would help in mitigating teacher shortages. Innovative ways need to be found to attract talent from other streams into the teaching profession. Superannuated qualified teachers may be re-employed in subject areas that have severe shortages. This strategy would be particularly useful in States like Kerala and Andhra Pradesh that have a relatively low retirement age for teachers in the government schools.

21.152. Upward career mobility options for teachers should be developed within each stage of education rather than across the stages, and should be linked with achievement of specific in-service certifications and experience criteria. High-quality teachers who wish to remain in active teaching as opposed to taking up administrative roles should have opportunities for career progression. A system of teacher evaluation based on objective measures of performance can be used as a basis for career ladders for teachers for bonuses, increments and promotions. These efforts along with continued professional development of teachers will ensure the teachers are motivated and lead to improving learning outcomes of the children.

Revamp Pre-Service Teacher Education

21.153. In view of large gaps in both quantity and quality of teachers, pre-service teacher education would be revamped. A revised scheme for teacher education would be implemented during the Twelfth Plan. The Scheme would strengthen institutional structures of DIETs, CTEs, IASEs and SCERTs. For their regular monitoring, elaborate process and performance indicators would be developed. In order to ensure adequate representation of teachers from the SC/ST/Minority communities, Block Institutes of Teacher Education in 196 SC/ST/Minority concentration districts would be set up.

21.154. The content and pedagogy of teacher education would be gradually aligned with the National Curriculum Framework for Teacher Education, 2009, which, inter alia, recommends a shift to a four-year integrated degree programme with concurrent study of a subject discipline and education after Class XII or two-year Bachelors in Education degree after graduation. Diploma in Education programmes for teachers for the elementary stage currently imparted by DIETs and other independent institutes should be progressively upgraded to degree programmes and these institutions could be upgraded as undergraduate colleges affiliated to the universities.

21.155. Distance-cum-contact degree programmes, increased use of ICT in regular programmes and adopting learn-work-learn cycles as an alternative to one-shot training would also be promoted. The professionals and BRCs/CRCs should be organically linked with DIETs under SCERT with knowledge capital infusion. It is essential that all these institutions are headed by professionals with appropriate qualification, experience, competence and vision. A large number of institutions and individuals must be identified to develop material for teachers and teacher educators in Indian languages based on curricular needs of pre-service programmes to begin with.

21.156. Linkages of teacher education institutes with each other, for example, of DIETs with CTEs and IASEs, and with the field, for example, the school system and NGOs operating in the sector need to be strengthened across the country such that academics and practitioners can work together towards the improvement of teacher education and school education more broadly. There should be effective use of technology as a tool for teacher education where special modules could be imparted to candidates across different geographical locations. These modules should integrate video lectures of professionals and highly reputed facilitators with careful selection of content. This can be combined with practical 'hands on' training in school environments in identified schools. Videos of best practices in teaching and pedagogy in Indian languages should be made available at these centres. Innovative alternate paths that would also allow lateral entry of talent from various

other streams into the teaching profession by choice should be explored and appropriate policy and regulatory structures put in place to support their adoption.

21.157. Regulatory arrangements for teacher education require overhaul with proper oversight in each State. Accreditation arrangements need to be strengthened and new credible agencies could be roped in for the purpose. There is an immediate need to lay down performance standards and benchmarks for teacher education institutions with clear accountability. This needs to be balanced with greater flexibility and rational norms and standards around infrastructure, faculty, curricula and entry eligibility from regulatory and governing bodies and Boards, in particular the National Council for Teacher Education (NCTE). Importantly, innovative programmes should be recognised by NCTE promptly so that these programmes can begin developing teachers in a short period of time. The recently introduced *Teacher Education Index* would be widely used to measure the quality of teacher education institutions. This third-party assessment by approved entities to avoid malpractice should be done periodically every five years and made public to ensure transparency.

Develop Teacher Educators

21.158. Availability of adequate number of quality teacher educators will receive high priority during the Twelfth Plan. A large number of teacher educators would be developed by identifying potential teacher educators through a transparent competency-based process. They will then undergo full-time capacity programmes at selected institutions. For this purpose, credible institutions in both the public and private sectors would be involved. Voluntary professional networks of teacher educators must be facilitated and strengthened to provide forums for professional interaction and development.

21.159. New programmes would be conceptualised for teacher educators. Curriculum, duration and structure of the M.Ed. programme would be revamped based on NCFTE 2009 and the new model curricula proposed by NCTE. At least 100

institutions across all States in the country would be identified and prepared to deliver such programmes. Selected multi-disciplinary public and private universities must be facilitated to establish departments/schools of education with direct links to good schools which can serve as a practice ground for honing practical teaching skills. Universities can also provide special courses which could be designed to combine specialised subject knowledge with educational courses and practical learning in an integrated manner, so that the problem of shortage of subject teachers is also addressed.

Ensure Continued Professional Development

21.160. The system of continued professional development of in-service teachers would be strengthened during the Twelfth Plan. For this, training needs would be systematically identified and programmes designed to meet their local requirements so that the teachers are engaged and find the programmes useful. Capacity-building programmes of short duration as well as relatively longer full-time or distance-cum-contact degree programmes should be encouraged. These programmes should develop in teachers the necessary orientations and expose them to the range of skills/activities which impact upon quality classroom transactions. Use of technology and innovative delivery methods would be important components. Along with specific training programmes, exposure visits or action research projects to be conducted with field organisations and academia should be organised. Appropriate enablers in the form of long-leave options or a significant number of mandated required days of in-service training along with appropriate budgetary support per-day/per-practitioner should be provided to the schools.

21.161. Untrained teachers and para teachers would require special attention. Modular courses to be delivered in distance-cum-contact mode could be developed and delivered so that these teachers can obtain formal qualifications over a three- to five-year period. Partnerships between teacher education institutes and colleges, both public and private, and National and State Open Universities to develop and deliver these programmes at an accelerated pace should be actively encouraged.

Quality and Certification Issues

21.162. In order to assess the quality of teachers, TETs would be institutionalised and made mandatory for teacher hiring. This would ensure that despite alternate pathways open to become teachers, standards of teaching are maintained. Teachers could be required to renew their certifications periodically so that they continue to invest in their own development. With focus on outcome, teacher education institutions could be rated on the basis of the scores in the eligibility tests. While focusing on eligibility tests as objective and transparent outcome measure for performance of teacher and teacher education institutions, care is needed that such eligibility tests do not become an end in themselves.

21.163. Thus, in addition to TETs, national performance standards for teachers, teacher educators and teacher education institutions must be developed. A well-defined system of teacher performance appraisal (based on teacher competencies, teacher performance, efforts made by the teachers to transact learning-related processes in the classroom and learning levels) would be introduced in stages. These could include (i) possibilities for internship for three years before getting a 'license', (ii) introducing a system of teacher evaluation based on attendance, effective teaching, evaluation of classroom work and so on, (iii) teachers once appointed could come up for evaluation and renewal of license every 5 years, (iv) teachers should have avenues open for retraining for other jobs they may want to take, and (v) lateral and vertical mobility for professional growth of teachers.

National Mission on Teachers and Teaching

21.164. During the Twelfth Plan, a National Mission on Teachers and Teaching would be launched so that issues of teacher education are dealt with in a holistic manner. This would also strengthen institutional mechanisms for strengthening vertical and lateral linkages. This would consolidate and strengthen ongoing programmes related to teachers and teaching through effective coordination and synergy by significantly enhancing the investment. Under the proposed mission, 30 Schools of Education will be established in the selected universities that will

conduct research into curriculum, pedagogy, and assessment and evaluation issues and offer degree programmes and conduct training for teacher educators. While CTEs that offer B.Ed. degrees are undergraduate colleges, these and organisations like the NCERT and the SCERTs lack any meaningful linkages with the university system.

GOVERNANCE AND EDUCATION LEADERSHIP

21.165. Performance-based innovative practices like social audits, linkages with panchayats and municipalities, energising and empowering village education committees, public reporting of expenditures linked to outcomes and results, and multi-stakeholder dialogues would be used to improve governance in the school system. Most important would be to empower local communities so that they have better oversight over schools and teachers. Local community could be given authority to hire, pay, and renew the contracts of community-based contract teachers (hired over and above the stipulated number of regular teachers), who can focus on supplemental and remedial instruction after school hours or during summer camps.

21.166. Overall strategy in governance reforms would be to strike a right balance between mandating and persuading. While efforts should be made to listen to stakeholders and embrace their concerns, a line must be drawn when it came to pushing through a reform or in ensuring commonality across the system. At the initial stage, the reforms are almost always driven from the Central agencies. Later, as the system improves, the locus for improvement shifts to instructional practices and primarily driven by the teachers and the schools by themselves.

21.167. A system of regular assessment of schools for both managerial and pedagogical aspects is needed. This would set the stage for formal accreditation of schools. In addition, there is a need to establish a vibrant teacher support system closer to the school setting. Block Resource Centres and Cluster Resource Centres that were conceptualised under DPEP and continued under the SSA would be revamped and repositioned so that these can work effectively for improving teacher performance. Their role could be

extended to the secondary schools. Finally, systemic improvement requires integration and coordination across different levels as can be seen in Table 21.6. The Twelfth Plan would focus on such integration and ordination.

21.168. Seven specific interventions are proposed in the Twelfth Plan. First is to improve functioning and strengthening of existing institutions such as the SCERT, SIEMAT, and DIETs. These entities would develop and disseminate best practices for effective classroom instruction, support teachers in effective pedagogy and efficient organisation of resources at school level (that is, people, teachers and students, space and time) so as to optimise learning opportunities for all children. A key goal will be to identify highly effective teachers for positions of educational leadership and mentoring, and to identify less-effective teachers for coaching and support.

21.169. Second would be on training of district and block-level education officers as well as head teachers for better management practices, on using data to better monitor and support school performance, and to mobilise community resources and efforts to improve school performance. Good performance of schools and teachers should be recognised and

rewarded to motivate teachers and administrators to achieve excellence. This recognition can be either financial or non-monetary, but the system as a whole should show that effort and performance is valued and rewarded. Third is to ensure full functioning of the already established National Centre for School Leadership and setting up of four Regional Centres of Educational Management co-located in existing institutions.

21.170. Fourth, the parents have to be more effectively engaged so that they demand better quality education and result-oriented teaching-learning process. For this, effective functioning of SMCs and Parent Teacher Associations (PTAs) is essential. These are central to the formation of School Development Plans and effective working of the schools. Special efforts and innovative approaches would be needed to enable illiterate, semi-literate or less-educated parents to partner with schools in their children's learning process. Fifth is focus on the role of community-based structures and the complementary and mutually reinforcing nature of their responsibilities in support of government machinery in monitoring of schools. Given the technical requirements, while the government can go deeper into the issue of inclusive classroom, some simple indicators

TABLE 21.6
Roles in System Improvement

Stakeholder	Key Role
Teachers	Deliver classroom instruction Collaborate with peers to develop, and share pedagogical practices that raise learning outcomes Engage parents as needed to advance student performance
School Administrators	Define and drive school improvement strategy, consistent with direction from district/State headquarters Provide instructional and administrative leadership for the school Involve school community to achieve school improvement goals
District/Sub-district School Leadership	Provide targeted support to schools and monitors compliance Facilitate communication between schools and the State Encourage inter-school collaboration Buffer community resistance to change
State Leadership	Set system strategy for improvement Create support and accountability mechanisms to achieve system goals Establish decision rights across all system entities and levels Build up skills and leadership capacity at all system levels

Source: Adapted from 'Education: How the World's Most Improved Systems Keep Getting better' by Mona Mourshed, Chinezi Chijioke and Michael Barber.

could be developed for monitoring by community-based institutions.

21.171. Sixth, good schools could act as exemplars for neighbourhood schools and a system of mentoring of schools, particularly in educationally backward regions, would be institutionalised. A system of sharing of best practices would also be introduced. This means that schools should match the best practices from a variety of perspectives from other schools in the same region. All Kendriya Vidyalayas and Navodaya Vidyalayas, along with newly set up Model Schools, should undertake pace setting activities for neighbourhood schools.

21.172. Seventh, sensitisation and re-orientation programme for national, State and field-level functionaries of the education departments would be conducted to bring quality and learning outcome focus in their work. Quality indicators need to be included in the agenda of review meetings at all levels. This would include attendance of students and teachers, learning outcome, supportive supervision provided by the field functionaries, graduation/dropout rate and so on. Revamping MIS/reporting systems having specific provision for reporting on

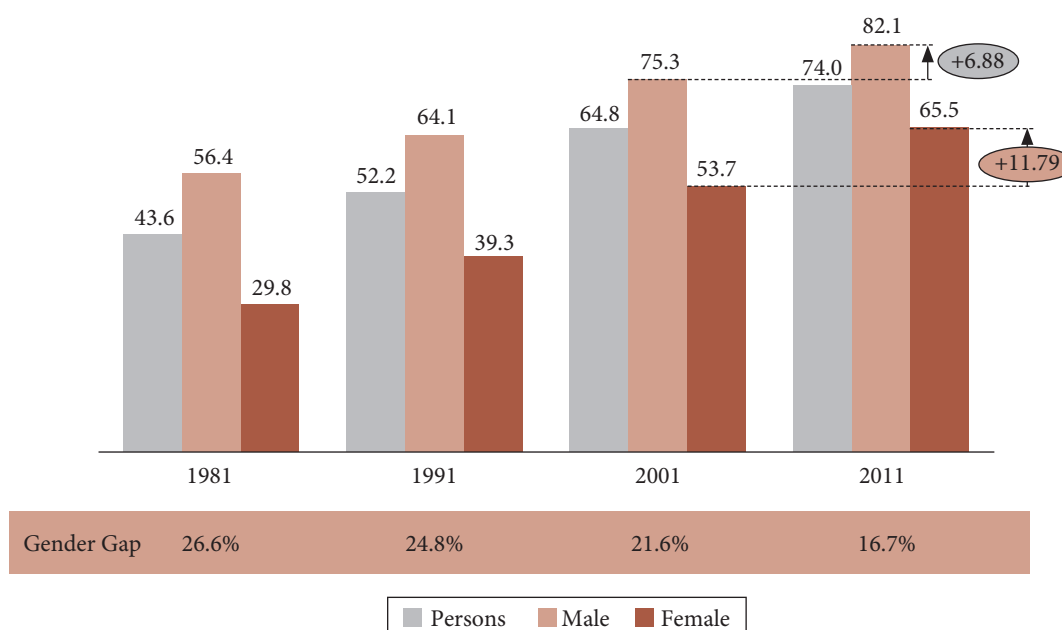
quality issues and active involvement of parents in the monitoring of quality of education imparted in the schools will also be ensured.

ADULT AND ADOLESCENT EDUCATION

21.173. As shown in Figure 21.2, in the decade from 2001 to 2011, literacy levels rose from 64.8 per cent to 74 per cent and the number of illiterates declined in absolute terms by 31 million with the number of literates rising by 218 million. The gap in literacy rates between urban and rural areas reduced by 5 percentage points. Female Literacy rate increased at a faster rate (11.79 per cent) than that for males (6.88 per cent), thus reducing gender gap from 21.59 per cent to 16.68 per cent. Gains in literacy levels are in part due to success of the adult education programmes and in part due to improvements in primary schooling. Relative contribution of each would be known once the age-wise disaggregated data for the 2011 Census is available. Despite these significant gains, large gender and regional disparities in literacy levels persist.

Saakshar Bharat

21.174. During the Eleventh Plan, *Saakshar Bharat*, a Centrally Sponsored Scheme that focused on women



Source: Census of India, 2011.

FIGURE 21.2: Improvements in Literacy Levels, 1981–2011 (%)

in particular and the disadvantaged groups in general, was launched. *Saakshar Bharat* is currently in operation in 372 districts. Under this scheme, functional literacy would be provided to 70 million adults (60 million women and 10 million men) in the age group of 15 years and above. Besides 3 million adults, half of them under basic education programme and the other half under vocational education and skill development programme are aimed to be covered. The scheme is anchored with Panchayati Raj Institutions and local self-government bodies and adopts a targeted approach with focus on women, SC, ST, and minorities; gives emphasis on quality; user context and group specific approach; promotes convergence and partnership and effectively uses ICT in implementation. *Saakshar Bharat* is using the concept of total quality management and is developing core curriculum framework for adult literacy.

21.175. Though *Saakshar Bharat* is conceived as a variant of National Literacy Mission (NLM), yet due to hiatus during the Tenth Plan period, management structures under the NLM had become moribund. Thus, galvanising the implementation machinery for *Saakshar Bharat* was a huge challenge. Now that it is in third year of its operation, significant support for *Saakshar Bharat* has been mobilised. Through large scale countrywide environment building and mass mobilisation campaigns, voluntary teachers/*preraks* have been motivated and trained in large numbers and community has been mobilised. A meaningful synergy between schemes of adult education, school education, departments of adult education in the universities, and other departments is being created.

Strategic Shift from Literacy to Lifelong Learning

21.176. *Saakshar Bharat* as a flagship scheme for adult education would be continued during the Twelfth Plan and, by 2017, it shall strive to raise the literacy rate to 80 per cent and reduce the gender gap to less than 10 per cent. Through continuing focus on literacy in the years to come, the goal of universal literacy by 2025 or even earlier would be achieved. During the Twelfth Plan, *Saakshar Bharat* will give special focus on young adults and OoS adolescents (15–19 years).

21.177. At the same, there is a need to redefine literacy and go for a paradigm shift from basic literacy to lifelong learning. In the present technology-driven knowledge-based competitive economy, even the basic ability to read and write with understanding is not enough; adults need to learn to manage information and knowledge in a critical and reasonable manner, learn to search, identify, evaluate, select, and use information and knowledge wherever they are available: print, mass media, or the Internet. Nevertheless, becoming literate can no longer be viewed as a specific and terminal period in the life of a person. In fact, literacy is the entry point to basic education and a stepping stone to lifelong education. Lifelong learning is today essential for survival and for enhancing people's quality of life, as well as for national, human, social and economic development. It should cover 'all learning activity undertaken throughout life-whether in formal, non-formal and informal settings with the aim of improving knowledge, skills and competence within personal, civic, social and for employment related perspective'. Under this new paradigm of lifelong learning and literacy, the focus is not only on non-formal education set up but on establishing strong linkages with the formal system with mechanism for recognising prior learning and accreditation.

21.178. Accordingly, *Saakshar Bharat* would be revamped during the Twelfth Plan and aligned to the new paradigm of lifelong learning. The key features of this programme would be:

1. It would provide opportunities to meet all types of learning needs including functional literacy, basic education, vocational education, physical and emotional development, arts, culture, sports and recreation. Such opportunities of learning will be for all adults, disadvantaged and advantaged, in the age group of 15 years and above, who missed the opportunity of formal education as well as all adults who wish to learn outside the formal system of education. It would continue to focus on inclusion with programmatic interventions in rural areas, urban slums, low literacy areas, tribal areas, SCs and minority concentrated areas. To facilitate more equitable access

and participation, the revamped programme would create appropriate infrastructure, especially in difficult, backward, tribal, and rural areas, and enhance culture of learning and education by eliminating barriers to participation through ICT, awareness, mobilisation, environment building and well-designed and targeted guidance, information and motivation.

2. At the Gram Panchayat level and at the equivalent levels in the urban areas, the existing well-equipped ICT-enabled multi-purpose Adult Education and Skill Development Centres (AESDCs) would be strengthened (or set up where these do not exist) to offer a range of adult learning and education programmes to meet local needs of the adults. For higher levels of adult education, secondary level institutions at the block and community colleges at the district level need to be set up.
3. Existing programme structures, including National Literacy Mission Authority at the apex level, the State Literacy Mission Authorities at the State level and the Lok Shiksha Samitis at the District, Block and the Gram Panchayat, as well as the resource support bodies, would be remodelled, strengthened and aligned to lifelong learning and literacy. Inter-sectoral and inter-ministerial cooperation would be obtained. In addition, active involvement of public authorities at all administrative levels, civil society, private sector, community and adult learners' organisations in the development, implementation and evaluation of adult learning and education programmes would be obtained. The revamped programme would need a permanent system with nationwide and multilevel network of institutions and structures that conform to these parameters. Additional resources should be allocated for building capacities of PRIs and other implementing agencies.
4. Objective criteria to assess learning outcomes, skill development, prior learning and equivalency should be developed based on which third party assessment and certification should be undertaken. For this, partnerships should be developed with accredited national and State-level agencies and open and distance learning

systems. *Lifelong learning and literacy* under the revamped programme should be seamlessly integrated with formal education system for horizontal and vertical migration by establishing equivalency frameworks to facilitate credit transfer among formal, non-formal and informal education.

21.179. The revamped *Saakshar Bharat* would be a continuing programme as a lifelong learning and literacy support system for the country. To promote a systematic lifelong learning, the country might require comprehensive legislation to formally recognise forms of education other than formal, integrate formal, non-formal and informal learning and for recognition, validation and accreditation of learning obtained in non-formal ways. Need for enabling legislative measures would thus be examined to provide a robust framework for lifelong learning and literacy.

HIGHER EDUCATION

21.180. Higher education is critical for developing a modern economy, a just society and a vibrant polity. It equips young people with skills relevant for the labour market and the opportunity for social mobility. It provides people already in employment with skills to negotiate rapidly evolving career requirements. It prepares all to be responsible citizens who value a democratic and pluralistic society. Thus, the nation creates an intellectual repository of human capital to meet the country's needs and shapes its future. Indeed, higher education is the principal site at which our national goals, developmental priorities and civic values can be examined and refined.

21.181. It is estimated that developed economies and even China will face a shortage of about 40 million highly skilled workers by 2020, while, based on current projections of higher education, India is likely to see some surplus of graduates in 2020. Thus, India could capture a higher share of global knowledge-based work, for example by increasing its exports of knowledge-intensive goods and services, if there is focus on higher education and its quality is globally benchmarked. The country cannot afford to lose time. The demographic bulge evident in India's population pyramid is encountering lower fertility rates,

leading to a rapid slowdown in population growth rates and a looming decline of the population in the prime educable age up to 25 years within the next couple of decades.

21.182. Despite considerable progress during the Eleventh Plan, less than one-fifth of the estimated 120 million potential students are enrolled in HEIs in India, well below the world average of 26 per cent. Wide disparities exist in enrolment percentages among the States and between urban and rural areas while disadvantaged sections of society and women have significantly lower enrolments than the national average. The pressure to increase access to affordable education is steadily increasing with the number of eligible students set to double by 2020. At the same time, significant problems exist in the quality of education provided. The sector is plagued by a shortage of well-trained faculty, poor infrastructure and outdated and irrelevant curricula. The use of technology in higher education remains limited and standards of research and teaching at Indian universities are far below international standards with no Indian university featured in any of the rankings of the top 200 institutions globally.

21.183. The key challenge is to find a path to achieve the divergent goals for the growth of higher education in India. Combining access with affordability and ensuring high-quality undergraduate and post-graduate education are vital for realising the potential of the country's 'demographic dividend'. Future expansion should be carefully planned so as to correct regional and social imbalances, reinvigorate institutions to improve standards and reach international benchmarks of excellence, match demand with supply by improving employability, and extend the frontiers of knowledge.

STRATEGIC AIMS OF THE TWELFTH PLAN

21.184. The Twelfth Plan will build on the momentum generated during the Eleventh Plan and continue the focus on the 'Three Es'—expansion, equity and excellence. However, the Plan proposes a paradigm change in the way we achieve such goals—through three new principles. First, an overriding emphasis will be given to quality—as further

expansion without quality improvement would be counterproductive for the future of India, given the serious quality issues noted in the sector. Second, the Plan also strives to diversify higher education opportunities, not only to meet the needs of employers, but also to offer a wide range of paths to success for our youth. India must develop world-class research universities as well as have sophisticated teaching institutions to impart key vocational and generic skills in a timely manner to cope with the rapidly changing labour market needs. Third, this excellence in diversity will be implemented through governance reforms, to enable institutions to have the autonomy to develop distinctive strengths, while being held accountable for ensuring quality. Hence, the Twelfth Plan adopts a holistic approach to the issues of expansion, equity and excellence so that expansion is not just about accommodating ever larger number of students, but is also about providing diverse choices of subjects, levels and institutions while ensuring a minimum standard of academic quality and providing the opportunity to pursue higher education to all sections of society, particularly the disadvantaged.

21.185. These objectives must guide the development of all three segments of higher education: Central institutions, which account for 2.6 per cent of the total enrolment; State institutions which account for 38.5 per cent of enrolment; and private institutions that cater to the remaining students. All three segments have to be expanded to achieve enrolment target (see Box 21.7) by creating additional capacity and ensuring equal access opportunities, while being supported to improve the quality of teaching–learning, attain excellence in research, and contribute to economic development.

STRATEGIC FRAMEWORK OF THE TWELFTH PLAN

21.186. In the light of past experience and considering the inter-linkages between expansion, equity, and excellence, a new strategic framework (see Figure 21.3) is required to pursue the objectives of the Twelfth Plan. This would involve cultural, strategic and organisational changes impacting on all aspects of higher education ranging from access and equity to governance,

Box 21.7 Enrolment Target for the Twelfth Plan

Additional enrolment capacity of 10 million students including 1 million in open and distance learning would be created by the end of the Twelfth Plan. This would enable roughly 3 million more students in each age cohort to enter higher education and raise the country's GER from 17.9 per cent (estimated for 2011–12) to 25.2 per cent by 2017–18 and reach the target of 30 per cent GER by 2020–21 which would be broadly in line with world average.

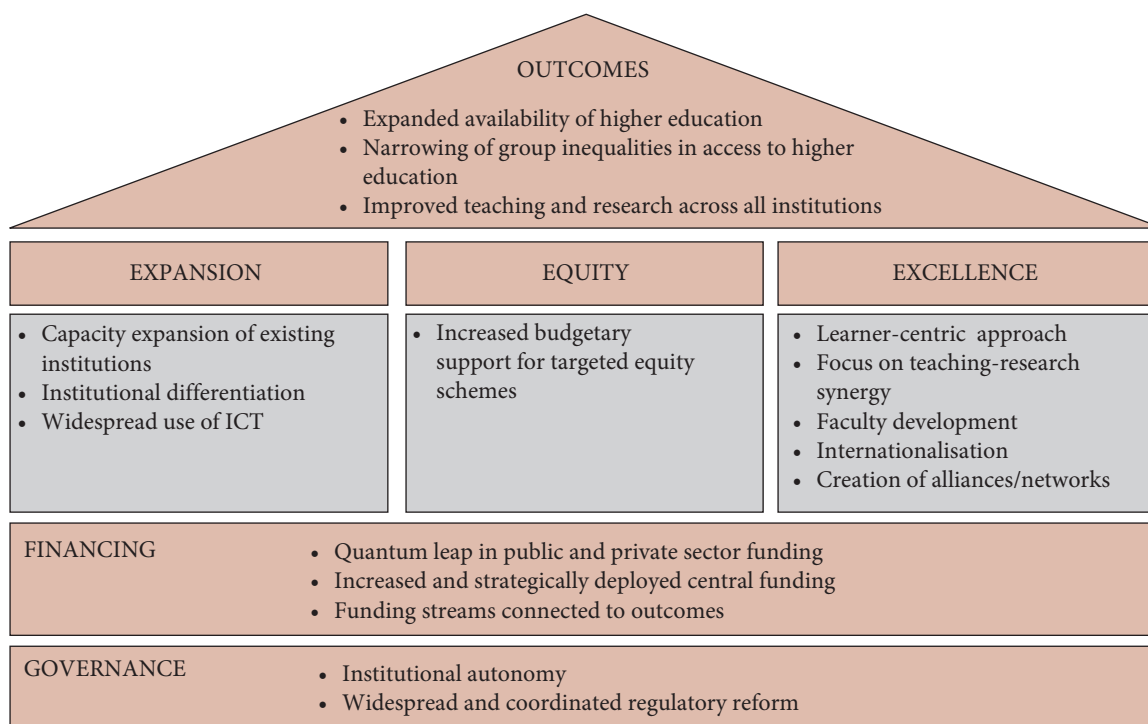


FIGURE 21.3: Strategic Framework

funding, monitoring and regulation, institutional structures, curricula and teaching–learning processes.

21.187. The strategic framework for the Twelfth Plan for higher education identifies such a paradigmatic shift in the following critical areas related to expansion, equity, excellence, governance and financing.

Expansion

1. Expand access by scaling up capacity in existing institutions rather than increasing the number of institutions, with the exception of new institutions needed to address critical regional and social gaps.
2. Create a system of institutional differentiation and distinctiveness to cater to a diverse body of students and the varied needs of employers.

3. Use the transformative potential of new technologies to improve quality, reduce costs, improve processes and efficiency and reach a larger body of students, while promoting efficient and transparent governance and raising the quality of teaching and research.

Equity

4. Provide significant increase in budgetary support for equity-related measures through targeted, integrated and effective equity-related schemes, which will replace the existing maze of multiple and diffused small outlay schemes.

Excellence

5. Foster a shift from an input-centric and credential-based pedagogical approach to a

learner-centric and learning-outcome based approach to improve the quality of teaching and research.

6. Ensure availability, recruitment and retention of qualified people to meet the growing need for quality faculty; upgrade the skills of existing faculty; and, build synergies between teaching and research to promote excellence in both.
7. Facilitate translation of academic research into innovations for practical use in society and economy and foster entrepreneurship that creates wealth and public goods.
8. Promote internationalisation by encouraging and supporting institutions and their faculty to engage more deeply with institutions and faculty around the world in areas ranging from teaching-learning to research and outreach.
9. Create and facilitate alliances, networks, clusters, and consortia of academic institutions amongst themselves and with research institutions and industry to accelerate the process of knowledge development by better resource utilisation and by complementing mutual expertise.

Governance

10. Enable institutional autonomy by transforming the role of government from command and control to a steering and evaluative role.
11. Enhance the capacity of the higher education system to govern itself by widespread and coordinated regulatory reform.
12. Increase transparency in both public and private institutions by requiring them to disclose important standardised information related to admissions, fees, faculty, programs, placements, governance, finance, business tie-ups and ownership.

Financing

13. Implement a quantum leap in both public and private sector investment in higher education to achieve the various goals set out for the Twelfth Plan.
14. Implement a significant increase in Central plan funds for higher education and strategically deploy these funds to improve the entire system of higher education, including State systems.

15. Directly connect funding streams to specific outcomes and desired impacts related to the Plan objectives through reforms in governance arrangements at the national, State and institutional levels with suitable implementation and monitoring mechanisms.

21.188. Figure 21.3 shows the various elements of the strategy framework and inter-linkages amongst them. The issues of expansion or widening access, improving equity in access, improving quality and fostering research and innovation, governance, financing, Plan implementation, monitoring and evaluation have been further elaborated in the subsequent sections. In each section, the experience of the Eleventh Plan is first analysed which leads to the specific strategy to be adopted and initiatives to be undertaken in the Twelfth Plan.

EXPANSION OF ACCESS TO HIGHER EDUCATION

Enrolment Expansion in the Eleventh Plan

21.189. The Eleventh Plan recognised and responded to the rising demand for higher education.¹² Enrolment increased in government as well as private institutions. Table 21.7 provides the enrolment numbers for the Tenth and the Eleventh Plan, the increase in enrolment and the compounded annual growth rate (CAGR).

21.190. Enrolment¹³ in open and distance learning (ODL) programmes also grew rapidly during the Eleventh Plan from 27.41 lakh students in 2006–07 to 42.01 lakh students in 2011–12 (Table 21.8). Apart from the Indira Gandhi National Open University, there are 13 State Open Universities and 183 other Distance Education Institutions (DEIs) approved by the Distance Education Council. Enrolment in DEIs that includes at least 44 private institutions grew most rapidly over 10 per cent per year during the Eleventh Plan period.

21.191. GER is often used to measure the higher education access. GER is the total enrolment in higher education (both degree and diploma programmes) as a percentage of the population in the eligible age

TABLE 21.7
Growth of Enrolment in the Eleventh Plan

Category	2006-07		2011-12		Increase	Growth Rate (Per cent)
	Total	Per cent	Total	Per cent		
(Enrolment in lakh)						
By type of institutions						
Government	63.38	45.8	89.63	41.1	26.25	7.2
Central	3.10	2.2	5.63	2.6	2.53	12.7
State	60.28	43.6	84.00	38.5	23.72	6.9
Private	75.12	54.2	128.23	58.9	53.11	11.3
By degree/diploma						
Degree	123.54	89.2	184.84	84.8	61.30	8.4
Diploma	14.96	10.8	33.02	15.2	18.06	10.8
Total	138.50	100.00	217.86	100.00	79.36	9.5

Source: University Grants Commission (UGC), All India Council for Technical Education (AICTE), NCTE, Indian Nursing Council (NCTE).

Note: Central institutions include Indian Institutes of Management even though they award PG diplomas in management.

TABLE 21.8
Growth of Enrolment in ODL Programmes in the Eleventh Plan

Enrolment	2006-2007		2011-2012		Increase	Growth Rate (per cent)
	Total	Per cent	Total	Per cent		
(Enrolment in lakh)						
Indira Gandhi National Open University	4.68		6.97		2.29	8.3
State Open Universities (SOU)	7.77		10.80		3.03	6.8
Distance Education Institutions (DEI)	14.96		24.24		9.28	10.1
Total	27.41		42.01		14.60	8.9

Source: Distance Education Council.

cohort of 18–23 years. Using this definition, GER for higher education was 12.3 per cent in 2006–07 and increased to 17.9 per cent in 2011–12. In regular programmes alone, GER has increased from 10.4 per cent in 2006–07 to 15.2 per cent in 2011–12.

21.192. Increased enrolments in the Eleventh Plan enabled Indian higher education to cross the threshold of 15 per cent GER, moving the country from an ‘elite’ to a ‘mass’ higher education system. Despite this, the unmet demand for access to higher education remains significant, indicating that a further expansion is required. However, expansion during the Twelfth Plan must factor that the recent growth has been skewed in favour of certain regions,

disciplines and sectors (see Table 21.9 for growth by field of study) and ensure further expansion has diversity in the provision of higher education including a focused emphasis on improving the quality of institutions, faculty and curricula.

INSTITUTIONAL EXPANSION IN THE ELEVENTH PLAN

21.193. Increase in higher education capacity during the Eleventh Plan was largely achieved through the setting up of new institutions by Central and State Governments and the private sector. The number of institutions grew by 58 per cent from 29,384 to 46,430. By the end of the Plan, the country had 645 degree awarding institutions, 33,023 colleges affiliated to

174 universities and over 12,748 diploma granting institutions. Table 21.10 provides a snapshot of this growth. With the growth rate of institutions matching that of enrolment, the problem of low enrolment per institution evident at the start of the Eleventh Plan remains. Combined with the skewed growth

of engineering and technical disciplines, this indicates that further expansion should be undertaken in the context of also achieving disciplinary diversity and increasing capacity within existing institutions rather than creating new institutions.

TABLE 21.9
Growth of Enrolment by Field of Study during the Eleventh Plan (in lakh)

Faculty	2006–07		2011–12		Growth Rate (Per cent)
	Total	Per cent	Total	Per cent	
Arts	54.86	39.6	65.78	30.2	3.7
Science	25.43	18.4	30.57	14.0	3.8
Commerce and Management	22.87	16.5	34.34	15.8	8.5
Education	6.21	4.5	13.00	6.0	15.9
Engineering	18.06	13.0	54.68	25.0	24.8
Medicine, Nursing and Pharmacy	5.98	4.3	12.02	5.5	15.0
Agriculture and Veterinary Science	0.93	0.7	1.21	0.6	5.4
Law	3.00	2.2	3.48	1.6	3.0
Others	1.16	0.8	2.78	1.3	19.1
Total	138.5	100	217.86	100	9.5

Source: UGC, AICTE, NCTE and INC.

TABLE 21.10
Growth of Institutions in the Eleventh Plan

Category	2006–07	2011–12	Increase	Growth Rate (Per Cent)
Central Institutions				
Degree Awarding Institutions	87	152	65	11.8
Colleges	58	69	11	3.5
Sub total	145	221	76	8.8
State Institutions				
Degree Awarding Institutions	227	316	89	6.8
Colleges	9,000	13,024	4,024	7.7
Diploma Institutions	1,867	3,207	1,340	11.4
Sub total	11,094	16,547	5,453	8.3
Private Institutions				
Degree Awarding Institutions	73	191	118	21.2
Colleges	12,112	19,930	7,818	10.5
Diploma Institutions	5,960	9,541	3,581	9.9
Sub total	18,145	29,662	11,517	10.3
Total	29,384	46,430	17,046	9.6

Source: UGC, AICTE, NCTE and INC.

Note: Central degree institutions include Indian Institutes of Management even though they award PG diploma in management.

21.194. Growth in private institutions was significant during the Eleventh Plan period. Ninety-eight private State universities, 17 private deemed universities, 7,818 private colleges, and 3,581 private diploma institutions were set up during the Plan period. While a majority of them offer professional or vocational programmes almost exclusively, it's worth noting that a number of arts, commerce and science colleges and a few comprehensive multidisciplinary universities have also been established in the private sector in recent years.

21.195. The expansion of Central institutions during the Eleventh Plan was historic. The Central Government has never established so many institutions in a single Plan period. The Central Government established 65 new institutions during the Eleventh Plan period (see Table 21.11). Each State now has at least one Central university except Goa, where the State Government did not want one. Special financial assistance was provided by the Central Government to existing Central institutions to raise their intake capacity in order to provide 27 per cent reservation to OBCs without affecting the number of general seats. The Central Government also supported the States to set up 45 model degree colleges (as against the 374 proposed in low enrolment districts) and 279 government polytechnics (as against the 300 proposed) during the Plan period.

On their own, the State Governments added 89 universities, 4,024 colleges and 1,340 diploma institutions during the same period.

21.196. Expansion of HEIs by Central ministries and departments other than MHRD was also significant with 14 institutions being established by other Ministries/Departments. These include medical and agricultural universities, institutes of fashion technology, pharmaceutical education and research institutes and the South Asia and Nalanda universities. However, this does not include institutions for maritime education and for flying and aeronautical education approved by the Directorate General of Shipping and Directorate General of Civil Aviation.

21.197. Affiliated colleges, which enrol 86.7 per cent of all students, are the mainstay of the country's higher education system. They enrol over 90 per cent of undergraduate students, over 70 per cent of the postgraduates and about 17 per cent of doctoral students. They follow curricula and examination systems determined by the affiliating universities.

21.198. Despite the growth in number of institutions, their geographical spread remains highly skewed with a large concentration in big cities and towns. While overall institutional density increased from 10 to 14 institutions per 1,000 sq. km. during

TABLE 21.11
Growth of Central Institutions during the Eleventh Plan

Type of Institution	2006–07	2011–12	Increase
Central Universities	19	40	21
Indian Institute of Technology	7	15	8
Indian Institute of Management	6	13	7
Indian Institute of Science Education and Research	2	5	3
School of Planning and Architecture	1	3	2
National Institute of Technology	20	30	10
Other Technical Institutions	15	15	0
Other Universities/Institutions	17	31	14
Total	87	152	65

Source: Ministry of HRD, Other Ministries.

Note: Other universities/institutions include deemed universities fully funded by the Central Government (via UGC) and institutions under other ministries.

the Eleventh Plan, a large number of habitations and settlement clusters with a population of more than 10,000 and less than 1,00,000 are without any proximate institution of higher education.

21.199. Even though GER at the national level is 18 per cent, there are wide inter-State variations. Delhi, Chandigarh and Puducherry, which attract a large number of students from outside their States, have GERs exceeding 30 per cent while States like Bihar, Jharkhand, Assam, Rajasthan, Odisha and West Bengal have significantly lower GERs. This suggests a need for State-specific strategies in addressing issues of expansion of higher education during the Twelfth Plan period.

21.200. To support institutional expansion, Central Government spending on higher education has grown steadily over the years and increased over six-fold between 2006–07 and 2011–12. In contrast, State non-Plan funding grew at a modest pace even though institutions in the State sector have also expanded significantly. As a result, the quality of State institutions has continued to deteriorate over the years.

21.201. During the Eleventh Plan, enrolment in higher education (including enrolment in open and

distance learning) grew by 9.3 million from 16.6 million (in 2006–07) to 25.9 million in 2011–12. Target for the Twelfth Plan is to increase enrolment capacity by another 10 million. Of this, 1 million will come from ODL, 3.3 million through large scale expansion of skill-granting diploma programmes and remaining 5.7 million will come from further expansion of degree programmes with accelerated expansion of postgraduate and doctoral programmes (see Table 21.12).

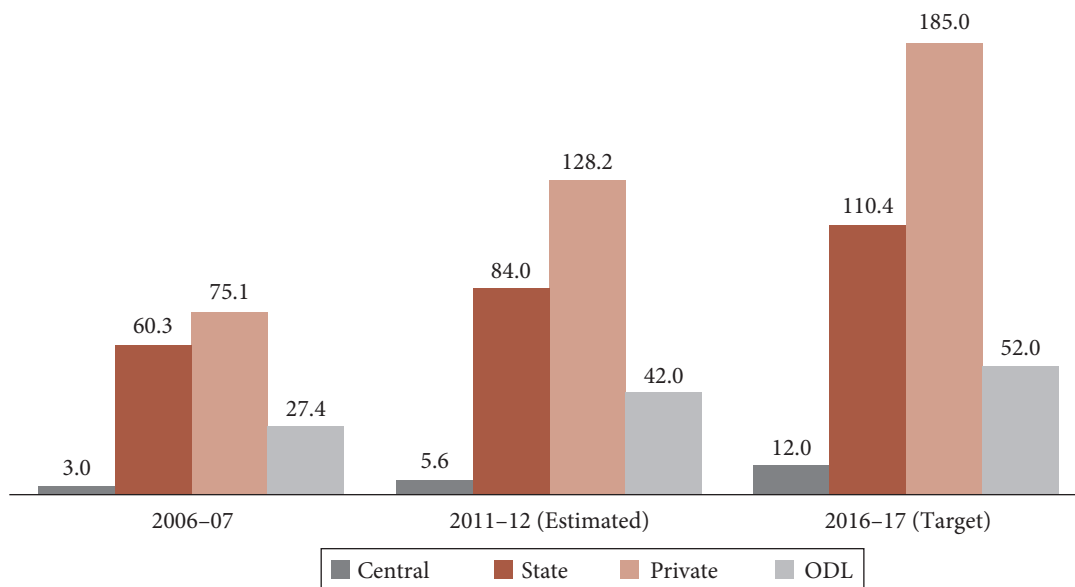
21.202. This additional enrolment capacity of 10 million students would enable roughly 3 million more students in each age cohort to enter higher education and raise the GER broadly in line with the current global average from 17.9 per cent (estimated for 2011–12) to 25.2 per cent by 2017. Enrolment capacity of Central institutions would be doubled from 0.6 million to 1.2 million. In the State institutions, it will increase from 8.4 million to 11 million. The bulk of growth would be in the private institutions. In private institutions, the enrolment capacity would increase from 12.7 million now to 18.5 million by the end of the Twelfth Plan period (see Figure 21.4).

21.203. Planning for expansion should be demand-driven. First, the national government would

TABLE 21.12
Enrolment Targets by Level/Type for the Twelfth Plan

Level/Type	(student numbers in lakh)		
	2011–12 (Estimates)	2016–17 (Targets)	Growth Rate (Per Cent)
PhD	1	3	24.6
PG General	17.3	33.2	13.9
PG Technical	5	12.2	19.5
UG General	116.6	128	1.9
UG Technical	45	66	8.0
Sub total	184.9	242.4	5.6
Diploma	33	65	14.5
Total	217.9	307.4	7.1
ODL	42	52	4.4
Grand Total	259.9	359.4	6.7
Population 18–23 years	1,451.2	1,427.4	–0.1
GER (%)	17.9	25.2	

Source: Planning Commission Estimates/Targets.



Source: Based on figures drawn from UGC, AICTE, NCTE, MHRD and INC.

FIGURE 21.4: Enrolments in Higher Education (in lakh): 2006-07 to 2016-17

prepare long-term occupational demand projections recognising that these must be updated periodically to meet the changing needs of the economy and society. For Central institutions, this would be followed through by developing institutional supply targets. For each State, the expansion plan should similarly be based on State-level demand projections. This would require coordinated efforts and enhancing the capacity for such planning both at the national and State levels.

TWELFTH PLAN EXPANSION STRATEGY

21.204. The expansion that took place in the Eleventh Plan was a logical response to the rising aspirations of young people, improved schooling, and the fact that jobs created through rapid economic growth and skill-based technical change require higher levels of education. During the Eleventh Plan, Indian higher education moved from 'elite' to 'mass' higher education (threshold of 15 per cent GER) and is now moving towards universal higher education (threshold of 50 per cent GER). This must be accompanied by offering a wider, diverse range of education—the student should be able to acquire skills in multiple disciplines while achieving a solid core set of skills and at a pace that is customised to individual's capacity to learn. With this in mind, further expansion will require a re-examination of the design, organisation,

definition, and purpose of higher education. The Twelfth Plan strives to create diverse education opportunities to cater to the growing number of students passing out of higher secondary classes on the one hand and the diverse needs of the economy and society on the other. Therefore, the four key principles that will drive the strategy for higher education expansion in the Twelfth Plan are as follows:

1. Expansion must focus on locations, States, subject areas/disciplines, and types of institutions where current capacity is low, instead of creating additional capacity across the board.
2. Expansion must be aligned to the country's economy. Therefore, a variety of HEIs offering innovative and relevant curricula designed to serve different segments of the job market or provide avenues for self-employment must be developed. Specific emphasis must be given to the expansion of skill-based programmes in higher education.
3. The relative strengths of different types of institutions must be harnessed to serve different needs. Central institutions must be assisted to become quality-leading institutions. State institutions must be supported to expand further and simultaneously address equity issues and improve quality. The philanthropic sector should

be invited and incentivised to infuse more funds and build larger, sustainable and higher quality private institutions. New models of Public-Private Partnership (PPP) in higher education must be encouraged not only for technology intensive education but also for multidisciplinary and research-based education. Open and distance learning must be used to widen access in a cost-effective and flexible manner.

4. Overall, expansion will be carefully planned to provide better access to the poor and disadvantaged social groups and first generation learners from backward areas.

21.205. Expansion should not only mean having more institutions of the same kind, but also developing new kinds of institutions. First, the country must have some globally competitive research-intensive institutions which should: (i) keep India abreast of the international scientific frontier; (ii) ensure that educational content and curricula is of world standards and updated regularly; (iii) ensure that research is actively used to solve India's own problems; and (iv) engage the best researchers in the country in teaching the next generation of students both within and outside their institution.

21.206. Second, teaching-focused institutions must offer a wide range of good-quality educational options, from liberal arts to professional and technical education. Part-time programs should also be introduced for working professionals and adult learners conferring the same degrees that are awarded through traditional full-time programmes.

21.207. Third, there must be institutions offering credible short-duration programmes that provide skills for development opportunities as well as remedial education—to make sure that those coming out of variable quality secondary schools have the opportunity to succeed in the higher education environment. Fourth, geographical mapping of HEIs should be done to identify habitations and settlements that lack higher education facilities. Expansion at the State or district level should be planned to develop diverse types of institutions of higher education depending on the opportunities for employment and

the size of the student body passing out at the higher secondary level.

21.208. While expanding capacity, costs have to be kept low while maintaining high quality. This can be achieved by ensuring that expansion primarily takes place by increasing the capacity of existing institutions. Several universities and colleges operate sub-optimally with just a few hundred students. Several specific strategies could be adopted for optimal operations. First, existing physical facilities can be used more efficiently through scheduling with multiple shifts and year-round operations. Second, high-cost full-time faculty can be engaged in high-value teaching while specially trained teaching assistants or adjunct faculty could be used for tutorials and online courses that are blended with face-to-face instruction.

21.209. Third, the land, which has become a binding constraint for setting up new campuses, should be efficiently used. Norms for land area requirement should be reviewed, keeping in mind energy and environmental impact, while affording adequate physical space for learning. The advent of new teaching technologies must be factored in the way, classrooms, laboratories and libraries are designed. Institutions, particularly in urban agglomerations, would be encouraged to consolidate capacity through mergers. The more reputed institutions would be encouraged to establish multiple campuses and benefit from the economies of scale and scope. And finally, there is benefit in co-locating institutions in large education or integrated hubs that would incubate and nurture talent, create innovation ecosystem and foster entrepreneurship. A few large education clusters would be established during the Twelfth Plan. These could be anchored by public and/or private universities with other higher education institutions and knowledge intensive industries in close proximity. This would facilitate and enhance interactions and collaborations across different higher education institutions and firms.

TWELFTH PLAN EXPANSION INITIATIVES

21.210. The Twelfth Plan initiatives would be designed to implement these strategic objectives

through new and continuing initiatives. The specific major Twelfth Plan initiatives are as follows:

Develop Central Institutions as Quality-Leading Institutions

21.211. Enrolment in Central institutions will be increased from 6 lakh to 12 lakh students mainly within existing Central institutions. Only research and innovation based institutions or exemplar institutions would be established in the Central sector or supported by the Central Government (see Box 21.8). Older Central institutions will be financially supported to redevelop campuses to achieve scale and build state-of-the-art facilities. In some cases, multiple campuses would be encouraged to enable economies of scale and institutional efficiency. The campuses to be upgraded during the Twelfth Plan would include ISM Dhanbad to IIT-level, BESU Shibpur to an Indian Institute of Engineering, Science and Technology, and NIFFT Ranchi as a premier institution for forging and foundry technology. HEIs with potential in the UTs that come under the Central Government (through the Ministry of Home Affairs) and have potential like the PEC University of Technology and Chandigarh College of Architecture would also be upgraded.

21.212. Central institutions should become catalytic role models for other institutions in all aspects including governance, infrastructure, faculty and curricula. For instance, in infrastructural development, they can help define new building technologies, the use of fixed-cost and time EPC contracts

and PPP models for the basic infrastructure. They will thus assist other institutions to improve standards, particularly in the States or regions where they are located. Co-location of State and private institutions and other enterprises with new Central institutions could build vibrant innovation clusters.

Strategic Support for State Higher Education

21.213. Central funding for State higher education is small; its reach is limited, and its impact insignificant. It is poorly coordinated and plagued by excessive bureaucracy, inefficiencies, low levels of monitoring and poor quality of outcomes. It therefore, provides little value for money. During the Twelfth Plan, State higher education would be provided significantly more Central funding. There will be a strategic shift in the manner in which State higher education systems are supported by the Central Government. Central funding for higher education will be done on a State-specific basis and allocated for the State's higher education system as a whole, even though it would flow to individual universities and colleges via the UGC as before. Details for allocation and flow of Central funds to State universities and colleges would be worked out through a consultative process. The UGC would play an important and more strategic role in allocation and disbursement of Central funds, particularly in funding strategic investment plans as proposed by institutions on a selective basis (see Box 21.9).

21.214. The goal of Central funding of State higher education should be to benefit from the synergies

Box 21.8

TISS: A Multi-Location Networked University

Tata Institute of Social Sciences has expanded rapidly since 2006 and emerged as a multi-location networked university for social sciences. It has enlarged its research base in social sciences and diversified its course offerings to provide access to a much larger body of students in various trans-disciplinary areas across the country. The capacity of its Mumbai Campus increased from 200 masters and 50 doctoral students in 2006 to 1,650 masters and 350 doctoral students in 2012; with a corresponding increase in the range of courses it offers. The Institute has established three campuses at Tuljapur (operational since 2004) and at Hyderabad and Guwahati, each of them will have about 1,000 students each by 2016. This expansion has been funded largely from resources mobilised through Indian trusts and foundations that have so far contributed about 130 crore with Central Government putting in another 26 cr. In addition, the Institute mobilised over ₹200 crore for research work and to set up new academic programs. Further, the Institute has collaborative research, faculty and student exchange programs with over 60 universities and institutions in the country—each of the collaboration is supported by competitive funding secured by the institute that enabled exchange at no extra cost to its students.

Box 21.9
Strategic Shift in Central Funding for State Higher Education

- Enable a State system-wide planning perspective and benefit from the synergy in spending by the Central and State Government.
- States to develop comprehensive State higher education plans that utilise an interconnected strategy to address issues of expansion, equity and excellence together.
- Central funding to be linked to academic, administrative and financial reforms of State higher education.
- Funding to be provided through a flagship programme: Rashtriya Uchcha Shiksha Abhiyan (RUSA).

between State and Central spending and to more effectively use Central funding to bring about administrative, academic and financial reforms in State systems, and as a powerful tool to address equity issues and improve quality at the State level.

Quality Private Growth

21.215. The Private sector has contributed significantly to higher education expansion during the Eleventh Plan and private higher education now accounts for 58.5 per cent of enrolments. The private sector will be encouraged to establish larger and higher quality institutions in the Twelfth Plan. Currently, for-profit entities are not permitted in higher education and the non-profit or philanthropy-driven institutions are unable to scale-up enough to bridge the demand–supply gap in higher education. Therefore, the ‘not-for-profit’ status in higher education should, perhaps, be re-examined for pragmatic considerations so as to allow the entry of for-profit institutions in select areas where acute shortages persist. This should, however, be subjected to the necessary oversight and accreditation arrangements to ensure quality and equity. For-profit private higher education can be taxed and the revenue from it can be channelled into large scale scholarship programme to promote equity as is practised in Brazil and China.

21.216. At the same time, innovative ways have to be found to encourage the infusion of more private capital in the traditional not-for-profit higher education. Some proposals that require serious consideration include: (i) enabling liberal financing options for the sector, like allowing private institutions to raise funds through public offerings of bonds or shares; (ii) changing the legal status of the sector to attract more investors, like allowing all types of institutions

to be established under Section 25 of the companies Act and allowing existing trusts and societies to convert to institution under Section 25 of the companies Act; (iii) giving priority recognition to the sector, like providing it ‘infrastructure’ status with similar, financial and tax treatment.

21.217. The government could support non-profit private institutions in three ways—(i) access to public student financial aid would be extended to accredited private institutions; (ii) access to research funding will be on an equal footing with public institutions with suitable protection for intellectual property derived from such research; and (iii) private institutions would benefit from various long-term quality enhancement efforts like enhanced use of technology and faculty development initiatives. The corporate sector could be involved in higher education and their large in-house training capacities, particularly in skill development and management, could be leveraged to improve access to higher education.

21.218. Simultaneously, measures to ensure that private institutions are committed to quality, equity and transparency will be introduced through reform of regulatory oversight. The current regulatory framework needs to be revamped to: (i) encourage serious private philanthropy and investment to innovate and provide high-quality education; (ii) promote better availability of information on private institutions to the public; (iii) ensure that institutions that indulge in unfair practices are dealt with swiftly. Accreditation will be central to such reforms.

21.219. New models of Public–Private Partnerships (PPP) in higher education will be encouraged in the Twelfth Plan, particularly in the establishment of research and innovation institutions. Based on

the Eleventh Plan experience of setting up Indian Institutes of Information Technology (IIITs) and polytechnics in PPP mode, a framework will be put in place to encourage the spread and growth of PPP models, increase and improve resource utilisation and enhance the quality of education in such institutions. In some cases, public institutions that are failing to meet standards could be assisted by the private partners to transform them through innovative PPP models.

Expansion of Skill-Based Programmes

21.220. Special emphasis will be placed on expansion of skill-based programmes in higher education during the Twelfth Plan. A framework for setting up community colleges based on the North American model is under development and has been endorsed in principle by the Central Advisory Body on Education (see Box 21.10).

21.221. Community Colleges can serve multiple needs, including (i) provide career oriented education and skills to students interested in directly entering the workforce; (ii) provide contracted training and education programmes for local employers; (iii) provide high-touch remedial education for secondary school graduates not ready to enrol in traditional colleges, giving them a path to transfer to three or four year institutions; (iv) offer general interest courses to the community for personal development and

interest. Given these objectives, community colleges would be located to afford easy access to underprivileged students. Such colleges could either be established as affiliated colleges of universities governed, guided and managed through a 'Department of Skills and Lifelong Learning' (DSL) or as entirely autonomous institutions linked to sector-skill councils.

21.222. Ongoing UGC initiative that supports career-oriented add-on courses in traditional universities and colleges and the IGNOU's scheme of community colleges would be reviewed. Technical support of Philanthropic Foundations and the Indian Centre for Research and Development of Community Education (which has 230 community colleges in its fold) would be taken to build on the current initiatives and create a robust framework for skill-based education within the higher education sector in the country. This could include institutional arrangements for recognition of prior learning.

Open and Distance Learning Initiatives

21.223. Open and Distance Learning (ODL) will be used to widen access and significantly expand capacity in a cost-effective and flexible manner. During the Twelfth Plan, support to IGNOU, State open universities and other institutions of distance education will be increased to expand access particularly for those beyond the normal schooling age. Such programmes will be regularly evaluated for learning

Box 21.10

Concept and Framework for Establishing Community Colleges

- Community Colleges will provide modular credit-based courses with entry and exit flexibility that conforms to the National Skills Qualifications Framework (NSQF).
- They will offer programmes leading to certificates (after one year), diplomas, advanced diplomas or associate degrees (after two years) with options to transfer to regular degree programmes.
- Their curricula will include an appropriate mix of academic and vocational skills and will be aligned to national occupational standards determined by employer-led sector skill councils.
- The assessment of vocational skills and training provided by Community Colleges will be done in accordance with assessment protocols developed by sector skill councils.
- Their faculty will typically consist of a permanent core, who will teach fundamentals (language, mathematics, science) and a large pool of adjunct or part-time faculty who will focus on specialisations.
- Well-designed online offerings would be integrated with face-to-face instruction to enhance and maintain quality.
- Community Colleges will be located in habitations with large potential student population.
- There will be local community involvement in their academic and administrative boards.
- They could be established in the premises of existing colleges, polytechnics, or even higher secondary schools and use online training and industry sites, wherever possible.

outcomes so that curricula and pedagogical changes can be made on an ongoing basis. In the face of growing concern about the quality of ODL programmes, regulatory oversight would be strengthened during the Twelfth Plan. Traditional institutions will be encouraged to offer part of their curriculum online to promote blended learning and provide students more choices while keeping costs low. This would also enable them to reach out to more students and non-traditional learners.

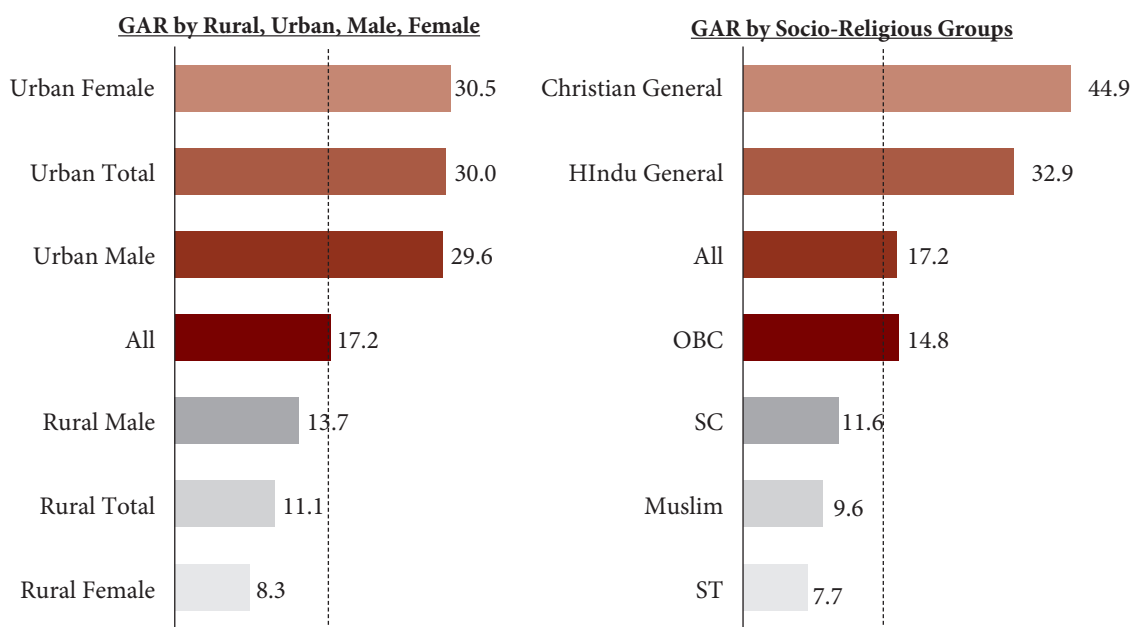
EQUITY IN ACCESS TO HIGHER EDUCATION

Multi-Dimensional Inequalities

21.224. Equitable access to quality higher education is an essential prerequisite for realising the Constitutional promise of ‘Equality of Opportunity’ as well as achieving the goal of inclusive development in the Twelfth Plan. However, many of these imbalances occur at the school level due to low enrolments and high dropouts amongst the deprived, underprivileged and marginalised sections. Thus, only a limited pool of such students is available for entry into higher education. As a result, a large proportion of seats in higher education reserved for SC, ST, OBC, and persons with disabilities remain unfilled (see Figure 21.5).

21.225. The data on Gross Attendance Ratio for 2007–08 confirms that higher education access for all disadvantaged social groups is well below the national average of 17.2 per cent. As Figure 21.5 shows, despite substantial overall improvement, the broad picture of inter-group inequality has changed only marginally. While access to higher education has improved for all social groups, including the disadvantaged, their relative disparities have not reduced substantially. These inequalities are not one dimensional: gender, disability, class, caste, religion, locality and region are some of the principal dimensions of inequality and when more than one of these conditions exist, their impact is compounded. Access to higher education, especially to prestigious programmes and institutions that are in demand, continues to reflect inherited social privileges.

21.226. The participation of SCs, STs and OBCs in higher education is significantly lower than the national average. The low percentage of students from the SC/ST and OBC categories in the domain of higher education is an acute problem that still persists and pulls the country backward. As per data of NSS 64th round, GER in the ST category is one-fourth that of general category students. It is less than half for the SC and more than half for the OBC



Source: Graph drawn from various sources like UGC, AICTE, NCTE, MHRD and INC.

FIGURE 21.5: Gross Attendance Ratio, 2007–08

students. When compared with the 2004–05 data, there is improvement in the educational levels of SC and the OBC groups, but a lowering of the figures for the ST group.

21.227. As higher education expands, more students will come from hitherto marginalised sections of society. HEIs must gear themselves to face the challenge of catering to the needs of such students to further reduce inequalities in access. The higher education system must:

1. Facilitate entry of the socially disadvantaged into HEIs and, in the case of some extremely disadvantaged communities, devise incentives that would allow ‘over-drawing’ from this currently small pool of eligible students.
2. Support retention of those disadvantaged students who enter higher education by ensuring that they do not drop out for lack of resources and inadequate academic preparation.
3. Enhance the quality of learning of disadvantaged students and provide guidance and support to improve their chances of entering disciplines that ensure decent employment opportunities or gaining admission to postgraduate degrees at top institutions.
4. Use the ‘community college’ as a key vehicle for entry into regular higher education by way of widely located, community-based institutions offering relevant education of high quality.

ELEVENTH PLAN EXPERIENCE

21.228. Several measures were initiated in the Eleventh Plan to achieve the goals of equity and inclusion. Centrally funded institutions received special financial assistance to increase the intake of disadvantaged groups and provide 27 per cent reservation for OBCs without affecting the number of general seats. Establishment of 374 colleges in low GER districts and setting up of 1,000 new polytechnics was taken up. Universities and colleges located in border, hilly, remote, small towns, and educationally backward areas and those with larger SC/ST/OBC/Minority/Persons with Disabilities student population were supported. Construction of a large

number of girls’ hostels was taken up to encourage girls to enrol in HEIs.

21.229. Merit-cum-means scholarships for students from families with annual incomes less than ₹4.5 lakh were started in 2008–09. Since 2009–10 the Central Government has provided 100 per cent interest subsidy during the moratorium period on educational loans taken by students with family income of less than ₹4.5 lakh per annum. A review of these initiatives and previous experience provides the following basic lessons:

- despite progress, relative disparities across various social groups and gender gaps in educational attainments continue to be high even today and area/beneficiary targeted approaches and specific interventions are necessary to narrow these inequalities;
- a substantial increase in funding is needed to achieve a quantum jump in the volume, range and amount of student support in the form of scholarships, stipends, assistantships and loans for disadvantaged students;
- the funding mechanisms for such aid should be structured in such a way that money follows the students for whom it is meant;
- it is necessary to have differentiated access strategies for different groups and in particular for those extremely disadvantaged communities/social groups that still remain largely excluded from the world of higher learning;
- special attention needs to be paid to measuring and redressing inequalities in high-end courses and institutions;
- special emphasis should be put on those schemes that recognise the intersectional nature of disadvantages to address all dimensions of inequality in a holistic manner;
- the delivery system for financial aid needs revamping to remove cumbersome processes and promote awareness of the schemes among the intended recipients;
- there is a need for mechanisms such as a ‘Diversity Index’ to monitor equity performance of institutions and to link it with monetary incentives.

TWELFTH PLAN STRATEGY

21.230. The thrust of the Twelfth Plan will be to achieve a quantum jump in the number, range and amount of student financial aid schemes in order to (i) significantly enhance funding for equity-related measures; (ii) evolve a differential response to the various dimensions of inequality; (iii) consolidate a range of schemes, especially those which address the intersection of more than one dimension of disadvantage.

21.231. The Plan will pay special attention to inter-State variations, the rural-urban divide, income inequality, gender disparities, persons with disabilities, marginal social groups such as SC, ST, Muslims, and the especially vulnerable sub-groups such as communities involved in scavenging, particularly vulnerable STs, most backward SEBCs and Nomadic/DNT communities. Muslim disadvantage has been highlighted by the Sachar Committee report and the needs of communities engaged in scavenging and DNT/Nomadic communities have also received a lot of attention in recent times. Inter-sectional dimensions of inequality shall be recognised by linking individual-oriented schemes to a multi-dimensional 'Index of Disadvantage'. HEIs would be encouraged to craft their admission policies to address inter-sectional dimensions of inequality as is practised by Jawaharlal Nehru University for over three decades now. The performance of institutions in increasing the participation of disadvantaged groups could be measured through a 'Diversity Index' and linked to budgetary incentives.

21.232. The reach of scholarships and student loans with government guarantees would be universalised so that no student is deprived of higher education opportunities for financial reasons. This will be complemented by schemes tailored to the specific needs of different groups. Attention to measures like improving the quality of teaching-learning in Indian languages should also be initiated in order to address the language-based dimension of inequality.

TWELFTH PLAN INITIATIVES

Creation of a Comprehensive Student Financial Aid Programme

21.233. Public spending on student financial aid would be enhanced considerably so as to increase the number and amount of scholarships. All student financial aid schemes under the Ministry of HRD would be consolidated under a single 'Student Financial Aid Programme' in order to rationalise and strengthen the administration of equity-related schemes by bringing them under a single umbrella initiative (see Box 21.11). An Empowered Committee would decide on guidelines for each of the scholarships keeping in mind the need for avoiding overlap and enhancing impact.

21.234. In addition to the Student Financial Aid Program, which focuses on scholarships, the Central Government will take significant steps to support student loan programs. A student loan guarantee corpus would be created under the management of a Credit Guarantee Trust to guarantee against default

Box 21.11 Student Financial Aid Programme (SFAP)

- Cover higher education at all levels—undergraduate, postgraduate, doctoral and post-doctoral research and include general as well as professional education;
- Cover significant costs of education in determining scholarship amounts and establish a mechanism to linking its revision to change in price index;
- Earmark a fixed proportion of these scholarships for SC, ST, SEBC, Minorities and Person with Disabilities as per the existing policy;
- Create a multi-dimensional 'Index of Disadvantage' that measures the inter-sectional dimensions of inequality that gives due weight to caste/community, gender, poverty and rural background and provide additional scholarships and individual-oriented financial aid schemes linked to such an Index;
- Simplify processes, self-certification and linkages to the unique identity numbers under the UID scheme; and
- Implement a single portal for delivery of all scholarships under the Central Government and explore the possibility of allowing States to join and integrate their student financial aid programmes with this single portal.

in repayment of student loans. This will substantially protect lending institutions from student default thereby encouraging them to make more student loans. In addition, the government guarantee should reduce the rate of interest on student loans (it should be only slightly more than the yield on comparable 10-year Government Securities) benefitting the student community at large.

National Initiative on Inclusion of Persons with Disabilities

21.235. All ongoing and several new initiatives for inclusion of persons with disabilities shall be covered under an umbrella National Initiative on Inclusion of Persons with Disabilities in higher education. This initiative would:

1. provide incentives and support to individual students and faculty with disabilities;
2. give support and policy direction to HEIs and services to make them disabled-friendly and create model universities and colleges at the State and district levels;
3. use new technologies effectively to address challenges of learning for persons with disabilities through various access devices and high quality learning materials;
4. create curricula, and provide research and training-related support to enhance awareness, knowledge and sensitivity about disability issues;
5. specify minimum standards of disability access that must be met by all physical infrastructures offering higher education.

National Initiative for Quality Higher Education in Indian Languages

21.236. The proposed national initiative (the 'Bhasha Initiative') recognises that language connects access and equity with quality of education and thus improving quality of teaching-learning in Indian languages is a cost-effective and sustainable intervention for reducing inequalities. This initiative is aimed at coordinating all the agencies that promote Indian languages with the aim of enhancing the teaching-learning process with Indian languages as the medium of instruction and promoting original research and publication in Indian languages in

colleges and universities. This initiative would have effective linkages with the other ongoing and new activities for language development and book promotion. This decentralised, flexible, and user-driven initiative would include setting up of new centres within and across universities, creation of teaching-learning resources, use of technology to create e-books and other learning media in Indian languages, career incentives and support for teachers and support for quality Indian languages publications in academic disciplines.

Focus on Muslims, SC, ST and OBCs

21.237. Schemes for establishing model degree colleges, community colleges and new polytechnics in the low GER districts would be modified to cover districts that have concentration of Muslims. Setting up of Women's Colleges in small towns and quantum jump in the capacity as also number of hostels for women would be given high priority. All these schemes should be included within the ambit of the State strategic plans for higher education to take into account the local context of each State.

21.238. Targeted schemes will be launched to draw students from Muslims that have low participation in higher education. These schemes will have to combine special incentives to the very tiny pool of school pass-outs from these communities (for example, scholarship from first degree to doctorate) with a pro-active approach to identification of beneficiaries with the help of non-governmental organisations working among these communities. Special scheme will be devised to support those HEIs in districts that have Muslim concentration. Particular emphasis will be given to educational opportunities for girls.

21.239. Despite a number of initiatives in the previous Plan periods, there is a staggering difference among different groups. Hence, a targeted approach with focus on SC and ST dominated regions and convergence of various equity schemes in a composite manner to address the educational needs of the disadvantaged sections including the OBCs will be critical to enhancing their inclusion in the mainstream of higher education. Given the co-existence of educational backwardness in both social and locational

factors, such as their greater presence in rural, hilly, geographically difficult to reach terrains, a synergy of efforts to address these multiple factors in a holistic manner will be significant.

Other Equity-Related Initiatives

21.240. Concerted efforts to increase the enrolment of students from disadvantaged communities will be supplemented by strengthening the current remedial teaching programmes with teaching/coaching modules, preparatory training and special coaching for entrance examinations to highly sought-after courses and institutions.

21.241. Schemes for establishing model colleges, community colleges and new polytechnics in low GER districts may be modified to cover minority concentrated districts and Fifth Schedule Districts with greater focus on States with low enrolment. Targeted schemes will be launched to draw students from especially vulnerable communities such as the most backward amongst the Muslim and the minority community. Given the negligible presence of such groups in higher education, these schemes will have to combine special incentives to the very tiny pool of school pass-outs from these communities with a pro-active approach to identification of beneficiaries with the help of non-governmental organisations working among these communities.

21.242. All equity-related schemes in higher education across different ministries under the Central Government would be brought under one umbrella, namely, 'Equal Opportunity for Higher Education Initiatives'. These would be coordinated by the Planning Commission to effectively monitor them and also take into account State-level initiatives.

EXCELLENCE AND IMPROVING ACADEMIC QUALITY

Criticality of Quality

21.243. Except at a few top-level institutions, quality is serious concern. The casual link between cognitive skills acquired through education and economic growth is now well-established. A major goal of the Twelfth Plan is, therefore, to improve the

overall quality of higher education in the country by improving the quality of the 'average' institution in the system.

21.244. Notwithstanding the growth of technical higher education, over half of students will enrol in general (meaning arts, science and commerce) undergraduate programmes. If properly imparted, general education could be an excellent foundation for successful knowledge-based careers. Therefore, focus should be primarily on improving the quality of general education. Graduates should be able to acquire skills beyond the basics of reading, writing and arithmetic (the '3Rs'). Critical thinking, communication, collaboration and creativity (the '4Cs') are increasingly important now. Special emphasis on verbal and written communication skills, especially, but not limited to, English would go a long way in improving the employability of the large and growing mass of disempowered youth. 'Professional' education that currently focuses on technical skills alone should adopt integrated curriculum with greater flexibility in choice of subjects and innovative pedagogic practices to improve its quality and enable better learning outcomes.

ELEVENTH PLAN EXPERIENCE

21.245. Several initiatives to improve quality were taken up in the Eleventh Plan. These were related to faculty issues, use of technology, academic and governance reforms and accreditation.

Faculty Initiatives

21.246. Measures taken during the Eleventh Plan to address faculty shortages, included (i) raising the retirement age of faculty to 65 years with provision for further extension to 70 years; (ii) institution of several fellowship and scholarship schemes for MPhil and PhD programmes; (iii) a faculty re-charge scheme to enable increased availability of young faculty; (iv) an initiative to enlist professionals and experts from outside academic institutions as adjunct faculty or scholars-in-residence; (v) a programme for post-doctoral fellowships for Indian scholars to augment faculty resources which will begin operations during the Twelfth Plan.

Technology Initiatives

21.247. The National Mission on Education through Information and Communication Technologies (NME-ICT) was launched during the Eleventh Plan. Under this initiative, 392 universities and 18,374 colleges were provided broadband connectivity. Ongoing initiatives for creation of e-content were strengthened and new initiatives were taken up. Virtual labs were developed for science and engineering and are currently being rolled out. Enterprise resource planning software for administrative and financial management of institutes and learning management system, both using open source software have been developed and are being tested by a number of institutions. A low-cost computing-cum-access device 'Aakash' was developed and is being currently tested for large-scale deployment. Overall, an investment of ₹1,472 crore was made on this mission during the Eleventh Plan.

Quality Initiatives

21.248. The first phase of the three-phase 'Technical Education Quality Improvement Programme (TEQIP)' with World Bank support was conducted from 2002 to 2009. With an investment of ₹1,378 crore, the programme covered 127 engineering institutions. Phase-II of TEQIP (2010–14), which extends into the Twelfth Plan, would cover another 180–190 institutions. Evaluation of the first phase has clearly shown a marked improvement in placement of graduates, more capacity in postgraduate and doctoral programmes and improved research performance.

Governance, Regulatory and Financial Initiatives

21.249. Several measures were taken during the Eleventh Plan to rationalise governance to promote innovative programmes and ensure standards, particularly in the areas of academic structure, interdisciplinary teaching and research, and accreditation. In order to promote interdisciplinary teaching and research both at the UG and PG levels, 417 departments of universities/colleges were provided financial support of up to ₹60 lakh during the Eleventh Plan. A few States adopted the semester system for their institutions and several universities, most notably University of Delhi, have shifted to the semester

system. While institutional accreditation through NAAC and programme accreditation through NBA gained momentum during the Eleventh Plan, the coverage is still small. Only about one-third (167 out of 516) eligible universities and about one-fifth (4,529 out of 22,500) eligible colleges have been accredited so far.

TWELFTH PLAN STRATEGY

21.250. Improving academic quality is a major objective of the Twelfth Plan. Higher education needs to prepare graduates not only for immediate employment but also for an economy in which most people will not only change jobs but also change careers several times in their lives. Hence, it requires inculcating the ability in students to think creatively, read critically, construct effective arguments using persuasive evidence, write clearly, remain flexible and look at issues with an open mind. This, in turn, requires the right curriculum, better teaching-learning processes, sharing of best practices nationally and internationally and the ability to impart a well-rounded and socially conscious education.

21.251. The Twelfth Plan strategy, therefore, includes a range of reforms aimed at improving the overall educational experience in HEIs. These include reforms in institutional organisation; reforms of pedagogy and curricula, particularly at the undergraduate level; and a focus on faculty and their work. These reforms would be supported by smarter use of technology, initiatives to promote internationalisation, the fostering of social responsibility in higher education, promotion of sports and wellness, increasing inter-institutional collaboration and coordination, and strengthening the accreditation system.

TWELFTH PLAN INITIATIVES

Reforming Institutional Organisation

21.252. During the Twelfth Plan, a five-pronged strategy will be adopted to reform the affiliating college system. First, large and reputed colleges with necessary capabilities and diverse learning streams will be converted into full-fledged universities. Second, college-cluster universities, under a new name, with each college working as a campus of

the university or its constituent unit will be created. Third, some of the large and unwieldy affiliating universities will be bifurcated or trifurcated into manageable units. Fourth, colleges desiring to scale up to leverage existing infrastructure and to offer new programmes would be allowed to consolidate through merger under an autonomous framework. Finally, affiliating universities will be required to revamp their college development councils and give greater autonomy to their colleges in all academic, administrative and financial matters.

Deepening Academic Reforms

21.253. The institutional framework to deepen academic reforms would include introduction of choice-based credit system, CCE, and regular revision of curricula for making them up-to-date and relevant to contemporary and future needs. To help institutions reform their courses, subject-specific model curricula and packaged, re-usable digitised content (such as packaged lectures and open source textbooks) would be created by instructors with the requisite expertise. This can best be done by subject-based networks such as Network of Social Work Education led by the Tata Institute of Social Sciences and the mathematics initiative taken by Delhi University. Such networks across subject areas would be encouraged. An important goal of these reforms would be to create active learning environments in colleges and universities.

Re-Crafting Undergraduate Education

21.254. Reforming undergraduate curriculum through funding and institutional support will be emphasised in the Twelfth Plan. Undergraduate programmes should provide a holistic education and give students opportunities for intellectual exploration, hands-on research, job skilling, experiential learning, creative thinking, leadership, ethics education, community service and more. In place of three-year programs, several institutions have introduced four-year undergraduate programs to achieve these multiple objectives. During the Twelfth Plan, four-year undergraduate programmes would be promoted. UGC currently provides financial support for starting specialised programmes in interdisciplinary and emerging areas, which could be strengthened

and could include support for four-year undergraduate programmes.

Focus on Teachers and Teaching

21.255. Due to rapid expansion, number of quality teachers in higher education is grossly inadequate. A doubling of faculty from the current 8 lakh to 16 lakh is envisaged during the Twelfth Plan. The large increase in capacity at the postgraduate and doctoral levels to enable this would require all institutions, whether Central, State or private to work in collaboration.

21.256. There is a common perception that higher education is a poorly paid profession in India. However, a recent survey¹⁴ of academic salaries across 28 countries shows that median academic salaries in India (on a purchasing power parity basis) are amongst the highest in the world. It is important, therefore, to correct the misperceptions about teaching careers in India in order to attract talent.

21.257. A large portion of those teaching in HEIs are currently casual or part-time academic staff and this is likely to continue. To improve their performance, improvements in their hiring practices and working conditions, and engaging them in faculty development programmes, including using online technologies for faculty development are needed. Most of the sixty-six Academic Staff Colleges (ASCs) established for faculty development have unfortunately not delivered. These were recently reviewed by NAAC. Based on the review findings, institutional weaknesses in the ASCs should be removed and a qualitative change in their content and methodology of faculty development must be brought about.

21.258. In addition to the ASCs, 'Teaching and Learning Centres (TLCs)' must be established in the country within existing universities, preferably those that have a strong research culture as well as large undergraduate programmes. During the Twelfth Plan, 50 such centres will be set up. In some cases the Academic Staff Colleges could also serve as a TLC.

21.259. To provide global exposure and thus facilitate adoption of innovations and best practices in

teaching and research, an International Faculty Development Programme would be launched. As part of this, Indian universities would be supported to organise 2–4 weeks summer workshops conducted by leading international teachers and researchers for select Indian post docs and faculty. Forty to fifty such workshops would be held annually on a range of topics and disciplines. Collaborations with foreign universities would be encouraged for organising such workshops. In addition, faculty in large numbers would be sent for three to six months to the best universities of the world for training and mentoring. An enabling policy framework would be put in place to attract faculty from abroad, particularly from amongst the overseas Indians teaching in universities abroad. Senior and tenured overseas faculty could be invited as international visiting professors by offering them attractive remuneration.

21.260. A programme to fund doctoral students to study at international institutions needs to be implemented, in return for commitments to join the faculty pool in India on completion of their studies. This could be supplemented by tapping the growing pool of retired experts. They could function as adjunct faculty and also enrol for doctoral degrees, for which current eligibility requirements could be waived.

21.261. Faculty motivation is crucial to improve academic quality. For faculty to be actively engaged in the teaching–learning process, they need control over their task, time, technique, and work environment, which is often not the case. Absence of basic amenities is one of the most de-motivating factors for a large section of faculty. The strategy for motivating faculty would focus on developing healthy work environment with high-quality minimum facilities and a flexible framework of accountability and performance evaluation. Consistent with international best practices, faculty selection, performance evaluation and promotion should be handled at the department level. New faculty may be kept under probation for a period of five years and confirmation could then be done on the basis of rigorous performance evaluation including peer review and student feedback.

21.262. Recognising the central role of teachers in improving academic quality, a ‘National Mission on Teachers and Teaching’ would be launched in the Twelfth Plan. This would address all the issues of teachers and teaching in a comprehensive manner and strengthen linkages between the school and higher education sectors. This would be organised under two sub-missions aimed at the school and the higher education sectors, respectively.

21.263. The sub-mission on higher education would pool all the ongoing initiatives and new initiatives on faculty development under one umbrella for their implementation and better monitoring. Under the sub-mission on school sector, the focus would be on expanding the capacity for preparation of teacher educators by setting up 30 Schools of Education in the university system. These schools of education would also conduct research and capacity building in curriculum, teaching–learning processes and assessment and evaluation systems. In addition, Schools of Academic Leadership will be established in select institutions.

21.264. The transformative potential of online learning is beginning to unfold now. From a few courses by a couple of elite universities, there are now global efforts to build massive online courseware by many of the world’s best universities. Given the acute shortage of faculty and the unlikelihood of our ability to overcome this severe constraint, technology would be leveraged by using these massive online courses so that the Indian students are a part of global learning systems at very low cost. The country’s efforts should be to contribute to this global repository, contextualise and perhaps translate these courses in the local languages to reach out to the maximum number of the students in the country.

National Mission on Use of ICT in Higher Education

21.265. During the Twelfth Plan various initiatives of the Eleventh Plan would be carried forward with an objective to make these programmes more effective, efficient and sustainable. These include:

1. Digital Infrastructure Initiatives: (i) upgrade connectivity for universities and colleges to 10GBPS and 1 GBPS, respectively; (ii) build computer labs in all institutions as required and increase availability of laptops and low-cost access devices for faculty and students; (iii) provide smart classrooms; (iii) set up classrooms with interactive video-conference facilities linking Meta-universities and affiliating universities; (iv) set up 100 server farms for cloud computing.
2. Content Initiatives: (i) develop virtual labs, to promote creation of user-generated content; (ii) establish a single national-level consortium for propriety content; (iii) create open access content repositories including interoperable institutional repositories; (iv) create platforms to facilitate user-generated content and related networks; (iv) create a single portal for access to all content; (v) continue current initiatives of DTH channels to telecast digital educational videos.
3. Governance Initiatives: (i) rollout institutional Enterprise Resource Planning (ERP); (ii) computerise examination wings of all universities; (ii) provide robust online linkage of all affiliating universities with their affiliated colleges; (iii) create online data collection system; (iv) library automation; (v) automation of grants management.
4. Training and Capacity-Building Initiatives: (i) train faculty in instructional design content creation; (ii) implement massive capacity-building efforts for adopting technology-mediated pedagogy in classrooms.

Technical Education Quality Improvement Programme

21.266. During the Twelfth Plan, the second phase of TEQIP would be continued and phase-3 of TEQIP would be launched. Under phase-3, focus would be on the 'eco-system' by supporting State Technical Universities introducing curriculum diversity and scaling up sector-wide programmes. This would ensure that the benefit of quality improvement interventions flow to all segments of technical education. The programme would also leverage synergy with other initiatives like the mission for teachers and teaching and mission for use of technology.

Architecture and town planning would be included in phase-3 of TEQIP. Separate and independent initiatives should be taken up for improving quality in other fields like management education, pharmacy education, and hotel management.

Language and Book Promotion Programmes

21.267. Promotion and development of Indian languages, including classical languages, English, and foreign languages will receive focused attention during the Twelfth Plan. Particular thrust would be on preservation, promotion and development of endangered languages which have less than 10,000 speakers. The National Translation Mission will be strengthened. There will be a focus on developing specialised courses in translation technology and related areas and capacity building of translators through short-term training programmes and language teaching programmes. Recognising the growing use of technology in knowledge delivery, promotion of e-books and digitisation of National Book Trust (NBT) books and records will be taken up during the Twelfth Plan. Capacity of NBT would be strengthened to discharge its new responsibilities.

Strengthening Intellectual Property Rights

21.268. During the Twelfth Plan, existing programmes under the Scheme of Intellectual Property Education Research and Public Outreach (IPERPO) will be continued. New Plan initiatives include: the setting up of new IPR Chairs, modernising the Copyright Office, and establishing a Centre for IPR studies. The rise of new electronic methods of publishing and distribution has resulted in an expansion of the scope of copyright issues internationally. The Copyright Board would be strengthened with experts in new and emerging areas of Copyright law as per the new Copyright (Amendment) Act, 2010 that came into force in June 2012. Copyright offices would also be modernised on the lines of other IPR offices like the Trademark office and the Patent office.

Higher Education Internationalisation

21.269. A strategy for higher education internationalisation to be developed during the Twelfth Plan would include faculty and student exchange programmes, institutional collaborations for teaching

and research, exposure to diverse teaching-learning models and enhanced use of ICTs. Globally compatible academic credit systems, curricula internationalisation and processes for mutual recognition of qualifications would be put in place. A professional national agency and on 'India International Education Centre' at New Delhi would be created to undertake internationalisation activities. It will support selected institutions to establish dedicated internationalisation units.

Fostering Social Responsibility in Higher Education

21.270. In the face of growing isolation of HEIs from society, there is a need for renewed effort for HEIs for genuinely engaging with community, conduct socially relevant research and education and foster social responsibility amongst students as part of their core mission. For this purpose, a National Initiative to Foster Social Responsibility in Higher Education would be launched. An Alliance for Community Engagement, an independent association of practitioners, academics and community leaders would be created to support its implementation.

Promoting Sports and Wellness

21.271. A National Initiative on Sports and Wellness would be launched in the Twelfth Plan. Activities under this initiative would include: (i) fitness and wellness programmes for all students; (ii) encouraging institutions to include physical education as a general institutional requirement; (iii) raising participation in competitive sports from the current 2 per cent of students to 10 per cent of students; (iv) creating and supporting departments and units for physical education in all institutions; (v) supporting creation of adequate sports infrastructure in institutions; (vi) encouraging development of a sports club system; (vii) establishing inter-disciplinary research centres on sports technology, sports medicine and sports management; (viii) creating an information network on sports.

Increase Inter-Institutional Collaboration and Coordination

21.272. In the Twelfth Plan, inter-institutional collaboration and coordination would be encouraged

to reap the benefit from synergies in capabilities and capacities and to create shared visions and agendas for excellence in teaching and research.

21.273. With a view to expanding student choice and increasing the design of innovative interdisciplinary programmes, a Meta-university framework as a network of universities would be promoted in the Twelfth Plan. This would enable several universities to come together and offer courses across disciplines, treat faculty and students from all institutions alike, and provide all network members access to content, teaching, and the research support they need. Massively open online courses (MOOCs) would also be encouraged under this framework.

Strengthening Accreditation System

21.274. Accreditation will play a central role in the regulatory arrangements for higher education under the Twelfth Plan. Accreditation will be mandatory with clear incentives and consequences. In order to handle large-volume accreditation, multiple accreditation bodies (in addition to NAAC for institutional accreditation and NBA for programme accreditation) would be established. In order to facilitate student mobility and academic articulation, it is important to develop easily comparable, comprehensible and consistent qualifications throughout the system. A new accreditation law that provides for accreditation by independent non-profit agencies registered with a national accreditation authority is currently under consideration. While, the proper institutional structure would only emerge once the new law is enacted, capacities of existing agencies, NAAC and NBA should be enhanced in the interim. Indian institutions would also be encouraged to obtain programmatic accreditation from a select group of credible international accrediting bodies.

RESEARCH AND INNOVATION

21.275. Research and innovation are now vital functions of higher education worldwide. The value of interdisciplinary research is recognised globally, as innovation is now happening at the intersections of disciplines. Collaboration is now central to innovation. Entrepreneurship that leverages innovation is also an increasingly integral part of

higher education systems. While all HEIs cannot be expected to become research-based institutions, it is vital that the country promote a research culture across all institutions while ensuring special support for those able to engage in state-of-the-art research.

21.276. The HEIs should contribute to the national innovation agenda, even when they are not research intensive—albeit in different ways. Teaching-focused institutions must train their students in the techniques of research so that the doors to research-based graduate education and employment are opened to them. Vocational institutions must enable the future workforce to engage at least in the ‘development’ component of R&D. It is essential that all institutions equip their graduates with core skills of critical thinking, communication, collaboration and creativity to enable the country to continuously innovate to adapt to new environments.

21.277. India’s research performance turned around in the last two decades, after over a decade of stagnation. An improvement in scientific output is evident both in absolute terms and relative to the comparison group. During the past 10 years, India’s overall share of publications in the world has risen from 2.8 per cent to 3.4 per cent, with a significant improvement in researcher productivity since 1999. India produces over twice as many scientific publications a year than it did a decade ago. Though dwarfed by China’s achievements, India’s output of publications has grown faster than that of Brazil and Russia.

21.278. There are indications that research quality has improved as well. India’s publications have accumulated 16,10,511 citations with 5.77 citations per paper, better than China, but still low compared to the world average of 10.81 citations per paper. The relative impact rose from 0.48 to 0.66 (world average being one). In 2009, India stood eleventh in terms of the number of papers published, seventeenth in terms of the number of citations, and thirty-fourth in terms of number of citations per paper as per the ISI Web of Science.

21.279. Notwithstanding such achievements, Indian higher education continues to have limited research

capacity. Low levels of funding and segregation of the country’s R&D institutions from universities and colleges have been responsible for the weak research capacity of Indian universities. It is disappointing to note that even the country’s top universities remain largely teaching-focused with limited research and doctoral education.

21.280. This lack of research orientation, even in the best of the Indian institutions, is reflected in their standing in global rankings, most of which rely heavily on measurable indices of research performance. No Indian university figured amongst the top 200 universities in the Times Higher Education (THE) Rankings or the Academic Ranking of World Universities (ARWU) for the year 2011. While it is neither necessary nor realistic to expect all institutions to achieve high levels of research excellence, a natural pyramid of quality excellence suggests that, if the average quality improves, then the best will enter the top leagues of research-intensive universities.

21.281. India’s output in PhDs was small at 10,781 in 2008–09, when compared against international peers. The total number of PhDs in science and engineering at 4,500 is miniscule as compared to the approximately 30,000 and 25,000 for China and the USA, respectively. In terms of innovation and the creation of intellectual property, Indians file and receive only a small number of worldwide patent applications (merely 11,937 applications filed by Indians compared to 2,41,546 by Chinese in 2009) and no Indian academic institution figures in the list of top applicants for patent filing.

21.282. Output measures related to publications, patents/licensing and spinoffs can provide some indications of research and innovation performance for research intensive institutions though even for them, these would be too narrow for gauging overall research performance. For less research intensive institutions, their contributions to innovation and economic development could derive from much less visible activities such as faculty consulting or development projects or education to instil students with creativity and entrepreneurship.

ELEVENTH PLAN EXPERIENCE

21.283. During the Eleventh Plan, several schemes for promoting excellence in academic research were implemented. A major scheme was to promote Basic Scientific Research (BSR). This included grants to departments and colleges for improving basic infrastructure; fellowships both for doctoral and post-doctoral work, networking centres, summer and winter schools, faculty recharge scheme, and promotion of research at the undergraduate level.

21.284. In addition, several new Central institutions with research focus were established in the Eleventh Plan. However, these initiatives tended to spread resources thinly and raised concerns about 'relevance' to needs and to innovation and entrepreneurship in particular. While national research institutions play key roles in meeting national needs in some key areas, much more could be done.

TWELFTH PLAN STRATEGY

21.285. In the Twelfth Plan, research efforts need to be more directly linked to the national development agenda and better connected to the needs of industry and society. Public R&D institutions should be permanently and closely coupled—including in governance structures—to local institutions of higher education. HEIs must, in turn, be the doors to collaborating with industry. There is also a need to look beyond an institutional focus for research productivity to a faculty focus, so as to enable creative faculty to build teams that cross the boundaries of institutions.

21.286. The Twelfth Plan would focus on the development of faculty, institutions, departments and centres of excellence in research and research training. Overall, investments in research will need to increase gradually from the current low level of less than 1 per cent of GDP to over 2 per cent nationally, with HEIs receiving a much higher share of research investments than before.

21.287. Emphasis will be laid on creating a better research infrastructure and work environment to attract the top talent from within the country and also bring back India's brightest graduates who left

the country to study abroad. Upper-tier institutions should be allowed to hire globally, including foreigners on permanent appointments, and provide compensatory benefits to those who relocate.

21.288. The governance and structure of doctoral education must be reviewed, as current programmes often sacrifice quality in the interests of rapid completion of the doctorate. Benchmarking doctoral programmes with global requirements on capacity to be developed is the key. Existing PhD programmes would be modernised, and new ones created, particularly in new institutions and those that require inter-disciplinary efforts.

21.289. There is a need for an overall increase in the level of research spending, more of which should be spent through HEIs which would provide multiple benefits. Concentrating significant resources in high-potential institutions and faculty through competition is necessary to create exemplars of global excellence. In funding research, social sciences require a greater boost given past neglect. The country must also put in place better mechanisms for university research capacity to lead to innovation, as has become the norm globally. This will require building university research capacity in areas of high potential, encouraging closer linkages between academia and industry, building institutional capacity to support academics to engage in innovation and commercialisation, and creating a dynamic ecosystem which can provide an enabling environment for innovation and entrepreneurship. There is a need for Indian institutions to build a range of institutional support mechanisms such as technology incubators, proof-of-concept centres, entrepreneurship programmes and technology transfer mechanisms within HEIs. Institutions should also be encouraged to build collaborative ties with private actors in the area of innovation and entrepreneurship including technology companies, venture capitalists, as well as national and international foundations.

21.290. During the Twelfth Plan, the country must develop objective and transparent research evaluation practices that are relevant to the national context and culture. To provide analytical underpinning

for research evaluation at national and institutional levels, a Centre for Research Evaluation within a research-intensive university could be established.

TWELFTH PLAN INITIATIVES

21.291. In the Twelfth Plan, universities at the top of the quality hierarchy would be identified and generously supported so they can reach the global top league. Equally important, promising faculty in all tiers of institutions will be identified through peer review and supported. Similarly centres of excellence within existing universities would be created. High-calibre faculty would be attracted from around the world on non-permanent teaching assignments and, similarly, Indian faculty would be provided exposure to teaching and research practices in the best universities from across the world. All related initiatives would be pooled to benefit from synergy under an 'India Excellence Initiative' during the Twelfth Plan. This would include:

Multi-Disciplinary Research Universities

21.292. During the Twelfth Plan, research universities with the capacity to engage in research and teaching in multiple disciplines will be promoted. A legislative framework to set up such universities termed 'Universities for Research and Innovation' is currently under consideration, with a target of 20 institutions by the end of the Twelfth Plan. These could be public or private universities or they could be set up as Public-Private Partnerships and may include both the conversion of existing institutions and new universities. Some may be mentored by existing world-class universities. At the core of achieving excellence is the ability of institutions to attract and retain high-quality faculty from across the world.

Centres of Excellence (CoE)

21.293. The Twelfth Plan will aim to create 20 Centres of Excellence as world-class research centres within existing universities and institutions of national repute. In addition, fifty (50) centres for training and research in the frontier areas of science and technology, social science and humanities would be established. The goal is to build the competencies of the host institutions in selected disciplines of

national importance. Collaborations with promising faculty across the nation will be encouraged.

NATIONAL INITIATIVES

21.294. A National Initiative for Excellence in Basic Sciences would cover the ongoing activities for promotion of basic scientific research that are being implemented by the UGC. A new National Initiative for Excellence in Social Sciences and Humanities would be launched to encourage bright students to choose programmes in the humanities and social sciences and improve the quality of teaching and research in these disciplines. An empowered committee may be constituted for revamping existing institutional funding and launching new schemes such as scholarships on the lines of INSPIRE scholarships for basic sciences, up-scaling doctoral and post-doctoral fellowships, flexible one-time support to existing centres of global excellence and creation of new Inter-University Centres.

21.295. A National Initiative for Innovation and Entrepreneurship will be launched. This initiative would (i) enable an environment that fosters innovation, value creation and technology transfer; (ii) aim at creating awareness and developing a culture for protection and management of IPRs in HEIs; (iii) help maximise benefits and returns from investments in research by developing partnerships amongst universities/institutes, R&D organisations and industry; (v) creation of national research parks. This initiative would pool all related activities under the MHRD, UGC and AICTE and build synergy with similar activities, schemes and programmes under the Ministry of Science and Technology.

21.296. Design-centred innovation is a force multiplier that can help the country move up the value chain, making Indian industry globally competitive. In this context, a National Initiative for Design Innovation would be launched in the Twelfth Plan. Under this initiative, 20 new Design Innovation Centres (DIC), one Open Design School (ODS) and a National Design Innovation Network (NDIN), linking together all these schools, would be set up. ODS would ensure maximum reach of design education and practice in the country through various

collaborative education programmes (linking a broad spectrum of educational institutions), and free sharing of its courseware through the Internet. NDIN would be a network of design schools that work closely with other leading institutions of industry and academia, NGOs and government to further the reach and access of design education, to promote design innovation in all sectors, and to develop wide-ranging collaborative projects between institutions. ODS and NDIN would also raise the standards of design education and innovation in the country through various initiatives including the creation of fabrication labs and digital media zones across educational institutions on a large scale.

Promoting Collaborative Research

21.297. Driven by the success of the research-based Inter University Centres (IUCs) and their positive impact on the university system, several new research-based IUCs in different areas would be established in the Twelfth Plan. These areas would be broad, contemporary, inter-disciplinary and of strategic importance to the country, and would involve both basic and applied research. All research-based IUCs could be brought under an umbrella Governing Council, while each of them would have its own governing board.

21.298. In order to foster inter-disciplinary research, enhance research training and increase innovation capacity, about 10 Inter-Institutional Centres (IICs) would be established in the Twelfth Plan. These Centres could either emerge as broad partnership between multiple research-oriented institutions or programme-specific partnership between funding agencies and research institutions.

21.299. Excellence Clusters and Networks will be established by creating linkages between national laboratories/national research centres and the universities. During the Twelfth Plan, several of these cluster and networks would be supported through research funds earmarked for research teams involving two or more institutions.

21.300. Similarly, local alliances would be created in different cities and interaction across institutions in

such hubs would be enhanced through a structured, highly interactive and collaborative framework. The institutions would be incentivised to collaborate and allow their courses to be available for students of other institutions.

21.301. Even though the collaboration between the academia and the industry is now growing, but this continues to be low-key and has significant room for improvement. A systematic approach to strengthen the scale and scope of these partnerships would be adopted during the Twelfth Plan. For this, a nodal agency—potentially called the Council for Industry and Higher Education Collaboration (CIHEC)—would be established to promote and facilitate industry-higher education collaboration. CIHEC will be an independent not-for-profit organisation founded by contributions from industry and government and will comprise business and higher education leaders. The goals of the CIHEC span the entire higher education and research landscape including framework development, capacity creation, research, training, and certification. The corporate sector could participate in existing institutions of higher education by setting up institutes offering degree/non-degree programmes in specific fields, creating centres of excellence for research and postgraduate teaching, establish teaching–learning centres to train faculty. In addition, the Indian Corporate Higher Education Scholarship Fund with contribution from the corporate sector and the Indian Corporate R&D Fund jointly funded by the government and the corporate sector could also be established.

21.302. Finally, international research collaborations now hold the key to competitiveness in the global knowledge economy. Only a few top Indian institutions are currently engaged in international research collaborations. In the Twelfth Plan, special efforts would be made to strengthen international research linkages and involve a larger number of Indian institutions in forging such links. Such collaborations would leverage the 22 million-strong Indian Diaspora which is recognised worldwide as a powerful asset for research, innovation and entrepreneurship.

GOVERNANCE

21.303. The government needs to play a sensitive and less intrusive role in the governance and regulation of higher education than it does at present. In place of a uniform regulatory role in respect of all institutions, the government's role could be calibrated according to the type of institution involved. While, the government could have a promotional and evaluative role for upper-tier institutions, it may play a steering role in mid-tier institutions, and should actively regulate the lower-tier institutions. The governance structure should also enable institutions to increasingly differentiate themselves through course diversity, multi-disciplinary programmes and other approaches. Enabling differentiation requires a new regulatory structure that encompasses all fields of education rather than the current structure that separates the regulation of technical fields from other fields. In this context, a paradigm shift in governance is needed. It should shift from inspection-based processes to autonomy and accountability through independent third-party validation, regulation by mandatory self-disclosures, and objective evaluation schemes. The overall approach is to allow institutions to make their own policies and decisions within a broadly defined memorandum of understanding on performance.

National-Level Governance

21.304. Based on the recommendations of the National Knowledge Commission (2005) and the Committee on Renovation and Rejuvenation of Higher Education (2009), steps were initiated during the Eleventh Plan to create a new legislative framework and provide a new governance structure for higher education in the country. For this purpose, several new laws are currently under consideration. These include (i) The Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and Universities Bill aimed at checking unfair practices relating to capitation fees and misleading advertising through mandatory disclosures by academic institutions; (ii) The National Accreditation Regulatory Authority for Higher Educational Institutions Bill that seeks to make accreditation by independent accreditation agencies mandatory for all higher educational

institutions; (iii) The Education Tribunals Bill to create a Central tribunal and State-level tribunals for expeditious resolution of disputes relating to institutions, faculty, students and regulatory authorities; (iv) Foreign Educational Institutions (Regulation of Entry and Operations) Bill to enable quality foreign education institutions to enter and operate in India and regulate operations of foreign education providers; (v) National Commission for Higher Education and Research (NCHER) Bill to create an umbrella regulatory authority subsuming the UGC, and current regulators, AICTE, NCTE and DEC; and (vi) The National Academic Depository Bill, 2011, to create a repository of all academic credentials in the country.

21.305. These new laws together reflect the Government's focus on quality, accountability, access, and inclusion and on preparing the country's higher education system for a more competitive globalising world. These reforms would enable and facilitate innovative and high-quality institutions to grow, while making it difficult for poor-quality institutions to operate. In the next few years, a new governance structure at the national-level consisting primarily of the NCHER, National- and State-level Tribunals and the National Authority for Accreditation would be in place.

21.306. In the meantime, the UGC and other regulatory agencies have an opportunity to revitalise themselves to ensure a smooth transition to the NCHER. In this context, a review of internal processes and staff capabilities is essential and agencies should draw up year-wise transformative action plans. In addition, the UGC could immediately implement a number of innovative financing schemes that could impact the state of higher education significantly. For example, (i) the UGC could shift from its current scheme-based approach to more effective programmatic interventions including norm-based financing of institutions; (ii) it could consider a move from historically determined detailed operational budgets to formula-based funding for general operations; (iii) it could start strategic funding of innovative programmes to promote certain activities/changes/investments based on institutional

proposals evaluated selectively and competitively; (iv) finally, the UGC or some other Central agency could further play a leading role in longitudinal profiling of students as they transition through the higher educational cycle into the workplace and could also play a role in institutional benchmarking on a longitudinal basis.

State-Level Governance

21.307. The structure of governance of higher education and their legislative framework varies widely across the States. All States will be encouraged to undertake a review of their current legislative and governance arrangements with a view to preparing themselves for the unique challenges they face in higher education.

21.308. It would be desirable for each State (except small States) to set up a State Council for Higher Education to lead the planned and coordinated development of higher education in the State and to foster sharing of resources between universities, benefit from synergy across institutions, lead academic and governance reforms at the institution level, maintain databanks on higher education and conduct research and evaluation studies. In small States, the main affiliating university can perform this role. Private universities and colleges form a bulk of higher education in several States. States could also establish independent agencies to regulate private HEIs.

Institutional Level Governance

21.309. Academic institutions primarily rely on individual initiative and creativity to develop their unique institutional culture and tradition over a long period of time. Principles of academic freedom, shared governance, meritocratic selection, promotion of diversity and institutional accountability are defining features of a well-governed academic institution. Moreover, the oversight, governance and management of HEIs should be closely tied to their mission. For this the current practice of treating all institutions alike will need to be abandoned. There is a need to move away from enforcing standardisation of education and processes to allow for diversity in institutional types, missions, resources and privileges. This would require a categorisation of

institutions of higher education, with each category of institutions being treated differently for purposes of academic regulation, governance and funding.

21.310. Empirical evidence suggests that better-run institutions are highly autonomous, especially when autonomy over academic matters vests with faculty. Autonomy in the areas of finance, organisational structure, operations and staffing is also important, but should be consistent with internal systems of evaluation and accountability and tied to the mission of the institution. Recently the Central Government has taken several measures to loosen its grip over institutions funded by it, as in the case of the Indian Institutes of Management, where the government no longer has any role in the selection of Board members. The Board plays the key role in the selection of the Director, though the final decision is still made by the government. The government has also explicitly promoted autonomy in State-funded institutions through programmes like the Technical Education Quality Improvement Programme. This process of freeing public institutions from government controls would be continued in the Twelfth Plan. This would be based on a framework for autonomy on all its five dimensions.

21.311. Institutional autonomy and external discipline arising from competitive grants and competition for students and faculty go hand in hand. For effective institutional governance, there is a need to shift towards smaller and more effective governing bodies that have several external experts that the universities select themselves, faculty representation and alumni that value the reputation of the institution. Given the potential positive contribution that the alumni can make in the growth of institutions, well-established institutions, with over 10 years in existence should have a fair representation of the alumni in their governing bodies. Overall, competition amongst institutions with nimble and professional governing boards responsive to external change would be encouraged in the Twelfth Plan.

Developing Academic Leadership

21.312. During the Twelfth Plan, an ecosystem for scholarship and development of professional

academic leadership in higher education would be created. For this, an 'Institute for Academic Leadership in Higher Education' could be co-located within NUEPA or any other institution of higher education. This institute would function as a hub with university-based 'Academy for Leadership Development' as nodes. At least five such academies would be set up in the Twelfth Plan.

Student Services and Admissions

21.313. Student affairs and services receive scant attention and are plagued by lack of professionalism in Indian higher education. The Twelfth Plan focuses on supporting universities and colleges to address the basic personal needs of students by providing them a comprehensive set of out-of-classroom student services.

21.314. Since HEIs fall under multiple agencies, reliable and current information about institutions is not available in any one place and information provided by regulatory agencies is not in a student-friendly format. As a result, students and their parents often rely upon brokers/agents, and promotion materials in the selection of institutions. Such information is often unreliable. The Prohibition of Unfair Practices in Technical Educational Institutions, Medical Educational Institutions and Universities Bill has provisions that can take care of such admission-related unfair practices and maladies. The Bill is under consideration. However, until the law comes into force, a centralised portal may be created to provide accurate and current information about institutions and courses to students and parents in a way that helps them in the process of decision-making with respect to institutions and courses for admissions.

21.315. There is also a very obvious need to reform the overall admissions process in the country. The multiplicity of admissions tests has resulted in large-scale coaching, often at the cost of regular education. The country should move towards fewer admissions tests, each of which should be conducted in a transparent and objective manner. Universities should be provided the autonomy to set their own admissions criteria and utilise the results of the nationwide tests for their admissions process as appropriate to their

academic mission and admissions philosophy. This would align students with the right institution, significantly reduce hardships on students and reduce admission-related unfair practices.

FINANCING STRATEGY

Review of Funding Trends

21.316. India faces a huge challenge to fund its rapidly growing higher education sector. Overall, the country spent about 1.22 per cent of its GDP on higher education in 2011–12. Household spending and investments by the private sector have grown more rapidly than government spending on higher education in recent years. Government spending, and particularly State Government spending, has fallen far short of the funding requirement in the face of a dramatic expansion of the system and the rising expectations of the people in terms of quality, equity and access. The Central and the State Governments jointly fund higher education. The Central Government's share is about 30 per cent, while the State Governments spend the balance 70 per cent mostly under the non-Plan head. Table 21.13 shows the funding responsibilities of Central and State Governments for the country's universities and colleges.

TABLE 21.13
Funding Responsibility for Universities and Colleges

Funding Responsibility	Universities	Colleges
Central govt. (both Plan and Non-Plan)	152	69
Central govt. (Plan only for State institutions via UGC)	144	6,285
State govt. (both Plan and Non-Plan)	316	13,024
No funding from Central or State Govt(s)	191	19,930

Source: Planning Commission.

21.317. Overall, Central funding of State institutions is meagre. Together the State systems enrolled 15 times more students than Central institutions, but received only one-third of the Plan grants during the Eleventh Plan. Half of the Central Plan funds (₹20,630 crore) went to Central institutions, with State universities, colleges and polytechnics receiving

just about ₹10,446 crore. In addition, Central institutions received about ₹25,000 crore as non-Plan grants during the Eleventh Plan period, while the State institutions do not receive any non-Plan grants. Consequently, State universities and colleges face serious financial difficulties that often result in poor quality.

21.318. The government spending on higher education has grown steadily over the years. Central Plan spending grew most rapidly from ₹1,600 crore in 2005–06 to ₹13,100 crore (over eight times), while State Plan funding increased much less. On the non-Plan side, while Central spending increased two and a half times, State non-Plan funding just about doubled during the same period. Thus, State Government spending has been growing slower than Central spending and the rise in funding levels do not match the rapid expansion of the State higher education systems.

21.319. The share of education in total Plan outlay increased from mere 6.7 per cent in the Tenth Plan to 19.4 per cent for the Eleventh Plan, of which 30 per cent was earmarked for higher education. This was a nine-fold increase over the Tenth Plan—₹84,943 crore against ₹9,600 crore during the Tenth Plan. Actual expenditure during the Eleventh Plan has been ₹39,647 crore (45.6 per cent of the Plan outlay). This was mainly due to the fact that funds were not allocated as per the approved outlays. It may be worthwhile to note that there is a committed investment of over ₹53,200 crore for activities initiated in the Eleventh Plan. A large part of this would in new Central institutions established during the Eleventh Plan, where investment so far has been very small.

Twelfth Plan Strategy

21.320. Higher education requires significantly larger investments to deliver on the multiple objectives and to achieve the various goals set out in the Twelfth Plan. This investment has to come from both public and private sources and from both Central and State exchequers. The role of Central Plan funds for higher education is critical not only to revamp Central institutions so that they can play national leadership roles in delivering three Es, but

also to leverage desired change in the entire system of higher education. This will include serious investments in building key institutions such as accreditation and funding bodies and mechanisms, so that they can take on the strategic central roles effectively. A continued and significant increase in Central Plan funds including investments to promote better implementation capacity is essential.

21.321. The Twelfth Plan advocates a paradigm shift in funding from demand-based grants and input-based budgeting to normative and entitlement-based grants and outcome-based budgeting. For example, block grants should replace line-item budgets and Plan allocations should be based on long-term strategic plans developed by the institutions. Consequently, annual funding should be linked to the performance of institutions against the milestones and targets laid down in their strategic plans. In turn, institutions need to provide complete transparency about their financial performance and use of funds by putting their financial statements online. All institutions should implement the recently finalised accounting standards developed by ICAI that lay down a common format for the reporting of financial statements.

Public Funding

21.322. Funding from both the Central and the State Governments has to be significantly increased and efficiency of its utilisation improved during the Twelfth Plan. The Plan should target public spending on higher education to reach 1.5 per cent of the GDP from the current 1.22 per cent. For this, the Central Government has to use its Plan funds strategically to encourage greater State funding and promote efficiency in expenditure.

21.323. During the Twelfth Plan, the States would be encouraged to draw up strategic plans for higher education. Such plans should be comprehensive and take a holistic view of increased demand pressure with improvements in the school system and greater need for more qualified people from the economy and the labour market. An institutional mechanism for joint funding of State plans by the Central and the State Governments would be evolved and there

would be a joint review mechanism to ensure proper use of funds. Central funding would be linked to governance and academic reforms in the State system that would focus on building overall system capacity.

Institutional Fee Structure

21.324. While, about 60 per cent students are enrolled in private unaided institutions and pay full fees, the remaining 40 per cent are enrolled in public-funded institutions and usually pay very low fees. Central universities, particularly that are Delhi-based, have not raised the fees for decades, while several State universities have raised the fees to reasonable levels. Maintaining low levels of fees is not sustainable; in fact, it is regressive since it often tends to benefit the better-off students. With growing prosperity, rising household incomes and strong family values, more and more households are now willing to pay higher fees. Hence, the process of raising fees, which started with the elite Central institutions like the IIMs and IITs raising their fees in recent years, should be continued and brought to reasonable levels. This should eventually cover all Central institutions. Similarly, State Governments should also be encouraged to raise fees to reasonable and sustainable levels in State universities and colleges. Some flexibility should also be provided to private institutions in matters related to fee fixation, which should be accompanied with transparency and provision of credible information about quality and fee levels to potential students.

Revenue from Other Sources

21.325. Institutions should be encouraged to mobilise resources through alternative sources so that student fees do not form the only source of revenue. They should be encouraged to seek funding from diverse stakeholders through external contracts/grants for research, consulting and/or training projects. The profile of external funding would be different across institutional types, with some having revenues from patent licensing, with others having greater incomes from short courses or consulting or even training. There is also a need to develop conducive framework to encourage endowment and promote culture of philanthropy in education sector in the country. Worldwide, individual and corporate donations have been a significant source of revenue for educational

institutions, a practice that should be encouraged and incentivised by the government. The focus can be on setting up empowered committees to devise and execute strategies to tap funds from individuals and corporates. Such funds can be targeted to be deployed for the purpose of specific projects like creating and running research centres for specialised subjects.

Twelfth Plan Outlay

21.326. During the Twelfth Plan, the focus will be on expansion by scaling up capacity of existing institutions, better targeting of equity initiatives and greater focus on improving quality and fostering excellence. Central institutions, in particular the new ones established in the Eleventh Plan, would require huge investments over the next few years for developing basic infrastructure and facilities to gain critical mass and make a meaningful impact. State universities and colleges that constitute the bulk of HEIs are poorly funded and suffer from acute quality deficit. A quantum jump in Central funding for State universities and colleges is envisaged. This funding would be strategically used to foster academic and administrative reforms, address challenges and fill in the gaps in the overall State plans for higher education. In addition, a separate outlay has been kept for creation of a large-scale ecosystem for skill-based higher education. A large outlay is needed for the revamped students' financial aid programme to significantly increase the reach of scholarships and education loans through government-backed guarantees as well as for various equity-related initiatives.

21.327. In addition, there are other ongoing schemes and initiatives of the Ministry of HRD, UGC and AICTE which require large outlays. These would also include the provision of flexi funds. Much of the focus is on consolidation and improving quality and focused interventions to address challenges of access, equity and excellence. Overall, an outlay ₹1,10,700 crore for higher education is proposed for the Twelfth Plan. This is merely 30 per cent more than the outlay in the Eleventh Plan, even though it is more than two and a half times the actual expenditure in the Eleventh Plan. Such a significant increase is justified because of the increasing demand for quality higher education driven by improved

schooling coupled with the shortfall in spending during the Eleventh Plan. A detailed matrix for the outlay is provided in the appendix.

21.328. About two-thirds of the increase in the Twelfth Plan outlays over the actual expenditure in the Eleventh Plan is accounted for by the following four major areas: (i) State universities and colleges (including polytechnics); (ii) equity initiatives (including student financial support); (iii) Central universities and institutions; and (iv) research and innovation initiatives.

IMPLEMENTATION, MONITORING AND EVALUATION

Implementation Framework

21.329. Specific interventions taken up during the Twelfth Plan would be aligned to the broad strategy spelt out in the Plan document. To overcome procedural bottlenecks, a system of empowered committees would be deployed wherever necessary. New structures and institutional mechanisms would also be created for coordination across ministries and agencies.

21.330. The implementation framework for the Twelfth Plan aims to:

1. Interlink expansion, equity and excellence, and focus on those programmes that serve as the locus at which more than one objective is met.
2. Bring down the walls that separate higher education from technical education with a focus on interdisciplinary action points.
3. Recognise State education systems as the principal site for expansion and focus on improving the average quality of State institutions.
4. Recognise that diverse disadvantaged groups suffer from different kinds of disadvantages and need specifically targeted interventions.
5. Revamp student financial aid programmes as the main channel for individual-focused equity schemes.
6. Recognise that fostering excellence is a multi-dimensional challenge requiring simultaneous action on many fronts.

7. Provide greater flexibility to the implementing agencies by grouping schemes under umbrella national initiatives.

Monitoring and Evaluation

21.331. Based on the implementation framework, it would be necessary to develop strategic indicators against various goals that clearly identify what would be measured. Monitoring of achievement of Twelfth Plan targets, annual and cumulative, may be done on the baseline data at the beginning of the Twelfth Plan. Monitoring would not be confined to the flow of funds and their utilisation, but will also include evaluation of programmes and initiatives for outcomes and impact. Services of independent evaluation agencies and researchers could be used for the purpose. Data on institutional performance on various parameters would be collected, compiled and shared. It is important that the practice to assess learning outcomes, to conduct student experience surveys, and to undertake longitudinal studies of students as they transition through the educational cycle into the workplace should be initiated. In order to globally benchmark Indian higher education, India should proactively participate in various international surveys and evaluations.

Higher Education Database Management System

21.332. The country lacks current and comprehensive data for evidence-based policymaking and effective planning. It would be critical to publish a comprehensive data book on the landscape of higher education with complete facts, figures and trends. This could include data across time and geography and should contain both State-level break-up and also inter-temporal trends. Data collection on higher education should be aligned to the International Standards Classification of Educational Data finalised by UNESCO recently. A classification framework of HEIs will also be necessary for getting a better sense of the institutional landscape in the country.

21.333. The Central Government is conducting an All India Survey on Higher Education. This should provide useful insights and can be the first step towards creating a comprehensive higher education

data management system. The onus of providing timely and reliable data on student enrolments and other strategic indicators/key metrics for a centralised web-based higher education data management system should rest with the educational institutions, whether public or private. The web-based higher education data management system should be used for tracking the progress of HEIs and for carrying out a variety of analysis leading to improved performance of HEIs. Also, the higher education data management system can be used for conducting surveys and generating additional data from educational institutions that could be used as inputs for higher education planning at the Central, State and institutional levels. Higher education database management system can also provide the desired data to various stakeholders such as national academic depository, planning bodies, research entities, students and other academic bodies.

Higher Education Policy Research

21.334. India does not have any major higher education research centre or a group of researchers focusing on this key subject. Higher education as an academic subject is not taught at Indian universities. As a result, there is a dearth of dependable, reliable, fact-based, unbiased, ideology-neutral policy information about Indian higher education. It is important for the country to create an ecosystem for higher quality policy research on higher education. In the Twelfth Plan, a network of centres for higher education research located at institutions that have the expertise for such research activity will be created.

21.335. In conclusion, it is imperative that during the Twelfth Plan period the country undertakes an overhaul of higher education and creates a robust, quality-driven system that is accessible to all segments of society. This is essential not only to ensure the continued economic growth of the country, but it is also necessary for social cohesion and to meet the rising aspirations of the country's young people. Building such a system of higher education requires clear articulation of the shortcomings and problems of the current system, a shared understanding of the solutions, and an alignment of the efforts of various stakeholders in higher education to implement these

solutions. This chapter has outlined the widespread systemic changes needed to effect such a paradigm shift in the cultural, policy, strategic and operational environment of higher education in the country.

FINANCIAL RESOURCES

21.336. The indicative Twelfth Five Year Plan Gross Budgetary Support for Ministry of Human Resource development is ₹4,53,728 crore. The Department wise allocation is given Table 21.14 below:

TABLE 21.14
Gross Budgetary Support for the Twelfth Plan

	₹ Crore
Department of School and Secondary Education	3,43,028
Of which	
1. Sarva Siksha Abhiyan	1,92,726
2. Rashtriya Madhyamik Shiksha Abhiyan	27,466
3. Mid-day Meal Scheme	90,155
4. Others	32,681
Department of Higher Education	1,10,700
Of which	
1. Central Universities and Centrally funded institutions	35,750
2. State Universities and Colleges, including RUSA	25,000
3. Equity initiatives (including students financial support)	11,300
4. Technical education quality improvement programmes	2,500
5. Research and innovation initiatives	5,900
6. Expansion of skill-based higher education including polytechnics & community colleges	4,450
7. National mission in education through ICT (NMEICT)	4,000
8. National Mission for Teachers and Teaching including teaching quality improvement initiatives	1,200
9. Open and Distance Learning	700
10. UGC (multiple schemes including flexi-funds)	9,000
11. AICTE (multiple schemes including flexi-funds)	5,000
12. Other initiatives (including language development, book promotion & copyright, Internationalisation, Planning etc.)	5,900

Source: Planning Commission.

NOTES

1. Gini coefficient is a measure of inequality. Zero value shows perfect equality where all values are the same, while value of one shows maximal inequality.
2. Total enrolment as a percentage of the child population in specified age groups including under-age and over-age children.
3. Percentage of age-specific enrolment to the estimated child population in specified age-groups.
4. DISE, 2010–11.
5. IMRB, 2009.
6. IMRB, 2005, 2009; ASER-Rural, 2011.
7. ASER, 2011.
8. ASER, 2011.
9. UNESCO, 2010.
10. ASER, 2010.
11. NSS, 2007–08.
12. Globally, enrolment in the 18–22 age cohorts is used to measure the GER. Using the global definition GER increased from 15.2 per cent in 2007–08 to 20.2 per cent in 2011–12.
13. Students enrolled in ODL programmes might not register in each semester/year. They usually take longer than students enrolled in regular programmes to complete their studies, and a large proportion of ODL students are older than those in the traditional age cohort and some of them may also be enrolled in regular programmes.
14. This survey was conducted by the Centre for International Higher Education at Boston College and Laboratory of Institutional Analysis (LIA) at the Higher School of Economics (Russia). See <http://acarem.hse.ru/>.

Employment and Skill Development

EMPLOYMENT

22.1. Generation of productive and gainful employment with decent working conditions on a sufficient scale to absorb the growing labour force was a critical element in the Eleventh Plan strategy for achieving inclusive growth. The Eleventh Plan aimed at bringing the overall unemployment down by generating new work opportunities exceeding the projected addition to the labour force. The results of NSS 66th round (2009–10) indicate that 18 million new work opportunities were created on CDS basis between 2004–05 and 2009–10. The unemployment in absolute terms came down by 6.3 million and the unemployment rate declined to 6.6 per cent in 2009–10 for the first time since 1993–94, after increasing to 7.31 per cent in 1999–2000 and 8.28 per cent in 2004–05. On UPSS basis also, during the same period, the unemployment rate declined to 2 per cent in 2009–10 from 2.3 per cent in 2004–05. The overall labour force expanded by just 11.7 million. The increase in labour force was lower compared to previous years. This, however, is a positive development as it can be attributed to higher retention of the young in schools and colleges, and also lower distress labour participation by working age women as family incomes improved in both rural and urban areas.

22.2. The employment elasticity in India in the last decade declined from 0.44 in the first half of the decade 1999–2000 to 2004–05, to as low as 0.01 during second half of the decade 2004–05 to 2009–10. The similar trends have been witnessed at the sectoral level, namely agriculture, service, and manufacturing sectors. In agriculture and manufacturing

employment elasticity in the latter half of the decade has been negative. The negative employment elasticity in agriculture indicates movement of people out of agriculture to other sectors where wage rates are higher. This migration of surplus workers to other sectors for productive and gainful employment is necessary for inclusive growth. However, the negative employment elasticity in manufacturing sector is a cause of concern particularly when the sector has achieved 6.8 per cent growth in output during Eleventh Plan.

TRENDS IN THE LABOUR FORCE AND WORK FORCE PARTICIPATION RATES

Quantitative Dimensions of Employment

22.3. The quantitative dimensions of employment captures the trends in Labour Force, Work force at rural–urban, Male Female and sectoral level. Table 22.1 provides the Labour Force (LFPR) and Work Force Participation Rates (WFPR) during the decade 1999–2000 and 2009–10. It emerges that the second half of the last decade witnessed the decline in LFPR in spite of increase in the population growth. Further it emerges that there has been decline in both rural and urban LFPRs and WFPRs during the second half of the decade. Female LFPR and WFPR show greater fluctuations particularly in rural India. The rise in female LFPR and WFPR during the first half of the decade might be the result of agricultural distress which depressed household income and pushed women into the labour force. Since all women entering the labour force did not get employment, the first half of the decade was also characterised by an increase

TABLE 22.1
LFPR and WFPR by Usual Principal and Subsidiary Status, 1993–94, 2004–05 and 2009–10 (%) Persons

	LFPR, WFPR and Unemployment Rate of 1999–00, 2004–05 and 2009–10 by UPSS								
	LFPR			WFPR			UR		
	1999–00	2004–05	2009–10	1999–00	2004–05	2009–10	1999–00	2004–05	2009–10
Rural	42.3	44.6	41.4	41.7	43.9	40.8	1.5	1.7	1.6
Urban	35.4	38.2	36.2	33.7	36.5	35	4.7	4.5	3.4
All		43	40	39.7	42	39.2		2.3	2

Source: NSS 55th, 61st and 66th Rounds.

in unemployment rate. In absolute terms, the first half of the decade experienced an increase of 20 million workers (238 million to 258 million) in agriculture. The slow growth in the labour force and hence in work force in second half of the decade may be due to rising participation in education by both male and female after the enactment of the Right to Education for 6–14 years old.

22.4. There has been a substantial divergence in the directions of growth of labour force and workforce in rural and urban sectors. In the Rural sector, the labour force declined marginally by 6.8 million from 348.7 million in 2004–05 to 341.9 million in 2009–10. The size of the workforce also showed similar trends. The workforce declined from 342.9 million in 2004–05 to 336.4 million in 2009–10, in the rural sector, marking a decrease of 6.5 million. The decline in labour force and workforce in the rural sector are impacted by MGNREGA programme and other new opportunities in rural sector (Table 22.2).

22.5. In the Urban sector, the trends show a totally different picture. The size of the labour force went up by 6.6 million from 120.3 million in 2004–05 to

touch 126.9 million in 2009–10. The workforce grew by 7.6 million from 115 million in 2004–05 to 122.6 million in 2009–10, in the urban sector. However the number of unemployed in the rural sector declined from 5.9 million in 2004–05 to 5.5 million in 2009–10 and in urban sector from 5.4 million to 4.3 million during the same period, indicating that the decline in urban sector was steeper than in the rural sector. The unemployment rates in rural sector have also seen a marginal fall from 1.7 per cent in 2004–05 to 1.6 per cent in 2009–10 and from 4.5 to 3.4 in the urban sector (Table 22.1 and Figure 22.1).

22.6. After rising from 6.06 per cent in 1993–94 to 7.31 per cent in 1999–2000 and further to 8.28 per cent in 2004–05 unemployment rate fell to 6.6 per cent in 2009–10. On the UPSS the unemployment rate has declined from 2.3 per cent in 2004–05 to 2 per cent in 2009–10. The decline in the LFPR for women and increase in the WFPR for men are suggestive of increase in the wages. Table 22.3 indicates that the wages for regular salaried male rural workers in real terms have increased by about 51 per cent and 56 per cent for casual workers. It also emerges from table below that increase in the wages have resulted

TABLE 22.2
Estimated Number of Persons in Millions

		61st Round of NSS (2004–05)		66th Round of NSS (2009–10)	
		Rural	Urban	Rural	Urban
Usual Status (ps+ss)	Labour Force	348.7	120.3	341.9	126.9
	work force	342.9	115	336.4	122.6
	unemployed	5.9	5.4	5.5	4.3

Source: NSS 61st and 66th Rounds.



Source: NSS Rounds.

FIGURE 22.1: Trend in Unemployment Rate

TABLE 22.3
Unemployment, Wages and Consumption Expenditure, 1993-4 to 2009-10

	Unemployment Rate (%) (CDS)	Salaries and Wages		Consumption	
		Regular	Casual	Rural	Urban
		₹ Per day, for male rural workers		Monthly per capita (in ₹)	
1993-94	6.06	58.48 (33.23)	23.18 (13.17)	281.4 (159.9)	458.04 (264.8)
1999-00	7.31	127.32 (46.98)	45.48 (16.78)		
2004-05	8.2	144.93 (45.43)	55.03 (17.25)	558.78 (175.2)	1,052.36 (311.3)
2009-10	6.6	249.15 (50.44)	101.53 (20.55)	927.7 (187.8)	1,785.81 (355.0)

Source: NSS Rounds.

Note: Figures in parentheses are at constant prices. For rural areas derived from CPI for agricultural labourers with base 1986-87 = 100, and for urban areas derived from CPI for urban non-manual employees with base 1984-85 = 100.

in increase in the consumption both in the rural and urban areas by 17.4 per cent and 34 per cent respectively during 1993-94 to 2009-10.

22.7. The rise in employment for males and wages has led to a sharp rise in consumption. As per NSSO data on consumption (NSS 66th Round) Monthly per capita consumption expenditure in rural areas in real terms increased to 1.4 per cent per year in the five years from 2004-05 to 2009-10 from 0.8 per cent per year in the 1993-94 to 2004-05 period. For urban areas, the real per capita expenditures grew faster during the same period from 1.47 per cent between 1993-94 and 2004-05 to 2.67 per cent between 2004-05 and 2009-10. The Conceptual framework

of employment and unemployment indicators are presented in Box 22.1.

22.8. In terms of Sectoral shares in employment it emerges that the agriculture share in employment declined from 59.9 per cent at the beginning of decade to 53.2 per cent at the end of the decade. However, this is still very high compared with the share of agriculture in other countries in the region. The share of manufacturing in the total employment after increasing to 12.2 per cent in the first half of the decade declined to 11 per cent in the second half of the decade indicating usage of more capital intensive technology in the absence of skilled manpower. The share of services has increased from 23.7 per cent in

Box 22.1
Conceptual Framework of Key Employment and Unemployment Indicators

Different approaches for determining activity status: On the basis of activities pursued by individuals during certain specified reference periods. There are three reference periods, namely (i) one year, (ii) one week and (iii) each day of the reference week. Based on these three periods, three different measures of activity status are arrived at. These are termed respectively as usual status, current weekly status and current daily status.

Usual activity status: The activity status on which a person spent relatively longer time (major time criterion) during the 365 days preceding the date of survey is considered the usual principal activity status of the person.

Subsidiary economic activity status: A person whose principal usual status is determined on the basis of the major time criterion may have pursued some economic activity for 30 days or more during the reference period of 365 days preceding the date of survey. The status in which such economic activity is pursued during the reference period of 365 days preceding the date of survey is the subsidiary economic activity status of the person.

Current weekly activity status: The current weekly activity status of a person is the activity status obtaining for a person during a reference period of 7 days preceding the date of survey. It is decided on the basis of a certain priority cum major time criterion. A person is considered working (or employed) if s/he, while pursuing any economic activity, had worked for at least one hour on at least one day during the 7 days preceding the date of survey. A person is considered 'seeking or available for work (or unemployed)' if during the reference week no economic activity was pursued by the person but s/he made efforts to get work or had been available for work any time during the reference week though not actively seeking work in the belief that no work was available.

Current daily activity status: The current daily activity status for a person is determined on the basis of her/his activity status on each day of the reference week using a priority-cum-major time criterion (day to day labour time disposition).

Labour force participation rate (LFPR): Labour force refers to the population which supplies or offers to supply labour for pursuing economic activities for the production of goods and services and, therefore, includes both 'employed' and 'unemployed' persons/person days. Labour-force participation rate (LFPR) is defined as the proportion of persons/person days in the labour-force to the total persons/person-days.

Worker Population Ratio (WPR): The estimates of employed (or worker) according to the usual principal status gives the number of persons who worked for a relatively long part of the 365 days preceding the date of survey. The work force, considering both the usual principal status and the subsidiary status, includes the persons who (i) either worked for a relatively long part of the 365 days preceding the date of survey and (ii) also those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey.

Unemployment rate (UR): Unemployment Rate (UR) is the ratio of number of unemployed persons/person-days to the number of persons/person-days in labour force (that is, number of employed and unemployed person/person-days). Estimates of UR are obtained by the three approaches used for classification of the activity statuses of the person.

Source: NSS Reports.

the beginning of the decade in 1999–2000 to 25.3 per cent in the end of the decade. The non-manufacturing sector has seen a sharp increase in employment and this is mostly in the construction sector (Table 22.4).

Sector-wise Employment Generation

22.9. During the period between 2004–05 and 2009–10 a total of 18 million work opportunities on CDS basis and 2 million at UPSS basis have been created. The performance varied across different sectors. The mining, manufacturing, trade, electricity

TABLE 22.4
Proportionate Share of Sectors in Employment

Sectors	1999–2000	2004–5	2009–10
Agriculture	59.9	56.6	53.2
Manufacturing	11.1	12.2	11.0
Non-manufacturing	5.3	6.5	10.5
Services	23.7	24.7	25.3
Total	100	100	100

Source: NSS Various rounds.

related sectors witnessed a decline in employment opportunities in spite of good sectoral growth. In all the sectors the performance was slightly short of the projections at the beginning of the Plan. The data in respect of employment in different sectors is given in Annexure 22.1.

22.10. Agriculture witnessed an oscillating trend in the employment in the last decade. While in the first half of the decade there was an increase in employment from 237.67 million in 1999–2000 to nearly 258.93 million in 2004–05, an increase of 21.26 million, there was a substantial decline in the number of people employed in agriculture in the later half of the decade from 258.93 million to 244.85 million, a decline of about 14.08 millions. However, total agricultural employment at the end of the decade was still higher by 3 per cent than it was at its beginning (Annexure 22.1). This suggests that the process of structural change in employment that one would expect with a period of unprecedented growth in output in the economy outside of agriculture, is not occurring fast enough.

22.11. The manufacturing sector witnessed an absolute increase in employment in the first half of the decade from 44.05 million to nearly 55.77 million in 2004–05. However, the second half of the decade witnessed a decline by about 5 million to reach the employment level of 50.74 million. However, this was still 15 per cent higher than the employment in the beginning of the decade. This change in the trend in employment generation in manufacturing sector may perhaps be due to faster increase in the average annual increase in real wages in India driven by a greater shortage of skilled workers (use of capital intensive technologies) and unskilled casual workers. The employment elasticity for manufacturing sector has shown a downward trend from 0.76 in the first half of the decade to –0.31 in the second half of the decade. This suggests substitution of labour by capital intensive technology resulting in fall in total employment despite an increase in total manufacturing output.

22.12. A close look at the employment trend in the main manufacturing industries given in Annexure 22.2

reveals interesting results. It emerges that the industries that registered an increase in employment in the first half of the decade, more than 80 per cent of them registered decline in the employment during the latter half of the decade. This decline was observed in the labour intensive industries which accounted for 68 per cent of total manufacturing employment in 1999–2000. The decline may be due to fall in the international demand for these products such as textiles, food products; tobacco, wearing apparel, wood products, fabricated metal and so on. These six industries registered an increase of 8.7 million employment during the first half of the decade, and a decline of 7.6 million employment during the second half.

22.13. The employment in the non-manufacturing sector in the decade 1999–2009 has increased by 27.44 million to reach 48.28 million in 2009–10, an increase of 2.3 times relative to 1999–2000. In the first half of the decade non-manufacturing employment increased from 21 million in 1999–2000 to 30 million in 2004–05, nearly a 50 per cent increase from 1999–2000. The absolute size of employment in non-manufacturing by the end of the decade was 1.6 times compared to 2004–05, or 2.3 times relative to the level in 1999–2000. This is comparable to employment in manufacturing sector which is 50 million during the same period. The main increase has been contributed by construction sector where the employment in the decade increased by 26.6 million of which 8.5 million was in the first half and 18.1 million during the second half. The other important sectors, namely mining and quarrying, electricity, gas and water supply have witnessed a very marginal increase (Annexure 22.1).

22.14. The Services/Tertiary sector witnessed an increase in the employment in the decade to reach a level of 116.34 million in 2009–10, contributing about 25.3 per cent to total employment. The growth in employment in the services sector was lower in the second half of the decade than in the first half. Within services, trade was the most important contributor to employment and accounted for one third of total services and employment in the economy both at the beginning as well as at the end

of the decade. It accounted for around 36 per cent (nearly 7 crore) of the increase in employment that occurred in the service sector in India in first half of the decade as compared to second half of the decade, when there was hardly any increase in employment. The second most important sector within services is transport, storage and communication whose contribution to total employment increased from 15.5 per cent at the beginning of the decade to 17.2 per cent at the end of the decade in 2009–10.

22.15. The employment in public sector services stagnated and there is, severe shortage in the public services of doctors, nurses, teachers, policemen, and judges. A rapidly growing economy cannot function without the simultaneous rapid expansion of such services. As this transition occurs in India in the next ten years a substantial improvement in higher quality jobs in public sector services may occur. The other services sector viz; banking and financial services and real estate have also witnessed an increase. The Employment in banking and insurance, which was 2.25 million in 1999–2000, had risen to 3.82 million in 2009–10 and in real estate from 2.7 million in 1999–2000 to 5.7 million at its end. The growth in real estate employment commensurate with increased focus of the government on both housing as well as infrastructure investment in the Eleventh Plan period.

22.16. Investment in infrastructure is expected to grow from \$500 billion during the Eleventh Five Year Plan to 1 trillion dollars in the Twelfth Plan, that is, to nearly 10 per cent of GDP. NSS data on employment in health and education services show marginal increase in the second half of the decade although first half had witnessed an increase. However while the GVA for education sector increased to 8.4 per cent per annum in the latter half of the decade from 7.1 per cent in the first half, for health sector the growth rate of GVA in was robust (10.1 per cent per annum) in the first half of the decade and declined to 4.2 per cent per annum in the second half of the decade, which perhaps explains the rather small increase in employment in the health sector in the latter half of the decade. With persistent shortage of health workers even post National Rural Health Mission.

The greater thrust of the government on education, skill development and health in the Twelfth Plan will increase employment in the sector in the Twelfth Plan.

EMPLOYMENT SCENARIO IN THE STATES

22.17. The variation in population increase in different states and in turn working age population has implication for employment generation. The present analysis of trends in employment in different sectors in different States would highlight the sectors that are contributing and would contribute to employment in future.

Agriculture

22.18. In agriculture at the national level there has been increase in the absolute number of people employed in the last decade (1999–2000 to 2009–10) although in the second half of the decade the proportion has declined marginally. The vast majority of the states have also experienced a decline in employment in agriculture between 2004–05 and 2009–10. However, since the total fall in employment in agriculture in the latter half of the decade was only 14.08 million, the distribution of this decline among the states did not lead to a significant shift of workers out of agriculture to industry or services. This does not indicate that temporary migration from rural to urban areas was not occurring. In fact for the first time since the Census of 1921 within the last decade, that is, 2001 to 2011 Census, the increase in the urban population (91 million) has been greater than the increase in the rural population over the decade (90 million). This may be because workers do migrate from rural to urban but only for temporary periods during the lean season for agriculture and move back during the peak season. Therefore, this workforce is not available for work in manufacturing or modern services due to lack of appropriate skill set. Their migration reflects rural distress, driven by the fact that 84 per cent of India's farmers are small and marginal, tilling less than 2.5 acres of land.

22.19. In this context, it is important to mention that just two states alone accounted for nearly half of the decline in agricultural employment in the latter half of the decade. Thus, in Bihar employment in

agriculture fell from 21.2 million in 2004–05 to 17.2 million at the end of the decade. Similarly, in U.P. employment in agriculture fell from 43.3 million in the middle of the decade to nearly 39.7 million at its end. On the contrary, the state of Maharashtra witnessed an increase in the employment in agriculture 3.97 million in the latter half of the decade. Another state which saw an increase in agriculture in the latter half of the decade was Punjab, from 3.6 to 4.7 million.

Manufacturing

22.20. The employment in manufacturing sector at All India level has fallen in the second half of the decade from 55.77 to 50.74 million. Most of this decline in employment was confined to states like Maharashtra (1.81 million) Tamil Nadu (0.98 million), Uttar Pradesh (0.85 million) and Jharkhand (0.25 million). The most distressing part was the fall in employment in the most industrialised states, namely Maharashtra, Tamil Nadu which accounted for 75 per cent of the decline in the manufacturing employment in the country in the second half of the decade.

22.21. In terms of state wise share of employment, it emerged that the national average for the share of manufacturing employment accounted for 11 per cent of total employment in 2009–10. There are 9 major states where this share is greater than the national average: Andhra Pradesh (11.9 per cent) Delhi (24.84 per cent), Gujarat (12.6 per cent), Haryana (12.2 per cent), Kerala (13.5 per cent), Punjab (15.9 per cent), Tamil Nadu (19.6 per cent), Uttar Pradesh (11.1 per cent) and West Bengal (18.4 per cent). Given the fact that there are advantages of agglomeration in the manufacturing sector it is likely that even in the future these states will continue to account for growth in manufacturing of GVA and employment. The state of Karnataka (9.4 per cent) also has similar proportion in employment as at national.

22.22. In terms of the share of manufacturing in state GVA, seven states have higher than the national average of manufacturing share in GDP (15.9 per cent) in 2009–10: Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Maharashtra, and Tamil Nadu. These

states could continue to grow fast during the Twelfth Plan period. But this depends to a larger extent on the manufacturing employment elasticity of output. While States of Chhattisgarh, Gujarat, Haryana, Delhi, Uttarakhand and West Bengal have positive employment elasticity, the states of Jharkhand, Maharashtra and Tamil Nadu have negative employment elasticity which implies usage of more capital intensive technology.

Non-Manufacturing

22.23. All the States experienced increase in non-manufacturing employment, mainly in construction sector in the second half of the decade.

Services

22.24. Services sector contributed about 25.3 per cent of total employment in 2009–10. Most of the states have shown a positive trend in the employment generation in the services sector in the latter half of the decade with exception of Andhra Pradesh, Madhya Pradesh, Maharashtra and Punjab which have shown decline in the service sector employment and negative employment elasticity. There is need for state governments to focus their attention on promotion of services for employment generation. 11 states share of services in total employment is greater than the national average namely Delhi (67.9 per cent), Haryana (25.2 per cent), Kerala (39.2 per cent), Maharashtra (29.8 per cent), Punjab (29.1 per cent), Tamil Nadu (27.0 per cent) and West Bengal (30.4 per cent).

QUALITATIVE DIMENSIONS IN EMPLOYMENT TRENDS

22.25. While the above analysis provide trends in creation of total employment both at the macro level and at state level as also the sectoral composition of the employment so created, it is necessary to look into the qualitative dimensions of employment in terms of equity, dignity, social security, status of employment and so on. This would help in formulating strategy for India's future challenges in generating productive employment, with decent working conditions.

Informalisation of Employment

22.26. A critical issue in assessing employment behavior of the economy is the growth of

TABLE 22.5
Formal and Informal Employment in Organized and Unorganised Sector (millions)

Sectors	Employment		
	2009–10		
	Informal	Formal	Total
Unorganised	385.08	2.26	387.34
Organised	42.14	30.74	72.88
Total	427.22	33.00	460.22
2004–05			
Unorganised	393.5	1.4	394.9
Organised	29.1	33.4	62.6
Total	422.6	34.9	457.5
1999–2000			
Unorganised	341.3	1.4	342.6
Organised	20.5	33.7	54.1
Total	361.7	35.0	396.8

Source: For 2009–10, computed from NSS 66th round, for other years taken from NCEUS, 2007.

employment in the organised sector vis-à-vis the unorganised sector and particularly in terms of formal and informal employments. It is generally opined that unorganised sector employment is of low quality compared to organised sector employment. Table 22.5 presents the employment in organised and unorganised sector in terms of formal and informal employment.

22.27. The above data shows a decline in the employment in the unorganised sector from 86 per cent in 2004–05 to 84 per cent in 2009–10. This means that the share of organised sector employment has increased to 16 per cent in 2009–10 from 14 per cent in both 1999–2000 and 2004–05. However, the increase in the organised sector employment is mainly in the informal category. The informal employment in the organised sector has increased from 46.4 per cent in 2004–05 to about 57.8 per cent in 2009–10. The informal employment in the unorganised sector remains the same. Nearly 93 per cent of the total workforce in 2009–10 is in informal employment, a rise from 91 per cent in 1999–2000. If agriculture is excluded from the workforce, the share of informal workers in the total non-agricultural workforce drops to 85.6 per cent from

93 per cent, which is still very high as compared to that in Brazil (51 per cent), Mexico (50 per cent), Indonesia (78 per cent), Philippines (72 per cent), and Thailand (49 per cent).

22.28. The above trend is indicative of movement of workers from informal agricultural sector employment to informal non-agricultural sectors. The transition from informal employment in the unorganised sectors to informal employment in the organised sectors is indicated by a decline of 8.4 million informal workers in unorganised sector along with an increase of 13 million informal workers in the organised sector. What is notable is that formal employment in the organised sector is not increasing. This shows that organised enterprises employers are increasingly hiring workers on contractual terms due to labour laws and other concerns. Small and medium size enterprises generally belong to the unorganised sector and employ informal workers. Hence analysing employment by size of enterprises would provide some insights on the qualitative dimensions of employment.

Size of Enterprises by Employment

22.29. The data in Table 22.6 on size class of enterprises by the number of workers that they employ shows an occurrence of shift in non-agricultural employment in the 2000s. The workers in the enterprises with less than six employees (that is, micro enterprises) show a remarkable decline both in absolute as well as in relative terms between 2004–05 and 2009–10. Such micro enterprises accounted for 152.5 million workers in the middle of the decade, or 75 per cent of all non-agricultural workers. By the end of the decade the number of workers in such enterprises had fallen by nearly 4 million, and the share of such micro enterprises in the total non-agricultural employment was down to 65.6 per cent. Correspondingly there was an increase in the number of workers employed in enterprises with 6 and above but less than 10 workers, from 15.2 million in the middle of the decade to nearly 24 million at its end, thus raising the share of workers in such enterprises from 7.5 per cent to 10.5 per cent of all non-agricultural employment in the country. It is better for workers since it reduces the fragmentation and enables them to organise.

TABLE 22.6
Number of Workers by Size of Enterprise in Industry and Services

Number of Workers in Enterprises	2004-05		2009-10	
	Number of Workers in Million	Share %	Number of Workers in Million	Share %
Less than 6	152.5	74.93	148.7	65.6
6 and above but less than 10	15.2	7.46	23.8	10.5
10 and above but less than 20	11.8	5.81	15.4	6.8
20 and above	24.0	11.8	38.8	17.1
Total		100		100

Source: Compiled from NSS, 2009-10 (66th Round) and NSS, 2004-05 (61st Round).

Category of Workers by Employment Status

22.30. In the labour market casual labour and self-employed are most vulnerable. Table 22.7 shows the annual increase in the work-force by category of employment in first half of the decade compared with second half of the decade. A notable feature is the increase in the number of jobs created at regular salaried wage and as casual worker. This may be due to increase in non manufacturing and service sector employment as discussed earlier.

TABLE 22.7
Number of Workers According to Usual Status (PS+SS) Approach by Broad Employment Status (Million Workers)

	1999-00	2004-05	2009-10
Self employed	209.3 (52.6)	258.4 (56.4)	232.7 (50.7)
Regular/Salaried employee	58.2 (14.6)	69.7 (15.2)	75.1 (16.4)
Casual labour	130.3 (32.8)	129.7 (28.3)	151.3 (33.0)

Source: Compiled from NSS, 55th, 61st and 66th Rounds.

Unemployment among Young and the Educated

22.31. The data and the Figure 22.2 show that Unemployment is higher among the youth and the educated who are looking for better quality jobs. The figure shows that unemployment among the age group 15-29 years for both males and females and in urban and rural areas is significantly higher than the average level of unemployment of all persons.

22.32. The incidence of employment by level of education in India (by UPSS) in Annexure 22.3 indicates that illiterates have the lowest rate of unemployment, and the rate of unemployment tends to rise with every level of education, with the highest unemployment rate for those with diploma/certificates (or those with one or two years of post higher secondary education). The unemployment rate for Diploma/Certificate holders was 9.6 per cent at the end of the decade. The unemployment rate does decline for graduates and slightly again for postgraduates and above, but not significantly.

EMPLOYMENT TRENDS AMONG THE SOCIAL GROUPS

Women's Employment

22.33. Although there has been consistent decline in workforce participation rate (WPR) of women since 1980s but the decline seems to have accelerated in the later half of the decade, that is, between 2004-05 and 2009-10 pushing down the overall LFPR and WFPR to a low level. The decline in female labour force participation has occurred in both rural and urban areas, though the decline is much sharper in rural compared to urban areas. This points to the fact that that in both urban and rural areas girls over 14 years of age (that is, of working age) are either attending the educational institution or have withdrawn from work due to improvement in the family income. The most serious problem that women in the work force face is poor quality of work. For the vast majority of



Source: NSS 55th, 61st and 66th rounds.

FIGURE 22.2: Unemployment Rate among Youth

women in non-agricultural employment they tend to work from home in home-based work, usually sub-contracted to them by male contractors in a variety of low-productivity work (for example, bidi-making, zari-making, and so on) or as helper in the construction industry. It is expected that attainment of the education would empower the women to join the labour market at a slightly later age better qualified and in quality employment though in unorganised sector (Tables 22.8 and 22.9).

22.34. At the policy level, there is need to give priority to Women in the National Rural Livelihood Mission (of the Ministry of Rural Development). NRLM will facilitate the creation of self-help groups of women at national scale and provide credit to SHGs to enable them to undertake self-sustaining economic activity.

Child Labour

22.35. Table 22.10 analyses incidence of Child labour since 1993–94. The incidence of child labour has declined since 1990s.

TABLE 22.8
LFPR by Usual Principal and Subsidiary Status, 1993–04, 2004–05 and 2009–10 (%) by Gender

Sector	Males			Females		
	1993–04	2004–05	2009–10	1993–04	2004–05	2009–10
Rural	87.6	85.9	82.5	49	49.4	37.8
Urban	80.1	79.2	76.2	23.8	24.4	19.4

TABLE 22.9
WPR by Usual Principal and Subsidiary Status, 1993–04, 2004–05 and 2009–10 (%) by Gender

	Male			Female		
	1993–04	2004–05	2009–10	1993–04	2004–05	2009–10
	86.4	84.6	81.2	48.7	48.5	37.2
	76.8	76.3	74	22.3	22.7	18.3

TABLE 22.10
Child Workforce Participation Rate by UPSS (Percentage), 1993–04, 2004–05 and 2009–10

Area	1993–04			2004–05			2009–10		
	Boys	Girls	Children	Boys	Girls	Children	Boys	Girls	Children
Rural	6.8	7.8	7.3	3.5	3.7	3.6	2.0	2.4	2.2
Urban	3.5	2.7	3.1	2.6	1.9	2.3	0.7	1.5	1.1
Combined	6.2	6.0	6.2	3.3	3.3	3.3	1.7	2.2	2.0

Source: NSSO 1993–04, 2004–05 and 2009–10.

22.36. It emerges that the active participation of both boys and girls in the labour market is falling. The decline in child labour commensurate with significant increase in school enrolment of both boys and girls. Since the proportion of girls who were out of school was higher than that for boys until the middle of the 2000s, the decrease in the incidence of female child labour is largely on account of their enrolment in schools. However, the NSS data for 1993–94 and 2007–08 reveals that girls are still being held back at home in order to perform household chores. In the proportion of children in the age of 5–14 who are categorised neither as child labourers nor as students enrolled in schools 11.4 per cent of girls belong to the category of nowhere girls in the 6–14 year old age group, while only 3.8 per cent of boys in the same age group belong to nowhere children. The education sector has a pre-eminent role in ensuring that all children in the age group 6–14 years are at school. The stricter implementation of SSA and Child labour regulations can ensure that the child labour is eradicated from the country.

Weaker Social Groups: The Scheduled Castes (SCs), Scheduled Tribes (STs)

22.37. In terms of most social indicators the Scheduled Castes (SCs) and the Scheduled Tribes (STs) among social groups are the most marginalised

sections (Table 22.11). For instance, the work force participation rate (by usual principal and subsidiary status) for SCs in 1993–94 was 71 per cent and for STs it was 81 per cent, which were both much greater than the workforce participation rate (WFPR) for all social groups (68 per cent) in rural areas; similarly, they were higher in 2004–05. Although urban WFPR is consistently lower for all groups, SCs and STs have a much higher WFPR compared to all groups. This higher than average WFPR for SCs and STs is attributed to the fact that SCs and STs of working age (that is, 15 and above) have lower enrolment ratio in secondary school than other social groups. The vulnerability of SCs and STs in terms of the labour market is emphasised by the fact that by UPSS SCs and STs have much higher unemployment rates, by and large, at least in urban areas.

22.38. Table 22.12 gives the unemployment rates among various social groups including SCs and STs from National Sample Surveys from 1993–94 to 2009–10. It may be seen that between 2004–05 and 2009–10, the unemployment rates for SCs have declined by 2.1 percentage points in urban areas while it did not change for rural areas and remained at 1.6 per cent. The unemployment rates for all the social groups in both the rural and urban areas, however, witnessed a decline, 0.1 percentage point in rural areas and

TABLE 22.11
Workforce Participation Rate by Usual Principal and Subsidiary Status, by Social Group, 1993–4, 2004–5 and 2009–10 (%)

Sector	SCs			STs			All Groups		
	1993–94	2004–05	2009–10	1993–94	2004–05	2009–10	1993–94	2004–05	2009–10
Rural	71.1	68.7	61.4	81.4	79.1	68.9	67.8	66.6	59.5
Urban	56.8	54.1	51.8	57	54.9	49.2	50.9	50.6	47.2

Source: NSS rounds.

TABLE 22.12
Unemployment Rate by Usual Principal and Subsidiary Status, by Social Group, 2004–5 and 2009–10 (%)

Sector	SCs			STs			All		
	1993–94	2004–05	2009–10	1993–94	2004–05	2009–10	1993–94	2004–05	2009–10
Rural	1	1.6	1.6	0.6	0.8	1.4	1.2	1.7	1.6
Urban	4.4	5.3	3.2	3.9	3.1	4.4	4.5	4.4	3.4

Source: NSS rounds.

1.0 percentage points in urban areas. But the unemployment for STs has increased in both rural and urban areas during the period 2004–05 to 2009–10.

LABOUR FORCE AND WORKFORCE PROJECTIONS FOR THE TWELFTH PLAN

Labour Force Projections

22.39. The projections of labour force have been made using the latest population projections made by the NSSO and 2011 census data. The projected increase in labour force during the Twelfth Plan period for the 15 and above age group is now estimated to be around 24.5 million from 477.9 million in 2011 to 502.4 million by the end of 2017. This is calculated on the basis of age specific LFPRs and population distribution trend that has existed since 2004–05. India has seen deceleration in population growth rate (Census 1991, 2001 and 2011). The 66th Round has also shown a decline in the female participation rate, which could be the effect of increasing enrolment in educational institutions, as also the impact of rising incomes, where women do not want to do low quality jobs (backward bending labour supply curve). With the focus of the policy planners on raising the gross enrollment ratio in secondary and higher education, the number of people entering the labour force may not see a significant rise. Assuming the rate of decline in population growth rate to be in line with the past trend, and taking into account the effect of education and rising family income on female work participation, the LFPR is expected to decline further. The absolute increase in the labour force by the end of Twelfth plan is therefore expected to be small. Based on these assumptions,

the population and labour force projections for the Twelfth Five Year Plan are shown in the Table 22.13.

22.40. With the enactment of Right to Education (RTE), introduction of the National Skills Qualification Framework (NSQF) and integration of vocational education with the secondary education, drop-out rates are likely to decrease. Creating non-farm employment opportunities for the educated youth will be a challenge for the country in near future. To meet the education targets of near full universalisation of secondary education (>90 per cent), GER of 65 per cent in higher secondary classes and expected increase of enrollment in universities and colleges from 200.3 lakhs in 2011–12 to 300.2 lakhs by 2016–17, about 28 million will be drawn out of the labor force (15–59 age group). Therefore, in order to ensure that the overall labor force participation rate does not fall much over the Plan period; efforts have to be made to raise the female work participation rates.

Work Force Projections: Total and Sectoral Employment Projections

22.41. The total employment over the period has been estimated on the basis of employment projections for individual sectors which are then aggregated for the economy as a whole. These sectoral employment projections are based on sectoral GDP growth rates combined with computed employment elasticities (1999–2000 to 2009–10). There are two plausible scenarios with respect to employment situation over the Twelfth Plan period. First is the business-as-usual scenario, where projections rely on an analysis of growth and employment trends

TABLE 22.13
Population and Labour Force Projections

Year	2011	2012	2013	2014	2015	2016	2017
Total population (0+)	1,210.2	1,227.1	1,244.0	1,260.6	1,277.1	1,293.5	1,309.7
15 and above population (%)	70.2	71.0	71.8	72.6	73.4	74.2	75.0
Population (15 and above) in millions	849.6	871.3	893.2	915.2	937.4	959.8	982.2
LFPR for 15 and above age group (%)	56.3	55.4	54.6	53.7	52.9	52.0	51.2
Labor force (15 and above) (in millions)	477.9	482.7	487.2	491.5	495.4	499.1	502.4

Source: NSS Round and Census 2011.

TABLE 22.14
Employment Elasticity from Past Data

	Agriculture	Mining and Quarrying	Manufacturing	Utilities	Construction	Trade, Transport and so on	Finance, Real Estate, and so on	Other Services	Total
Employment elasticity	0.04	0.52	0.09	0.04	1.13	0.19	0.66	0.08	0.19

for agriculture, manufacturing, non-manufacturing industry and services over the last Five Year Plan period. It is built on the assumption that the growth pattern of various sectors during the Twelfth Plan would be similar to what it was during the Eleventh Plan period. Second is the Twelfth Plan scenario, which takes into account the aim of the Twelfth Five Year Plan of creating quality and productive employment opportunities, with focus on acceleration of the rate of transition of labor out of low productivity agriculture to higher productivity industry and services sectors. If the manufacturing sector is able to reverse the declining trend of employment growth with focus on expanding the labor-intensive manufacturing, agriculture is able to grow at 4 per cent with improvements in productivity and diversification, and the contribution from the non-manufacturing sectors, particularly construction and services continues to increase, the planned scenario gives the alternative set of employment projections (Set 2). One of the main objectives of the growth strategy in the Twelfth Plan period must be to ensure that this process of structural change in terms of employment opportunities is accelerated.

Employment Elasticity

22.42. Sectoral employment elasticities have been calculated by running a log-log regression on observed sectoral GDP figures at constant prices from 1999–2000 to 2009–10 (independent variable) and employment figures for the same period, obtained by interpolating the series on the 1999–2000, 2004–05 and 2009–10 employment outcomes obtained from various NSSO rounds.

Business-as-Usual Scenario

22.43. If the economy and its sectors continue to grow at the rates with which they grew during the

Eleventh Plan (Table 22.14), the projected employment (15 and above age group) on a pure demand side basis is about 508.9 million. This would lead to a reduction in unemployment rate, and when adjusted for labor force participation rates, the employment in agriculture is expected to decline. Even with business-as-usual growth rates, the farm sector share in employment is expected to drop from 51.8 per cent in 2011–12 to 47.3 per cent in 2016–17. This also shows that shift from the farm to non-farm sector would be small, if the skill up-gradation and expansion of employment opportunities in manufacturing and services does not take place (Tables 22.15 and 22.16).

Twelfth Plan Scenario

22.44. If the manufacturing sector becomes an engine of growth, by growing at the targeted two percentage points above the overall growth rate (11 per cent); and the agriculture sector grows at 4 per cent, the sectoral growth rates would be as given in the Table 22.17.

TABLE 22.15
Sectoral Growth Rates: Business-as-usual Scenario

Sector	Growth Rates
Agriculture	3.3
Mining and quarrying	3.2
Manufacturing	6.8
Utilities	6.0
Construction	7.3
Trade, transport, hotels, and so on	10.0
Finance, insurance, real estate and so on	10.7
Community, social and personal services	8.3
Total	7.9

TABLE 22.16
Sectoral Employment (in million): Business-as-usual Scenario

Year	Agriculture	Mining and Quarrying	Manufacturing	Utilities	Construction	Trade, Transport, Hotels, and so on	Finance, Banking, Real Estate, and so on	Community, Personal and Social Services	Total
2009–10	241.7	2.7	50.0	1.4	43.6	68.6	9.5	37.2	454.7
2011–12	242.3	2.8	50.6	1.4	51.1	71.2	10.9	37.7	468.0
2016–17 (pure demand side)	243.9	3.1	52.2	1.4	75.8	78.2	15.4	39.0	508.9
2016–17 (adjusted for labour force participation rates)	237.4	3.1	52.2	1.4	75.8	78.2	15.4	39.0	502.4
Projected Share of Employment in per cent									
2011–12	51.77	0.60	10.81	0.29	10.91	15.22	2.34	8.06	100.0
2016–17	47.25	0.61	10.38	0.28	15.09	15.57	3.06	7.77	100.0

TABLE 22.17
Sectoral Growth Rates—Twelfth Plan Scenario

	Agriculture	Mining and Quarrying	Manufacturing	Utilities	Construction	Trade, Transport, Hotels, and so on	Finance, Insurance, Real Estate and so on	Community, Social and Personal Services	Total
Growth Rates	4.0	3.2	11.0	6.0	7.3	10.0	10.7	8.3	9.0

22.45. The cornerstone of the manufacturing policy for the Twelfth Plan is to create 10 million additional jobs in the manufacturing sector by focusing on labor-intensive manufacturing and by suitable amendments to the labor regulatory framework, so that manufacturing becomes a genuine engine of employment growth in the country. If we focus on more productive and quality (organised and self-employed) employment in the manufacturing and services sector, additional 50 million job opportunities can be created in the non-farm sector. But this will need a huge effort in the form of skill development aligned to the market needs. In particular, manufacturing, construction, trade, transport, hospitality and financial services are the promising sectors where skill development can lead to a faster growth in employment opportunities.

22.46. As more skilled people coming back to the labor force after completing their education and training to join the work force, those under-employed in agriculture will be drawn out to fill the job opportunities created by the non-farm sector. This could, in the planned scenario, bring down the projected share of employment in farm sector to about 45 per cent of the total. The details are summarised in the Table 22.18.

22.47. To summarise, the Twelfth Plan should focus on demand aligned skill development, and aim at significantly stepping up growth in employment in manufacturing, so that under-employed labour force can speedily move from low-paid farm jobs to better paid, more productive manufacturing and services sectors. Simultaneously, we should improve

TABLE 22.18
Sectoral EMPLOYMENTS (in million): Twelfth Plan Scenario

Year	Agriculture	Mining and Quarrying	Manufacturing	Utilities	Construction	Trade, Transport, Hotels, and so on	Finance, Banking, Real Estate, and so on	Community, Personal and Social Services	Total
2011–12	242.4	2.8	51.0	1.4	51.1	71.2	10.9	37.7	468.6
2011–12	Farm 242.4	Non Farm 226.1							
2016–17	226.0	3.1	63.5	1.4	75.8	78.2	15.4	39.0	502.4
2016–17	Farm 226.0	Non Farm 276.4							
Projected Share of Employment (in per cent)									
2011–12	51.74	0.60	10.88	0.29	10.90	15.20	2.33	8.06	100.00
2016–17	44.99	0.61	12.65	0.28	15.09	15.57	3.06	7.77	100.00

the working conditions for women to improve their work participation rates, and focus on greater organised sector jobs that will meet the aspirations of the rising number of educated and skilled youth in the country.

CHALLENGES FOR EMPLOYMENT POLICY

Expanding Employment Opportunities

22.48. The employment elasticity of the manufacturing sector has witnessed a decline in spite of increase in the gross value added in the sector. The usual structural transformation associated with high growth does not seem to have happened in India and more people continued to be employed in agriculture and other forms of informal employment. The Twelfth Plan hopes to make the manufacturing sector a genuine engine of growth, which could generate 100 million work opportunities by 2022. The employment contribution of labour intensive manufacturing, namely textile and garments, leather and footwear, gems and jewellery, food processing industries and so on can be greatly enhanced provided the Government puts supportive policies in place. Some of these are mentioned in the sub-section below.

22.49. Incentives will have to be improved for expanding employment in the organised sector. Services like information technology, finance and banking, tourism, trade and transport are going to be

major generators of employment in the Twelfth Plan period and beyond. Sector specific strategies need to be adopted to ensure sustained expansion of employment opportunities in these areas.

Simplifying Regulatory Framework

22.50. The multiplicity of labour laws administered both by the Central and the State governments are not conducive for the congenial development of the factory sector. The 84 per cent of the unorganised sector is outside the purview of the labour laws, while the 16 per cent organised sector is overburdened with regulatory interference at all levels. There is need to simplify labour laws both at the Centre and the State level. In particular the following actions need to be taken on an urgent basis:

- I. To ensure speedy resolution of industrial disputes, particularly the collective disputes which have a bearing on law and order, the District Collector or the Sub-Divisional Magistrate may be appointed as Conciliatory Officers under the Industrial disputes Act, 1947.
- II. A comprehensive social security must be put into place for workers in the organised sector, which provides for pension, medical insurance and unemployment benefits that are seamlessly transferable across employers in all sectors of the economy. Suitable provisions need to be made for workers in the unorganised sector, where

their own contributions can be supplemented by some support from the Government.

- III. To generate greater overall employment, at least labour intensive manufacturing industries like textiles and garments, leather and footwear, gems and jewellery, food processing and so on must be permitted to adjust its labour force, in response to fluctuations in demand. The focus should be on promoting labour market flexibility without compromising fairness to labour.

Addressing the Problems of Specific Categories

22.51. NSS data shows that female employment has declined both in rural areas and urban areas in recent years. This is a major concern and needs to be addressed during the Twelfth Plan period. While this could be partly due to improved enrolment of girls and young women in secondary and higher education, the effect of increasing household income on female work participation rates is also being felt. As household incomes rise and budget constraints relax, women weigh the trade-offs between available employment opportunity and home making more carefully. The only way to slow down the declining female work participation rate is to make the work environment more conducive to women, and provide for the genuine needs of home-making and child care.

22.52. Unemployment among educated people is going to be a major issue during the Twelfth Plan period. India is one of the few countries which have educated unemployed in large numbers. The major reason is the dearth of vocational and technical education leading to skill mismatch in the job market. Similarly, the issue of promoting employment opportunities for minorities, SC/ST and disabled people assumes greater importance, and employment oriented education needs to be provided in a manner that ensures the needs of the vulnerable sections of the society are taken care of.

Bridging the Skill Gap

22.53. There is need for skilling and reskilling the persons entering the labour force to harness the demographic dividend that India enjoys. While the enrolment in technical higher education has grown,

the employers continue to complain about non availability of requisite number of skilled persons. This challenge needs to be addressed at the All India as well as the State level in a mission mode manner, as otherwise the benefits of demographic dividend would be lost. The skill enhancement also leads to increased wages for the people and a positive growth outcome for the economy at large.

22.54. The employment challenges as reflected above needs to be addressed so as to meet the faster and inclusive growth agenda for the Twelfth Plan. Skill development should, therefore, occupy centre-stage in any employment strategy for the Twelfth Plan. The following paras will discuss the current status of skill development in India, the challenges emerging from thereon and the road map for skilling the requisite manpower so as to reap the demographic dividend on one hand and enhance the employability of the labour force for inclusive growth on the other.

SKILL DEVELOPMENT: THE CHALLENGE

22.55. Skill development is critical for achieving faster, sustainable and inclusive growth on the one hand and for providing decent employment opportunities to the growing young population on the other. The demographic window of opportunity available to India would make India the skill capital of world. India would be in position to meet the requirement of technically trained manpower not only for its growing economy but also of the aging advanced economies of the world. Hon'ble Prime Minister has rightly indicated that young population is an asset only if it is educated, skilled and finds productive employment. If this happens then our dream of realising India's potential to grow at 10 per cent or more per annum for a substantial period of time can become a reality. Boston Consultancy Group's study in 2007 had clearly indicated that by 2020 while India will have surplus of 56 million working people, the rest of the world will encounter a shortage of 47 million working people. However, skilling this large and growing young population from an exceedingly small base would be a big challenge for India. The skill strategy for the Twelfth Plan would have to accordingly model for these skill challenges in terms

of outreach, quality, systemic/institutional setups, current status of skill development efforts and various economic policies proposed in the Twelfth Plan.

22.56. Structural shifts in the economy in terms of increase in contribution of secondary and tertiary sectors to GDP and demographic dividend have implications for skills development strategy. India will have about 63 per cent of its population in the working age group by 2022. China's demographic dividend would start tapering off by 2015, but India would continue to enjoy it till 2040. India needs to provide skills and training to its young workforce if this window of opportunity is not to be lost. However, the availability of demographic dividend varies across the country with wide variation in Northern and Southern states. While the Northern states would have young population the southern states have already started aging. It emerges from the Annexure 22.4 that the Dependency ratio in UP and Bihar at 1.05 and 1.08 respectively is lower than the dependency ratio in Tamil Nadu and Kerala at 1.74 and 1.79 respectively. This is also lower than the dependency ratio at All India Level at 1.33.

22.57. The rise in the share of the working-age population would lead to increase in demand for decent

employment opportunities. However, the realisation of full potential of the demographic dividend depends on generation of adequate decent non-farm employment opportunities and up gradation of skills of existing as well as new entrants to the workforce.

The Level of Education of the Labour Force

22.58. As per the 66th round of NSS (Table 22.19) the general education level of over 50 per cent of India's labour force in the age group 15–59 remains extremely low. Of the total labour force of 431 million on UPSS basis about 29 per cent are not even literate and another about 24 per cent were having education up to primary level. Of the balance, about 29 per cent had education level up to secondary which included 17.6 per cent with middle level education. Only about 17 per cent have higher levels of education (including higher secondary, diploma/certificate, graduates, and higher than graduation).

22.59. As indicated earlier in the chapter the growth is expected to lead to transition of labour out of agriculture into industry and services sectors. However, the low education levels of the labour force, especially those engaged in agriculture would make transition to non-farm sector difficult except as low

TABLE 22.19
General Education Level of Labour Force (PS+SS) in the Age Group 15–59

	Numbers (mn.)	Share in Labour Force in Age Group 15–59 per cent	Share in Labour Force (470.1 million) per cent
Not literate	125.65	29.14	26.73
Literate without formal schooling	2.12	0.49	0.45
Below primary + Primary	102.38	23.74	21.78
Middle	76.08	17.64	16.18
Secondary	52.39	12.15	11.14
Higher secondary	29.19	6.77	6.21
Diploma/certificate course	6.02	1.40	1.28
Graduate	28.01	6.49	5.96
Graduate and above	9.40	2.18	2.00
Total	431.23	100.00	91.73

Source: NSS 66th Round 2009–10.

paid laborers in the construction industry. In other words, there is need to ensure basic skill, that is, at least functional literacy and numeracy among the labour force.

The Share of Vocationally Trained in the Labour Force

22.60. As per the 66th Round of NSS (2009–10), the vocationally trained in the age group 15–59 in the labour force are around 10 per cent of the Labour Force in that age group. The absolute number of those who are receiving formal vocational training is 1.9 mn in 2009–10. An additional 9 mn in the labour force have already received vocational training formally. Finally, an additional 32.7 mn have received non-formal vocational training. Thus, the total number of those received or receiving vocational training in the labour force (15–59) was 43 mn in 2009–10.

Educational Qualification and Vocational Training of Workers

22.61. A look at the profile of workers by economic sectors in Table 22.20 indicates that the proportion of illiterate workers is highest in agriculture and allied activities (about 40 per cent), followed by the non-manufacturing sector (33 per cent).

22.62. Overall 10 per cent of the workforce in the age group of 15–59 years received some form of

vocational training. The proportion of workers who received vocational training was the highest in the services sector (33 per cent), followed by manufacturing (31 per cent), agriculture (27 per cent), and non-manufacturing and allied activities (9 per cent). But the important thing is that vast majority of workers received non-formal vocational training. The proportion of workers with non-formal vocational training was the highest in agriculture and it was primarily in the form of hereditary transfer of knowledge. In the non-agricultural sector, the non-formal vocational training was in the form of on the job learning. Dependence on non-formal vocational training to such an extent highlights the grossly inadequate system of vocational training that currently exists in the country. What is remarkable is that there is little difference between manufacturing and agriculture in the share of those with vocational training who only received non-formal training: 86 per cent in agriculture and 91.7 per cent in manufacturing. Only in services is the share of those informal training much lower at 56 per cent (Table 22.21).

THE SKILL TARGETS FOR TWELFTH PLAN

22.63. During the Twelfth Five Year Plan (2012–17), 50 million non-farm employment opportunities are proposed to be created and at least equivalent number of people would be provided skill certification.

TABLE 22.20
Estimated Number of Workers (PS+SS in the age group of 15–59) by Level of Education by Sector (millions), 2009–10

	Agriculture and Allied	Manufacture	Non-Manufacture	Service	Total
Not Literate	87.36	9.56	14.42	13.65	124.99
Literate without formal schooling	1.23	0.25	0.21	0.42	2.11
Below primary + Primary	57.62	12.69	12.47	18.32	101.10
Middle	36.20	10.27	8.67	18.98	74.12
Secondary	21.30	7.02	4.27	18.21	50.79
Higher secondary	10.36	3.21	1.45	12.43	27.45
Diploma/certificate course	0.58	1.16	0.53	3.12	5.39
Graduate	3.84	3.01	1.25	17.82	25.93
Graduate and above	0.74	0.73	0.24	7.00	8.70
Total	219.23	47.90	43.50	109.96	420.59

Source: Computed from NSS (66th Round), 2009–10.

TABLE 22.21
Distribution of Formally and Informally Vocationally Trained Workers (PS+SS in the age group of 15–59)
Within Primary, Secondary and Tertiary Sectors (%) in 2009–10

	Agriculture and Allied	Manufacture	Non-Manufacture	Service	Total
Receiving formal vocational training	18.7	16.6	5.5	59.2	100
Received vocational training: Formal	7.8	19.8	8.1	64.4	100
Received vocational training non-formal, of which:	31.9	35.0	11.0	39.7	100
Received vocational training non-formal: Hereditary	56.9	26.3	4.1	12.6	100
Received vocational training non-formal: Self-learning	26.4	33.5	9.2	30.8	100
Received vocational training non-formal: Learning on the Job	11.1	45.1	14.5	29.3	100
Received vocational training non-formal: others	22.0	33.6	7.0	37.4	100
Total	26.8	31.4	8.7	33.1	100

Source: Computed from NSS (66th Round), 2009–10.

The existing annual training capacity in the country is 4.5 million. It needs to be more than doubled to achieve the target.

AN OVERVIEW OF THE ELEVENTH PLAN

22.64. The Eleventh Five Year Plan while focusing on utilisation of the human resources for economic growth, recognised that skill building is not a static process and that individual's skills needs to be upgraded continuously for workforce to remain relevant and employable. To realise this Coordinated Action on Skill Development was initiated in 2008 which provides for a three tier governance structure, namely Prime Minister's Council on Skill Development as apex body for policy direction to be supported by National Skill Development Coordination Board (NSDCB) in Planning Commission for coordinating and synergising the efforts of the various central ministries that are involved in the skill development and National Skill Development Corporation for catalysing private sector efforts in the skill development. During the Eleventh Plan most of the states have set up state skill development missions for focused and synergised approach for scaling up of skill efforts in respective states. A National Policy on Skill Development was also formulated in 2009 which focuses on policy coherence, inclusivity,

improving the quality with emphasis on employment outcomes. The government has, therefore, put in place a governance structure for implementation of skill initiatives at highest level and the policy for providing an enabling environment and framework to address the challenges of skill development.

National Policy on Skill Development Policy, 2009

22.65. The National Policy on Skill Development Policy formulated in 2009 envisions empowering all individuals through improved skills, knowledge, and nationally and internationally recognised qualification to gain access to decent employment and ensure India's competitiveness in the global market. The Key Features of the Policy for addressing the challenges in the skill space are given in Box 22.2.

Expansion of Training Capacity—Industrial Training Institutes, Modular Employable Skills (Vocational Training Providers) and Polytechnics

22.66. The training infrastructure in terms of Government Industrial Training institutes as well as Industrial Training Centers run by private sector saw a significant increase to reach a level of 9,447 in the Eleventh Plan from about 5,114 in the beginning of

Box 22.2
Skill Policy for Promoting India's Competitiveness in the Global Market

Objectives

- Expanding the outreach by adopting established and innovative approaches to ensure equitable access to training to all irrespective of any gender, regional, social and sectoral divide.
- Promoting greater and active involvement of all stakeholders including social partners and forging a strong, symbiotic, private-public partnership in skill development.
- Develop a high-quality demand driven skilled workforce/entrepreneur relevant to current and emerging employment market needs.
- Enable the establishment of flexible delivery mechanisms that respond to the characteristics of a wide range of needs of stakeholders.
- Enable effective coordination between different ministries, the Centre and the States and public and private providers.
- Creating institutional mechanism for research, development, quality assurance, examination and certification, affiliation and accreditation and coordination of skill development across the country.

Coverage

The National Skill Policy aims at promoting the following forms of delivery of skills: institution-based skill development including ITIs/Private ITIs/vocational schools/technical schools/polytechnics/professional colleges; learning initiatives of sectoral skill development organised by different ministries/departments; formal and informal apprenticeships and other types of training by enterprises; training for self-employment/entrepreneurial development; adult learning, retraining of retired or retiring employees and lifelong learning; non-formal training including training by civil society organisations; and e-learning, web-based learning and distance learning.

Finance

All stakeholders, the Government both at Centre and States, the enterprise—public and private, and the direct beneficiary—the individual, would share the burden of mobilising financial or in-kind resources for skill development.

the Plan. The seating capacity also increased to 13.35 lakhs from 7.42 lakhs in 2007. However, the geographic distribution of ITIs/ITCs remained skewed with South and West Zones accounting for 67 per cent of private and government ITIs catering to 51 per cent of the population with 60 per cent of seating capacity and North and East Zones accounted for 33 per cent of ITIs catering to 49 per cent of population with 40 per cent of seating capacity. Even within each zone, there are significant state-wise variations.

22.67. With the objective of expanding the outreach of the training facilities to school dropouts/ and recognising need for prior learning of workers in the unorganised sector, 'Modular Employable Skills (MES)' programme has been initiated by Ministry of Labour and Employment wherein short duration courses are provided to prospective trainees using both government and private infrastructure. 1,402 modules covering more than 60 sectors

have been developed, 36 Assessing Bodies empanelled for conducting assessment, 6,951 Vocational Training Providers (VTPs) registered and more than 13.53 lakh persons have been trained/tested up to 31.3.2012.

22.68. In addition the quality of training at ITIs has been improved through up gradation and creation of Centers of Excellence by introducing multi-skilling courses. This is done under public-private-partnership in the form of Institute Management Committees (IMCs) with representatives from industries, government, and academic organisations who play a major in terms of providing practical training and identification of emerging skill demands in the local industry. An interest free loan is provided to the IMC with 10 year moratorium and repayable in annual equal instalments over 20 year period. The evaluation of such training institutes indicates improvement in physical infrastructure. However,

the shortage of quality trainers remains a cause of concern which needs to be addressed urgently by up grading facilities at Model Industrial Training Institutes (MITIs) and also by capacity enhancement for Training of Trainers under Directorate General of Employment and Training (DGET).

22.69. The Courses in Polytechnics have been diversified to address skilled manpower demand of the service sector besides conventional subjects. Women's polytechnics continued to offer courses in garment technology, beauty culture, textile design with modern techniques. The number of polytechnics have increased to 1,914 during the year 2009–10. In addition under the Coordinated Action on Skill Development, Ministry of Human Resource Development has taken initiatives to set up 300 polytechnics through PPP by the State Governments/ Union Territories in consultation with CII, FICCI, ASSOCHAM and PHD Chamber of Commerce and 400 additional Polytechnics by the private sector.

22.70. For an effective vocational education system, it is not only necessary to increase the training capacity, but also maintain a minimum standard of training. For a mandatory accreditation system, appropriate institutional structure has to be created. The details about the increase in the capacities, accreditation bodies for technical education and for universities and so on is given in Education chapter.

Apprenticeship Training Scheme (ATS)

22.71. The Apprentice Training Scheme is implemented by Ministries of Labour and Employment and Human Resource Development under the Apprentices Act, 1961. About 254 groups of industries are covered under the Act and about 27,000

establishments engage apprentices. DGE&T is responsible for implementation of the Act in respect of Trade Apprentices in the Central Government Undertakings and Departments. It is done through six Regional Directorates of Apprenticeship Training located at Kolkata, Mumbai, Chennai, Hyderabad, Kanpur and Faridabad. It covers 15–18 year olds, who have completed at least eight years of schooling. Department of Secondary Education in the Ministry of Human Resource Development is responsible for implementation of the Act in respect of Graduate, Technician and Technician (Vocational) Apprentices. This is done through four Boards of Apprenticeship Training located at Kanpur, Kolkata, Mumbai and Chennai and is targeted at 19 to 22 year olds who are certificate or diploma or degree holders in engineering and management. The scheme has a focus on manufacturing or non-manufacturing industry and within that also only the organised sector leaving the unorganised sector completely dependent on informal system of apprenticeship. The progress under the scheme is given in Table 22.22.

Vocationalisation of School Education

22.72. The vocational education was started in schools in 1985 but the progress under the scheme remained very slow as in the beginning of the Eleventh Plan only 3 per cent were enrolled in Vocational courses at the secondary level. The Department of Secondary Education has revamped its existing scheme of Vocationalisation of Secondary School Education in 2011 which envisages strengthening of 10,000 existing secondary schools with vocational stream and establishment of 100 new vocational schools through State Governments. The scheme envisages provision of assistance to run 500 vocational schools under PPP mode. There is a

TABLE 22.22
Apprentices in India (Under the Apprenticeship Training Act, 1961)

Year	Trade Apprentices (Mole)			Graduate, Technician and Technician (Vocational) Apprentices (MHRD)		
	Seat Available in Lakhs	Seat Utilised in Lakhs	Per Cent Utilised	Seat Available in Lakhs	Seat Utilised in Lakhs	Per Cent Utilised
Upto March 2011	3.37	2.21	65.57	1.02	0.65	63.74

Source: Ministry of Labour and Employment.

provision for in-service training of 7 days for 2,000 existing vocational education teachers and induction training of 30 days for 1,000 new vocational education teachers. 250 competency based modules are proposed to be developed for each individual vocational course. The revision in curriculum is mandatory once in three years to ensure that the curriculum is guided by needs of the industry. A separate vocational cell has been established within the Central Board of Secondary Education. There is also provision for assistance to reputed NGOs to run short duration innovative vocational education programmes. All the components and activities would be guided by the National Skills Qualifications Framework (NSQF).

22.73. The approach so far has been to create stand-alone vocational education facilities. The need of the hour is that secondary schools in every panchayat can be used for vocational training outside the school hours. A formal system of vocational education certification needs to be evolved to certify students and youths to acquire skills through this method. This would require adequate and suitable infrastructure to impart the vocational training.

Promoting Public Private Partnerships

22.74. The Eleventh Plan has seen a paradigm shift in skill development strategy wherein Public Private Partnership model has been encouraged in the skill development. Besides involving private sector in upgrading the capacity in the existing institutions both at the ITI and Polytechnic level, an institutional structure in the form of National Skill Development Corporation (NSDC) has been put in place to catalyse the private sector efforts. The NSDC provides soft loans to the private partners for undertaking skill activity. NSDC works in around 365 districts in 28 states and 2 Union Territories in both organised as well unorganised sectors. NSDC along with its partners have trained over 1.8 lakh people in the year 2011–12 with an aggregate placement record of around 79 per cent.

22.75. To bring together all stakeholders, namely industry, training providers and the academia. NSDC has been catalysing the setting up of industry

led Sectoral Skill Councils (SSCs) for identified priority sectors. Till March 2012, 11 such SSCs have been approved. These SSCs are expected to lay down the National Occupational Standards for different levels of jobs in their respective sectors, formulate certification and accreditation norms, strive to create knowledge repository on current requirement of skill development in the industry, assess the supply of skilled workers, identify the demand and supply gap in each sector, and identify trends and future requirements.

Training Programme for the Poor and Vulnerable

22.76. Ministry of Rural Development has launched schemes for empowering young people from poor and the weaker sections of the society by imparting skills and providing gainful employment including 'Special Projects for Placement Linked Skill Development of Rural BPL Youth' under Swarna Jayanti Gram Swarozgar Yojana (SGSY-SP) and RUDSETI for setting up a dedicated Skills development infrastructure in each district in the country aimed towards entrepreneurial development. The SGSY has been restructured and called NRLM/Aajeevika which focusses on harnessing the innate capabilities of the poor and complements them with capacities (information, knowledge, skills, tools, finance and collectivisation) to participate in the growing economy of the country. Ministry has also initiated Himayat, a placement linked skill development scheme for youth from Jammu and Kashmir. Himayat scheme will cover 1 lakh youth from J&K in the next 5 years and will be implemented through competent training providers, from the private sector and non-profit Organisations. The training providers for placement linked skill training will give a 75 per cent placement guarantee for the trained youth. Placement for youth will be provided all over the country, within J&K and outside. Under SII J&K Scheme, different training strategies will be used for diverse groups of youth—school dropouts, dropouts of XII class level, and those who have had college education. Ministry has also initiated Parvaaz—a pilot programme on 'Comprehensive Skills and Education Program for Rural BPL Minority Youth' with the objective of mainstream the minority BPL

youth of the country by empowering them with education, skills and employment. This would help in bridging social divide.

Skill Development in the Unorganised/ Informal Sector

22.77. As per 66th NSSO round 2009–2010, 84 per cent of the total workforce was in the unorganised sector and 93 per cent in informal employment (Table 22.5). The sector is heterogeneous which cut across all economic activities in rural and urban areas. It contributes about 60 per cent of the GDP. The unorganised sector is dominated by workers in micro enterprises, unpaid family members, casual labourers, home based workers, migrant labourers, out of school youth and in need of skills, farmers and artisans in rural areas. These groups form a bottom of skill pyramid who have low skills, poor productivity and low income.

22.78. The skill profile among this labour force in young group is distressing. The key issues of skill development in unorganised sector include inadequacy of current training programme to meet the requirement of large workforce in the informal sector. The formal training system because of its entry requirement and urban buyers needs does not offer skills to people with limited education and when it does, it is not appropriate to those in the rural non-farm sectors. Most workers continue to learn on the job informally at their place of work from other low skilled qualified people. The Modular Employable Skill Programme of the Ministry of Labour; STEP of Women and Child Development; Himayat, Parvaaz and NRLM of Ministry Rural Development; Community Polytechnic Development Programme of Human Resource Development and Programmes of the Ministry of Micro Small and Medium Enterprises are some of the programmes that are benefiting this segment of the workforce. However, given the scale of the problem much more needs to be done in terms of up scaling the training capacities, recognition of prior learning, functional literacy and so on.

22.79. Besides these initiatives, sectoral Ministries of Textiles, Woman and Child Development, Tourism,

Health and Family Welfare, Agriculture, MSME, Urban Development and so on have also initiated large number of programmes to address the training requirement of their sectors and groups.

ISSUES AND PRIORITIES FOR THE TWELFTH PLAN

22.80. There is an urgent need to mainstream skill formation in the formal education system and at the same time innovative approaches for the skill creation outside the formal education system. Although the Coordinated Action on Skill Development has brought about a paradigm shift in addressing the issues of relevance in skill development, the gaps in the skill development are to be identified so as to achieve the objectives in terms of quantity, quality, outreach and mobility while building on the foundation. The workforce not only needs to be trained to meet the requirement of all sectors and all kinds of jobs but also linking them to job opportunities and market realities. This would facilitate transformation of young population into a productive workforce engaged in economic activities and not unproductive activity. Some of the areas that merit attention are:

- Since over 90 per cent of India's labour force is engaged in the non-formal sector, the most important challenge would be to reach out to this sector. An approach would need to be worked out to cater to the skilling needs of this very large section of workforce. Innovative approaches of working through grass-root level organisations such as panchayati raj bodies would need to be considered.
- Putting in place a National Skills Qualification Framework which lays down different level of skills required by industry, which allows multiple points of entry and exit, which recognises prior learning, and which allows for mobility across different levels, as well as between vocational and technical training on the one hand, and general education on the other.
- To put in place a permanent institutional framework, entrusted with the requisite authority and resources, and which is responsible solely for skill development in the country.
- Students belonging to the economically weaker sections need to be supported in terms of access

to bank loans on soft terms that are linked to their placement as is the case in the higher education loans.

- To increase the training capacity in the country by adopting myriad approaches—such as facilitating capacity creation in public private partnerships as being done by NSDC, allowing available government infrastructure to be used for training by both the public and private sector, running training institutions in multiple shifts, increasing the number of trainers by adding to Teachers' Training capacity in the country, and by making it attractive for qualified persons to opt for becoming trainers. As part of this approach, the possibility of using the infrastructure, equipment and manpower of sick public sector units would also be explored.
- Further building on the potential of the Modular Employable Skill Programme by ensuring that combination of modules sufficient to guarantee employability are delivered to the trainees introducing more course modules and strengthening of assessment and certification systems for quick delivery.
- Developing a cogent and sustainable approach to provide for industry participation in skill development, particularly in the field of developing course content which is aligned to industry requirements. Similarly, accreditation and certification standards to be developed with industry's active participation through the medium of Sector Skill Councils.
- Developing the Labour Market Information System for real time information on sectoral basis to help trainees and make training relevant.
- Making necessary changes to the regulatory framework governing the employment of apprentices so that this avenue is able to contribute significantly to the skill development effort in the country. To achieve this, industry needs to be made an active partner, and a collaborative approach with industry would be adopted. Such an approach would permit using the potential offered by MSME units also. Through the use of policy and other tools, to encourage the creation of training capacity in a manner that dovetails with the population and

sectoral requirements. The current lop-sided geographical distribution of training facilities and the concentration of training facilities in only a few sectors would be corrected so that training capacity is created in the areas of high population and in sectors which have been identified to offer skill gaps.

- Making Skills aspirational among youth, through advocacy campaigns aimed at social change. These efforts would be complemented by necessary changes in the regulatory framework to make it economically rewarding for persons to become skilled—such as through providing sufficient differential in the minimum wages for unskilled, semi-skilled and skilled workers.

22.81. The aim should be to increase the percentage of the workforce which has received formal skills through vocational education and training from 10.0 per cent at present to 25.0 per cent by the end of the Twelfth Plan. This would mean substantial increase in the skill training capacity in the next five years.

22.82. The approach to the Twelfth Five Year Plan has identified Priority sectors for employment generation and skill development (see Box 22.3 below).

22.83. The key challenges/areas requiring attention are discussed below.

Quality, Quantity, Equity and Systemic Reforms

22.84. The priorities/challenges in Skill Development and Training as indicated in the foregoing paragraphs can be grouped under the following: (i) quality and relevance, (ii) quantity, (iii) expansion of outreach and equity, and (iv) systemic reforms.

Quality Issues

22.85. Quality Issues: Quality and relevance of skill development are key to India's global competitiveness as well as improving an individual's access to decent employment. To increase the relevance with future labour market including promotion of self-employment, soft skills and entrepreneurship skills need to be made integral parts of skill development.

Box 22.3
Priority Sectors Identified in the Twelfth Plan

Sectors that will create large employment; Textiles and Garments, Leather and Footwear, Gems and Jewellery, Food Processing Industries, Handlooms and Handicrafts.

Sectors that will deepen technology capabilities in Manufacturing: Machine Tools, IT Hardware and Electronics.

Sectors that will provide Strategic Security: Telecommunications equipment, Aerospace Shipping, Defence Equipment, Manufacturing Technology Sectors for Energy Security: Solar Energy, Clean Coal Technologies, Nuclear power generation, Capital equipment for India's Infrastructure Growth: Heavy electrical equipment, Heavy transport, earth moving and mining equipment

Sectors where India has competitive advantage: Automotive Sectors, Pharmaceutical and Medical Equipment,

Micro Small and Medium Enterprises Sector: The base for the Manufacturing Sector—employment and enterprise generation

Source: Draft Approach Paper for Twelfth Five Year Plan.

22.86. Mismatch in demand and supply: The second major issue in skill development is mismatch between the demand and supply of skills. The problem has arisen due to supply driven skill delivery system. Presently the labour market is facing a strange situation, where on the one hand, an employer does not get manpower with requisite skills and on the other, millions of job seekers do not get employment. Such a mismatch compromises potential economic development. This requires:

- Establishing a mechanism for providing access to information on skill inventory and skill map on real time basis.
- National Qualification Framework to ensure both vertical and horizontal mobility and clarity of career choices, options and acceptability of the qualifications.
- Building skills training as a mainstream and inclusive programme to be promoted by creating a formal arrangement among the three key stakeholders in the delivery process: Government, Industry and Skills providers.
- Focus on International Collaborations to have better understanding of the fast changing skills demands and provide skills solutions that transpose the models and practices and Reverse transfer the best practices from India to world.

22.87. Industry participation and Setting up of Sector Skills Council: In order to make the skill

development system relevant and driven by labour market signals, it is necessary to increase participation of industries through Sector Skill Councils. Functions of SSCs could include inter alia, identification of skill gaps, preparation of Skill Development Plans and establishment of well-structured sector specific Labour Market Information System to assist planning and delivery of training.

Quantity Issues

22.88. Limited capacity: The first major roadblock in expanding the outreach is our limited capacity to absorb all those joining the Labour Market. As per Twelfth Plan projections about 25 million new entrants would join the labour force in the next 5 years.

22.89. Shortage of Trainers: Training of trainers is a key component of the skill development. There is an acute shortage of trainers not only in the existing trades but also in the proposed new trades. There is an urgent need for improving the quality and size of trainer resource. Skill up-gradation of trainers, their quality assurance, and improvement of their status in society are important to improve the quality of training. It is the pedagogical expertise of the trainer which ensures that the learner gets a wholesome experience, understands the standards and is fully equipped to apply the concepts learnt during his employment. The Training of Trainers hence becomes a major challenge. As per the NSDC report on Education sector there is

an incremental requirement of 86,64,000 teachers and trainers between 2008 and 2022. This fund support should not only allow the State Governments to retain the trainers for the schools and other institutions but also invite participation of many more people into the training industry.

Expansion of Outreach and Equity

22.90. India's large geographical territory comprising of 6,38,365 villages, 4,378 towns in 35 states/UTs and 640 districts with difficult terrain and varying socio-economic conditions make the implementation of standardised skill-training a huge challenge. 11 most populous States like Bihar, (with a population greater than that of Germany), Jharkhand, Uttar Pradesh, Chattisgarh comprising 80 per cent of India's population with little access to skills training need to be taken up on priority. About 90 per cent of the 15–59 year olds have had no vocational training. Of the 10 per cent who received vocational training, only 2 per cent received formal vocational training. Therefore, access to skills programmes is a major challenge. Moreover, many emerging fields are coming up for which vocational training is needed (such as Nano Technology, Green Initiatives, and so on) so as to maintain relevance with recent changes. The need is to implement the customised training depending on the geographical differences, capacities of the local people and requirement of the industry. Providing opportunities of skill development to all sections of society irrespective of any economic, social, regional, gender, spatial and sectoral divide is necessary to achieve faster and inclusive growth and for development of a just and equitable society.

Systemic Reforms

22.91. National Skills Qualifications Framework: Currently there is no system in place which provides a framework to whole skill development and training sphere. There are no standards set in many areas creating problems for all the stakeholders. It is therefore needed to implement and run NSQF effectively.

22.92. Labour Market Information System: Dynamic and relevant inputs are important for taking informed decisions. Presently, there is no system

where the stakeholders of employment and training, namely Government, Industry, Job seekers, private vocational training setups and so on can stream relevant information on a common ICT platform and benefit there from.

22.93. Testing Bodies: The number of Industrial Training Institutes (ITIs) and Polytechnics have increased significantly over the past years. Also, with the introduction of modular pattern of training, the number of examinations conducted has also increased. All these activities have increased the volume of the work involved, resulting in delay in certification. The successful trainees have to wait for months to obtain the certificates. The assessment and certification bodies could be separated for facilitating early employment outcomes.

LEARNING FROM OTHER COUNTRIES

22.94. As noted above, skill development and vocational education is a critical area of concern in the Indian context. As far as enrolment in vocational education and training courses is concerned, India has net enrolment of 3.5 million per year, as compared to 90 million in China and 11 million in US. India can learn from the strengths of the vocational education and training systems of other countries, namely, active participation of industry and employers to map current and future skill needs; sharing of work benches by the Industry; creation of asset bank of infrastructure to be used both by the private and the public sector; capacity to effectively train its large young population in Apprenticeship programme through use of MSME clusters; Training of Trainers including testing and certification of vocational teachers may be adopted; Incentives for Industry in terms of tax exemptions in lieu of training and extensive use of ICT.

LEARNING FROM DIFFERENT STATES INITIATIVES

22.95. The skill development has been a priority area for government at the State level as well. The States are implementing Central as well as their own schemes which take into account the State issues. Some of the good practices in terms of Skill Voucher, multi skill development centres, addressing needs of

non literates and dropouts and so on are addressing different challenges, namely expanding outreach, improving quality, ensuring mobility and flexibility can be replicated and scaled up to address the issues at national level. The key learning's from different States best practices are:

1. Emphasis on outcome and not infrastructure.
2. Government should ensure level playing field for private providers vis a vis public institutions.
3. Provide flexible schedule and multi skilling at own time.
4. Success through innovation in training and development.
5. Continuous linkage with industry.
6. Encourage Public Private Partnerships.
7. Enhance choice for trainees.
8. Create awareness among the prospective trainee and employers.

A ROADMAP FOR THE TWELFTH FIVE YEAR PLAN

22.96. It emerges from above that at present there is low penetration of vocational education and training in India and skills are yet to become aspirational among the youth. In order to realise the vision of the PM Council on Skill Development the need of the hour is to formulate appropriate policies and Programmes that lead to scaling up of skill efforts, improve quality and relevance of vocational education through active industry involvement; Promote Public Private Partnership in skill development; facilitate mobility between general and vocational stream; and creation of credible certification and assessment system with industry participation. The success of skill initiatives depends on creation of awareness among youth and adequate availability of financial resources.

22.97. In order to address the issues relating to quantity and quality improvement; expansion of outreach and equity and systemic and institutional reforms a time bound action plan in terms of well-defined implementation and operational strategies with focus on the delivery of the skill is the need of the hour. The key strategies that need to be followed are given in the Box 22.4.

Permanent Institutional Structure for Driving the Skill Development Agenda

22.98. There is need for an overarching institutional structure that has the authority and responsibility to coordinate the skill development activities of all the other agencies engaged in the same—both at the central and state levels, and to also engage with non-government players, including the corporate and NGO sectors. Accordingly, setting up of a National Skill Development Authority is being considered. The proposed Authority may discharge the functions outlined in Box 22.5.

National Skill Qualification Framework (NSQF)

22.99. The national policy on skill development mandates the necessity of qualification framework to address inter-alia the issues of the fragmentation in the skill system both at the central and the state level; lack of uniformity in nomenclature of courses, duration, curriculum design, content and examination system of various Technical Vocational Education & Training (TVET) courses alongwith recognition of prior learning; easy entry and exit for students between vocational and general education stream as well as to progression in vocational education like in the general education and facilitate mobility between programmes and institutions across the country. The system of multi-entry and multi-exit will enable students to acquire some skills after finishing compulsory general schooling, then enter the labour market and gain some work experience and return to the Vocational Education and Training system to continue their vocational education/training. The system would facilitate credit accumulation and transfer which would convert all forms of learning in higher certificate/diploma and degree. It would be particularly beneficial for relatively poor students, since it would enable them to continue in either the vocational education stream of the secondary system or the ITI system, rather than dropping out from the educational or vocational training space altogether.

22.100. It would facilitate the training system to be in sync with Industry demand and recognition of prior learning. The certification of prior learnt skills would improve the employability and raise the income and also dignity of such skilled workers.

Box 22.4
Strategies for Expanding and Scaling up the Skill Development in Twelfth Plan

Implementation Strategies:

- Expanding outreach to bridge all divides;
- Improving quality through better infrastructure, new machines and technology and trainers;
- Defining standards for outcome driven training programme and regular monitoring;
- Introducing flexibility by adopting global standards and dynamic processes to suit the requirement of both national and international users;
- Developing strong partnerships between all stake holders, encouraging private partners through incentives;
- Creating enabling environment and Monitoring the training Programme to achieve outcomes.

Operational Strategies:

- Replicability and scalability; Strengthening existing centers;
- Linking training with Outcome;
- Affordability across economic levels;
- Stress on Inclusivity and Technology and innovation;
- Flexibility in course content; Qualification standards; Quality trainers; and
- Focus on delivery.

Box 22.5
Major Functions of Proposed National Skill Development Authority

1. To launch a National Skill Development Mission to, inter alia, skill 5 crore persons during the Twelfth Plan through appropriate strategies, including support to State Governments/State Skill Missions, and for active engagement with the private sector, NGOs and so on.
2. To lay down strategies, financing and governance models to expedite skill development activities and coordinate standards of skill development working in close coordination with regulators concerned like NCVT, AICTE, Sector Skill Councils, and so on.
3. To assist Central Ministries in enhancing their skill development capacities.
4. To act as a nodal agency for guiding State Skill Development Missions and providing funds to them to increase level of skill development activities.
5. To act as the nodal agency for the launch and operations of National Skills Qualifications Framework (NSQF) and keeping the NSQF constantly updated and ensuring its implementation of the same.
6. To monitor, evaluate and analyse the outcomes of various schemes and programmes relating to skill development through a technology-enabled national monitoring system, and suggest/initiate mid-course corrections, additions and closure of parts or whole of any particular programme/scheme.
7. Promote greater use of Technology in the area of Skill Development.
8. To oversee the advocacy campaign to ensure that aspirational aspect and enrolment in skill development programmes continue to rise.
9. To advise as well as take required measures in various matters related to skill development like training of trainers, apprenticeship training, assessment, accreditation, certification systems and national occupational standards and so on.
10. Discharge any other functions and assume any other responsibility related to skill development as may be assigned to it by the Government of India.
11. Overseeing and supporting the on-going skill development efforts of Central and State/UTs Ministries and Departments and ensure that the estimated training target of 5 crore during the Twelfth Plan is achieved.

The assessment of competency and certification will enable informally trained workers currently in the workforce to either continue to acquire further certificates by entering the VET system, or alternatively, returning to the labour market with such recognition

and certification. To conclude, the NSQF would address the issue of mobility both vertical and horizontal by establishing the equivalence in general and vocational education; reflect the labour market requirement for skill training through involvement

of industry in curriculum development, certification and so on; encourage multi entry and multi exit and recognition of prior learning.

Skilling Workers in the Unorganised/Informal Sector

22.101. As indicated in para 22.77, 84 per cent of the workers are employed in the unorganised sector and 93 per cent are engaged in informal employment. Although different Ministries/Departments have taken initiatives however, the scale of problem in the heterogeneous sector dominated by workers in the micro enterprises, unpaid family members, farmers, artisans, out of school youths, casual, migrant and home based workers is huge and requires more concerted effort to improve their skills. It is estimated that there are about 7,000 clusters in the country of which more than 6,000 are classified as micro enterprise clusters and around 650 are manufacturing clusters. The skill up gradation can be undertaken in clusters which are providing informal employment. The Ministry of Micro, Small and Medium Enterprises is operating schemes to develop such clusters to become globally competitive as well as to develop entrepreneurs. There is need to adopt the district level programme with the clusters. The skill development in the unorganised sectors requires more. There are 2.6 crore MSMEs in the country which are providing employment to 6 crore persons and manufacture more than 6,000 products. It contributes about 45 per cent of the total manufacturing output, 40 per cent share in the exports and contributes 8 per cent to the GDP.

22.102. To promote skill development in unorganised sector following issues need to be addressed:

- a) To upscale the training capacities from the present capacity of training,
- b) Skill up-gradation and certification,
- c) Recognition of prior learning,
- d) Spreading skill development activities throughout the country, particularly in the backward areas and the areas affected by extremism and reach the weaker sections of the society through setting up of Skill Development Centres (SDCs),
- e) Provision of literacy and basic education,
- f) Replication of successful models,
- g) Provision of mobile training vans for larger out reach,
- h) Each MSME cluster can act a centre for apprenticeship training,
- i) Developing an eco-system for improvement in the success rate of training in self-employment or job employment through the process of Train—Loan-Link—Support,
- j) Developing a pool of certified trainers with adequate technical competency, and
- k) Developing a transparent system for conduct of the programmes, registration of participants and so on and putting it in the public domain.

Fostering Public Private Partnerships

22.103. Governments have taken number of steps to catalyse the involvement of private sector in the skill development efforts which range from setting up of institutional framework of NSDC, setting up Industrial Management Committees for up gradation of infrastructure, adoption of institutes by industrial houses and so on. However, given the scale of the challenge to train 500 million skilled manpower by 2022, there is need for greater participation on the part of private sector both in terms of technology transfer and actual training both trainees and trainers. This may involve extension of financial support to the private industrial training institutions in modernisation of their infrastructure and expansion. The industries need to be involved in curriculum design to make it more relevant and also in assessment and certification. Permitting the private sector to use the unutilised/under-utilised capacity created within the government system would be another cost-effective way to foster the PPP approach. The NGOs can be effective partner for reaching out effectively in the remote and difficult areas.

Strengthening and Revamping the Institutional Structure

22.104. The introduction of skill framework would require re-engineering of existing institutions and the building of new ones. There is need for a permanent institutional structure as indicated in Para 22.98 which can act as focal point for coordinating the efforts of different Central Ministries/Departments

and state governments in the field of skill development. The proposed new Authority would be responsible for policy formulation, assisting the skill development mission in capacity enhancement and promoting NGOs and Private sector involvement in the skill development.

22.105. Another critical set of new institutions that have to be built are the Sector Skill Councils. For identifying skills availability and for scaling up skill development efforts in different sectors. The Sector Skill Councils can act as a crucial means to promote industry ownership and acceptance of skill development standards. The role of existing institutions such as the National Council of Vocational Training (NCVT, currently part of the MoLE's Directorate-General of Employment and Training); the establishment of new Regional Directorates of Apprenticeship Training; expanding capacity for instructor training; and so on, need to be reviewed.

22.106. The National Policy on Skill Development has envisaged re-engineering of National Council of Vocational Training (NCVT) to play a greater role in the field of skill development. Presently NCVT is the apex advisory body looking after various functions like trade testing and certification, prescribing standards in respect of syllabi and so on for training provided by the ITIs (Government and Private). The NCVT needs to be given autonomy with its own secretariat through a bill in the Parliament. The Ministry of Labour and Employment has already initiated a process to this effect in the Eleventh Plan.

22.107. In addition there is need to have additional Trade Testing Capacity an independent—National Board of Trade Testing Certification (NBTTTC), to avoid inordinate delay in issuance of certificates to the students for speedy employment. This centre needs to be independent of the delivery system making assessment more relevant, transparent and swift. The center would design and conduct all India Trade Tests; after evaluation entered the results into the centralised 'Trade Testing Certification' system which would be developed by the NBTTTC and accessible through intranet/VPN based internet by each centre. The NBTTTC would ensure issuance of

provisional certificate by the centre (Generated online by TTC system) to the candidate, printing of trade certificate by NBTTTC and sending the same by courier in a pre-defined service level agreement with a logistics partner and provision of an electronic certificate and giving legal sanctity to it.

Expanding the Out Reach to Under-served Areas and North Eastern States through PPP

22.108. There is need to set up ITIs and Skill development centers in the under-served Blocks of the country. MOLE is proposing to set up these institutions under PPP mode in the Kaushal Vikas Yojana. The scheme when implemented would create 3,000 ITIs and 5,000 Skill Development Centers in the country. This would take skill development to the doorstep of the rural population. Skill Development Centers would provide training on short term modular basis course certification system. In addition women skill development would also be promoted through opening of new Regional Vocational Training Institutes which would enable them to earn decent employment and gain economic independence. There is also need to set up training institutes in SC/ST, minority and weaker section of the society dominated areas to facilitate their participation in skill development for enhancing their employability.

22.109. Youth from low-income families in rural and semi-urban areas are unable to access vocational training as they cannot afford to pay the fees normally charged by training institutes located primarily in urban centres. The existing framework, in both public and private sectors, currently provides formal skill development opportunities to about 1.4 million persons annually, which is far less than the projected requirement. Since the current policy and regulatory framework will not be able to attract the required investment into this sector, there is an urgent need to create an enabling framework that would attract private participation through Public Private Partnership (PPP).

22.110. As part of the Government's initiative to augment the programmes for skill development, the Prime Minister had announced setting up of 1,500 ITIs through Public Private Partnership (PPP) during the

Eleventh Plan. The scheme could not be launched in the Eleventh Plan and it is now proposed to take up 3,000 ITIs during the Twelfth Plan in blocks which are unserved, that is, no government approved ITI is operating in such blocks. For this purpose, the Central Government has prepared a scheme for private participation in ITIs under the Kaushal Vikas Yojana (KVY). The objective of the scheme is to set up 3,000 ITIs through (PPP) for skill development of about 30 lakh youth, of which 15 lakh would be from socially and economically disadvantaged categories.

22.111. This scheme aims at optimising on the respective strengths of the public and private sector entities engaged in skill development. Mobilising the requisite investments, setting up first-rate ITIs, ensuring efficiency in operations and management, and enabling post-training employment will be the primary responsibilities of private sector entities while the Government will provide the enabling framework and the requisite financial support especially in respect of students from socially and economically less privileged families. The proposed model would accelerate this much needed skill development programme and not only provide gainful opportunities to a large number of aspiring youth, but also meet the growing deficit of skilled personnel.

22.112. There is need to enhance the training infrastructure in the North East also to enhance employability and competencies and promotion of self-employment and entrepreneurship amongst youth. The existing programmes of MoLE and Ministry of DONER needs to be strengthened. Ministry of Labour and Employment proposes to initiate schemes to cater to this requirement.

Training of Trainers

22.113. The demand for trained instructors is huge as compared with the capacity of instructor training of DGE&T field institutes. Presently, the gross requirement of instructors is 79,000. The additional requirement of instructor per annum is about 20,000 whereas the present instructor training capacity of about 2,000 per annum which is inadequate to meet the demand. There is huge gap and in many institutes there are 60 to 70 per cent vacancies which

would be a serious bottleneck in enhancing skill development target. To address this problem, the facilities of Model ITIs are proposed to be upgraded. This initiative would add further capacity to bridge the gap between the demand and the existing infrastructure in place. The output from such an initiative would be 1,200 trained instructors per year at the rate of 300 trained instructors/MITI every year. As of now there are 4 MITI. There is need for a setting up of dedicated trainers skill institute.

22.114. In addition the industry may be involved in training the trainers. This can be done through various fellowship programmes, industry exposure to faculty to match the emerging needs of the economy, flexible teaching and cross movement of faculty to industry and industry personnel to institutions to enhance quality of teaching learning process; active participation of industry in training programmes conducted in ITIs and other technical institutions; encouraging employment of retired trained manpower from the defense forces, employ skilled workers from the industry and also retired instructors. In addition there is need to strengthen the capacities of the line ministries and institutes involved in curriculum development.

Reforming the Apprenticeship System

22.115. The Apprenticeship system is in need of major reform in terms of enhancement in both physical and human infrastructure. There is a need to develop a centralised institutional mechanism at the RDATs and a matching Web Portal at the district/state/national level with transparency in the process of filing applications for apprentice training. The web-based Portal would enable the employers to publish their trade-wise requirements of apprentices and facilitate apprentices to apply online. These processes may be facilitated by the LMIS. The MoLE is proposing the Amendment in the Apprenticeship Act, 1961. The norms relating to engagement of skilled workers as apprentices under the Apprenticeship Act 1961 need to be made flexible. The stipend paid may be enhanced linked to minimum wages for the trade at the state level. Industry should be free to pay higher stipend to apprentices if it feels so. Given the need to train larger numbers as apprentices for

eventual employment. The MSME may explore the avenues for engaging apprentices. Further modular courses can be brought under the purview of the Apprenticeship Act.

Credible Assessment and Certification System

22.116. Certification and assessment are one of the key drivers leading to quality assurance and enhanced employability which would result in industry engagement. Certification and assessment as a procedure and as an outcome are key aspects for collaboration.

Labour Market Information System (LMIS)

22.117. Currently there is no common platform where industry, job seekers and government can share information and take informed decisions. Prospective employees may acquire skills which have little or no demand or may take a career path which has little relevance in the market. The government does not have reliable data source of industry demand/available skills and the labour market conditions with the result effective policy decisions impacting training and enhancing employment potential of youth cannot be taken. This situation is disappointing for both prospective employers and employees resulting in job mismatch and low and inferior quality output. This necessitates the implementation of a Labour Market Information System (LMIS) which would pave the way for a shared platform providing quantitative and qualitative information and intelligence on the labour market to all the stakeholders for making informed plans, choices, and decisions related to their business requirements, career planning, education and training programmes, job search, recruitment, labour policies and workforce investment strategies. LMIS would facilitate formulation of effective policies for filling the skills gap; evaluating results of labour related policies and programmes; providing key indicators on demand and supply labour. It would assist the job seekers take informed decisions about their future career development by providing information on the needs of the labour market; identify current and future job market opportunities; provide analysis of the labour market based on the economic development and also enable employers take decisions about

upgrading their employees' skills; access information on skills available in the labour market; different labour characteristics such as labour policies, labour costs and so on.

Making Skills Aspirational through Advocacy

22.118. There is great need of attaching prestige to Vocational Training and make it aspirational in the society. To improve the social acceptability, intensive awareness generation is necessary. At present there is lack of awareness about the type of courses, trades and institutions both Government and private and also about opportunities in the field of vocational education and training. The awareness generation requires sensitisation through various audio visual media, skill fair and competitions at District, State and National Level; public campaign about the significance of the vocational training in enhancing the employability for decent jobs and so on.

22.119. The information can be created and spread through key locations/centers where it is conveniently accessible to the target group. In addition to being repository of information these centers can also act as training/testing centers. Universities can facilitate creating a brand value of vocational education and training by setting up skill development centers with a good degree of autonomy.

22.120. The NSQF would also go a long way to attract students to vocational courses for better career prospects than going to a general education system. At present different ministries/departments are creating awareness generation through different medias but in a very limited way. The NSDC is doing advocacy to popularise vocational education and training in the country in a focused manner. The details of the skill development initiatives at the secondary school and higher education are discussed in the respective chapters in the Plan document.

FINANCING SKILL DEVELOPMENT

22.121. In India, currently the training programmes both at the Central and the State level are funded from the plan budget. However, the challenge of skilling the youth bulge requires a paradigm shift in the financing pattern of vocational training and

skill development involving innovative solutions. Financing of the skill development involves both mobilisation of resources and allocating the same. The financing should involve public, private and PPP mode. A successful financing model for vocational education and training depends on factors such as demand driven skill system; sustainable funds; transparent and outcome based fund allocation; competition for funds among training providers and so on. This can be done when the ad-hoc allocation of funds is stopped and institutions are provided funds for training based on some transparent guidelines both at central and state level requiring placement as an end result (that is, as in the NSDC funding model). Creation of training funds are an increasingly common vehicle for financing training in many countries worldwide. A typology of funds for training based on the purpose is given in Table 22.23.

22.122. The strategy for financing the skill development requires addressing both the aspects of financing, namely resource mobilisation and allocation of resources. The resource mobilisation requires that all the stakeholders, namely Government, students and employers share the burden. While government provides funds through budget, there is role for greater involvement of employers and students in the financing of the training. However, this will happen only if the outcomes of the training are improved in terms of availability of right skilled workers to employers and decent employment to skilled youth. As regards students sharing the cost of training it may be indicated that government can offset the adverse impact on the poor students by providing the scholarships/loan on easy terms. In fact large number of Central

Ministries/Departments and State governments are providing scholarships to students of poor and marginalised sections of the society. The private sector needs to take greater responsibility for skill development. In India, the employers do bear the cost through their own in-service training but the results are not very encouraging. Box 22.6 gives details of successful financing innovation in number of countries.

22.123. The experiences of other countries in terms of innovative financing solutions such as tax deductions; levy grant system; training funds; skill vouchers need to be considered. Across the globe and many of the South Asian and East Asian Countries, National Training Funds (NTFs) or Skill Development fund (Singapore) or Human Resource Development Fund in Malaysia levy reimbursement scheme have been created for financing training. The Training Fund provides an institutional framework for collecting and allocating funds to training providers. The fund has been responsible for massive growth in the training. The fund unifies and augments public funding and allocate resources in line with national priorities. The training funds need to be sustainable and used to provide budgets to institutions training for workers for the formal sector, incentives to formal sector enterprises to train their workers through some kind of levy grant scheme, training courses for the unemployed and the disadvantaged groups, training for micro enterprises and the informal sector.

22.124. As indicated above in India most of the training is funded by the public resources although in the Eleventh Plan, National Skill development

TABLE 22.23
A Typology of Training Funds

Type	Main Purpose	Financing Sources
Pre-employment Training Fund	Finance the expansion and delivery of initial training before employment	Payroll levy—revenue generating
Enterprise Training Fund	Provide incentives to increase in-service training of workers within enterprises	Payroll levy—incentive schemes
Equity Training Fund	Increase opportunities for skills acquisition by disadvantaged groups not covered by enterprise schemes	Public subsidy, levy or donors

Source: Johanson, R. (2009), A Review of National Training Funds—SP Discussion Paper No. 0922, World Bank, November 2009 (page 6).

Box 22.6
Good Performers in Financing—Chile, Australia, South Africa, Singapore

- Tax Deductions and Credits (encourages private spending)
- Performance budgeting for the public sector (encourages good use of public expenditure, focus on outcomes in financing formulas)
- Vouchers and learning accounts (targeting special groups, use in lifelong learning, empowers demand side of market)
- Training funds and competitive procurement (promotes competition, targets marginalised group)
- Levy grant systems (promotes in service training, encourages enterprises to train, free-rider problem)

Source: Arvil Van Adams, 2012.

Corporation has been set up to mobilise the efforts of the private sector and raise funds through private participation, multilateral and bilateral institutions. The scale of challenge of skill development requires huge resources and innovative ways to mobilise resources and allocate them in an efficient manner. Some of the innovative financing strategies that can be used for meeting the skill challenge are:

- A training fund for the mobilisation and allocation of resources can be set up by the appropriate authority. In South Asian countries the funds are mobilised through either payroll or Tax levies. To begin with the levies could be collected from medium and large enterprises in the organised sectors as it would be difficult to collect levies from highly fragmented widely spread unorganised sector. Both Organised and the Unorganised sector enterprises should be entitled to draw on the fund. But the exact share needs to be worked out through a process of consultation of stake-holders, so that organised sector enterprises feel that they have a stake in the system, while at the same time equity considerations are taken in to account in deciding on disbursement of funds. In addition the resources can be allocated based on performance of institutions in either the public or private sector.
- There is need for India to adopt both revenue-raising and levy disbursement schemes. Given the wide variety of enterprises in terms of size, and in the form of organised/unorganised segments, it would be wise to adopt a variety of modalities to raise revenues. Exactly which modalities should be adopted for which segments of enterprises should be a matter of discussion between relevant stake-holders. For instance, while a combination of revenue raising and levy disbursement schemes may be applied to the large public enterprises, the medium enterprises may be encouraged to adopt levy disbursement schemes for provision of in service training.
- There should be considerable scope for demand side financing of training through payment of stipend. Training provision in India has historically been supply-driven while the demand for skills has been neglected. There is a very strong case for using training levy funds for financing students from poor backgrounds who are unable to bear the opportunity cost of undertaking training before entering the labour market. Students must earn in order to survive, and cannot 'afford' to be trained. If trainees are provided a stipend, it would partially offset the opportunity cost of not working, and the cost of training fees (Box 22.7).
- Schemes of demand side financing could be encouraged to pay for in service training. This would encourage not only the trainees to come forward and obtain training in various industries, but would also encourage companies to come forward and participate in such scheme so as to get labour paid by the fund directly. The key defining feature of a demand side subsidy is a direct link between the intended beneficiary, the subsidy and the desired output, that is, training in this case. Different techniques which could be used to fulfill these are stipend, targeted bursaries and vouchers. The skill vouchers allow the trainees to purchase their own training which can help to build the

Box 22.7 Equity Implications of User Fees

The positive financial benefits from cost-recovery through user fees need to be weighed against the potentially adverse effects on equity. Here the tradeoff is clear. Higher, realistic fees may exclude from training those who cannot afford to pay, while low fees may not contribute enough for the provider to recover costs. Negative impacts on access to training opportunities for the poor, minorities, rural populations, and other disadvantaged groups are likely to ensue. Governments can offset the adverse impact of fees on equity by using some of the savings realised from fee income to provide targeted scholarships to low income groups. Theoretically, at least, increased fees could lead to increased equity of access because with the savings the government can afford to finance the enrollment of more low-income students. This, of course, presupposes that the relatively well-off students are willing to pay fees—they will only do so if they perceive the quality of education being provided is good and that they are likely to find employment after graduation. The equity implications of charging fees underscore the widely recognised need to introduce subsidies targeted to at-risk groups, in the form of scholarships and fee discounts. The challenge will lie in developing appropriate mechanisms which will effectively target the poor.

Source: Johanson, R. and Adams A.V. (2004), Skills Development in Sub-Saharan Africa, cited in Skill Development in India—The Vocational Education & Training System, World Bank, January 2006 (page 74).

demand side of the training. They can stimulate competition among the training providers. The key element is competition for the funds.

- Incentivising institutions to generate income from the sale of products and service activities of trainees and to retain it for meeting the operating costs. As per estimates of DGET, 64 per cent of ITIs have started revenue generation activities. This needs to be institutionalised. This would not only facilitate generation of additional resources but would also give exposure to local market and help in market oriented training. This requires change in the training fee policy so that the funds becomes part of the institution's budget and does not flow back to the government revenues.
- A number of possibilities exist today to enhance financing for skill development. First, the Union government collects a cess upon construction companies with projects of value above a certain threshold. This Construction Workers Cess Fund has accumulated many thousands of crores, which have been lying unutilised for years. Part of these funds could be used for skilling construction workers, who are in the industry which has been expanding employment the fastest in any Indian industry in the last 10 years (as discussed earlier).
- In order to shift away from the existing practice of providing only plan funds for the training, the Indian Banks' Association (IBA) is working on vocational education loan scheme that would provide an impetus to the country's skill mission, part of a thrust to improve the efficiency of the labour force and boost the economy. The scheme will help not just students but also skill providers complaining of low enrolment due to financial reasons. No collateral security is contemplated and the interest rate would be linked to the base rate of banks. Simple interest will be charged during the study period and up to the commencement of repayment. The repayment schedule is proposed to be dependent on duration of a course. The skill loan amount may be in the range of ₹20,000 to ₹1.5 lakh. The modalities are being worked out between the NSDC and the IBA. A universal vocational loan scheme is expected to increase financial accessibility for poor students. Gujarat is experimenting with the Skill voucher scheme to provide choice to the trainees for training providers.
- Corporate Social Responsibility: This is another source of fund to finance the skill training. Both public sector and private sector companies need to invest in the skill training as part of their corporate social responsibility. As per law the PSUs with about ₹100 crore profit are to invest about 5 per cent in the training. The central government and state need to proactively involve with the PSUs to undertake this responsibility and spend the resources earmarked meaningfully.

TO SUMMARISE, THE TWELFTH PLAN NEEDS TO FOCUS ON

1. Improving the outreach of the skill development, both quantitatively and qualitatively to bridge the divides, namely spatial, sectoral, regional and gender and so on.
2. Putting in place an institutional mechanism that is focused solely on skill development.
3. Put in place necessary support mechanisms to enable the financial requirements/skill loans for poor students (Credit Guarantee Fund).
4. Development of National Skill Qualification Framework, incorporating the standards developed by Sector Skill Councils, and have in place a regulatory framework to oversee the functioning and ensure accountability of Sector Skill Councils.
5. Improving quality and quantity by focusing on Training of Trainers.
6. Promoting Public Private Partnership.
7. Greater interaction encouraged among industry, academia and skill providers to narrow the gap between the demand and supply of skilled manpower.
8. Focus on Informal sector by finding a model that reaches out to the people, as the livelihood promoting institutions, panchayati raj institutions and NGOs are engaged effectively.
9. Developing ICT based real time labour market information system.
10. An outcome based approach which ensures that the employability created is manifested in immediate, measurable and tangible employment/self-employment of the trainees.
11. An online national register of the persons skilled, and their current engagement—to not only provide a national database to employers and all other stakeholders, but also to facilitate a transparent monitoring system.
12. Review labour laws which inhibit the hiring of short term interns and trainees.
13. All employment exchanges to come online, and act as pro-active counseling and placement centres.
14. Activating State Skill Missions and make them nodal points for receiving most of the skill related funding from Centre.
15. Setting up of National Skill Registry having facility to link various data bases across Ministries and states to work as a platform to link people seeking training to trainers/sponsoring organisations and people having skills to prospective employers.
16. Improving focus of Ministries like Social Justice and Empowerment (SJE), Tribal Affairs (TA), Minority Affairs, Women and Child Development (WCD), Development of North Eastern Region (DONER) and so on, working for disadvantaged sections on skill development programmes so that much larger funding for skill development through them may be ensured.

PLAN OUTLAYS FOR THE MINISTRY OF LABOUR AND EMPLOYMENT

22.125. An indicative outlay of ₹13,223 crore has been made for the Ministry of Labour and Employment to carry implement various schemes. Of this an amount of ₹7,316 crore is earmarked for Rashtriya Swastahya Bima Yojana and ₹5,907 crore for other schemes of the Ministry of Labour and Employment.

ANNEXURE 22.1
Employment Across Various Sectors (in millions) 1999–2000, 2004–5, 2009–10—on UPSS basis

Sectors	Employment Across Various Sectors (in millions)			Absolute Increase in Employment (in millions)	
	1999–2000	2004–05	2009–10	1999–00 to 2004–05	2004–05 to 2009–10
Agriculture	237.67	258.93	244.85	21.25	–14.08
Manufacturing	44.05	55.77	50.74	11.72	–5.03
Non-manufacturing	20.84	29.96	48.28	9.11	18.32
Mining and quarrying	2.17	2.64	2.95	0.47	0.31
Electricity, gas and water supply	1.13	1.30	1.25	0.17	–0.05
Construction	17.54	26.02	44.08	8.48	18.06
Services	94.20	112.81	116.34	18.77	3.53
Trade	36.63	43.36	43.53	6.74	0.17
Hotels and restaurants	4.62	6.10	6.13	1.48	0.03
Transport, storage and communication	14.61	18.47	19.97	3.86	1.5
Banking (and insurance)	2.25	3.10	3.82	0.84	0.72
Real estate, Renting and Business Activities	2.67	4.65	5.75	1.98	1.12
Public administration and defence	10.48	8.84	9.46	–1.64	0.62
Education	8.47	11.43	11.85	2.96	0.42
Health	2.62	3.34	3.59	0.73	0.25
Other Services	11.85	13.51	12.24	1.66	–1.27
Total	396.76	457.46	460.22	60.70	2.76

Source: NSS Employment Unemployment Surveys.

Note: Based on different NSS Rounds.

ANNEXURE 22.2

Absolute Increase/Decrease Employments Across Various Sectors (in millions) in Manufacturing, 1999–2000, 2004–5, 2009–10

Sectors	1999–00 to 2004–05 Increase/Decrease		2004–05 to 2009–10 Increase/Decrease	
food products and beverages	-0.30	↓	-0.15	↓
tobacco products	0.25	↑	-0.52	↓
Textiles	2.25	↑	-1.7	↓
wearing apparel; dressing and dyeing of fur	5.26	↑	-1.62	↓
wood and of products of wood and cork, except furniture	0.70	↑	-1.62	↓
paper and paper products	0.36	↑	-1.15	↓
coke, refined petroleum products and nuclear fuel	-0.28	↓	-0.84	↓
chemicals and chemical products	0.24	↑	-0.39	↓
other non-metallic mineral products	1.07	↑	-0.16	↓
basic metals	-0.12	↓	0.37	↑
fabricated metal products, except machinery and equipment	0.53	↑	-2.01	↓
electrical machinery and apparatus, that is	-0.21	↓	0.05	↑
motor vehicles, trailers and semi-trailers; other transport equipment	0.50	↑	-0.42	↓
medical, precision and optical instruments, watches and clocks	.83	↑	-3.14	↑
Recycling	0.07	↑	0.01	↑
Furniture: manufacturing n.e.c.	0.6		2.89	↑
Rubber and Plastic products	-		0.7	↑
Office accounting and commuting machinery	-		0.1	↑
Radio, television and communication equipment and apparatus	-		0.2	↑
Publishing, printing and reproduction of recorded media	-		1.1	↑
Other transport equipment	-		0.8	↑
machinery and equipment n.e.c.	-		1.6	↑
Total Manufacturing Employment change	11.7		-5.07	

Source: NSSO Various Rounds.

ANNEXURE 22.3
Incidence of Unemployment for 15 Years and Above Age Group, by Level of Education,
2004-5 and 2009-10 (UPSS) in Percentage

Level of Education	2004-05	2009-10
Not Literate	0.3	0.3
Literate Without Formal Schooling	1.2	0.3
Below Primary	1.2	0.7
Primary	1.4	1.2
Middle	2.7	2.1
Secondary	4.8	2.7
Higher Secondary	6.4	5.2
Diploma/Certificate	10.4	9.6
Graduate	8.8	6.9
Post Graduate and Above	8.1	6.7
All Level of Education	2.3	2.0

Source: Calculated from NSS Database, Employment and Unemployment Survey (2004-5 and 2009-10).

ANNEXURE 22.4
Dependency Ratio Across India States, Census 2001

	Ratio—15–59:<15 Persons	Ratio —15–59:>59 Persons	Ratio—WA: Non-WA Persons
Bihar	1.22	7.72	1.05
Uttar Pradesh	1.26	7.37	1.08
Meghalaya	1.25	11.62	1.13
Rajasthan	1.32	7.84	1.13
Madhya Pradesh	1.40	7.63	1.19
Jharkhand	1.37	9.26	1.19
Arunachal Pradesh	1.36	12.10	1.23
Chhattisgarh	1.51	7.72	1.26
Uttaranchal	1.53	7.23	1.26
Haryana	1.57	7.51	1.30
Assam	1.51	9.67	1.31
Jammu and Kashmir	1.61	8.60	1.35
Orissa	1.76	7.07	1.41
Nagaland	1.60	12.92	1.42
Tripura	1.75	8.11	1.44
Maharashtra	1.84	6.77	1.45
Mizoram	1.67	10.71	1.45
Sikkim	1.70	11.05	1.47
Punjab	1.90	6.60	1.47
West Bengal	1.79	8.37	1.48
Lakshadweep	1.74	9.69	1.48
Himachal Pradesh	1.93	6.63	1.49
Gujarat	1.83	8.72	1.52
Andhra Pradesh	1.88	7.93	1.52
Karnataka	1.89	7.85	1.53
Manipur	1.85	9.01	1.54
Dadra and Nagar Haveli	1.72	15.18	1.55
Delhi	1.92	11.97	1.65
Kerala	2.43	6.05	1.74
Tamil Nadu	2.38	7.22	1.79
Pondicherry	2.40	7.77	1.83
Andaman and Nicobar Islands	2.23	13.39	1.91
Chandigarh	2.27	13.21	1.94
Goa	2.71	7.99	2.02
Daman and Diu	2.47	13.29	2.09
India	1.61	7.64	1.33

Note: WA: Working Age; NWA: Non- Working Age.

NOTE

1. Organised and unorganised sectors have been defined as per NCEUS definition.

Women's Agency and Child Rights

INTRODUCTION

23.1. The Twelfth Five Year Plan recognizes the primacy of India's Women and Children, who constitute over 70 per cent of India's people. This Chapter reflects their voices and aspirations, and the nation's commitment to translate this vision into a reality during the Plan period. The Twelfth Plan strategy of inclusion envisages the engendering of development planning and making it more child-centric. Structural transformation is called for—not only in the women and child related direct policy and programme interventions, but also more generally in the policies and programmes of the many sectors that impact upon women and children especially those from the weaker sections or whose individual circumstances make them the most vulnerable. High priority will be given to women and children from the poorest communities, from the most deprived socio-religious communities, such as Scheduled Castes, Scheduled Tribes, particularly vulnerable tribal communities, de-notified and nomadic groups, religious minorities, other backward classes, migrants, those living in inaccessible or scattered hamlets, those living in insecure environments and the urban poor, among others.

23.2. Since many of the programmes most relevant for children and women are implemented at the third level of government, that is, the Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs)—success in achieving these outcomes depends critically on women's participation in these levels of government and their empowerment with respect to programme implementation. We must move towards creating 'Women and Child Friendly Panchayats' and ULBs, complemented by Baal

Panchayats, with child participation taking on a new dimension. With progressive devolution of powers to PRIs and an increasing number of states requiring 50 per cent reservation for women in PRIs, new opportunities are emerging for making development planning processes gender sensitive and child friendly at the grass roots level in the Twelfth Plan.

23.3. There are many faces of vulnerability and deprivation, which the Twelfth Plan strategy for Women and Children addresses. The intergenerational cycle of multiple deprivation and violence faced by girls and women is epitomized by the adverse child sex ratio in children under 6 years of age. The ending of gender based inequities, discrimination and violence is an overriding priority in the Twelfth Plan. Ending gender based violence against girls and women including improvement in the adverse and steeply declining child sex ratio, is therefore, recognized as an overarching monitorable target of the Twelfth Plan for Women and Children. The 12th Plan will endeavor to provide nurturing, protective and safe environment for women to facilitate their entry into public spaces.

23.4. Part I of this Chapter focuses on Women's Agency and engendering of development. The key strategies for women's agency in the Twelfth Plan have been identified as: (i) Economic Empowerment; (ii) Social and Physical Infrastructure; (iii) Enabling Legislations; (iv) Women's Participation in Governance; (v) Inclusiveness of all categories of vulnerable women, (vi) Engendering National Policies/ Programmes. These strategies bring out the crucial challenges posed by traditional determinants of

women's agency and empowerment such as asset ownership, skill development, financial inclusion, along with new and emerging challenges posed by urbanisation, climate change, energy insecurity, the role of the media and so on. Strategies for the inclusion of vulnerable women such as those belonging to the Scheduled Castes (SC), Scheduled Tribes (ST) and minorities; single women, differently abled women; migrant and trafficked women have also been identified. Specific initiatives for empowering women and engendering development in the Twelfth Plan have been outlined.

23.5. Part II of this Chapter highlights the Twelfth Plan strategy to fulfill the rights of children to survival, protection, participation and development. Based on an analysis of the current situation of children this chapter outlines the vision, key priorities, and monitorable targets of the Twelfth Plan strategy for children. This includes both child specific and child related policy and programme interventions that are multi-sectoral in nature. These relate to (i) Child Survival and Development—which includes ICDS Restructuring; (ii) Early Childhood Care and Education; (iii) Child Protection and Participation; (iv) The Girl Child and (v) Adolescents. Child specific initiatives and schemes for children are detailed in these sections, while related sectoral strategies such as Health and Education are provided in relevant sectoral chapters.

23.6. Part III highlights the Twelfth Plan Strategy towards achieving Nutrition Security For All, especially the most vulnerable children, adolescent girls and women who are locked into an intergenerational cycle of multiple deprivation. The monitorable targets for nutrition and key priorities evolve from a detailed situation analysis and evaluation of the progress made during the Eleventh Plan. The Nutrition Strategy in Part III outlines: (i) the evolving multisectoral interventions for nutrition, including introducing a strong nutrition focus to sectoral programmes, strengthening and re-activating Institutional Arrangements and the Multi-sectoral Nutrition Programme in 200 High Burden Districts; (ii) Promoting Optimal Maternal, Infant and Young Child Care and Feeding Practices; (iii) Combating

Micronutrient Deficiencies in a holistic manner; (iv) Addressing the Dual Burden of Malnutrition; (v) Nutrition Capacity Development; (vi) Nutrition Education and Social Mobilization—including a societal campaign against malnutrition and (vii) Nutrition Monitoring and Surveillance Systems, to monitor and review nutrition outcomes.

WOMEN'S AGENCY AND THE ENGENDERING OF DEVELOPMENT

23.7. According to the 2011 census, women account for 586.47 million in absolute numbers and represent 48.46 per cent of the total population of the country. While there has been an appreciable gain in the overall sex ratio of 7 points from 933 in 2001 to 940 in 2011, the decline in child sex ratio (0–6 years) by 13 points from 927 in 2001 to 914 in 2011 is a matter of grave concern. On the health front, implementation of the National Rural Health Mission has resulted in an improvement on many indicators pertaining to gender. Fertility Rates have come down and have reached replacement levels in a number of states; Maternal Mortality Rate (MMR) is improving, from 301 per 100,000 live births in 2003 it has come down to 212 (SRS 2007–2009); Infant Mortality Rate, though still high, has reduced to 47 per 1,000 in 2010. Institutional deliveries have risen from 41 per cent in 2006 to 73 per cent in 2009. There are increasing concerns regarding the gap between male and female infant mortality rate 49 for girls as compared to 46 for boys. The under-five mortality rate for girls in India is very high at 64 per 1,000 live births as compared to 55 per 1,000 live births for boys. The decline in MMR has fallen behind and is less than the target of 100 in the Eleventh Plan.

23.8. There has been an increase in literacy amongst women from 53.67 per cent (Census 2001) to 65.46 per cent (Census 2011). The challenge however remains in bridging the gender gap which stands at 16.68 per cent. The gender differential in education is declining, particularly at the primary level. There is a need to address the issues of retention of girls' in school, quality of education and the provision of separate toilets, sibling care facilities, and so on. From 1993–94 to 2009–10 women's participation in the labour force has decreased substantially

from 36.8 per cent to 26.1 per cent in rural areas and from 17 per cent to 13.8 per cent in urban areas as indicated by NSSO data. Another major concern is the gender gap in the educational level of the labour force. Whereas in 2004–05, 60 per cent of employed females were illiterate and 3.7 per cent were graduates for men it was 28 per cent and 8 per cent, respectively. Female hourly wage rates in agriculture vary from 50 per cent to 75 per cent of male rates, and are insufficient to overcome absolute poverty.

23.9. Addressing violence against women, in both public and private sphere, is a major challenge. Data from National Crime Records Bureau (NCRB) shows that the total number of crimes against women increased by 29.6 per cent between 2006 and 2010. What is equally disturbing is that conviction rates remained low, reflecting inter alia, that many of these cases are not being well prosecuted and inadequate proof is tendered before the courts. The 2005–06 National Family Health Survey (NFHS-3) also reported that one-third of women aged 15 to 49 had experienced physical violence, and approximately one in 10 had been a victim of sexual violence. Early marriage makes women more vulnerable to domestic violence. According to the NFHS 3 data, the median age of marriage for women in the 20–49 years age group ranges between 16.5 years to 18.3 years. Trafficking of women and children is a gross violation of human rights which needs to be addressed. Trafficked women and children are subjected to multiple conditions of exploitation such as commercial sexual exploitation and bonded labour.

BARRIERS TO WOMEN'S EMPOWERMENT

23.10. The barriers to women's empowerment are manifested in various ways. Deep-rooted ideologies of gender bias and discrimination like the confinement of women to the private domestic realm, restrictions on their mobility, poor access to health services, nutrition, education and employment, and exclusion from the public and political sphere continue to daunt women across the country. Other parameters that reflect the status and position of women in society are work participation rates, sex ratio in the age group of 0–6 years and gender

based violence which remain heavily skewed against women. New challenges such as increased intra-country migration, changing labour markets that require new skill sets and rapidly changing technologies have also emerged.

23.11. The access of women to key social services such as health and education is a critical determinant of the status of women and their ability to participate in making society a better place. Details of access in each dimension are discussed in the relevant chapters (see especially Chapters on Health and Education). While the overall picture is one of progress in many dimensions, large gaps still remain. India's Gender Inequality Index value of 0.617 in 2011 placing the country at 129 among 149 countries globally is reflective of the high gender inequality that is prevalent. The lower attainments of women in key human development indicators are indicative of the sharp disparities in opportunities available to women and men. An exceptionally worrying factor is the deteriorating child sex ratio.

23.12. Hence, the key elements for Gender Equity to be addressed in the Twelfth Plan can be clubbed under the following:

1. Economic Empowerment
2. Social and Physical Infrastructure
3. Enabling Legislations
4. Women's Participation in Governance
5. Inclusiveness of all categories of vulnerable women
6. Engendering National Policies/Programmes
7. Mainstreaming gender through Gender Budgeting

ECONOMIC EMPOWERMENT

23.13. The Twelfth Plan will endeavour to increase women's employability in the formal sector as well as their asset base. It will improve the conditions of self employed women. Focus will be on women's workforce participation particularly in secondary and tertiary sectors, ensuring decent work for them, reaching out to women in agriculture and manufacturing, financial inclusion, and extending land and property rights to women.

EMPLOYMENT GENERATION WITH EQUITY IN WORK CONDITIONS

23.14. A significant increase is required in formal sector employment, that is work with reasonable pay and conditions, which would provide for the specific needs of women workers. Fortunately, the Twelfth Plan strategy focussing on health, education, sanitation and infrastructure development will create many productive jobs, a large proportion of which will be in the formal sector. This must be accompanied by measures to ensure that women have adequate access to these new job opportunities.

23.15. The Plan will strengthen the implementation of the Equal Remuneration Act and the Maternity Benefits Act. As a complement to the strategy for increasing women's employment in the formal sector, it is imperative that the Protection of Women from Sexual Harassment at Work Place Bill is made into law.

SKILL DEVELOPMENT

23.16. One of the major impediments affecting women's participation in the workforce, particularly in secondary and tertiary sectors, is the lack of skills. The Twelfth Plan envisages a major scaling up of skill development as outlined in the Chapter on Employment and Skill Development. This must be accompanied by special efforts to promote skill development of women from traditional skills to emerging skills, which help women break the gender stereotypes and move into employment requiring higher skill sets. Training of women as BPO employees, electronic technicians, electricians, plumbers, sales persons, auto drivers, taxi drivers, masons, and so on. will be incorporated in the skill development programmes. Skill development would be seen as a vehicle to improve lives and not just livelihoods of women. The curriculum should therefore include inputs that help women to assert themselves individually and collectively. Gender disaggregated data should be maintained by the National Skills Development Corporation on the number of women that receive training in the programmes supported by the corporates. This would allow for the assessment of whether the minimum reservation of 33 per cent of seats for women is being utilized and whether

women are getting employment and spaces in the market economy after they are trained.

SPECIAL PROMOTION OF ENTERPRISES OF HOME-BASED WORKERS/SMALL PRODUCERS

23.17. The promotion of enterprises of home based workers, self employed workers and small producers is an essential component of the Twelfth Plan and is of particular relevance for women. The Twelfth Plan strategy would be to identify such workers and support their enterprises through setting up of common facility centres to ensure all important services including technology and skill training, entrepreneurship training, market information, access to institutionalised credit, power and other infrastructure and related facilities are readily provided.

23.18. Medical Insurance policies will be modified to recognise needs of women headed and single women households and encouraged to have uniform coverage norms. Policies on Pensions and Post-retirement benefits will be engendered to reflect the needs of single women and women headed households. Kisan Credit Cards should be issued to women farmers, with joint pattas as collateral. There will be provision of refinance loan for women entrepreneurs to extend their involvement in economic activities. Government loan guarantees to substitute for collateral to facilitate women's access to credit will also be provided. Efforts will be made to ensure that SHGs are classified under priority sector and given loans at concessional rates. Under the National Rural Livelihood Mission, the Government is extending an interest subsidy so that the SHG beneficiaries pay only 7 per cent interest on their loans. The scope for extending this benefit to SHGs under other schemes also must be considered. There is a need to review the SHG interventions and ground realities to determine how SHGs may better serve the interests of poor women, and suggest changes required in overall SHG policy frameworks.

WOMEN IN AGRICULTURE

23.19. Women's role as agricultural workers, especially their work on family farms is increasing thanks to the process of feminisation of agriculture (see Chapter on Agriculture). This process reflects

the fact that small and fragmented holdings do not allow for the generation of sufficient household income leading to migration of male members into other sectors, leaving the family farms to be tended largely by women and children. The Twelfth Plan recognizes the need to increase awareness about the growing feminisation of agriculture through sensitisation of policy makers, so that the gender stereotype of farming being a solely male activity is adequately challenged.

23.20. Existing formal institutions must recognize women's roles and needs in various fields of agricultural activity and must ensure the participation of women farmers in designing programmes for technical training and research. The methodologies, time duration, location and other factors of programme design must be appropriate to the needs of women. Women must also be included in land and water management, *pani* panchayats, preservation of soil fertility and nutrition management, sustainable use of soil, water, livestock and fishery resources and in creating village level community seed banks, and so on.

23.21. Women's access to the various agriculture schemes being implemented by the government will be ensured. A quota for women will be incorporated by modifying the guidelines of agriculture related schemes like Rashtriya Krishi Vikas Yojana (RKVY). Further involvement of women can be ensured by providing financial and infrastructural support to SHGs for seed production, storage, preservation, and distribution.

23.22. Access to agricultural technology for women will improve by designing agricultural technology that is women friendly. Technology to reduce drudgery would, at the very least, lead to better health and productivity. Technology transfer to women would be prioritised in all aspects of farming and farm management, including dry land farming technologies, animal husbandry, forestry, sustainable natural resource management, enterprise development, financial management and leadership development. They would be provided training in pre and post-harvest technologies. To train women farmers in

new technologies and practices, gain access to information on schemes and subsidies, training in crop planning and so on. Special Resource Centres would be provided. Women and young girls will be given training in the use and repair of bore wells with special focus on promoting low cost irrigation.

23.23. Endowing women with land is an important instrument for empowering them economically and strengthening their ability to challenge social and political gender inequities. There are three main sources of land for women: direct government transfers, purchase or lease from the market and inheritance. To enhance women's land access from all three sources, a range of initiatives are needed, including joint land titles in all government land transfers, credit support to poor women to purchase or lease land from the market, increase in legal awareness and legal support for women's inheritance rights, supportive government schemes and recording of women's inheritance shares, and so on. There is also need for reliable, fair and accessible mechanisms such as social audit with greater participation of women in the audit bodies for resolving disputes and providing remedies in matters related to tenure and security of lease.

23.24. States should also consider the adoption of a "group approach" in land cultivation and investment in productive assets. States could undertake an assessment of all uncultivated arable land presently with the Government and give women's groups long term usufruct rights to it for group cultivation. The group leasing rights will be recognised under government programmes for agricultural promotion to allow women to avail benefits of schemes such as agricultural extension services and crop insurance to mitigate risks. Women will also be helped to purchase land in groups for group cultivation by a loan-cum-grant scheme with 50 per cent of the loan as a low interest loan and the remaining 50 per cent as a grant. Incentives will be provided to women farmers/SHGs, for group farming on leased or owned land through financial support for group formation; tying credit subsidy, technology access, and so on. to group farming.

23.25. Where new land is being distributed or regularised, individual titles in women's names only rather than joint titles with husbands could be considered. States may also want to consider group titles to women's groups though this would require changes in tenancy laws to allow leasing of land to women's groups as well as recognise such groups as a valid category of landowners. As many states have already given joint pattas on government land in the past, and this trend may continue, such pattas would be made partitionable, so that the wives, if they so desire, can have half the share of land in their single names. The present reality is that after divorce or abandonment, wives are left without any share in such land.

23.26. The 2005 Hindu Succession Amendment Act (HSAA) brings all agricultural land on par with other property. This makes Hindu women's land inheritance rights legally equal to men's across states, overriding any inconsistent State laws. Various provisions need to be reviewed and strategically acted upon. This includes devolution of a woman's property in the same manner as a man's, restricting the right to will to prohibit disinheritance of wives and daughters, protecting women's right to property by eliminating forced coercion aimed at women relinquishing their shares, and ensuring that HSAA overrides State laws related to agricultural land. In addition, the Ministry of Women and Child Development in collaboration with the Department of Land Resources, should start intense monitoring of the progress in implementation of HSAA, and ensure its speedy implementation.

23.27. In irrigation projects, any new land arrangements (that is compensatory land given to displaced persons) must be in the joint names of the man and the woman, or exclusively in the name of the woman where she is the main economic provider. This would increase women's equity in property.

WOMEN IN MANUFACTURING

23.28. In order to promote the participation of women in the manufacturing sector, the plan supports the promotion of marketable manufacturing skills in production activities with special emphasis

on skill development of women belonging to marginalized sections. For important traditional industries like leather, handlooms, handicrafts and sericulture, existing publicly funded institutions will be activated to identify the industry's market potential and existing skills. Bottlenecks for modern market-oriented production will be located, and incremental technological improvements including use of computerised technologies for coordination through a gendered analysis of the industrial climate will be introduced. State policies will be encouraged to publicise the opportunities in these industries among potential women entrepreneurs and give assistance to them in their ventures. The Twelfth Plan must also encourage social action and propaganda to change attitudes towards gender stereotyping of skills and removal of prejudice against caste-based activities and worker communities.

WOMEN IN THE UNORGANIZED SECTOR

23.29. Women in the unorganized sector require social security addressing issues of leave, wages, work conditions, pension, housing, childcare, health benefits, maternity benefits, safety and occupational health, and a complaints committee for sexual harassment. This can only be ensured by extending labour protection to these sectors in a manner that pays special attention to the needs of women workers.

SOCIAL AND PHYSICAL INFRASTRUCTURE

23.30. The strengthening of social and physical infrastructure especially health and education, sanitation, transportation, and so on is critical for inclusive growth. There are considerable gender differences in the needs of men and women in the various infrastructure development projects. So there is a need for a gender analysis of infrastructure policies to ensure women's needs are taken into account. Women should be consulted at the time of designing the project—its site selection, objective, operation and maintenance plans, and so on. They should also be involved in the social audit of these programmes.

HEALTH

23.31. It is vital to widen the emphasis hitherto laid on women's reproductive health to adopt a life cycle

approach towards women's survival, overall health and well-being. The sex ratio and the decline in child sex ratio is clearly a major problem. High anaemia, unrecognised care burden, differentials in morbidity and mortality and access to care also need more attention. Sex disaggregated data on disease burden and access to treatment is inadequate and must be expanded in the Twelfth Plan. This data will be further disaggregated on the basis of socio-religious categorisation to identify the most vulnerable women. The Plan recognises the gender dimension of health problems and seeks to address issues of women's survival and health through a life cycle approach.

23.32. In view of the consistently higher female IMR figures, along with the increasingly disturbing dynamics of the declining child sex ratio, a separate target for lowering female IMR will be added under NRHM. An impact assessment of Janani Suraksha Yojana, Jansankhya Sthirata Kosh and equity implications of health insurance, user fees and other activities under the NRHM will also be undertaken.

23.33. Dovetailing of IGMSY (a pilot conditional maternity benefit scheme), National Food Security Bill (NFSB) and related State schemes with NRHM will be undertaken for an effective convergence of programmes relating to pregnant and lactating mothers. Successful State level schemes/initiatives for reducing MMR would be considered for replication.

EDUCATION

23.34. Under Sarva Shiksha Abhiyan (SSA), the number of women teachers, especially in rural schools and remote, inaccessible areas will be increased by providing enabling work conditions for women teachers including transportation facilities and housing. In the wake of RTE, a child tracking system would be adopted to achieve full inclusion and to address the issue of school drop-outs. Providing hostel facilities and scholarships for girls as well as including non-traditional vocational training as part of the overall education curriculum are the best instruments for engendering the education strategy. These issues are discussed in detail in the Chapter on Education.

SANITATION

23.35. Lack of sanitation, especially toilets, in rural areas is a major weakness in our system and one that impacts most adversely on women. The Twelfth Plan will undertake a gender impact assessment of the Total Sanitation Campaign to assess whether it has reduced women's workload, provided security, improved hygiene and reproductive health of women, decreased school dropout rates for girls, and so on. The Plan will also ensure the provision of toilets with water in all schools and anganwadi centres and the active involvement of women in determining the location of sanitation facilities. Implementation of eco-sanitation, non-flushing, self-composting toilets will go a long way towards success given the chronic water scarcity everywhere.

TRANSPORTATION

23.36. There are women-specific transport needs like transportation of primary products; inter- and intra-village roads/paths; non-motorised transport; dedicated bicycle lanes, pedestrian sidewalk use, passenger safety, and so on which should be included in any transport policy or plan. Every major transport project should undertake a Pre-project Rapid Gender Assessment Survey to ensure that women's needs are addressed right at the design and planning level. Project planning and implementation need to be participatory, including community infrastructure management and maintenance.

23.37. Design improvements are necessary to meet the specific needs of women, especially lower height of entry steps, length of straps, and so on in buses and trains, installation of handrails, ramps, and so on. Dedicated exclusive services such as ladies special buses and trains are also necessary in our social circumstances. Women's needs require better route planning. The provision of special buses, increased services for women travelling during off-peak hours or services on less-travelled routes all need more attention. Personal security risks at parking lots, buses, bus stops, airports, highways and so on, affect women's travel patterns. A Gender Audit of transport terminals must be undertaken

Box 23.1 Women Friendly Infrastructure Development in Kerala

In Kerala it was decided that in the year, 2010–11, a major focus would be on women friendly infrastructure. This included interventions like construction of toilets in public buildings, bus stations, construction of night shelters for fisherwomen, energy efficient gas stoves within EGS schemes, cheaper rental flats for women who commute, creation of domestic violence Counselling Desks in public hospitals, and so on. These measures helped promote convergence and are also examples of Gender Budgeting in mainstream Departments like Kerala State Road Transport Corporation (KSRTC), Public Works Department (PWD), Ports and Housing. With these interventions, the number of Departments with women specific schemes has increased from 10 in 2009–10 to 16 in 2010–11. Further, there has been an increase in allocations for women from 5.5 percent in 2009–10 to 8.6 percent in 2010–11 and to approximately about 10 percent in 2011–12.

and safety measures for women introduced. The Plan will promote creation of night shelters and toilets for women at bus stations, and so on to facilitate travel. The Plan will also undertake a national level assessment of the transport requirements of women particularly those in the informal sector.

ENERGY AND NATURAL RESOURCES MANAGEMENT

23.38. Women are the primary stakeholders in energy and natural resources management, especially for domestic use. A comprehensive policy on domestic energy must be evolved to create a portfolio of energy options. Apart from electricity and biomass sources, non-biomass sources of energy, including solar, for small production units will be promoted. Women's groups will be encouraged to undertake smaller power production units and energy-based enterprises such as making charcoal, briquette making and gassifiers. Capacity building and seed-capital assistance will be provided to women to manage energy programs. Special trainings will be provided to women to develop their expertise in the renewable energy sector, including the repair of solar lanterns, improved cooking stoves, pumpsets and so on. Gender sensitive energy development will be promoted in the Twelfth Plan through the two pronged strategy of customizing technology to reflect the views and experiences of women and creating a large pool of trained female energy technocrats/energy entrepreneurs.

URBAN PLANNING AND LIVELIHOODS

23.39. Urban livelihoods are often overlooked and undermined by policies, regulations, and practices

of municipalities and urban planners and are eroded by urban renewal schemes. With 85 per cent of all urban women being employed informally, women in urban India face threats to their livelihoods on a daily basis. Allocation of urban land/space and other resources will be made for livelihoods of the poor. Resettlement schemes must be evaluated by the affected communities, with a gendered assessment of repercussions on livelihoods of the evictees. The number of safe shelter homes, women friendly public toilets, public crèche facilities, and so on should be increased on a priority basis to reach saturation levels in all cities.

CLIMATE CHANGE

23.40. There are important gender perspectives in all aspects of climate change. Adaptation efforts must systematically and effectively address gender-specific impacts of climate change in the areas of energy, water, food security, agriculture and fisheries, biodiversity and ecosystem services, health, industry, human settlements, disaster management, and security. Gender inequalities in access to resources, including credit, extension services, information and technology, must be taken into account in developing mitigation activities. While National and State level Action Plans on Climate Change are being formulated, the Twelfth Plan will ensure a gender assessment of these plans including gender specific objectives, indicators, monitoring and evaluation dimensions, capacity building and so on, in order to make climate change mitigation and adaptation plans more responsive to women's concerns and needs. Gender and climate change adaptation strategies will be made a part of all ongoing poverty reduction and development policies,

including Disaster Risk Reduction (DRR) planning and implementation at local, national and regional level, country's Nation Adaptation Programmes of Actions (NAPAs); and in the numerous climate change related funds that are in the process of being established.

ENGENDERING THE MEDIA

23.41. The visual and audio media, including television, films and radio shows are important channels of information dissemination. The Twelfth Plan is committed to engendering the different channels of the media including local media like Nukkad Nataks (Street Plays), Community Radio and so on. The Information and Broadcasting Ministry will encourage gender messaging in major programmes and shows across channels. This will entail substantive engagements with the executive producers, content writers and editors of all channels on critical gender concerns and issues. Recognition will be accorded to the programmes that air messages critical to the empowerment of women.

ENABLING LEGISLATIONS

23.42. The Pre-Conception and Pre-Natal Diagnostic Techniques ACT (PC-PNDT Act): Several laws were conceived to promote the objective of women's equality and gender balance in society. These must be effectively administered with the State taking primary responsibility. The practice of using technology for foetal sex determination to engage in female foeticide needs to be addressed stringently. The provisions of the PC-PNDT Act must be reviewed to make sex selection practices effectively punishable. This calls for strengthening the enforcement mechanisms for the Act and making penalties severe. Restrictions on sex detection and sex selection advertisements must be enforced. Registration/Regulation of sonography machines must be ensured. It must be mandatory for all registered centres to maintain all records, charts, forms, reports and consent letters for a period of two years or until permitted by the concerned Appropriate Authority. Decoy and sting operations must be an integral part of the strategy to catch the doctors/clinics indulging in the illegal practice of sex-determination and abortion of the female foetus.

23.43. Maternity Benefit Act: The Maternity Benefit Act 1961 will be reviewed to increase the length of leave women employed in factories, mines, plantations, shops and so on can take and to give her the choice of utilising the period of paid absence as per her convenience.

23.44. Equal Remuneration Act, 1976 (ERA): Discrimination against women workers in payment of wages, and so on exists in spite of the provisions of the Equal Remuneration Act, 1976 (ERA). The implementation and monitoring of the Act will be strictly enforced.

IMPROVING IMPLEMENTATION OF PROTECTION OF WOMEN FROM DOMESTIC VIOLENCE ACT (PWDVA) AND DOWRY PROHIBITION ACT (DPA)

23.45. Under the Protection of Women from Domestic Violence Act (PWDVA) the State Governments are required to appoint Protection Officers, register Service Providers and notify medical facilities. Most of the States/UTs have given additional charge to their existing officers to perform the duties of Protection Officer which is said to be affecting implementation of the Act. State governments must be encouraged to appoint personnel as needed and provide support for establishing Counselling Facilities or Family Counselling Centres as well as for capacity building of the officials and infrastructural support to Protection Officers. A Scheme to this effect will be introduced during the Twelfth Plan. Appointment of sufficient number of dedicated, full time Dowry Prohibition Officers to enforce the DPA Act will also be undertaken. Training and capacity building of law enforcement agencies and the Judiciary on issues concerning dowry related harassment of women and dowry deaths will also receive attention. Besides this new initiatives such as One Stop Crisis Centres for providing shelter, police desk, legal, medical and counseling services and Women's Helpline will be considered.

23.46. The Twelfth Plan recognises the need to partner with the corporate sector in its fight against gender discrimination by making gender equity an

integral objective of corporate social responsibility. The corporate sector will be encouraged to take up projects that provide assistance and support services to women in situations of domestic violence and for rehabilitation of victims of trafficking.

WOMEN'S PARTICIPATION IN GOVERNANCE

23.47. Effective participation of women in institutions of governance is the only assured way of empowering women and bringing gender dimensions under focus.

WOMEN IN PANCHAYATS

23.48. The power of Elected Women Representatives (EWRs) must be harnessed as change agents for better governance and social change. They need to be equipped to ensure the efficient delivery of public services under the Integrated Child Development Services, the National Rural Health Mission, Sarva Shiksha Abhiyan, Mahatma Gandhi National Rural Employment Guarantee Scheme and so on. by overseeing the functioning of grassroots workers like Anganwadi Workers (AWW), Accredited Social Health Activists (ASHA), primary school teachers, and so on. Village level committees must be formed in which women workers at grassroots level that is members of the Panchayat and SHGs, AWWs, ASHAs, school teachers, and so on could collectively discuss and formulate work plans to address issues arising in the implementation of programmes, lead campaigns and highlight issues of importance in the gram sabha.

23.49. The role of panchayat must be increased in enforcing registration of births, deaths, marriages and migration so as to make an impact on issues of trafficking and child marriage and to equip EWRs to enable their panchayats to focus on elimination of violence against women and girls and achieve universal education.

23.50. The Ministry of Women and Child Development and the Ministry of Panchayati Raj in collaboration with other Ministries must promote several activities including especially, (i) capacity building and training modules on women's programmes for government functionaries and officers,

(ii) pre-election preparation of women candidates and voters, intensive training of elected panchayat women representatives, and (iii) gender budgeting and gender audit in rural and urban local bodies.

23.51. The Gender Resource Centres (GRC) of Department of Women and Child Development, Government of Delhi are envisaged as instruments to bring social, economic and legal empowerment of women, particularly those belonging to the under privileged sections of society. The activities of GRC are to ensure (i) Social Empowerment (ii) Legal Rights (iii) Access to Healthcare (iv) Non-Formal functional Literacy (v) Economic initiatives-Skill building/Vocational Training in Conventional and Non-Conventional trades (vi) Micro enterprise and Entrepreneurship Development through Self-Help Groups, and (vii) Information-Cum-Facilitation Centre for information sharing and networking aspects. This experiment should be tried in other states.

WOMEN IN URBAN BODIES

23.52. Urban local bodies need (a) a gender focal point in each body, (b) citizen report cards with focus on meeting women's needs in urban services such as water and sanitation, widows' pensions and so on. The Plan would also lay more focus on capacity building and networking of women councillors to improve their participation in urban infrastructure planning. This will include training in planning, budgeting and resource mobilisation, ICT and networking, and so on.

SPECIAL PROBLEMS OF WOMEN IN VULNERABLE GROUPS

23.53. The Twelfth Plan pays special attention to the needs of vulnerable women, including the Scheduled Castes, Scheduled Tribes, OBCs and Minorities. The strategies towards these groups must be crafted to ensure effective engendering. The special provision for women in programmes for these groups are discussed in detail in the Chapter on Social Justice and Empowerment. An overarching fact of vulnerability is that women from every state and every community, dalits, adivasis, minorities and so on suffer due to the prevalence of alcoholism which eats its way

into precious family income, leads to poverty, malnutrition and domestic violence, problems which the plan aims to tackle. This needs to be addressed with utmost urgency.

23.54. The groups of women that deserve special attention are discussed below.

SCHEDULED CASTE WOMEN

23.55. In view of the multiple vulnerabilities faced by SC women they should be provided with good quality house sites in the joint names of both the wife and husband. Under PDS, outlets should be opened in SC bastis which should be operated, as far as possible, by local SC women. In view of the particular vulnerability faced by SC women and children, migrant labour, special programmes and interventions should be drawn up for them, particularly in the fields of education and health. Special measures should be undertaken in the Twelfth Plan for better implementation of the Scheduled Castes and Tribes (Prevention of Atrocities) Act, 1989.

SCHEDULED TRIBE WOMEN

23.56. The Twelfth Plan must lay greater focus on awareness building among tribal women about policies, programmes, schemes and legislations meant for them by using various print and electronic media. The Twelfth Plan must focus on the implementation of the Scheduled Tribes and other Traditional Forest Dwellers Act and on the provision of adequate land development facilities and credit facilities on priority basis to all land allottees under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. Representation of tribal women on Committees formed for fixation of Minimum Support Prices for Minor Forest Produce (MFP) will be considered. Within the Scheduled Tribes, a special category called PVTGs (Particular Vulnerable Tribal Groups) has been identified. A special scheme needs to be developed targeting women of these communities. Interventions are needed to ensure that during the 12th plan period their status is lifted to match that of the other tribal groups.

WOMEN OF RELIGIOUS MINORITIES

23.57. Muslim girls will be given additional support for education including provision of collective

transportation facilities (not limited to cycles) which can largely improve their enrolment and attendance. This should be made a part of the SSA and also linked with KGBV Schools. Along with STs and SCs, OBCs from religious minorities should be included as a target group. For improving accessibility to health services, coverage of minority dominated blocks under NRHM will be specifically reviewed. Sanitation and health facilities, (including the construction of toilets) along with social education will be provided for in religious educational institutions including Madarasas. Women artisans from religious minorities who desire occupational diversification will be provided alternative training.

DIFFERENTLY ABLED WOMEN

23.58. Differently abled women suffer from being doubly disadvantaged as they are subjected to socio-cultural restrictions as well as prevailing economic limitations, which impede their access to health care, education, vocational training and employment. The Twelfth Plan will endeavour to engender all programmes aimed at the differently-abled. Screening campaigns for early detection of children with different abilities in schools, especially girls' schools and KGBVs will be conducted. Also provision of enabling infrastructure amenities in schools, KGBVs, Polytechnics and AWCs will be undertaken. Sensitisation and training of school teachers and AWWs, vocational training and assured employment for women with different abilities, and special rehabilitation services along with care provisions in existing MWCD run short stay homes and hostel facilities must be conducted.

SINGLE WOMEN AND WIDOWS

23.59. Special attention is needed on the issues of single women, particularly widows. The provision of rehabilitation and compensation, besides economic packages for widows, must be examined. Further, the widow's pension scheme should be extended to a larger pool of beneficiaries by reworking the age eligibility criteria as some States have done. Indexing of pension to inflation should be considered.

23.60. A separate quota under Indira Awas Yojana and Rajiv Awas Yojana for single women will be

considered and their access to employment and equal wages through special job cards for single women under MGNREGA must be ensured. Separate entrepreneurship and leadership development schemes for single women will be promoted along with preferential selection in credit grants with flexible payment modalities and lower interest rates.

23.61. Single women must be made aware of their rights and entitlements within their maternal and matrimonial households. For this, special focus is needed on legal aid to single women as well as promotion of separate federations of single women at block and district levels.

ELDERLY WOMEN

23.62. The Twelfth Plan will give special attention to older women in order to address their health, nutrition and pension concerns. Focus will be upon creating awareness of various diseases that older women are more susceptible to such as osteoporosis, breast cancer and cervical cancer. Mental health issues among older women will be a key area of focus. The cost of medical procedures for single/poor senior citizens will be subsidised. Waiver of the income criteria for old age pensions to women above the age of 75 years in rural areas/urban slums/JJ colonies will be provided. A pension fund will be made for elderly women in the unorganised sector rendered jobless and without any savings when unable to work.

WOMEN AFFECTED WITH HIV/AIDS

23.63. The Twelfth Plan will reach out to women living with HIV/AIDS, especially those who have been deserted by their family, have lost their husbands, and are without any social or economic support. Access of women living with HIV/AIDS will be prioritised in the different livelihood programmes. HIV positive or affected women will be empowered through vocational training, including training to conduct HIV/AIDS awareness programmes. Legal services will be made a part of the process of rehabilitation. HIV/AIDS awareness will be integrated in the training programmes for government personnel. Caregivers of People Living with HIV (PLHIV) and AIDS will be trained in all aspects of the disease. The ICDS guidelines will integrate information

on nutritional support to women and children on ARTs. Training programmes for crèche personnel will include information about the needs of children infected and affected with HIV. Transport and nutritional support will be extended to PLHIV and to children with HIV.

MIGRANT WORKERS

23.64. The Twelfth Plan will ensure provision of financial services to migrant women to enable promotion of savings and to facilitate secure transfer of remittances. To protect migrant domestic workers from exploitation by placement agencies, a system of registration, monitoring and accountability of placement agencies for domestic workers may be introduced. To prevent marginalisation of migrant labour, especially women migrants at their new destination, portability of entitlements such as ration cards based on the experience of the RSBY card will be ensured. Migrant Resource Centres/Assistance centres will be set up in major destination areas to provide information counselling for migrants including training and placement to ensure better integration in urban labour markets.

WOMEN IN DISTURBED AREAS

23.65. Women in disturbed areas face special issues including continuous army presence, suspended civil rights and lack of normal access to facilities/services due to continuous violence. They are most vulnerable to atrocities and need special attention in areas like health care measures, schools, free legal aid and so on. Gender sensitisation programs will be held for the authorities who implement specific legislations applicable to disturbed areas such as the Armed Forces Special Powers Act (AFSPA), and so on. The Twelfth plan will also initiate review of the Armed Forces Special Powers Act (AFSPA) using a gender lens. Documentation of the gendered dimension of violations and needs assessment of women in disturbed areas presently under AFSPA will be done.

23.66. Gender Resource Centres will be established by the State Departments for Women and Child Development in all pockets of disturbed areas on a priority basis in order to provide information and counselling for women, enable access to justice,

benefit from all central government schemes, including social protection schemes and public services. District plans and funds will be directed towards providing sustainable livelihood opportunities, increased and equitable access to land, common property resources, improved social and physical infrastructure and governance institutions, greater coverage of MGNREGA and NRLM, and better credit opportunities for women in the disturbed areas.

TRAFFICKED WOMEN

23.67. Trafficking for commercial sexual exploitation is one of the worst forms of crimes against women and children as it exposes them to a life of humiliation and sexual abuse. Poverty, illiteracy, lack of livelihood options, natural/man made disasters and lack of social and family support, migration are among the factors which make women and children vulnerable to such trafficking. A study entitled 'Girls and Women in Prostitution in India' (2002–2004) by Gram Niyojan Kendra (GNK), sponsored by the Ministry of Women and Child Development, estimates that the primary means of entry into prostitution of about three fourths of the women and children is through trafficking and that there are about 2.8 million sex workers in the country of which 36 per cent are children. Cross-border trafficking from Bangladesh and Nepal to various cities in India is another area of concern.

23.68. The Government has ratified the United Nations Convention on Transnational Organized Crime (UNTOC) and its Protocol to Prevent, Suppress and Punish Trafficking in Persons especially trafficking in Women and Children. The Protocol casts an obligation on the State Parties to undertake measures for prevention of trafficking as also for providing physical, psychological and social recovery of victims of trafficking in persons. The Government has also ratified the SAARC Convention on Preventing and Combating Trafficking of Women and Children for Prostitution.

23.69. During the Twelfth Plan the Government will intensify its efforts to prevent trafficking for commercial sexual exploitation and efforts at rehabilitation

of the trafficked victims including those in prostitution who wish to leave the exploitative situation. Skills training for alternative livelihood opportunities will be provided for women in prostitution to enable them to move out and support their families. In order to break the vicious cycle of second generation prostitution and brothel related livelihood, the children of sex workers should be mainstreamed with proper education and an enabling, conducive environment including placement in suitable homes as well as enrollment in residential schools under Sarva Shiksha Abhiyan.

WOMEN IN PRISON

23.70. The prison population in India in 2010 was 36,68,998 against an official capacity of only 3,20,450. About 4 per cent of prison population is female. Despite numerous attempts at prison reforms, problems such as overcrowding, prolonged detention of undertrial individuals, poor living conditions, and allegations of physical, sexual and mental abuse have featured repeatedly in the public domain. Women with children are rarely provided facilities for child-care and the lack of skills makes it difficult for them to find meaningful employment after serving their sentences. The All India Committee on Jail Reforms (1980–1983), the Supreme Court of India and the Committee of Empowerment of Women (2001–2002) have all highlighted the need for a comprehensive revision of the prison laws. This is an area where further action is needed.

TRANSGENDER COMMUNITIES

23.71. The Twelfth Plan proposes empowerment of the transgender community by advocating that line Ministries support their education, housing, access to healthcare, skill development, employment opportunities and financial assistance. Identification will be provided for transgendered persons in all Government and non-Government records by introducing a separate column to include the third gender. The Ministry of Social Justice and Empowerment along with the Ministry of Statistics and Programme Implementation will determine the number of transgendered persons in India, map their socio-economic status in order to create a law

to protect interests of the community and improve their living conditions.

ENGENDERING FLAGSHIP PROGRAMMES

23.72. To ensure that the Twelfth Plan's thrust on faster, sustainable and more inclusive growth benefits both women and men, it is necessary to address gender concerns at all levels of policy especially in the operation of special programmes.

23.73. The Government of India is implementing a number of programmes, for improving access to employment, education, health, infrastructure development, urban development, and so on. Many of these programmes, although seemingly gender neutral, often have a differential impact on women in view of their different life experiences, requirements, socio-cultural drivers and priorities. These constraints must be identified and addressed.

23.74. A gender analysis of all flagship programmes will be undertaken at the design stage. This will include an activity profile of what women do and an access and control profile of women which can be used to build gender considerations into the project. Systems will be put in place to ensure that women are consulted at the time of designing the project—its location, objective and so on. Further there will be provisions put in place to undertake a social and gender audit of flagship programmes. A brief summary of issues is given below:

23.75. The Ministry of Women and Child Development/The Ministry of Statistics and Programme Implementation will monitor the gender dimensions of the flagship programmes.

BHARAT NIRMAN PROGRAMME

- Any new land arrangements (that is compensatory land given to displaced persons) must be in the joint names of the man and the woman or exclusively in the name of the woman. In particular, women will be trained in operation and maintenance work of drinking water projects.
- Women's participation in site selection will be ensured.

PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)

- The PMGSY will be engendered by incorporating gender differentials and women-specific needs especially in keeping with women's economic, domestic and community management roles.
- The ongoing process of convergence between PMGSY and MGNREGA will be strengthened by strategic coordination with NRLM aimed at the empowerment of women.

NATIONAL RURAL LIVELIHOOD MISSION (NRLM)

- More clusters and federations of women SHGs will be promoted to enable women to operate on a larger scale and avail benefits of aggregation.
- Women will be provided with information on marketing and business skills including pricing, budgeting, and access to pension and insurance products.

THE MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME (MGNREGS)

- A day per month will be allocated as sensitisation day, devoted to sessions on raising awareness about the various components and rights under MGNREGS and on socially relevant legislations like Protection of Women from Domestic Violence Act, PC-PNDT Act, and Dowry Prohibition Act. Wages will be paid as on normal work days to those present in order to encourage attendance.
- The list of permissible work under MGNREGA will be expanded to allow for greater diversity of activities.
- Women's Groups will be included as implementing agencies of MGNREGS works.
- The existing provision for crèches at the work site will be implemented on a priority basis. The possibility of setting up crèches in collaboration with ICDS Anganwadis will be explored.
- The wages under MGNREGS will not be calculated on a piece-rate basis which often works to the detriment of women.

NATIONAL RURAL HEALTH MISSION

- Women from vulnerable communities, especially the scheduled castes, scheduled tribes, de-notified and primitive tribal groups, minorities, will be reached.
- Sex disaggregated data will be generated on disease burden and access to treatment.
- Focus will be extended to address ailments which women are especially prone to, such as post-menopausal problems, osteoporosis and breast and cervical cancer, and so on.
- Special measures will be undertaken on problems of those affected by HIV/AIDS.
- Dovetailing of NRHM with IGMSY (a pilot conditional maternity benefit scheme) and National Food Security Bill (NFSB) will be undertaken.

INTEGRATED CHILDHOOD DEVELOPMENT SCHEME

- Training component of Anganwadi and ASHA workers on issues relating to nutrition, counselling, child rights and gender discrimination will be strengthened.
- Area-based strategies of production/consumption based on local procurement will be encouraged. Use of PDS will also be encouraged.
- The work of ASHAs/AWWs, will be valued and recognised.

SARVA SHIKSHA ABHIYAN (SSA), KASTURBA GANDHI BALIKA VIDYALAYA AND THE RIGHT OF CHILDREN TO FREE AND COMPULSORY EDUCATION ACT

- Kasturba Gandhi Balika Vidyalayas would be upgraded up to secondary school level.
- Standards of quality of education will be adhered to at all levels with focus on availability of teachers, proper infrastructure and standardisation of learning levels.
- Gender sensitive educational system would be developed which would entail addressing sexual stereotyping, changing the attitudes and perceptions of school teachers, providing a safe and secure environment for the girl child, especially those belonging to the SC, ST and minority communities, provision of schools within easy reach,

child care support to release girls from the burden of sibling care, transport and separate girl's toilets.

INDIRA AWAS YOJANA/RAJIV AWAS YOJANA

- Special provisions for housing for vulnerable women, especially single women and female headed households will be made.
- As a part of promoting economic opportunities for women in urban slum areas, particularly if the settlements are away from the city, space and buildings will be allotted for creation of work sheds for women in Rajiv Awas Yojana settlements.

NATIONAL RURAL DRINKING WATER PROGRAMME AND TOTAL SANITATION CAMPAIGN

- Women will be actively involved in determining the location of sanitation facilities.
- Targets will be set for providing toilets with water in all schools and anganwadi centres.

23.76. Difficulties in the usage of toilets will be addressed (eg. need for lighting, inappropriate location, and so on). This will be supported by IEC campaigns.

RAJIV GANDHI GRAMEEN VIDYUTIKARAN YOJANA (RGGVY)

- Some states have adopted policies for bifurcation of feeders for farms and homesteads. This allows regular flow of electricity to homesteads thereby facilitating women in accessing drinking water, studies of children and other household requirements. This model will be replicated in other states.

JAWAHARLAL NEHRU NATIONAL URBAN RENEWAL MISSION (JNNURM)

- Component on safe city planning will be added.
- Adequate resources will be allocated for undertaking safety audits and infrastructure creation for the same.
- New provisions for creating infrastructure, for example, market spaces for women hawkers, and so on will be introduced.
- Women water users groups, women councillors, a mohalla committee with women members will be included in decision making.

- Skill and capacity building amongst women will be undertaken to increase their employability in JNNURM projects.

GENDER BUDGETING (GB) INSTITUTIONALISING GB WITH GREATER VISIBILITY

23.77. The process of GB will be further strengthened in the Twelfth Plan and its reach extended to all Ministries, Departments and State Governments. Steps will be taken to further institutionalise the GB processes by strengthening and empowering the Gender Budget Cells (GBCs.). To ensure this, the suggested area of work in the Charter for GBC will be included in the quarterly/half yearly/annual plan of action. A comprehensive evaluation of GBC will also be undertaken.

23.78. The Gender Budgeting Statement (GBS) has emerged as an important advocacy tool which reflects on the flow of funds for women and encourages debate and discussions on Gender Budgeting. The scope of the GB Statement must be expanded to cover all Union Ministries and Departments by making it mandatory for all to report under the same. The new methodology and format of the GBS will promote *purposive gender planning*. To ensure better analysis, a review of the format and the methodology of the Gender Budget Statement will be undertaken in the Twelfth Plan. To further engender the union budget making process, formal pre-budget consultations must be undertaken by Ministry of Finance with women's groups as is the practice in several countries.

GB AT THE DESIGN STAGE FOR NEW PPS

23.79. In order to move from environment building and reporting to actual engendering of Policies/ Programmes/Schemes (PPS), there is a pressing need to make the objectives, operational guidelines, financial norms and unit costs of the existing schemes across various Ministries/Departments more gender responsive. Planning and budget approval systems will need to be modified to make gender clearance and specific approvals of GBCs mandatory to ensure

that PPS are engendered from the design stage itself.

23.80. The EFC formats must be modified to include questions to confirm that the scheme has been examined by the GBC of the Ministry. The Planning Commission at the Union Level and the State Planning Boards at the State level will ensure that proposals submitted by Ministries/Departments for any new Policy, Legislation, Programme or Scheme, includes an assessment of gender concerns/impacts on the same lines as is mandated for environmental clearance.

GENDER ANALYSIS AND AUDIT

23.81. Gender Audit as an integral part of Gender Budgeting will be promoted in the Twelfth Plan. Ministries/Departments will undertake gender audits of major programmes, schemes and policies. At the State level, mandatory gender audit of all Centrally Sponsored Schemes and Central Schemes would be undertaken. Building up the technical expertise to undertake gender audit would be integrated as part of the GB training programmes. A quantum leap in this direction will be achieved by gender perspective being incorporated within the Expenditure and Performance audits conducted by CAG.

GENDER APPRAISALS, MONITORING AND EVALUATION

23.82. Evaluation and impact assessment of schemes by an external agency are a mandatory requirement for the continuation of existing schemes beyond the plan period. It will be ensured that all impact assessment and evaluation of schemes would include a gender assessment/status of gender mainstreaming. The Ministry of Women and Child Development would ensure that the existing schemes are engendered.

GENERATION OF SEX-DISAGGREGATED DATA

23.83. Effective Gender Budgeting requires data. Hence, it is necessary to put mechanisms in place for mandatory collection of sex disaggregated data. To make this happen, all Ministries/Departments must ensure that all MIS data generated on number of users/beneficiaries is classified by sex.

CONTINUED EMPHASIS ON CAPACITY BUILDING

23.84. The current efforts of capacity building of policy makers, programme planners, budgeting and implementing officials on the tools and techniques of Gender Budgeting will be continued and expanded taking it further down to district and urban local bodies.

GENDER FOCAL POINTS

23.85. Gender Focal Points will be established within various organisations like the Ministries/ Departments of the Central Government and Urban and Rural Local Bodies to enable all institutions to identify and respond to gender issues. The existing constraint of adequate and appropriately trained human resources will be addressed by drawing up a Comprehensive Human Resources Plan to make the gender architecture effective. A comprehensive evaluation of the entire gender architecture in our country will be undertaken in the Twelfth Plan.

TECHNICAL SUPPORT FOR GB

23.86. To provide technical back stopping to this process, officers dedicated to Gender Mainstreaming

and Gender Responsive Budgeting must be placed within the Ministry of Women and Child Development. The GBCs will be supported by a gender expert or gender resource centre.

INCREASING ACCOUNTABILITY ON GB

23.87. Gender Budgeting will be used to mainstream gender into the existing accountability mechanisms of the Government. The Results Framework Document (RFD) is an accountability mechanism which must be gender mainstreamed by making gender outcomes a mandatory part of the RFD. For improving gender accountability a section on gender sensitivity and initiatives undertaken for gender equality could be added as part of the personnel appraisal systems of the Government.

23.88. To oversee the progress of the GB efforts, the Ministry of Women and Child Development must create a Gender Task Force with representation from the National Mission for the Empowerment of Women, Ministry of Finance as well as the Planning Commission to review the functioning of Gender Budget Cells. This Task Force would undertake a scan of all new laws, policies and programmes for

TABLE 23.1
Ministry-Wise Incorporation of Gender Concerns (under RFD)

Ministry/Department	Commitment under RFD
Science & Technology	Application of Science & Technology for weaker sections, women and other disadvantaged sections of society is one of the key functions of the Ministry. Among the key objectives, priority is being accorded to providing support to women for gender parity in Science & Technology .
Department of Bio-Technology	Under its objective of promotion of specialised human resource for frontier research the Department has accorded priority to participation of employed/unemployed women scientists.
Information Technology	Priority has been accorded to make Common Service Centre sustainable which includes e-literacy for women as success indicators.
Labour	Imparting vocational training to women has been accorded priority among the key objectives of Ministry of Labour.
Youth Affairs	Under the key objective of 'Engaging Rural Youth in Nation Building Activities', priority has been accorded to Skills Development Programmes for women in Jammu & Kashmir and border areas.
Panchayati Raj	Ministry of Panchayati Raj has incorporated enhancement of reservation for women in PRIs and also their leadership quality among its objectives.
Human Resource Development	The School Education and Literacy Department has reflected girls' education in the key objectives to meet its goal of equity and inclusion of disadvantaged groups and weaker sections by increasing enrolment in KGBVs and approval of girls hostels for secondary schools.
Health and Family Welfare	The Mission statement of the RFD document of Ministry of Health and Family Welfare includes bringing down Maternal Mortality Rate.
Rural Development	The RFD document of Rural Development Ministry has set gender disaggregated targets for employment generated under MNREGA.

gender inclusiveness. Similar mechanisms will be created at the state and district levels as well.

REFLECTING GENDER CONCERNS IN RESULTS FRAMEWORK DOCUMENT

23.89. Gender being a cross cutting issue, the RFD document of Ministries would explicitly reflect gender concerns in their vision, mission and objectives, especially those pertaining to equity, inclusiveness and empowerment and also gender disaggregated inter se priorities, targets/success indicators to make the gender outcome accountable and visible. Since the policies, programmes and schemes of these Ministries have a key role in social, political and economic empowerment, gender mainstreaming of their RFD is necessary for gender equity and inclusion.

23.90. An illustrative list of Ministries which have already incorporated gender concerns in their vision, objectives and indicators under RFD is outlined below as on Table 23.1.

TWELFTH PLAN SCHEMES

23.91. During the Twelfth Plan a number of initiatives will be undertaken for empowering women. To promote socio economic development existing schemes like the Support to Training and Employment Program (STEP) for skill development and income generation, Priyadarshini for improving sustainable livelihood opportunities and Working Women Hostels will be strengthened. The Swayamsiddha Phase II will ensure holistic empowerment of women in a sustainable manner through SHGs.

23.92. Ujjawala, a comprehensive scheme to prevent and combat trafficking with provisions for rescue, rehabilitation and reintegration of victims will integrate the victims back into society. The Swadhar Greh Scheme, based on the merger of two earlier schemes that is Swadhar and Short Stay Home will reach out to women who as victims of unfortunate circumstances are in need of institutional support for rehabilitation. A scheme for providing restorative justice to victims of rape through financial assistance as well as support services will be implemented in the

Twelfth Plan in pursuance of the Supreme Court of India directives.

23.93. The Gender Budgeting Scheme which assesses gender differential impact of the budget will be continued in the Twelfth Plan Period.

NATIONAL MISSION FOR EMPOWERMENT OF WOMEN (NMEW)

23.94. With the specific objective of ensuring convergence and better coordination among the schemes/programmes of various Ministries/Departments, the Ministry launched the National Mission for Empowerment of Women (NMEW). The Mission would aim to strengthen the processes that promote all round development of women by focussing on a coordinated approach to implementation of schemes of participating Ministries/Departments. This would include generating awareness, building strategies to question prevalent "patriarchal" beliefs, establishing a convergence mechanism at multiple levels, creation of gender resource centres, formation of women's collectives and improving their capacity to access the benefits of government schemes, programmes, laws and policies and developing empowerment indicators relating to the survival, visibility, freedom and equality of women. The NMEW will also look at the inclusive development of women, including mapping vulnerabilities of women living in difficult circumstances—taking age, caste, different abilities, women headed households, ethnicity, education, income, minority status, religion, marital status, region, and so on as parameters. Collection of data on mortality of women, especially maternal mortality, deaths related to diseases, different abilities and violence based on the different socio-economic parameters is recommended.

AUTONOMOUS BODIES UNDER MWCD

23.95. **Central Social Welfare Board (CSWB)** will continue providing financial assistance to various voluntary organisations under its different schemes like Integrated Scheme for Women Empowerment for North East Region, Condensed Courses of Education for Women, Awareness Generation Projects for Rural and Poor Women, Family Counselling Centres, etc. It will also undertake a Vocational

Training Programme for Women of Weaker Section in order to provide qualitative training in traditional and non-traditional trades to women and to equip them with marketable skills.

23.96. Rashtriya Mahila Kosh (RMK) as the credit extending arm of the MWCD will be strengthened and restructured with an enlarged corpus of ₹500 crores. This will enable it to reach out to a larger number of poor, assetless and marginalised women for income generation, production, skill development and housing activities.

23.97. The National Commission for Women was set up in the year 1992 as a statutory body at the national level to protect and safeguard the rights of women. In the Twelfth Plan coordination between the National Commission and State Commissions will be strengthened. The National Commission for Women will also spread awareness of Women's Laws and Rights through various communication strategies. It will also ensure capacity building of Judicial and Police officials for proper implementation of Women related laws.

II. CHILD RIGHTS

23.98. More inclusive growth begins with Children. So the Twelfth Plan accords the highest priority to the needs of children of all classes of our society. It must ensure the fulfillment of the rights of children to survival, development, protection and participation as the foundation of human development and as a major driver of faster, more inclusive and sustainable growth.

MONITORABLE TARGETS

23.99. The Monitorable Targets of the Twelfth Plan for Children are-

- Improve the Child Sex Ratio from 914 in 2011 to 950 by 2017.
- Prevent and Reduce Child Under nutrition (percentage of underweight prevalence in children 0–3 years) by half (50 per cent) of the NFHS–3 levels.
- Reduce anaemia in girls and women by half (50 per cent).

- Ensure that all children receive a protective environment at family and community levels and through health and child care centres, schools and other facilities.
- Ensure that 80 per cent or more panchayats, districts and cities progressively become child friendly.

STATUS OF CHILDREN: AN OVERVIEW

23.100. India is home to the largest number of children in the world. Nearly every fifth child in the world lives in India. It is estimated that there are about 43 crore children in the age group of 0–18 years. It is estimated that a large proportion of these children are in very difficult circumstances or vulnerable. This includes children in poor households without family income, children denied education opportunities and forced into labour, abused/trafficked children, children on the streets, children affected by substance abuse, by armed conflict/civil unrest/natural calamity and so on. Survival, growth, development and protection of these children therefore need priority focus and attention.

23.101. The status of children in the dimensions of health, and education are discussed in detail in the Chapter on Health and the Chapter on Education. Further analysis of children of different socio-religious communities is also provided in the Chapter on Social Justice and Empowerment. Some important indicators of the situation of children are summarised below.

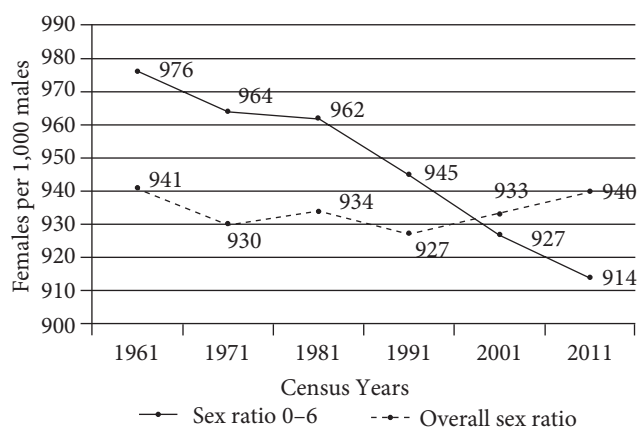


FIGURE 23.1: Child Sex Ratio 0–6 Years and Overall Sex Ratio India: 1961–2011

23.102. Maternal Mortality Ratio has improved and is 212 (2007–2009), as compared to 254 (2004–06).

23.103. Infant Mortality Rate has come down to 47 in 2010 from 58 in 2005, a decline of 11 points over the last 5 years and an annual average decline of about 2.2 points. Despite this decline, one in every 21 infants, one in every 20 infants in rural areas and one in every 32 infants in urban areas still die within one year of life in our country (SRS, 2010). Neonatal mortality in India is 33 per 1,000 live births (SRS 2010). This contributes to around 55 per cent of under five deaths. Three quarters of these deaths occur in the first week of life, 20 per cent take place within the first 24 hours of birth. This clearly highlights that reduction in early neonatal mortality (currently 25 per 1,000 live births) is critical for ensuring child survival.

23.104. Child mortality in children under 5 years was 59 in 2010, showing a decline of 5 points over 2009.

23.105. The Child Sex Ratio in the age group of children 0–6 years has declined from 927 girls per thousand boys in 2001 to 914 girls per thousand boys in 2011 (as shown in Figure 23.1). The decline is especially disturbing as it is occurring in spite of a strong legal and policy framework and various government initiatives, including cash transfers and incentive schemes, various media and messaging efforts. If not reversed, it will alter demography, erode gender justice, social cohesion and human development. The state wise position is summarised in Box 23.2.

23.106. Sex Ratio at Birth has shown marginal improvement from 901 in 2005–07 to 905 in 2008–2010. This is unacceptably low. Chhattisgarh has

reported the highest Sex Ratio at Birth (985) while Punjab has reported the lowest (832).

23.107. Gender differentials in Mortality Rates continue to be discernible. The Infant Mortality Rate for girls is 49 as against 46 for boys, with differentials of over 5 points seen in states such as Gujarat, Chhattisgarh, Rajasthan, Uttar Pradesh and Himachal Pradesh in 2010. Significant gender differentials (9 points) are reflected in India's Child Mortality Rates (in children under 5 years) which were 64 for girls as against 55 for boys in 2010. Even sharper gender differentials of 10 points or more in Under Five Child Mortality Rates are seen in states such as Rajasthan (19), Uttar Pradesh (16), Jharkhand (14), Himachal Pradesh (14) and Punjab (10). This clearly highlights the need for a comprehensive strategy for care and protection of the girl child, rooted in long term interventions for gender equality (SRS Statistical Report 2010, RGI 2012).

23.108. High levels of under nutrition in children: India faces major nutrition challenges, with 22 per cent babies born with low birth weight, as many as 40.4 per cent of under three children underweight, 44.9 per cent stunted and 22.9 per cent wasted in 2005–07 according to the data provided by NHFS-3. It should be noted that this data indicates the position prior to the Eleventh Plan and it is likely that the position has improved since then because of initiatives taken in the Eleventh Plan. Unfortunately the relevant data will not be available for some time.

23.109. An Inter-generational Cycle of Under nutrition: About one-third of currently married women in the age-group 15–49 years have low Body Mass Index (BMI) (less than 18.5 kg/m²) and about 47 per cent girls in the age-group 15–19 years have low

Box 23.2 Declining Child Sex Ratio—A Call for Urgent Action

The lowest child sex ratio (0–6 years) has been observed in the States of Haryana (830), Punjab (846) and Jammu and Kashmir (859), with alarmingly low child sex ratios in districts such as Jhajjar (774) and Mahendragarh (778).

Child sex ratio (0–6 years) has declined in 22 States and 5 UTs, which is a serious concern, highlighting both the increasing magnitude and spread of the problem. Jammu and Kashmir records the steepest fall of 82 points, with other states also registering sharp declines, such as Maharashtra (30) and Rajasthan (26). The number of States and UTs with child sex ratio 0–6 years below 915 has increased from nine in 2001 to fourteen in 2011 and the share of population in this category has doubled.

BMI. These factors, along with factors such as early marriage and early childbearing manifest in unfavourable outcomes for the mother and the neonate, including low birth weight. Around 43 per cent of currently married women in the age-group 20–24 years were married before attaining the age of 18 years (DLHS 3).

23.110. The high prevalence of anaemia amongst women, adolescent girls and children remains a major challenge. NFHS-3 (2005–06) indicates that about 55 per cent of women in the age group 15–49 years suffer from anaemia and about 79 per cent of children in the 6–35 months age group were found to be anaemic.

23.111. Common neonatal and childhood illnesses such as respiratory infections, diarrhoeal diseases, other infectious and parasitic diseases and malaria, account for about half of under-5 deaths in India. Respiratory infections and diarrhoeal diseases together contribute to around one-third of all deaths in children under-5 years of age. As per DLHS 3 (2007–08), the coverage rate of treatment of diarrhoea with only Oral Rehydration Solution (ORS) has been 34 per cent.

23.112. Complete immunisation (all vaccinations) remains a challenge, especially in some states, even though coverage rates for vaccinations have significantly improved in the recent past. A major milestone is that India has now become polio free. It is also seen that the current level of Vitamin A supplementation amongst children is low. The DLHS-3 (2007–08) reports that only 19 per cent of children aged 12–35 months had received 3–5 doses of Vitamin A.

23.113. Children of vulnerable communities with multiple deprivations: Wide disparities in social indicators relevant to children and their communities continue to exist across and within states, districts and diverse socio religious communities. Vulnerabilities such as poverty, exclusion, gender discrimination compound each other and their impact is often inter-generational.

23.114. Children living in insecure environments: Children living in insecure environments

experience denial or disruption of access to health, childcare, education and other basic services which may create exposure and vulnerability to violence. A major initiative was effectively taken up addressing areas affected by Left Wing Extremism and other tribal and backward districts through an Integrated Action Plan launched in initially 60 and later 78 districts in 9 states. This has provided learning models for strengthening a protective environment in such areas—in families, communities, in health and childcare centres and schools—with an effective community based child tracking system, psychosocial care and support and special protection measures as needed. Similarly, enabling interventions are also needed in any other areas that may be affected by insecurities in the environment.

23.115. Children of urban poor communities: As pointed out in the Chapter on Urban Development, the size of the urban population is expected to increase rapidly and this will involve stress on children because urban basic facilities are not expanding as they should. Children of the poor in urban areas face multiple instances of deprivation and exclusion in rapidly increasing cities and towns—especially children of communities who live in unregistered/unrecognised slums or settlements. Children of urban poor communities living on or off the streets are often “invisible”—denied an identity and vulnerable to abuse, violence and exploitation—including sexual abuse. Increased vulnerability to substance abuse is another facet of these conditions. Despite various policy provisions, these children are not only denied a protective environment but also subjected to different forms of abuse, including in occupations such as domestic work, especially the girl child. This highlights the need to ensure that all children receive basic services, regardless of their location and the status of their settlements.

23.116. Children at Work: A large number of children are forced to work to earn money to contribute to families. According to the Census 2001, about 12.6 million child labourers in the age group of 5–14 years were engaged in hazardous occupations. Some of them are living on the streets or off the streets as well, which further results in them being exploited. A survey Conducted by National Sample Survey

Organisation (NSSO), showed 90.75 lakh working children in 2004–05 which came down to 49.84 lakh in 2009–10. As per NFHS-3 data, about 11.8 per cent children are engaged in work.

23.117. Children in Conflict with Law Incidents of juvenile crime reduced slightly in 2009—lower by about 2.5 per cent with reference to 2008. Under IPC crimes the highest numbers of apprehensions were for theft, followed by hurt, burglary and riots. These together contributed to 55.8 per cent of the reasons for children being in conflict with the law under the IPC.

23.118. Child victims of Crime: Crimes against children, increased by 18.57 per cent between 2007 and 2009 as reflected in Crimes in India 2009 published by the National Crime Records Bureau. The increase is attributed to an increase in kidnapping and abduction, infanticide, rape and murder during the period.

23.119. Victims of Child Abuse: The Study on Child Abuse conducted by MWCD in 2007 in thirteen states, also reported high incidence of sexual abuse of children. Sexual offences against children are inadequately addressed by earlier existing legislation. A large number of sexual offences are neither specifically provided for nor are they penalised, as a result of which offenders are tried under more lax and non-specific provisions of the Indian Penal Code (IPC).

23.120. Children affected/infected by HIV/AIDS: In the context of children affected/infected by HIV/AIDS, the greatest impediment is the denial of basic services. This is especially so in the sectors of health and education where stigma and discrimination weaken social support systems leading to social exclusion.

23.121. Children with disabilities: There are a multitude of challenges faced in the context of children with disabilities, which include the exclusion of certain types of disabilities, lack of awareness regarding issues of children with disabilities including those with learning difficulties and lack of information about the law and its specific entitlements.

PROGRESS DURING THE ELEVENTH PLAN

23.122. Progress during the Eleventh Plan in various government schemes aimed directly at benefiting children is summarised below.

CHILD SURVIVAL AND DEVELOPMENT UNIVERSALISATION OF ICDS

23.123. The Eleventh Plan witnessed the universalisation of ICDS in 2008–09 and a consequent expansion of anganwadis from 10.5 lakhs to 13.17 lakhs by the end of the Eleventh Plan, against a requirement of 14 lakhs. ICDS is a unique early childhood development programme aimed at addressing health, nutrition and development needs of young children, pregnant and breastfeeding mothers. ICDS began in 33 community development blocks selected in 1975 and covers almost all habitations across the country. However, the larger part of expansion (more than 50 per cent) has taken place post 2005. ICDS today reaches out to 7.9 crore children (6 months to 6 years) and 1.82 crore pregnant and lactating mothers through a network of 13.17 lakh operational AWCs/Mini AWCs in 7005 operational projects. The early learning component of the programme benefits 3.5 crore children, 3–6 years old (As on 30.06.12). ICDS provides the critical link between communities and the primary health care and education systems.

23.124. Two new schemes were introduced from the platform of ICDS—Indira Gandhi Matritava Sahyog Yojana (IGMSY) and Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (SABLA). They address the needs of the pregnant and lactating mothers and adolescent girls respectively, across the life cycle continuum. Indira Gandhi Matritva Sahyog Yojana (IGMSY) was introduced on a pilot basis in 53 districts in all States/UTs for providing cash directly to women during pregnancy and lactation to improve the health and nutrition status of pregnant, lactating women and infants, benefiting nearly 12.5 lakh mothers every year. SABLA, primarily for out of school adolescent girls (11–18 years) is being implemented in 200 districts on a pilot basis using the ICDS platform, to address their multi-dimensional needs. It is likely to cover nearly one crore adolescent girls annually.

23.125. The Prime Minister's National Council on India's Nutrition Challenges was constituted in end 2008 and in its first meeting in end 2010, it gave new policy directions which provide the road map for the Twelfth Plan. (Detailed in Part III).

EDUCATION

23.126. A critical milestone in education was the enactment of the Right of Children to Free and Compulsory Education Act, 2009. The RTE Act came into force on April 1, 2010, extending India's commitment to a rights-based system of development and translating the Constitutional provision for children's education to a justiciable right for children 6–14 years old. The impact on RTE on the lives of children, with respect to enabling them to realise full development potential and ensuring their safety and protection, is expected to be significant. The Act includes provisions against corporal punishment and makes 25 per cent reservation for disadvantaged children in private schools mandatory.

23.127. A core committee of Experts in Early Childhood Care and Education (ECCE) constituted by the Ministry of WCD has formulated a draft National ECCE Policy, National Curriculum Framework and Quality Standards for ECCE, which is likely to be finalised in the Twelfth Plan period.

CHILD PROTECTION AND CHILD RIGHTS

23.128. Introduction of Integrated Child Protection Scheme to comprehensively address child protection: To give a fillip to the implementation of the JJ Act and facilitate better implementation in the States/UTs, the centrally sponsored umbrella scheme 'Integrated Child Protection Scheme' (ICPS) was introduced in 2009–10. This was done by merging three Schemes of the Ministry, along with substantially enhanced infrastructural, staffing and financial norms, and introducing a range of new measures.

23.129. Protection of Children from Sexual Offences Act 2012: The Act was passed by Parliament in May 2012 and seeks to protect children from sexual offences. The Act regards the best interests and well-being of the child as of prime importance at every stage of the judicial process, and

incorporates child friendly procedures for reporting of cases, recording of evidence, investigation and trial of offences. The Act is a step towards creating child-sensitive jurisprudence. This process will be further strengthened during the 12th Plan period by making further amendments in the Juvenile Justice Act, 2000.

23.130. Child Rights: The Eleventh Plan started several significant initiatives with regard to child rights such as the setting up of the National Commission for Protection of Child Rights (NCPCR) in 2007 as an independent statutory commission, with similar commissions envisaged at State level. Since then fifteen States have set-up State Commissions, and strengthening, empowering these SCPCRs, with mentoring support by NCPCR remains an issue that needs to be addressed.

23.131. Review and Updation of the National Policy for Children (NPC) 1974 was initiated to reflect a paradigm shift from a 'needs-based' to a 'rights-based' approach, aligning this with the strategic directions of the Twelfth Plan.

STRATEGIES FOR PROMOTING CHILDREN'S RIGHTS: KEY PRIORITIES STRENGTHENING POLICY AND LEGISLATIVE FRAMEWORKS

- Harmonisation of different child related legislative provisions and ensuring child-sensitive jurisprudence.
- Updation of the National Policy For Children in harmony with the Twelfth Plan.
- Development and implementation of National/State/District Plans of Action for Children, with monitorable outcomes, based on the updated policy, building on the Twelfth Plan.
- Focused interventions to improve the Child Sex Ratio, within an overall National Strategy for Care and Protection of the Girl Child.
- Designing a strategic approach to respond holistically to the emerging needs of children of excluded socio religious community groups such as SC, ST, particularly vulnerable tribal groups, Minorities, other disadvantaged communities, including urban poor communities.

- Development of National ECCE Policy, curricular framework and standards with National and State Early Child Development Councils.

PROGRAMME INTERVENTIONS

- ICDS strengthening and restructuring, in mission mode, with flexibility in implementation.
- Repositioning AWCs as vibrant child friendly ECD centres, owned by women and communities and with piloting of AWCs cum crèches, linked to ICDS restructuring. Models of MGNREGA/ICDS AWC cum crèche convergence are also envisaged.
- Redesign of the Rajiv Gandhi National Creche Scheme, with different models.
- Strengthening and progressive expansion of SABLA and IGMSY, with projected universalisation of maternity benefits under the Draft National Food Security Bill.
- Design and implementation of multi-sectoral initiatives to address maternal and child under-nutrition (as detailed in Part III of this Chapter on Nutrition).
- Consolidation and enrichment of ICPS with strengthening of institutional capacity through a National Resource Centre.
- Strengthening the protective and nurturing environment for children in the family, community and in service institutions like crèches, Anganwadi centres, schools, health centres, and child care homes.
- Expansion of Childline and replication of this kind of partnership model to other thematic areas, such as IYCF, IMS Act and areas for attention to specific and concerted action such as learning disability in early childhood, in convergence with the Ministry of Social Justice and Empowerment.
- Harmonisation, design and coordination of interventions for adolescents—(girls and boys).
- Design of a new child participation intervention including “Baal Panchayats” which complement child friendly panchayats.

INSTITUTIONAL CAPACITY DEVELOPMENT

- Strengthening of institutional mechanisms and capacities at National, State and District levels for converging multi-sectoral action for children

with reference to child specific and child related sectors.

- Strengthening of institutional mechanisms and capacities at National and State levels for the Protection of Child Rights, through empowered SCPCRs in states.
- Creating a multidisciplinary resource support network for children.
- Focus on enabling and recognising child friendly panchayats and urban local bodies where children's rights are respected, protected, facilitated and fulfilled.
- Guidelines for strengthening civil society engagement in children's issues and forums.
- Improving understanding and duty responses amongst prime care givers and service providers towards a full spectrum of care, protection and development.

TWELFTH PLAN STRATEGY

23.132. The strategy for child development in the Twelfth Plan will build on what has already been achieved in the Eleventh Plan. The fulfillment of child rights will constitute a sensitive lead indicator of national development, at national, state, district and local levels and be reflected in the Monitorable Targets for the Twelfth Plan. This will provide an overarching framework to which concerned ministries/departments that impact the lives of children, will be committed. Policies of concerned child specific and child related sectoral ministries will need to be aligned to the same. The Programme Implementation Plans of different flagship programmes will reflect child related outcomes and concomitant resources. These commitments will also be reflected in the Results Framework Documents and Five year Strategic Plans of concerned ministries and regularly reviewed.

MULTI-SECTORAL POLICY AND PLANNING FOR CHILDREN

23.133. **Key child related policies and legislations** need to be developed and/or strengthened to create the enabling policy environment needed to fulfill children's rights. This includes the *Development of a comprehensive Children's Code*, harmonising and updating different legal provisions for children, with

uniformity in the definition of “children,” and creating more effective mechanisms for Child sensitive and child friendly Jurisprudence. The **Child Labour (Prohibition and Regulation) Act** will need to be amended in line with the RTE as it makes a distinction between hazardous and non-hazardous categories of work for children under 14 years. It will need to be amended to abolish all forms of child labour, as children cannot be both working and in school at the same time. Transition measures and support for families, enhanced opportunities for skill development, vocational training and rehabilitation for children will also be needed. Setting up of **State Commissions for Protection of Child Rights (SCPCRs)** needs to be made mandatory for all State Governments. The mentoring role of NCPCR needs to be strengthened and SCPCRs mandated to adopt normative guidelines for their constitution and functioning. The **Immoral Trafficking Prevention Act (ITPA)**, needs to be amended to clearly define trafficking and sexual exploitation, recognising different aspects of the same. The **Protection of Children from Sexual Offences Act 2012**, passed in Parliament will be taken forward in the Twelfth Plan. It also needs to be ensured that the **draft National Food Security Bill** protects children’s rights and does not dilute earlier provisions for all six services of ICDS, mandated by earlier Supreme Court directives and also provides support for maternity protection.

23.134. Review and Updation of the National Policy for Children 1974 to fulfill children’s rights and harmonisation of State policy interventions is a critical initiative in the Twelfth Plan. Under the proposed renewed National Policy for Children, **National and State Plans of Action For Children (and progressively District Plans of Action For Children)** need to be developed, implemented and monitored, with accountability for achieving child related outcomes.

23.135. Aligned to and building on the Twelfth Plan Monitorable Targets and strategies, the Plans of Action For Children will have monitorable outcomes, measurable indicators, defined multisectoral commitments, enhanced resource allocation

and specified time frames. The **National, State and District Plans of Action For Children** will also specifically highlight how concerns for the care and protection of the girl child are being addressed.

23.136. Institutional Arrangements will also need to be strengthened for improved formulation, regulation, implementation and monitoring of child rights related legislations, policies, plans, and interventions across child specific and child related sectors. The National Coordination Group will need to be revisited and redefined, linked to the PM’s National Council on India’s Nutrition Challenges and the possible constitution of a Standing Committee on Women and Children in the National Development Council. Similar multisectoral Coordination mechanisms are needed at State/District levels for effective implementation of the revised National Policy for Children and National, State/District Plans of Action For Children. States may also be encouraged to set up separate departments of WCD, distinct from Social Welfare, and clearly bifurcate responsibilities for Women and for Children, so that each group receives high priority.

23.137. Capacity Development is needed and human resources will need to be enriched, with continuity of technical support within the Ministry of Women and Child Development, at National and State levels, (progressively at district levels) to respond to emerging issues and initiatives related to children. This needs to be provided on a planned and sustained basis from government resources, reducing dependency on external aid for the same. A Technical Directorate for Child Development and Protection is needed for sustained technical support in view of the progressive universalisation/expansion and quality enrichment of major schemes. The role of NIPCCD in networking with other national institutions such as NCERT, NIN, NHSRC, NIHFW, NIUA and others working on child specific and child related themes needs to be enhanced. Institutional capacity development would need to include linking with and/or creating Centres for Child Development and Protection in Universities, Home Science/Medical Colleges in collaboration with UGC or others (as

has been done for Gender Studies or as Ambedkar University and Jamia Millia Islamia have done for ECD) and establishing learning hubs and multi disciplinary training resource networks. A Child Web Portal needs to be created which includes a comprehensive data base on child survival, development, protection and participation, with supportive resources and links to similar state portals/networks of other sectors.

23.138. Community Action: This will be geared to creating child friendly panchayats and urban local bodies, with recognition and awards along the line of Nirmal Gram Puruskar, complemented by Baal Panchayats, where children's voices will be heard in assessing how their panchayat fares.

23.139. Convergence: For binding commitments of different sectors to multisectoral action, a matrix of the indicative contribution that can be made by different sectors for fulfilling children's rights will be finalised, based on the updated National Policy and National Plan of Action For Children, in consultation with child specific and child related sectors and states.

EDUCATION

23.140. The Twelfth Plan places special emphasis on education which is critical for child development. The detailed strategy for education, especially at the elementary and secondary level, is discussed in Chapter on Education. It is a key element in the strategy for equipping our children with the learning capacities and skills they need to ensure the realisation of their full development potential, without discrimination.

CHILD SURVIVAL AND DEVELOPMENT RESTRUCTURING THE ICDS

23.141. The ICDS is a unique national flagship programme for children. While it has been universalised there is much that needs to be done to improve the quality of delivery for achieving child development and nutrition outcomes. Based on the decisions of the Prime Minister's National Council on India's Nutrition Challenges and the recommendations of the Inter Ministerial Group on ICDS Restructuring, chaired by Member Planning Commission, a major strengthening and restructuring of the ICDS Scheme has recently been approved by the Cabinet. The restructured ICDS is a critical component in the Twelfth Plan strategy for child development. The reformed and strengthened ICDS embodies a genuinely integrated life cycle approach to early childhood care and development—transforming AWCs into vibrant, child friendly ECD centres, to be ultimately owned by women in the community.

23.142. Repositioning the AWC as a vibrant, child friendly ECD centre (Baal Vikas Kendra) which will ultimately be owned by women in the community. This will have expanded/redesigned services, extended duration (6 hours), with an additional AWW provided initially in 200 high burden districts and with piloting of crèche services in 5 per cent of AWCs. These would function as the first village outpost for health, nutrition, early learning and other women and child related services. This would include the provision of adequate infrastructure, facilities such as safe drinking water, toilets, hygienic SNP arrangements, wall painting, play space and a joyful early learning environment including provision for activity corners, and anchoring of other

Box 23.3

Making the Difference—ICDS Restructuring

- 'What is different'—the focus on the critical age group—pregnant and breastfeeding mothers and children under three years—for integrated early child development.
- The defining difference in 'How will things be done differently' is decentralisation, with flexibility in implementation.
- Panchayat led models which respond effectively to the needs of local communities—especially the most vulnerable communities—SCs, STs and minorities, among others.
- ICDS Restructuring seeks to empower states/districts/blocks and villages to contextualise the programme and find innovative solutions, building on local capacities and resources.

services for maternal, child and care for out of school adolescent girls through the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls. Greater ownership by women and communities would also come with institutional reforms that include the establishment of Anganwadi Management Committees, which include mothers/mahila mandals/parents as members, empowered with untied funds for local action.

23.143. Re-designing and reinforcing of the package of ICDS services, including a new component of Child Care and Nutrition Counselling for mothers of children under three years. This will focus on regular and prioritised home visiting at critical contact points, improving key family care behaviours— Infant and Young Child Feeding, health, hygiene, psychosocial care, early learning and care of girls and women.

23.144. Enhancing Nutritional Impact with revised nutrition and feeding norms; ensuring provision for nutritious, freshly cooked, culturally appropriate meal, (morning) snack and Take Home Rations in harmony with Supreme Court directives and the IMS (and its Amendment) Act and greater involvement of women’s SHGs. Piloting of community kitchens and joint kitchens with Mid Day Meals will also be undertaken. A focus on early preventive action in a public health perspective will be promoted by reaching pregnant and breastfeeding mothers and children under three years more effectively in the family and community.

23.145. A continuum of care will be promoted across the life cycle, extending from care in the family, in anganwadis and communities to health sub centres and health facilities. An innovative new component is SNEHA SHIVIRS (see Box 23.4) for promoting community based prevention and care of severely undernourished children, backed by stronger referral linkages with the health system (Nutrition Rehabilitation Centres under NRHM). Requisite safeguards will be ensured so that there is no “product driven” or commercial interference with infant and young child feeding practices.

23.146. Strengthening Early Childhood Care and Education (ECCE) by redefining ICDS non formal preschool education to ECCD, with additional and trained human resources, introduction of a developmentally appropriate curriculum framework with joyful learning methodologies. This will be supported by the use of local culturally relevant play/activity materials, AWC activity corners and local toy banks in child friendly AWC environments. Joyful early learning approaches will be promoted—for children 3–6 years of age, including school readiness interventions for children 5 plus years of age, either in AWCs or in schools (depending upon the state context). Co-location of ICDS AWCs with schools where locally decided, will enable resource sharing, mentoring of AWWs and better school readiness and transition. Children from different community groups, playing/learning together and eating together at AWCs will lay the foundation for more inclusive early socialisation and more inclusive and cohesive communities.

Box 23.4 **Learning by Doing—SNEHA SHIVIRS**

Building on learnings from the positive deviance approach initiated, SNEHA SHIVIRS will be introduced for community based care of undernourished children.

These include 12 day Nutrition Care and Counselling Sessions at AWCs, using positive role model mothers, whose children are growing well, for demonstrating positive care practices, cooking and feeding, (with mothers’ contribution) to mothers of undernourished children in similar community environments.

This improves family care and feeding behaviours (Learning By Doing) through sustainable approaches, enhancing local caregiving capacities through peer counselling, demonstrating positive care practices and enabling change, using local resources—touching the lives of young children and their communities.

23.147. Strengthening civil society partnerships to allow operating up to 10 per cent of the ICDS projects by CSOs. These models will contribute to innovation, component enrichment, quality improvement, extending reach to unreached areas and better responsiveness to local contexts. Flexibility will be provided to States to decide upon this.

23.148. Ensuring convergence with related sectors such as NRHM, TSC, NRDWP, SSA, MGNREGA through joint planning, inclusion of young child related concerns in State/District Annual Programme Implementation Plans (AIPs) of relevant sectors, joint monitoring of key results and indicators and defined roles and accountabilities. Institutional mechanisms for convergence will be anchored in Panchayati Raj Institutions such as Village Health, Sanitation and Nutrition Committees at village level. These will be strengthened and platforms such as Fixed Monthly Village Days at AWCs (for Health, Nutrition and ECCE) will take this forward. Resources of other programmes will also be mobilised for AWC construction and upgradation.

23.149. Institutional Reforms aim at transforming ICDS into a "Mission Mode." decentralised programme, with a flexible implementation framework with monitorable outcomes for improved effectiveness, efficiency and accountability. The ICDS National Mission Steering Group would function for Nutrition coordination as well and report to the PM's National Council. A Policy Coordination Support Unit in Planning Commission would need to provide multi-sectoral policy coordination support to the same.

23.150. ICDS Missions at National, State and District levels with structure and systems, enhanced human and financial resources, empowered for action with clearly laid down systems for financial, human resource, logistics and procurement, programme and operations monitoring. The existing service delivery mechanisms will be strengthened through setting up of National/State ICDS Mission Directorates, Technical thematic groups State and District Child Development Societies with

coordination and monitoring committees at block, village and anganwadi levels.

23.151. Progressive devolution of powers to Panchayati Raj Institutions and Urban Local Bodies is envisaged. The emphasis is on reinforcing the AWC as a village habitation level institution owned by the community, with the leadership and support of panchayati raj institutions. Training, capacity development of PRIs, especially women members and members of VHSNCs will be supported, with need based catalytic support from NGOs at field level.

23.152. Strengthening of ICDS Management Information System (MIS) This would be revamped to focus on real time data for assessment, analysis and action, closest to the level at which data is generated, using Information Communication Technology (ICT) and the reach of mobile telephones. The use of Mother and Child Protection Cards for the monitoring and promotion of young child growth and development is critical, with transparent community validation at Village Health and Nutrition Days and community owned accreditation processes, with the active involvement of VHSNCs and women's/community groups.

23.153. Community owned ICDS accreditation system will be introduced to ensure quality standards in child care service delivery at all levels, with grading of AWCs, sectors, block/projects, districts, based on child related outcomes, using a checklist based on service standards. This would be reinforced by community based recognition and awards for child friendly Anganwadi Centres, Panchayats, blocks and districts.

23.154. Community ownership of ICDS will be ensured through the common Village Health, Sanitation and Nutrition Committees and the AWC Management Committees. Involvement of Women SHGs, Mothers' Committees/women link volunteers will also be promoted in order to deepen community ownership of ICDS. Initiatives for extending and deepening the involvement of women's SHGs

in ICDS, including in the Supplementary Nutrition component, will be promoted, in convergence with Rural Development.

23.155. The IDA assisted Integrated Child Development Services Systems Strengthening and Nutrition Improvement Project (ISSNIP) will also be implemented in 162 high burden districts of 8 states, reinforcing the strengthening and restructuring ICDS, and enhancing child nutrition and development outcomes.

23.156. Indira Gandhi Matritva Sahyog Yojana (IGMSY)—the Conditional Maternity Benefit Scheme will be expanded in the Twelfth Plan, building on learnings from the pilot in 53 districts. Promoting a life cycle approach, this will also be linked to the umbrella ICDS mission. This is also likely to be included as an entitlement for Maternity Protection under the proposed National Food Security Bill 2011.

23.157. Rajiv Gandhi National Crèche Scheme (RGNCS) needs a relook, with the universalisation of ICDS, which aims to cater to a similar target group of children, and provides a larger gamut of services. Appropriate linkages may be developed with the ICDS mission on pilot basis.

EARLY CHILDHOOD CARE AND EDUCATION (ECCE)

23.158. The approach would be to address areas of systemic reform in ECCE across all channels of services in the public, private and voluntary sectors, going beyond ICDS, and with stronger linkages with Education.

23.159. National Policy on ECCE: A National Policy on ECCE will be formulated accompanied by a comprehensive Plan of Action. It will address four main policy challenges that is Access, Inclusion, Quality and Institutional Capacity for ECCE.

23.160. Ensuring Universal Access with Inclusion: Universalisation of access with inclusion will imply

that each and every child in the relevant age group from all social and economic categories is given access to ECCE of acceptable quality. For children below 3 years, the focus will be on home based early childhood development. Universal Access with Inclusion will call for greater flexibility and a move away from the current centralised, standard design towards more decentralised, habitation based and contextualised planning and interventions. The ECCE strategy includes (a) Restructuring of ICDS with flexibility and decentralisation; (b) Involvement of NGOs; (c) Community based models; (d) Demand driven models; (e) Innovations grant for New Schemes; (f) Promoting Public Private Partnerships; (g) Urban strategy; and (h) Convergence.

23.161. Quality with Inclusion: Strategies for ensuring quality with inclusion will include: (a) National Curriculum Framework for ECCE; (b) Quality Standards and a system of Accreditation; (c) Developmentally appropriate Curriculum; (d) Ensuring a child friendly joyful early learning environment; (e) Professionalisation of ECCE; (f) Training Framework; and (g) Advocacy and Communication.

23.162. Institutional Capacity: Strategies for strengthening institutional capacity for improved ECCE will include: (i) Establishing a reliable and efficient Management Information System; (ii) Research; and (iii) Capacity Strengthening through establishment of National/State ECD Resource Centres, linked to NIPCCD Regional Centres, NCERT/SCERTs and ECCE Units in DIETs. This would also be linked to a network of ECCE centres/study units in established universities, as has been demonstrated by ECCE centres in Ambedkar and Jamia Millia Islamia Universities.

23.163. National/State ECD Councils: A National Early Childhood Development (ECD) Council will be established to take on policy, curricular framework and standards regarding ECCE. Progressively similar Councils are envisaged at State levels for effective monitoring of the proposed ECCE policy.

Box 23.5
Early Joyful Learning-Chilli Pilli

The Government of Karnataka introduced the concept of early joyful learning in anganwadis in Karnataka. Chilli Pilli, designed to address all interrelated development domains of the child—physical, cognitive, psycho social and language development.

Chilli Pilli is a comprehensive package which adopts developmentally appropriate practices, through training of anganwadi workers and ICDS functionaries, use of a thematic activity bank relevant to the local cultural context. Stree Shakti groups are also involved in making these materials. Activities encourage children to explore their environment and learn while doing. The activities include stories, games—indoor and outdoors, art and craft related and concepts of colour, shape pre-number. Curiosity corners are set up and children clustered into two groups 3 to 4 years and 4 to 5 years to enable developmentally appropriate practices.

By effective demonstration, Chilli Pilli has increased the participation of children and their active learning capacities, preparing them better for school. It has also reached out to parents, communities and panchayats in ICDS, who own this initiative.

23.164. Strengthening NIPCCD: NIPCCD will be strengthened to function as a global centre of excellence. It will have an expanded resource network of additional Regional Centres/State Institutes to reach out effectively, with clusters of States/UTs. New initiatives will be taken to expand and enrich the pool of core trainers to respond to training needs arising from ICDS Restructuring, likely universalisation of IGMSY under the Draft National Food Security Bill, strengthening of SABLA—especially the non nutrition component (life skills) and ICPS expansion, upcoming new ECCE policy and new thematic focus areas.

23.165. In view of the ICDS Restructuring recommendation that 10 per cent of ICDS projects be taken up in partnership with NGO's, NIPCCD and its regional and state centres need to redesign and strengthen their support for Voluntary Action as related to Women and Child Development. National and State NGO Forums for Children may be enabled, through networking, dialogue and a resource inventory created so that NGOs are able to access information and resources related to child care. Other new initiatives envisaged include setting up a National Nutrition Resource Centre and National/Regional Child Development Resource Centres; setting up Child Budgeting/Training Cell and collaboration with Breastfeeding Promotion Network of India and MWCD on the lines of ChildLine Foundation.

PROMOTING CHILD PROTECTION AND PARTICIPATION

INTEGRATED CHILD PROTECTION SERVICES

23.166. Strengthening Implementation of Integrated Child Protection Scheme as a vehicle for implementation of the JJ Act is a priority. Although ICPS is a comprehensive scheme on child care and protection, it does not adequately focus on restoration of children back to the families and rehabilitation. It requires consolidation as well as focused efforts to address implementation gaps. Emphasis will, therefore be placed on improved implementation by the states, reviewing norms and procedures and building capacities.

23.167. Ensuring and Enhancing response for children in emergency situations: Children separated from their families that is missing children, children being trafficked/abused or exploited, children on the streets needing immediate help can be assured of timely help through the 24 hr. telephone outreach CHILDLINE service currently available in 181 cities. Services will be expanded and improved through Strengthening and Expansion of Childline Services to all districts/cities through professionalising of the service, stronger partnerships and consultations with voluntary organisations, greater investment of resources and capacity building.

INCLUSIVE APPROACHES FOR REACHING THE MOST VULNERABLE CHILDREN IN NEED OF CARE AND PROTECTION AND IN CONFLICT WITH LAW

23.168. Amendment of JJ Act: Since the last amendment to the Act in 2006, various issues have emerged such as the abuse and trafficking of children in Homes not registered under JJ Act. To establish and sustain a Justice System that is truly child centric, the next five years will seek to address the needs of all children (including vulnerable children) holistically.

23.169. Other elements of the Child Protection Strategy in the Twelfth Plan will include strengthening families and communities to care for and protect their children, interventions such as Open Shelters, community based foster care; Registration Rationalization and Up-gradation of Institutional services; professionalisation of Child Protection services and orientation/training of Police personnel. Creating a database of Children availing child protection services and a system for matching 'missing' and 'found' children, promoting adoption of children without parental support and strengthening of CARA/SARAs will be other elements of the strategy for Child Protection. Effective linkages with programmes such as SSA will bring children in need of care and protection back into the mainstream.

23.170. Differently Abled Children: The emphasis on primary prevention of childhood disability and early intervention through NRHM and ICDS will be strengthened in the Twelfth Plan along with community based management and inclusion of children with different abilities. Major relevant flagship programmes will include specific earmarked allocations for reaching out to and including children with special needs, as was initiated with Sarva Shiksha Abhiyan. Similarly the restructured ICDS will include specific resource provisions for mainstreaming prevention, early intervention, community based care and referral support for addressing disability in the very young child early on. The joint ICDS\NRHM mother-child card is a useful starting point and referral care linkages with the health system and with institutional support mechanisms such as District Rehabilitation

Centres (DRCs) will also be strengthened for effective community based rehabilitation.

23.171. Major initiatives in the Twelfth Plan will be the constitution of a National Task Force on Childhood Disability, setting up of Childhood Disability Resource Centres in relevant National Institutes, in key national/state institutions responsible for training NRHM, ICDS and SSA personnel (such as NIHFWS/SIHFWS, NCERT/SCERTs, NIPCCD/MLTCs/AWTCs) and the development of core training modules for integration in respective training programmes. Greater participation of civil society, including parent networks, will be a significant feature to develop and scale up innovative models and approaches.

CHILDREN OF MOST VULNERABLE COMMUNITIES WITH MULTIPLE DEPRIVATIONS

23.172. Reaching every child through universal approaches with normative standards and flexible, locally relevant and culturally appropriate strategies is a challenge that will be addressed not only in terms of the manifestations of social exclusion—but through structural transformation in its causal framework, along with affirmative action for disadvantaged groups. Recognising the need to anchor inclusion of children of socio-religious communities more firmly in relevant national flagship programmes and closely monitor the child related component of schemes taken up under targeted interventions such as Scheduled Castes Sub-Plan SCSP and the Tribal Sub Plan (TSP) and the MSDP for minorities, new linkages will also be established with the Assessment and Monitoring Authority for this purpose.

23.173. Relevant child related flagship programmes will also be enabled through capacity development, more inclusive institutional mechanisms (mission steering groups/programme committees/village committees and so on), greater representation of women of these communities as community workers (AWWs, ASHAs, link volunteers), and decentralised participatory planning processes, with leadership of PRIs. Disaggregated tracking and reporting of child related

outcomes to monitor social inclusion of diverse socio religious communities will be a major initiative with community based monitoring and social audits.

23.174. There will also be incentivisation of sectors, States (through Additional Central Assistance) and panchayats where social inclusion indicators related to children of socio religious communities—including minorities—improve, with peer learning/motivation through sharing of best practices, within and across States/Districts.

ENDING DISCRIMINATION AGAINST THE GIRL CHILD

23.175. Advancing the rights of the girl child and ensuring gender equality is a critical development challenge. The recommendations for the 12th Five Year Plan centre around four main conceptual issues intended at addressing the underlying and root causes. These are: (i) Protection and advancement of rights of the Girl Child; (ii) Gender Equality; (iii) Empowerment and enhancement of Self Esteem; and (iv) Institutional arrangements.

23.176. *Girl Child Specific District Plan of Action:* An integrated approach focusing on the girl child is needed. It must be led by State Multi sectoral Task Forces for Care and Protection of the Girl Child, which bring together different departments of government and civil society, to improve the child sex ratio, especially in States where the child sex ratio is very adverse and/or the decline has been steep. The implementation of the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act will be strengthened so as to prevent the misuse of medical technology for sex selection, supported by a concerted societal campaign to change societal norms to ensure equal value for the girl child. The Girl Child Specific District Plan of Action will be developed through decentralised planning processes, involvement of panchayati raj institutions and partnership with civil society organizations. These will also link with the proposed pilot interventions planned by the Ministry of Panchayati Raj to award panchayats that improve the child sex ratio and enhance care and protection of the girl child (proposed as Rashtriya Gaurav Gram Sabha Awards).

In the Twelfth Plan, a High Level Inter-Ministerial Committee will be set up on “Care and Protection of the Girl Child,” which will constitute the institutional mechanism for mobilising and monitoring multi sectoral interventions for addressing the adverse child sex ratio, rooted in longer term interventions for gender equality. The time bound National Strategy will bring together government, sectors, states and civil society for urgent concerted action. The High Level Inter-Ministerial Committee will also link with and mentor State Task Forces which will develop State Programmes of Action across the country.

23.177. *Quality Education For Girls:* Increasing girls’ access to and motivation for additional schooling can be a key intervention strategy for affirmative action for girls and women, as detailed in the Chapter on Education.

23.178. *Prohibiting Dowry and Child Marriage:* Effective enforcement of the Child Marriage Prohibition Act, Dowry Prohibition Act (DPA) and Protection of Women from Domestic Violence Act (PWDVA) needs to be encouraged through several actions, as detailed in Part I.

23.179. *Incentive Schemes For the Girl Child:* Review and Redesigning of Cash Incentive Schemes and Conditional Cash transfers for the Girl Child (including Dhanlakshmi) will be undertaken in the first half of the Twelfth Plan. The Government of India’s pilot scheme on conditional cash transfer with insurance benefit, titled ‘Dhanalakshmi’ also will be revisited and the possibility of providing ownership of assets such as a house under Indira Awas Yojna rather than cash incentives will be explored.

23.180. *Interventions for improving the Self Esteem of Girls and Women:* For enabling girls to challenge the norms of a patriarchal and male-dominated society, they have to be empowered with high self-esteem, as detailed in Part I. Additionally, gender and girl child impact analysis based on disaggregated data focusing on gender, caste, minority status and geographic location, in benchmarking, designing, implementation and monitoring policies and programmes needs to be undertaken. Concerns of the

girl child, which are unique, and which need special attention and provisions, should be focused upon in the National/State/District Plans of Action For Children that are envisaged.

ADOLESCENTS

23.181. Strengthen Coordination Mechanisms: The mandate for strengthening existing coordinating mechanisms is vested in the Ministry of Women and Child Development, in partnership with the Ministry of Youth Affairs and this may be linked to the reconstitution of the National Coordination Group in the Twelfth Plan.

23.182. Uniformity in the age-group: The age group for adolescents under various schemes varies and needs to be standardised. For adolescents, the age group 10 to 18 years may be taken and necessary harmonisation of guidelines undertaken accordingly.

23.183. Abolition of all forms of Child labour: The abolition of all forms of child labour for the effective implementation of RTE Act needs to be mandated. Child labour in any form is detrimental to the physical, mental and cognitive growth and development of the child. The RTE Act, guarantees the right to every child between the ages of 6 and 14 to free and compulsory elementary education whereas the Child Labour (Prohibition and Regulation) Act makes a distinction between hazardous and non-hazardous categories of work for children under 14 years. Children cannot be both working and in school at the same time.

23.184. Extension of Right of Children to Free and Compulsory Education Act, 2009 (RTE Act) upto Senior Secondary: The extension of RTE upto senior secondary level is proposed in the Twelfth Plan, for expanding the possibilities of the adolescents to realise their full learning rights and to address early marriages of girls, teenage pregnancy and juvenile delinquency.

23.185. Strengthening of RGSEAG—SABLA scheme: The pace of implementation of the SABLA scheme has been slow. The scheme components, especially the linkages with education and skill

development, or the non nutrition component, requires strengthening and the scheme requires evaluation, before expansion is recommended.

CHILD PARTICIPATION

23.186. Involving children and encouraging their participation in all decisions related to programmes and policies meant for them, is the key to institutionalising a child rights framework within the country. Children must be provided with an environment wherein they are aware of their rights; possess the freedom and opportunity to fully and freely express their views in accordance with their age and maturity; and that their views, especially those of the girl child and of children from minority groups or marginalised communities, are respected. During the 12th Plan, making information on child rights, laws and policies available and accessible to all children in accordance with their age and maturity will be a priority. NCPCR will be the nodal agency to develop different models, undertake research to develop monitorable indicators of child participation and document best practices in child participation. The models will include building on the experience with Baal Panchayats and Baal Sabhas, complementing child friendly panchayats.

STRENGTHENING INSTITUTIONS AND PROCESSES FOR PROMOTING CHILD RIGHTS- NCPCR AND SCPCRs

23.187. During the 12th Plan period, the NCPCR will be strengthened in its role as an independent statutory Commission, with enabling provisions to expand its mentoring support to SCPCRs and with enhanced human and financial resources. As State Commissions have not been set up in all states, NCPCR will also consider setting up representative offices in some states, to cover all regions of the country, to ensure access to services to children across the country and to address cases of child rights violation. To encourage each State/UT to set-up the SCPCR with adequate infrastructure and human resources as envisaged under the Commissions for Protection of Child Rights Act, 2005, funding through Additional Central Assistance is also envisaged. Policy and programme recommendations for providing a protective environment for children, with child tracking

mechanisms, especially in areas affected by conflict (such as Integrated Action Plan districts), will be a priority, building on learnings from the Baal Bandhu pilot programme.

Outcome Oriented Child Budgeting

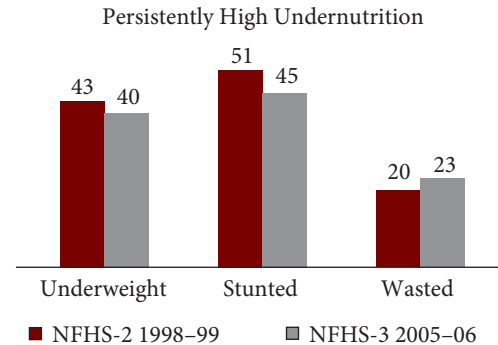
23.188. Child Budgeting has received recognition in the 11th Five Year Plan. However, there is need for better targeting through child budgeting mechanisms to ensure that all child-related needs are not only adequately resourced and that outlays are increased, but also effectively utilised and translated into meaningful outcomes for children.

23.189. To institutionalise child budgeting procedures during the 12th plan, there will be focus on building capacities to analyse the central and state budgets and their impact on the outcomes for children. This assessment will then inform policy and programme formulation for children across ministries/departments. Outcome oriented Child Budgeting will be progressively institutionalized in the Twelfth Plan period, building on the experience with Gender Budgeting. A Child Development Index also needs to be developed on the lines of 'Women Development Index.'

23.190. An Impact Assessment of relevant sectoral policies and programmes on children will be made a mandatory part of the Mid Term Appraisal of the Twelfth Plan. This will provide the basis for mid course policy and programme redesign to ensure more inclusive growth, linked to similar initiatives for assessing the inclusion of different communities.

NUTRITION

23.191. The challenging state of nutrition in India, highlighted by high rates of child malnutrition has been a matter of grave concern and a legitimate focus of criticism. Nutrition constitutes the foundation for human development, by reducing susceptibility to infections, reducing the related morbidity, disability and mortality burden, enhancing cumulative lifelong learning capacities and adult productivity. There can be no doubt that improvement in the nutritional status of both children and adults must have high priority in any strategy for human development. Nutrition



Note: Using WHO 2006 International Reference population.

FIGURE 23.2: Nutrition Status of Children under 3 Years (%)

status of the most vulnerable age group of children is both a sensitive proxy indicator of human development and also a key determinant of the effectiveness of national socio economic development strategies.

23.192. However, in designing strategies to improve nutrition, it must be recognised that nutrition is an outcome of multi-sectoral interventions that impact communities, especially women and children over the life cycle. Under-nutrition is the outcome of many factors. Insufficient dietary intake and absorption and inadequate prevention and management of disease/infections linked to the lack of access to health and child care services, lack of access to safe drinking water, environmental sanitation and hygiene, lack of access to household food security and livelihoods, and inadequate caring and feeding practices for children and women are key determinants. Basic determinants include income levels, agriculture, animal husbandry, public distribution systems, water and environmental resources, education and communication, control and use of resources (human, economic, natural), shaped by the macro socio-economic and political environment.

23.193. Part III of this Chapter focuses on addressing direct nutrition related interventions for maternal and child care, with different Chapters addressing other facets of multi-sectoral action for Nutrition. These include the Chapters relating to Health, Drinking Water and Sanitation, Food and Agriculture, Rural Development, Panchayati Raj Institutions and Education among others.

23.194. In India, undernutrition levels remain high—especially in utero and in the first two years of life, in adolescent girls and in women across the life cycle, in vulnerable/excluded community groups and those living in poverty and in areas or conditions of high nutritional vulnerability and where the disease load is high. The latest data for malnutrition in children measured in terms of weight for age, height for age or weight for height are for 2005–06 from NHFS 3. When these are compared with earlier NHFS data from NHFS 2 and 1 there is a moderate trend improvement over time (See Figure 23.2).

23.195. There are also large inter-state variations in the patterns and trends in underweight prevalence reported in NFHS 3—amongst children this was highest in Madhya Pradesh (60 per cent), followed by Jharkhand (57 per cent) and Bihar (56 per cent) and lowest in Mizoram, Sikkim, Manipur, and Kerala.

23.196. A recent HUNGAMA (Hunger and Malnutrition) Survey conducted in 2011 across 112 rural districts of India with especially challenging socio economic indicators, suggests that the prevalence of underweight in children under 5 years has decreased significantly from an estimated 53 per cent (as per DLHS 2 in 2002–04) to 42 per cent (2010–11) in this survey. This represents a 20.3 per cent decrease over a 7 year period (compared with DLHS 2) with an average annual rate of reduction of 2.9 per cent. The study however does not elaborate upon its assessment of wasting levels in children under five

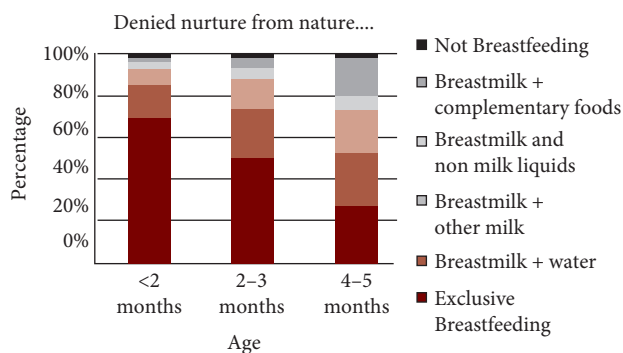
years (both severe and moderate) in these districts, at around half of what is estimated as the All India average by NFHS 3 (2005–06).

23.197. It is possible that malnutrition is being reduced more rapidly than earlier as in the case with poverty reduction. However this can only be validated by the Data from the Annual Health Survey and District Level Household Survey, which will be available by 2013.

23.198. Infant and Young Child Feeding Practices: Appropriate feeding practices in children under 2 years are crucial for their survival, healthy growth and intellectual and physical development. Early initiation of breastfeeding (within one hour of birth) and exclusive breastfeeding for the first six months of life provides optimal nutrition for growth and development. According to the Lancet 2004, universalisation of breastfeeding (including exclusive breastfeeding for the first six months and continued breastfeeding for the next six months) will reduce mortality of children under 5 years by 13 per cent globally and by around 16 per cent in India (India Analysis). Introduction of appropriate complementary feeding after six months also prevents undernutrition in children and growth faltering. The initiation of breastfeeding within one hour in India was only 24.5 per cent while the exclusive breastfeeding rate in children under six months was 46.4 per cent (NFHS 3), as seen in the Figure 23.3.

23.199. NFHS 3 data also indicated that around half (56 per cent) of children aged 6–9 months are provided with the recommended semi-solid complementary foods and breast milk.

23.200. However some improvement is visible in early initiation, as the rate of breastfeeding within one hour of birth increased from 27.8 per cent in DLHS 2 to 40.5 per cent in DLHS 3. Recently released AHS data 2010–11 for 9 states (UP, Rajasthan, Odisha, Bihar, MP, Uttarakhand, Assam, Jharkhand and Chhattisgarh) reveals that children exclusively breastfed (0–6 months) ranges from 17.7 per cent in UP to 47.5 per cent in Chhattisgarh, highlighting the challenges ahead, especially in these states.



Source: NFHS 2005–06.

FIGURE 23.3: Inadequate Exclusive Breastfeeding in India (0–6 Months)

NUTRITIONAL STATUS OF WOMEN AND ADOLESCENT GIRLS

23.201. More than one third (36 per cent) of women aged 15–49 have a Body Mass Index (BMI) below 18.5, which indicates chronic energy deficiency. About 16 percent are moderately to severely thin. Bihar (45 per cent), Chhattisgarh (43 per cent), Madhya Pradesh (42 per cent) and Odisha (41 per cent) are the states with the highest proportion of undernourished women. Adolescent girls are also one of the vulnerable groups which require concerted attention. Adolescent Girls between 11–18 years constitute 16.75 per cent of female population (Approx. 8.32 crore). Among these, approximately 2.75 crore (33 per cent) are undernourished. Their health and nutrition status is further compromised by early marriage and early childbearing as reflected in DLHS 3 findings according to which around 43 per cent of currently married women in the age-group 20–24 years were married before attaining the age of 18 years.

MICRONUTRIENT DEFICIENCIES

23.202. Micronutrients are Vitamins and Minerals that humans need to consume in small amounts for optimal health and development. Micronutrient deficiencies often coexist with protein energy malnutrition and also have independent and interacting effects on health, growth and immuno competence. The groups most vulnerable are pregnant mothers, breastfeeding mothers and young children. Iron, Vitamin A and iodine deficiencies are major public health problems, among the range of Vitamin and Mineral Deficiencies.

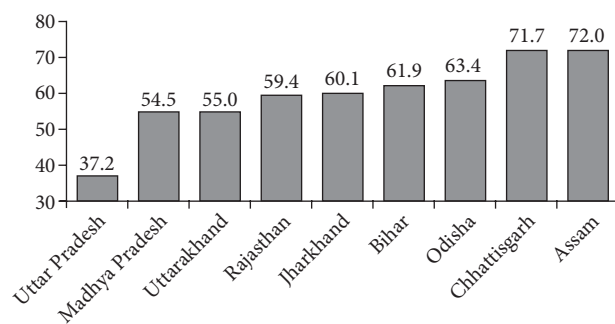


FIGURE 23.4: Children Aged 6–35 Months who Received a Vitamin A Dose During Last Six Months (%) (AHS 2010–11)

23.203. Vitamin A: Sub-clinical Vitamin A Deficiency (VAD) is a well-known cause of morbidity and mortality, especially among young children and pregnant women. Vitamin A deficiency limits the growth of young children, weakening their immunity and, in cases of acute deficiency, leading to blindness and to increased mortality. Vitamin A supplementation has proven successful in reducing the incidence and severity of illness. It has been associated with an overall reduction in child mortality, especially from diarrhoea, measles and malaria. As per NFHS-3, only one in four children aged 12–35 months received the six monthly Vitamin A supplement in the six months before the survey. This figure drops further, to only 18 per cent, among children aged 6–59 months. This data relates to 2005–06.

23.204. The later DLHS 3 survey for 2008–09 shows the 54.5 per cent Children (aged 9 months and above) received at least one dose of the Vitamin A supplement. The most recent Annual Health Survey 2010–11 (Figure 23.4) showed that at least every 2nd child aged 6–35 months has received a Vitamin A supplement in AHS States in the last six months—except in Uttar Pradesh where it is every 3rd child. (AHS 2010–11 covered 9 states—UP, Rajasthan, Odisha, Bihar, MP, Uttarakhand, Assam, Jharkhand and Chhattisgarh). These surveys suggest that the challenge of achieving high coverage with completion of all six monthly Vitamin A doses (9 m-under 5 years), remains an unfinished agenda, especially in states with low coverage rates.

23.205. Iron: Iron deficiency anaemia (IDA) is common across all age groups, but highest among young children, adolescent girls, pregnant and lactating women. The consequences of IDA in pregnant women are increased risk of low birth weight or premature delivery, peri-natal and neonatal mortality, inadequate iron stores for the new-born, lowered physical activity, fatigue and increased risk of maternal morbidity. Iron deficiency impairs growth, cognitive development and immune function. It leads children to perform less well in school and adults to be less productive. Prevalence of anaemia among children 6–35 months has increased from 74 per cent in NFHS-2 to 79 per cent in NFHS-3.

23.206. AHS 2010–11 data shows that IFA (Iron Folic Acid) supplementation to children aged 6–35 months during last 3 months ranges from 9.4 per cent in Rajasthan to 37.7 per cent in Chhattisgarh. This merits attention across the 9 States covered by AHS, especially Rajasthan and Uttar Pradesh.

23.207. Amongst adolescent girls, anaemia levels continue to be high; 2.75 crore girls are found to be undernourished, and their health and nutrition status is further undermined by early marriage and early child bearing.

23.208. Anaemia is a major health problem for adults as well, affecting 55 per cent of women and 24 per cent of men. The prevalence of anaemia in ever-married women has increased from 52 per cent in NFHS-2 to 56 per cent in NFHS-3. This highlights the need to accelerate interventions for prophylaxis and control of nutritional anaemia across the life cycle.

23.209. Iodine: Iodine Deficiency is the most common cause of preventable mental retardation and brain damage in the world. Iodine deficiency during pregnancy is associated with low birth weight, increased likelihood of stillbirth, spontaneous abortion and congenital abnormalities such as cretinism and irreversible forms of mental impairment. During the childhood period, it impairs physical growth, causes goitre and decreases the probability of child survival. It has been estimated that 200 million people in India are exposed to the risk of iodine deficiency and more than 71 million suffer from goitre and other iodine deficiency disorders (MoHFW, 2005). As per the district level IDD survey conducted by Directorate General of Health Services, ICMR, AIIMS, NIN, Hyderabad, State Health Directorate and other Health institutions, out of 365 districts surveyed covering all States/UTs, 303 districts are endemic where the prevalence of iodine deficiency disorders is more than 10 per cent. Thus, no State/UT is free from IDD.

23.210. According to NFHS-3, among the households that had their salt tested, just over half (51 per

cent) were using salt that was adequately iodized others were using salt that was either inadequately iodized or was not iodized at all. However, CES 2009 shows that the household consumption for iodised salt has increased to 71 per cent.

23.211. Zinc deficiency also results in the stunted growth of children. Zinc deficiency compromises the effectiveness of the immune system, increasing the incidence and severity of infections such as diarrhoeal disease and pneumonia. Therefore, as per MHFW guidelines, diarrhoea management is envisaged through ORS with zinc supplementation.

THE DUAL BURDEN OF MALNUTRITION: UNDER NUTRITION AND OBESITY

23.212. There is a small, but increasing percentage of overweight children who are at greater risk for non-communicable diseases such as diabetes and cardiovascular heart disease. These levels of overnutrition significantly compromise health and productivity. There was, however, a modest improvement in the situation during the 1990s (NFHS-3). The NNMB 2006 report shows an increase in the prevalence of overweight/obesity among rural men (6 per cent vs. 8 per cent) and women (8 per cent vs. 11 per cent) from the year 2000–01. On the other hand, NFHS-3 has reported that overweight/obesity has affected almost 15 per cent of women and 12 per cent of men, mostly in urban areas, in wealthier households, and among older adults.

MATERNAL AND CHILD HEALTH

23.213. Maternal Mortality Ratio (MMR) is estimated to have declined from 400 maternal deaths per 1,00,000 live births in 1997–98 to 254 in 2004–06 (SRS, 2009) to 212 (SRS, 2011). However, these achievements have not met the Eleventh Plan health goals. Infant Mortality Rates (IMR) and Under-5 child mortality rates are still very high that is IMR is 47 per 1,000 live births (SRS 2011 for the year 2010). During 2010, child mortality in children under 5 years was 59, showing a decline of 5 points over 2009, with a sharp gender differential, as this was 64 for girls as against 55 for boys in 2010 (SRS Statistical Report 2010, RGI 2012).

23.214. Maternal, neonatal, infant and child health is a critical determinant of nutrition status. In the causal matrix of under nutrition, important determinants include access to health care and hygienic environments and caring practices—health, hygiene and psychosocial care for girls and women. There is increasing awareness that cultural and behavioural practices with regard to child rearing practices influence child nutrition, survival and development. Health related interventions such as those related to antenatal care, institutional deliveries, prevention and management of common neonatal and childhood illnesses such as acute respiratory infections, diarrhoea, timely and complete immunisation, with requisite Vitamin A and IFA supplementation,

deworming and regular monitoring and promotion of child growth and development contribute significantly to improving nutrition outcomes. There has been improvement in several health related indicators but this has not been adequate. (Details of this are provided in the Health Chapter).

23.215. Nutrient Intakes among Children (1–6 years): Projected data from the surveys carried out by NNMB on nutrient intake in pre-school children between 1975 and 2006 has not shown any substantial improvement in their dietary intake over the last two decades. There has not been a major change in energy and protein intake of the children. Time trends of the intra familial distribution of food

TABLE 23.2
Monitorable Targets of Eleventh Plan and Its Achievements

Sl. No.	Eleventh Plan Monitorable Targets/Strategies	Achievement
1.	Reduce malnutrition among children of age group 0–3 to half of 46 per cent.	Current data not yet available.
2.	Reducing anaemia among women and girls by 50 per cent by the end of 2012.	Recent data not yet available.
3.	Providing clean drinking water for all by 2009 and ensuring no slip-backs.	88 per cent have access to an improved source of drinking water (NFHS-3).
4.	IFA Supplementation Programmes under RCH (NRHM) to cover infant and young children, by providing IFA in syrup form, and weekly iron supplements to adolescent girls (10–19 years).	Policy in this regard has been worked out. No recent study with regards to extent of coverage. Scheme for adolescents being finalised.
5.	Vitamin A Supplementation Programme had to cover all children between 9 months to 5 years of age and existing low coverage to be brought to 90 per cent by 2009.	Current data not yet available.
6.	Promotion of breastfeeding, promotion of consumption and production of fruits and vegetables in the Community, Environmental sanitation and hygiene.	DLHS 3 data shows an improvement in the rates of initiation of breast feeding within an hour (was 24.5 per cent as per NFHS-3 and 40.2 per cent by DLHS-3).
7.	High priority to micro-nutrient malnutrition control, specifically to tackle anaemia.	Double Fortified Salt has been introduced and MHFW has come up with the scheme to provide weekly iron and folic acid supplementation to adolescent girls.
8.	DLHS of RCH Programme to monitor prevalence of micro-nutrient deficiencies on priority.	Limited progress in this regard.
9.	National Nutrition Monitoring Bureau (NNMB) of ICMR to be expanded to all States/UTs.	Limited progress in this regard.
10.	Studies undertaken for collecting evidence regarding interaction amongst micro-nutrients, regional variations in deficiency and so on.	Limited progress in this regard.
11.	Vigorous awareness campaign.	A vigorous IEC campaign against malnutrition is under active consideration.

indicate that the proportion of families where both the adults and preschool children have adequate food has declined from 30 per cent to 22 per cent over the last 30 years. The proportion of families where the preschool children receive inadequate intake while adults have adequate intake has increased to a greater extent. This data reinforces the need to strengthen infant and young child caring and feeding practices.

REVIEW OF ELEVENTH FIVE YEAR PLAN MONITORABLE TARGETS

23.216. During the 11th Five Year Plan, Nutrition assumed a central role with the constitution of the Prime Minister's National Council on India's Nutrition Challenges in 2008. The first meeting was convened on 24th November 2010. The decisions taken during the meeting of the Prime Minister's National Council included- (i) Strengthening and restructuring the ICDS Scheme; (ii) Introduction of a multi-sectoral programme to address maternal and child malnutrition in selected 200 high burden districts; (iii) Introducing a nation-wide information, education and communication campaign against malnutrition; and (iv) Bringing a strong Nutrition focus in sectoral programmes.

23.217. These decisions were informed by the Recommendations For Action that emerged from the Multi-stakeholder Retreat on Addressing India's Nutrition Challenges, anchored by the Planning Commission in August 2010.

23.218. The commitment of the 11th Plan to adopt a life cycle approach to reducing under-nutrition was realised by initiating the process of strengthening and restructuring ICDS in Mission Mode and by introducing two new schemes—IGMSY for pregnant and lactating mothers and SABLA for adolescent girls, as detailed in Part II of this Chapter.

23.219. Table 23.2 presents a summary assessment of what has been achieved in the Eleventh Plan compared with the monitorable targets that were set.

REVIEW OF IMPORTANT DEVELOPMENTS

23.220. Major developments during the 11th Five Year Plan that have significantly impacted upon the nutritional scenario include:

DRAFT NATIONAL FOOD SECURITY BILL, 2011

23.221. The Bill seeks to provide food and nutritional security, in a human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices, for people to live a life with dignity. The provisions related to Nutrition include Direct provisions; Indirect provisions and Other miscellaneous provisions. Direct provisions list specific entitlements for pregnant and lactating women, children between 0–6 years, destitute persons, homeless persons, migrants, emergency and disaster affected persons and persons living in starvation, among others. Support for exclusive breastfeeding of infants between 0–6 months is also a mandated entitlement.

REVISED RECOMMENDED DIETARY ALLOWANCES (RDA)

23.222. The ICMR Expert Committee has revised the RDA for Indians (Nutrient Requirements and Recommended Dietary Allowances for Indians: A Report of the Expert Group of the Indian Council of Medical Research, 2010). The recommendations take into account the fact that body weight and physical activity are major determinants of energy requirement. Similarly the Expert Committee has provided recommendations for energy requirements for reference children as well as energy requirements per kilogram, so that the gap between the energy requirement and energy intake can be computed on the basis of current stature. This is an important contribution, because the country has entered the dual nutrition burden era. In view of the revised RDAs, it may be noted that various food supplementation programs like SABLA, MDM and IGMSY will need to consider this while reviewing the nutritional norms of these programmes.

BRINGING STRONG NUTRITION FOCUS INTO DIFFERENT SECTORAL POLICIES AND PROGRAMMES

23.223. Another milestone was the institution of a regular multisectoral review mechanism for bringing a strong nutrition focus in relevant programmes, convened by the Planning Commission since mid 2010. Different Ministries have given their commitments for taking proactive measures. These will need

to form the core of the renewed National Plan of Action for Nutrition in the Twelfth Plan, with specific sectoral outcomes and indicators.

23.224. An illustrative example is how this initiative has mobilized the leadership of Panchayati Raj Institutions for Nutrition and the Girl Child. Ministry of Panchayati Raj has asked States to mainstream Nutrition in the training of PRIs—especially Women panchayat members, for Malnutrition free panchayats, earmarking certain wards to them. A special gram sabha meeting dedicated to Nutrition is to be held in every gram panchayat in the month of August. Panchayati Raj Institutions are also being enabled to actively monitor the ICDS programme through the Anganwadi level Monitoring and Support Committees and key programmes (NRHM, ICDS, TSC) through Village Health, Sanitation and Nutrition Committees.

23.225. Village level institutional mechanism established for nutrition convergence, anchored in Panchayati Raj Institutions: NRHM Village Health and Sanitation Committees were expanded in July 2011 to include Nutrition and ICDS to become Village Health, Sanitation and Nutrition Committees, recognised as sub committees of Gram Panchayats. There are 4.97 lakh such Committees which will provide the village level institutional mechanism for the convergence of NRHM, Total Sanitation Campaign and ICDS and also Drinking Water. Linking these to similar mechanisms at block and district levels will be the next steps in the Twelfth Plan.

23.226. The adoption of the WHO Growth Standards was another policy development milestone, based on a national consensus evolved in early 2007. These were introduced in mid 2008 under ICDS as well as NRHM, for the monitoring and promotion of young child growth and development. The WHO Child Growth Standards are rights based and gender specific. These normative standards recognise the breastfed infant as the norm for healthy growth. They also link physical growth with development milestones and care for development. As anticipated, this change in the standards and classification used (from the NCHS standards—IAP classification to

WHO standards 2006) has resulted in much higher estimates of severely undernourished children, and with higher under-nutrition prevalence in infants between 0–6 months.

23.227. It needs to be reiterated that the perceived increase in the reported percentage of severely undernourished children in programme data reflects the change in the standards/classifications used rather than deterioration in the situation of children. The change to WHO child growth standards from the NCHS standards used by earlier NFHS/other surveys and from the Harvard Standards (IAP Classification) used by ICDS earlier has also enabled both harmonisation and updating standards used across different systems. The refrain that ICDS figures do not match NFHS data needs to be understood in the perspective of the different growth standards/classifications used before this update and harmonisation process.

THE NATIONWIDE INTRODUCTION OF THE JOINT MOTHER AND CHILD PROTECTION CARD

23.228. The introduction of the joint card by ICDS and NRHM in March 2010 was another landmark, signifying the strategic focus on reaching mothers and children under three years of age and a holistic approach to child health and development. The maternal and child care entitlement card which enables unreached groups to demand and access health (NRHM) and child care (ICDS) services, has currently been rolled out in more than 6,305 of the 7,076 ICDS projects so far. It is a counselling tool—improving family care behaviours, using critical contact points for strengthening the continuum of care and enabling mother—child cohort tracking. The card is unique in linking maternal, newborn and child care, in integrating health, nutrition and development, thereby reinforcing a rights based and integrated approach to the young child, that recognises the indivisibility of child rights and empowers families. The card promotes the use of the JSY registration number and birth registration number (with the potential for linking with UID in future). It also enables gender disaggregated tracking, to accelerate interventions for ensuring optimal care for the young girl child.

INFANT MILK SUBSTITUTES, FEEDING BOTTLES AND INFANT FOODS (REGULATION OF PRODUCTION, SUPPLY AND DISTRIBUTION) ACT 1992 AND ITS AMENDMENT ACT 2003

23.229. Popularly known as IMS Act, this is a globally well-recognized instrument to promote, protect and support breastfeeding and to ensure optimal infant and young child feeding practices. Following its amendment in 2003, direct advertisement for IMS has stopped. However, commercial interference with infant and young child feeding practices and growth related claims still continue surreptitiously. Besides, promotion in the name of symposia and sponsorships by companies in the health care and other education systems are being used as covert tools for promotion. The implementation of the Act suffers due to inadequate enforcement machinery, understanding and the knowledge of the Act, lack of adequate resources and commercial onslaughts. These would require appropriate regulation and supervision.

23.230. Enhanced resources, enforcement machinery and reactivation of institutional mechanisms such as

National/State Breastfeeding and IYCF committees, with designated nodal officers at state/district levels in both the health and ICDS systems are required for effective compliance. Experience over the Eleventh Plan period highlights that requisite safeguards also need to be established to curb commercial interference with Infant and Young Child Feeding Practices.

NATIONAL NUTRITION POLICY AND NATIONAL PLAN OF ACTION ON NUTRITION (NPAN)

23.231. Like the National Nutrition Policy, the implementation of NPAN requires acceleration. State Nutrition Councils have been set up in a few states and some states had initiated state specific plans of action. In view of the changes that have taken place in the policy and programme environment, there is a need to review the NPAN and state initiatives and their linkages with other sectoral institutional arrangements such as NRHM mission societies or National/State Food Commissions if these are established when the draft NFSB is enacted. It also needs to be ensured that nutrition interventions are planned and implemented in consonance with the national policy framework.

TABLE 23.3
Existing Programmes/Schemes

Target Group	Schemes	Expansion
Pregnant and Lactating Mothers	ICDS, RCH- II, NRHM, JSY, Indira Gandhi Matritva Sahyog Yojana (IGMSY)— The CMB Scheme	NRHM (2005–06) JSY (2006–07) ICDS (2008–09)
Children 0–3	ICDS, RCH- II, NRHM, Rajiv Gandhi National Creche Scheme	RGNCS (2005–06) ICDS (2008–09)
Children 3–6	ICDS, RCH- II, NRHM, Rajiv Gandhi National Crèche Scheme, Total Sanitation Campaign (TSC), National Rural Drinking Water Programme (NRDWP)	TSC (2008–09)
School going children 6–14	Mid Day Meals (MDM), Sarva Shiksha Abhiyan (SSA)	SSA (2002/2005–06) MDM (2008–09)
Adolescent Girls 11–18	Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls (RGSEAG), Kishori Shakti Yojana, Total Sanitation Campaign (TSC), National Rural Drinking Water Programme (NRDWP)	NRDWP (2010) RGSEAG (2010–11)
Adults and Communities	MGNREGS, Skill Development Mission, Adult Literacy Programme, TPDS, AAY, Old and Infirm Persons Annapurna, Rashtriya Krishi Vikas Yojana, Food Security Mission, Safe Drinking Water and Sanitation Programmes, National Horticulture Mission, National Iodine Deficiency Disorders Control Programme (NIDDCP), Nutrition Education and Extension, Bharat Nirman, Rashtriya Swasthya Bima Yojana	NHM (2005–06) MGNREGS (2005–06) NRLM(2010–11) NIDDCP (1992) RSBY (2007) Bharat Nirman (2005)

DOUBLE FORTIFIED SALT FOR REINFORCING ANAEMIA CONTROL

23.232. To reinforce interventions for prophylaxis and control of nutritional anaemia, the use of Double Fortified Salt (DFS) was mandated in government Food Supplementation programmes such as ICDS and MDM, among others, as a follow up of multi sectoral consultations.

REVIEW OF EXISTING PROGRAMMES/SCHEMES

23.233. The Government of India has been implementing a number of programmes, which have the potential to contribute to improving nutrition security, as they address immediate, underlying and basic causes of malnutrition—especially maternal and child under-nutrition. An indicative list of the programmes relevant for different groups across the life cycle is given in Table 23.3 with an indication of when they were expanded.

23.234. The major government interventions with the potential to address the nutrition challenges include interventions for maternal and child care and care of adolescent girls. These include the Integrated Child Development Services (ICDS), the Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls (RGSEAG)—SABLA, the Indira Gandhi Matritva Sahyog Yojana IGMSY, which have been discussed earlier in Part II of this chapter. Also relevant are the programmes related to-

- Access to Maternal and Child Care such as ICDS, IGMSY, and SABLA for adolescent girls;
 - Access to health care such as NRHM;
 - Access to safe drinking water, hygiene and environmental sanitation such as the National Rural Drinking Water Programme and the Total Sanitation Campaign;
 - Access to household food security and food supplementation programmes such as the National Food Security Mission, Targeted Public Distribution System, Mid Day Meals Scheme;
 - Programmes related to Agriculture, Animal Husbandry and horticulture;
 - Programmes related to poverty alleviation, livelihoods and skill development such as MGNREGA and NRLM;
- Access to Education, Information and Communication through Sarva Shiksha Abhiyan, Sakshar Bharat, initiatives for girls' education, women's literacy and empowerment and youth initiatives, information campaigns;
 - Social and community mobilisation, including ownership of panchayati raj institutions/urban local bodies;
 - Targeted development interventions for different vulnerable community groups such as Scheduled Castes, Scheduled Tribes, including particularly vulnerable tribal groups and minorities, among others.

These have been discussed in the relevant sectoral Chapters of the Twelfth Plan.

STRATEGIES FOR PROMOTING NUTRITION SECURITY IN THE TWELFTH PLAN

23.235. The decisions of the first meeting of the PM's National Council on India's Nutrition Challenges provide the road map for the Twelfth Plan and are as follows:

1. **The ICDS requires strengthening and restructuring**, with special focus on pregnant and lactating mothers and children under three years. The ICDS also needs to forge strong institutional convergence with the National Rural Health Mission and the Total Sanitation Campaign particularly at the district and village levels. It needs to provide flexibility for local action and empower mothers in particular and the community in general to have a stake in the programme.
2. **A multi-sectoral programme to address maternal and child malnutrition** in selected 200 high-burden districts would be prepared. This programme will bring together various national programmes through strong institutional and programmatic convergence at the State, District, Block and Village levels.
3. **A nation-wide information, education and communication campaign** will be launched against malnutrition.
4. The Ministries that deal with Health, Drinking Water Supply and Sanitation, School Education, Agriculture and Food and Public Distribution

will **bring strong nutrition focus** to their programmes.

23.236. Multi-sectoral interventions are envisaged because as outlined in the preceding section, different sectors address different determinants of malnutrition—directly or indirectly, thereby contributing to improving nutrition outcomes. This is by increasing access to maternal and child care services and improving caring practices, access to health care, water, sanitation and hygiene, household food security, TPDS, agriculture, poverty alleviation and livelihoods, education and communication and mobilisation of community support. The Twelfth Plan strategy therefore accords priority to multi-sectoral action, which is reflected in relevant sectoral chapters. This section focuses on outlining how such multisectoral interventions and direct nutrition interventions will converge for improving maternal and child related nutrition outcomes and achieving monitorable targets.

23.237. Based on these broad directions, the following are the areas on which policy planning must concentrate in the Twelfth Plan—

EVOLVING MULTI-SECTORAL INTERVENTIONS FOR NUTRITION

23.238. The National Nutrition Strategy in the Twelfth Plan will be based on the decisions of the PM's National Council on India's Nutrition Challenges; multi-sectoral commitments (emerging from the reviews convened by the Planning Commission); the Recommendations For Action of the Multi-stakeholder Nutrition Retreat, anchored by the Planning Commission (August 2010) and building on the joint strategy paper evolved through this process. It envisages Multi-sectoral State/District Nutrition Plans of Action which will be developed, implemented and monitored by National/State/District Nutrition Councils, especially in high burden/high focus States/Districts. Key commitments would be included as a part of State MOUs, binding all parties towards monitorable outcomes. Nutrition monitorable targets and outcomes would be reviewed regularly by National/State/

District Nutrition Councils and also by a National Development Council Sub Committee periodically.

23.239. The monitorable targets, strategies and interventions of National Nutrition Policy NNP and National Plan of Action on Nutrition (NPAN) will be updated in the light of emerging policy directions. The updated National Plan of Action on Nutrition (NPAN) will be aligned with the Twelfth Plan. It will also aim to strengthen multi-sectoral interventions addressing maternal, neonatal, infant and child mortality and under-nutrition synergistically—especially in 200 high burden districts, linking with 264 high focus districts under NRHM.

BRINGING STRONG NUTRITION FOCUS TO SECTORAL PROGRAMMES

23.240. Building on multi-sectoral reviews anchored by the Planning Commission in 2010–2012, the Nutrition component will be prioritised in relevant social sector and flagship programmes through the Twelfth Plan sectoral strategies, sectoral Results Framework Documents, 5 year strategy plans and Programme Implementation Plans of relevant flagship programmes. The Nutrition component in National Rural Health Mission Programme Implementation Plans will especially be strengthened. Nutrition status of children under 3 years (Underweight prevalence) will be used as a lead proxy indicator in national/state/district level reviews and specifically for NRHM and ICDS.

23.241. To provide an illustrative example—National Rural Health Mission (NRHM) has achieved considerable progress in the Eleventh Plan in providing universal access to equitable, affordable and quality health care, which contributes to improved nutrition outcomes. There are many health services under NRHM and other health sector interventions that have relevance to preventing and reducing under-nutrition, including: (i) Immunisation Programme; (ii) newborn care; prevention and management of common neonatal and childhood illnesses including diarrhoea and Acute Respiratory Infections; (iii) Care of the sick child—at the community level through the ASHA and at the institutional level through primary health

care facilities; (v) Vitamin A administration; (v) Anaemia management and Paediatric De-worming; (vi) School health programmes with supervised weekly IFA supplementation and six monthly deworming; (vii) Nutrition Rehabilitation centres—for sick and severely malnourished children; (viii) Programmes of adolescent health which address nutrition counselling and anemia; (ix) National Maternity benefit scheme—now a component of JSY; and (x) State specific programmes of nutrition supplementation such as the Muthu Laxmi maternity benefit scheme of Tamil Nadu and the Velugu programme in Andhra Pradesh and (xi) Universal Salt Iodisation programme and the national goitre control programme. Details of these interventions are provided in the Health Chapter and similarly in respect of other sectors.

STRENGTHENING/RE-ACTIVATING INSTITUTIONAL ARRANGEMENTS

23.242. Nutrition is a complex issue which cuts across the sectors. There is a recognized need for institutional mechanisms as well as programme implementation platforms to effectively converge and monitor both direct and indirect multisectoral interventions for enhanced nutrition outcomes. The National Nutrition Policy provides for enabling institutional arrangements for addressing India's nutrition challenges. While some of these institutional arrangements have been functional in some States, these have not been fully operationalised, especially at district and sub district levels. Priority would be accorded to strengthening/re-activating comprehensive institutional mechanisms related to the National Nutrition Mission at all levels, and ensuring their synergistic linkages with the institutional arrangements envisaged under ICDS Restructuring. These are as follows:

23.243. **National Level:** Under the guidance and policy direction of the PM's National Council on Nutrition, the Executive Committee headed by the Minister for WCD [which will be the same as ICDS National Mission Steering Group] will oversee and coordinate the implementation of Nutrition related Programmes. This Executive Committee under the chairpersonship of Minister for WCD would

have Member, Planning Commission (In Charge of WCD) as Vice Chairperson with representation of some State Ministers and Chief Secretaries, Secretaries of different Ministries, on rotation basis. At an operational level, in order to ensure multi-sectoral convergence, an Empowered Committee headed by the Secretary—MWCD and comprising of representatives from different Ministries will guide the implementation of multisectoral policies and programmes for nutrition. This Committee will also ensure convergence at the national level and will report to the Executive Committee (and thereby to the PM's Council) on the same. This Council would be technically supported by a Policy Coordination Support unit in the Planning Commission to bring in inter-sectoral nutrition focus and accountability and a strengthened Food and Nutrition Board (MWCD).

1. **State Level:** The CM's State Nutrition Council and the State Executive Committee headed by the Chief Secretary will guide the convergent actions at the state level.
2. **District Level:** The District Nutrition Council headed by the concerned District Magistrate/CEO Zila Parishad will be responsible for convergent action at the district level.
3. **Village Level:** The Village Health Sanitation and Nutrition Committees which are recognized as sub committees of the Gram Panchayat, will have representation from health, ICDS, TSC functionaries, user groups and PRIs. They will be responsible for reviewing the performance of individual programmes, as well as for enabling convergent multi-sectoral actions which impact upon nutrition outcomes, with reference to the Subjects allocated to Panchayats under the Eleventh Schedule of the Constitution and mandated by the 73rd Constitutional Amendment.
4. **Habitation level:** At the Anganwadi centre level, the anganwadi monitoring and support committee (ALMSC), including representation from mothers' groups/women's SHGs will monitor convergent actions and suggest actions for effective programme implementation.
5. **In the urban context:** similar institutional arrangements will be set up, depending on the category of the urban local body, with city/town/

ward and neighbourhood committees being constituted, with representation of elected representatives of ULBs.

23.244. The above framework has been deliberated and agreed upon in the Inter-Ministerial Group on ICDS Restructuring, chaired by Member, Planning Commission. In the context of institutional mechanisms for nutrition, similar arrangements, including at State, district and sub district levels will be correlated with the ICDS Mission and monitoring structures.

MULTI-SECTORAL APPROACH FOR ACCELERATING ACTION ON DETERMINANTS OF UNDERNUTRITION

23.245. As indicated earlier, the National Nutrition Policy advocated a comprehensive inter-sectoral strategy between 14 sectors (which directly or indirectly affect dietary intake, prevention and management of disease/infections and nutritional status of the population) for combating the multifaceted problem of under-nutrition. The number of sectors mobilized has now expanded to nearly twenty. The core strategy envisaged under NNP is to tackle the problem of nutrition through direct nutrition interventions for vulnerable groups, as well as through various development policy instruments which will improve access and create conditions for improved nutrition. Both the direct and indirect interventions cannot be undertaken by a single sector. There is need for a comprehensive response that addresses the multiple and inter related determinants of malnutrition and different dimensions of the nutrition challenges synergistically. In order to achieve this, the 12th Five Year Plan will focus on the following:

23.246. Multi-sectoral Programme to address maternal and child malnutrition in selected 200 high burden districts: As mandated by the PM's National Council on India's Nutrition Challenges, a Multi-sectoral Nutrition Programme is being finalised for 200 high burden districts. The Multi-sectoral Nutrition Programme is designed to (i) focus action on the critical age groups to prevent and reduce under-nutrition as early as possible, across the life cycle (pregnancy, lactation, infancy and early

childhood, adolescence); (ii) address key inter related determinants of malnutrition together by facilitating convergence; (iii) provide local flexibility, support pilots and innovative panchayat led models of convergent action and (iv) to focus on districts with the highest burden of malnutrition, so that reduction in maternal and child under-nutrition is accelerated. This will also be linked to reducing maternal, neonatal, infant and young child mortality in NRHM high focus districts.

23.247. This will be designed and implemented to facilitate convergence of key services and stakeholders. The proposed programme would seek to ensure universal access to women and child care services, primary health care, safe drinking water and sanitation, nutrition counselling as a service, change caring and feeding practices in families and communities, link with initiatives for ensuring food security and livelihoods, and address the different determinants of under-nutrition in an integrated way, with effective institutional arrangements. This would synergise multisectoral interventions from ICDS, NRHM, Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls, Indira Gandhi Matritva Sahyog Yojana, Mid-Day Meal Scheme, the proposed National Food Security Act, Public Distribution System, Total Sanitation Campaign, NRDWP, MGNREGS, NRLM and others. It would ensure a platform of coordinated nutrition relevant action at the State, District and grassroots levels for addressing maternal and child under-nutrition, with strong teamwork of AWWs, ASHAs, ANMs, ICDS and NRHM functionaries, involvement of women's/ community groups and leadership of panchayati raj institutions.

23.248. The Multi-sectoral Programme to address maternal and child malnutrition would ensure that relevant nutrition outcomes are not only integrated into the concerned sectoral plans but also that appropriate resources are allocated for achieving those outcomes. Funds for local gap filling support would be provided as per the needs identified on the basis of the District/State Nutrition Plans and reviewed by the District/State Nutrition Councils. At the national level, an Empowered Committee headed

by the Secretary, Ministry of WCD would be set up for approval and budget release, based on the annual State Nutrition Plans submitted by the concerned States/UTs.

23.249. Operationalising Convergence through the multi sectoral programme: There are several programmes and schemes aiming to directly and indirectly affect nutrition related outcomes. There is a need to bring more coherence among these programmes through processes of convergence at programmatic, thematic, operational and institutional levels.

MOBILISING A NATIONWIDE CAMPAIGN AGAINST MALNUTRITION

23.250. A concerted societal campaign against malnutrition will be initiated, which would create a mass movement for improved nutrition and development of children and women. A National Communication Strategy Framework (with contextualisation/adaptation at State/District levels) will be developed. This will include an advocacy strategy that creates the necessary priority and media environment for nutrition; a social mobilisation strategy that mobilises communities and resources for concerted action and a behavioral development strategy for changing key care behaviours at field level.

23.251. A nation-wide communication campaign coordinated by the Ministry of Women and Child Development, in consultation with the Planning Commission and Ministry of Health and Family Welfare, will be launched against malnutrition.

23.252. A social mobilisation or societal movement will be initiated, including strategic partnerships and linkages with civil society organisations, professional networks, Voluntary Action Groups, home science, medical and public health colleges, practitioners, community groups with voluntary action for sharing of technical knowledge, experiential learning, increasing nutrition awareness and community based monitoring.

23.253. Changing and sustaining positive care practices will be critical through skilled counseling

support from the ICDS and NRHM team, using a common core counseling package, building on the joint ICDS NRHM Mother Child Protection Card. Positive role model mothers will be encouraged to demonstrate improved care and feeding practices to community/mothers' groups for peer learning through Sneha Shivirs. The strategy would cover different aspects of care behaviour such as health, hygiene, care for girls and women, psychosocial care and early learning, supporting for improved parenting, with shared responsibilities of both parents and family support.

23.254. National/State communication strategies would also improve the demand for, utilisation and monitoring of key health and child care services and be integrally linked with service quality improvement interventions under the Multi-sectoral Programme, ICDS Restructuring and NRHM. Behavioral outcomes of the communication strategy will be monitored through the institutional arrangements for Nutrition.

PROMOTING OPTIMAL MATERNAL, INFANT AND YOUNG CHILD CARE AND FEEDING PRACTICES

23.255. Optimal Infant and Young Child Feeding (IYCF) practices form the cornerstone of child care and development. Despite breastfeeding having numerous recognised advantages, and several initiatives to promote breastfeeding, early and exclusive breastfeeding rates in most states of India are low. The following actions will be taken urgently in the Twelfth Plan:

23.256. *Emphasis on IYCF and dissemination of National guidelines on IYCF:* A comprehensive National Policy on Infant and Young Child Feeding will be developed through consultative processes, linked to the updation of the National Policy on Nutrition and NPAN and within the legal framework provided by the IMS Act. Supporting National/State Plans of Action with monitorable outcomes will be developed and implemented, linking ICDS, NRHM and others, backed by adequate resource allocations to bridge various identified programmatic gaps.

23.257. Community initiatives for supporting women: Aggressive marketing of baby food by companies can easily mislead women who do not have access to accurate information. An empathetic and skilled health worker must support women at the time of birth to succeed in beginning breastfeeding within an hour of birth and providing prolonged skin-to-skin contact. They should also have access to counselling (one to one or group) and support to continue exclusive breastfeeding for the first 6 months, with counselling for adequate complementary feeding and continued breastfeeding at the completion of 6 months for two years or beyond.

23.258. Critically addressing infants under 6 months: The 0–6 months infant is often left out of initial weighing/child care counselling sessions. The Twelfth Plan accords high priority to promoting early and exclusive breastfeeding for the first six months of life and reaching these infants and mothers. Nutrition and breastfeeding support centres will be set up, with skilled counsellors initially in all district hospitals—and followed at CHC, PHC levels in a phased manner.

23.259. Strengthening ICDS: Nutritional and care counselling will be introduced as a service in ICDS in the Twelfth Plan, with provisions for an additional Anganwadi worker in 200 high burden districts, based on state requirements. This would focus on prioritised home visits for children under 3 years and mothers to promote infant and child care and feeding practices.

23.260. Enhancing capacity building of field level functionaries on IYCF practices. It is imperative to build knowledge and skills, capacity for behaviour change communication, counselling and develop problem solving skills for Anganwadi Workers (AWWs), Accredited Social Health Activists (ASHAs) and Auxiliary Nurse Midwives (ANMs) for improving IYCF practices. Resource provisions for capacity development for IYCF will be enhanced in ICDS and NRHM. A network of National/State Resource Centres on IYCF will be established, in partnership with professional networks/civil society organisations/medical colleges—functioning

as “living universities” with decentralised and field based capacity development.

23.261. Pre-service curriculum strengthening for doctors and nurses will be undertaken systematically in the Twelfth Plan. This will reduce the need of in-service training and improve the knowledge and skills of doctors and nurses, which is a recognized need. Medical colleges must be involved for this purpose and “Centres of Excellence” in IYCF will also be identified, forming the hub of an institutional strengthening effort.

23.262. Behaviour change communication: An extensive and focused communication campaign on IYCF will be launched, integrally linked to the Nationwide IEC Campaign for Nutrition.

23.263. Skilled nutrition counselling: Skilled nutrition counselling will be recognized as a service with a support chain from village level to sub centre, PHC, CHC, subdivision, district and state levels, including mother and child cohort tracking and linking with referral services.

23.264. Protecting breastfeeding and compliance with the Infant Milk Substitutes Act (IMS Act): In the Twelfth Plan, the Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act 1992, and Amendment Act 2003, will be strengthened through effective implementation mechanisms and earmarked resources for ensuring and monitoring compliance. Monitoring the compliance of the IMS Act by companies will also be taken up for effective implementation of IMS Act, while ensuring that commercial influences and conflict of interest do not undermine optimal infant and young child feeding practices.

23.265. IYCF counselling centres in Health facilities: Through an IYCF component in NRHM PIPs, it will also be ensured that each health facility has skilled IYCF counselors—doctors and nurses trained in the skills to deal with infant and young child feeding counselling as well as on HIV and infant feeding.

23.266. VHND: The frontline workers' team comprising of ASHA, AWW, ANM, and the PRI representatives, will be fully involved in organising VHND to bring about changes in child caring practices and promote IYCF practices. A nodal person will be identified and trained to oversee convergence between the ANM and ASHA; and the network of Nutrition counsellors will serve as a link between ICDS and NRHM.

23.267. IEC and Nutrition messages: Mass Media campaigns will be designed that will enable families to adopt better maternal, child care and IYCF practices. A technical core group will be constituted as a part of the Nutrition institutional arrangements to ensure that the content of messages is updated, consistent with the national policy framework and IMS Act and is appropriately sensitive to local traditions, practices and needs. Convergence of MWCD, MHFW, MYA, MHRD, MIB and MPR especially will be strengthened.

23.268. Introduce Village/Panchayat report cards: VNSNCs will monitor and support the regularity of functioning of AWCs, ensuring coverage of all eligible beneficiaries as against the surveyed population. Community based accreditation system under ICDS Restructuring will be used to recognize villages, panchayats, blocks and districts for achieving targets of children growing well and preventing them from becoming undernourished. These could even spark and catalyse a community movement for other aspects contributing to "child friendly panchayats". Every village can prominently display these cards, depicting what progress the village has made. This will therefore link with the concept of baby and child friendly panchayats detailed in Part II on Child Rights.

23.269. National IYCF/Nutrition Communication Campaign and the role of media: A national nutrition communication strategy framework will be developed as outlined earlier, a campaign linking concerned sectors (e.g. gender related issues, health and hygiene practices) must be evolved. A national movement for promoting IYCF must be an integral part of the same.

23.270. Strengthen National and State Coordination Mechanisms and Capacity for promoting Infant and Young Child Feeding and implementation of the IMS Act: The National Breastfeeding Committee under the IMS Act will be rejuvenated and strengthened, and State Breastfeeding Committees constituted as envisaged, with identified State Nodal Officers within State WCD and Health Departments for IYCF, supported by technical teams at different levels. This will be appropriately linked to Nutrition institutional arrangements. A National Resource Centre will be established, in partnership with appropriate professional networks/voluntary agencies to enable capacity development for IYCF for both NRHM and ICDS, supporting both the Ministries of WCD and Health and Family Welfare, with State level Resource Units, linked to other training institutions. This could also be assigned to national level partner organizations or set up especially to focus on the issue.

23.271. Conflict of Interest: Policy guidelines and mechanisms will be developed to ensure that infant feeding practices are kept free from commercial influences and that nutrition programme implementation is free from conflict of interest, as mandated by the IMS Act.

COMBATING MICRO-NUTRIENT DEFICIENCIES IN A HOLISTIC MANNER

23.272. There are clear strategies to combat micro-nutrient deficiencies (Iron, Vitamin A and Iodine) in children, women and adolescent girls. A comprehensive approach should be adopted which includes complementary strategies to address micro-nutrient malnutrition including: (i) Infant and Young Child Feeding Practices; (ii) Dietary Diversification; (iii) Horticultural interventions; (iv) Nutrient Supplementation; (v) Food fortification; and (vi) Public Health Measures.

23.273. Supplementation with micro-nutrients/food: Micro-nutrient deficiencies, particularly Iron Deficiency Anemia, IDD and Vitamin A will be addressed through intensified actions focussing on: (i) Adopting a comprehensive approach involving improved IYCF practices, dietary diversification, food

supplementation, food fortification and horticultural interventions, Iron and Folic Acid supplementation for young children, adolescent girls, pregnant and lactating women, also supported by the use of Double Fortified Salt; (ii) Periodic screening for anaemia; (iii) Strengthening Vitamin A supplementation Programme in convergence with NRHM for improved coverage; (iv) Supply of adequately Iodized salt through TPDS and also double fortified salt; (v) Public health measures—deworming, environmental sanitation, safe drinking water; and (vi) Micro-nutrient supplements and health check-up for school children through MDM programme.

23.274. Food Fortification: Micro-nutrient malnutrition control programmes in the country have focused on nutrient supplementation of some vulnerable groups. This will be complemented by addressing micro-nutrient malnutrition through a comprehensive strategy. Double fortified salt is a successful example, which has been introduced for government food supplementation programmes. Requisite safeguards against commercial interference and regulatory mechanisms for the above will also be developed.

23.275. Improved health education and IEC: This will be carried out with the aim to disseminate knowledge on micro-nutrients and its prevention as well as advocacy for food diversification to include iron, vitamin A, and carotene rich food in regular dietary intake. Besides, it would also help in ensuring improved dietary intake to meet RDA, improved compliance of IFA and improved iodized salt consumption in every household.

23.276. Monitoring and Surveillance: Initiatives for monitoring the programme for preventing and controlling micro-nutrient deficiencies would include strengthening routine reporting under NRHM/RCH and ICDS programmes to include percentage of pregnant women, children, adolescent girls, anaemic women and girls, percentage given IFA tablets, compliance for IFA, Vitamin A supplementation for children as well as mobilising PRIs, Women Self Help Groups and Anganwadi Workers to monitor intake of IFA tablets.

23.277. Evaluation of the on-going process and impact is expected to be done as a part of the Annual Health survey/District Health Survey/National Health Survey including haemoglobin estimation, questions regarding IFA coverage and intake. In addition as and when large-scale surveys are done, information can be collected on prevalence of anaemia.

23.278. Wherever possible, (such as during school health check-up) attempts will be made to screen adolescent girls for anaemia. Special focus should be on those who are undernourished or have menstrual problems. Adolescents who are pregnant should receive very high priority for screening and management of anaemia.

Addressing the Dual Burden of Malnutrition

23.279. Increasingly, health systems in many developing countries are simultaneously confronting under- and over-nutrition—not only at the national level, but also within households. Both under-nutrition and over-nutrition are linked with a range of adverse health conditions. Importantly, however, underweight and overweight are both forms of malnutrition, a term that encompasses either a lack of or excess in energy and/or nutrients. The Dual burden of Malnutrition presents a unique challenge for public health. Programmes should promote nutritious foods and a healthy lifestyle to address both types of malnutrition at the same time. In the Twelfth Plan, the Health system will be responsible for screening persons for over-nutrition, while ICDS and health will be responsible for screening for under-nutrition. The Health system will also support personalized advice for early detection of overweight and diet counselling as well as monitoring the improvement and providing focused care to those who are facing problems in modifying their lifestyles. Nutrition and health education through all available modes of communication will emphasize the need for: (i) eating balanced diets; and (ii) adopting healthy lifestyles with adequate physical activity. Health interventions will be carried out by the health system including, (i) screening persons for over-nutrition whenever they access health care; (ii) using of BMI for adults and BMI-for-age in children and adolescents for

early detection of over-nutrition; (iii) identification of over-nourished persons and personalised advice regarding modification of dietary intake and life style; and (iv) monitoring the improvement and providing focused care to those who are facing problems in modifying their lifestyles.

NUTRITION CAPACITY DEVELOPMENT

23.280. Capacity Development for Nutrition will need to include strengthening and networking of Nutrition resources within key National Institutions such as NIHFW, NHSRC, NIRD, strengthening the Food and Nutrition Board and NIPPCD and networking with Nutrition Resource Units in Agricultural Universities, Medical Colleges and Home Science Colleges. Appropriate training is needed at state, district and block management levels and service provider and supervision levels. A shared training space and team at the state, district and block levels would therefore be essential. A shared resource centre of WCD and health or State/District Resource Centres for Nutrition need to be progressively established—building on existing institutions such as SIHFWs/SHSRCs, Medical College Hospitals, Home Science Colleges, AWTCs—responding to the requirements of different sectors and stakeholders. This should be linked to State/District Nutrition Mission Councils, and will need to be set up in a phased manner, initially in high burden states/districts. This will also require mentoring support by voluntary agencies, resource teams at district/block/local levels, especially for strengthening community processes, decentralized planning and monitoring.

23.281. Nutrition Resource Platform In order to strengthen the knowledge base on nutrition education, national, regional and state level Nutrition Resource Centres and networks also need to be set up. A national Nutrition Resource Platform is envisaged as a web portal for easy access to information relating to nutrition and child development and as a repository of nutrition related resources including research, new publications, government policies, training materials and so on.

NUTRITION EDUCATION AND SOCIAL MOBILISATION

23.282. Nutrition Education will be integrated and appropriately/strengthened in the school education curriculum framework at national levels and linked to Mid Day Meals, so that children also promote nutrition relevant practices in the community and through the Child to Child approach. This will be incorporated in Sakshar Bharat. Similarly, the nutrition component in the medical and nursing education curriculum will also be strengthened, networking medical colleges, nursing colleges and councils.

23.283. Education of girls and women's literacy will be promoted, responding to their nutrition, development and protection needs. Their nutrition status will also improve by availing of MDM, health care, IFA supplementation and deworming interventions, increased duration of schooling, higher education and improved life skills and productivity. Education of girls and women's literacy will have multiple long term benefits.

23.284. Community Mobilisation: Improving community mobilisation levels will imply greater sensitization and involvement of Panchayati Raj Institutions and Village Health Sanitation and Nutrition Committees. Effective nutrition orientation for grass-root workers, PRIs, women's and youth groups would create an understanding about the importance of nutrition and their pivotal role in the prevention of malnutrition.

NUTRITION MONITORING AND SURVEILLANCE SYSTEMS

23.285. Effective monitoring of national nutrition programmes requires both monitoring and assessment of processes and outcomes. A responsive and dynamic Nutrition Surveillance System (NSS) will be put in place in order to capture nutrition related information. It would help assess the current situation, analyse the causes/reasons of the problem and based on the analysis and available resources, suggest solutions to improve the situation. It would provide information on nutritional practices of vulnerable

groups including SCs, STs, and Minorities being reached under ICDS, NRHM and related programmes of different sectors, keeping in view the multi-factorial nature of nutrition. It would take the following measures in a synergistic manner to achieve optimal results:

- The critical indicators of maternal, infant and child care and nutrition will be constantly monitored to ensure better young child survival, nutrition and development, in case of each mother-child cohort tracked, with the aid of Mother and Child Protection Card, linked to the NSS network and to the NRHM Mother-Child Cohort Tracking System.
- The Kishori card being linked to the NSS database will ensure better health and nutrition among adolescent girls, through consistent data inputs on BMI and IFA intervention.
- Baseline Surveys of nutrition and health related indicators of children under six years of age, adolescent girls and women will be undertaken by all States/UTs before the commencement of XII Five Year Plan. The support of Technical Institutions like NIN, Medical Colleges and Home Science Colleges, to establish the benchmark of nutrition indicators for the National NSS and Database is crucial. This will complement planned AHS, DLHS and NHFS surveys.
- The Geographical Information System (GIS) Mapping will be used to generate data at the Anganwadi level for monitoring at Block/District levels. The National Nutrition Database for National Nutrition Surveillance and policy inputs will provide support.
- It will help in mapping of undernourished endemic zones of the country in terms of identifying districts and terming them as 'high risk and vulnerable districts'. Special focus within National NSS will be on household food security in difficult survival environments like remote, hilly, tribal and drought prone areas, deserts, BPL populations, different socio religious groups, and so on.
- Central Monitoring Unit (CMU) set-up under ICDS will be utilized for NSS as well as for a

comprehensive, non-repetitive assessment and correction of the field situation.

CONCLUSION

23.286. The Twelfth Plan seeks to make the fulfillment of women's rights an inalienable condition to achievement of rapid and sustainable economic growth. According the highest priority to ending gender based inequities, discrimination and violence faced by girls and women is the prerequisite to the objective of the Plan. Fulfilling children's rights to survival, development, protection and participation is a critical development imperative that must be realised in the Twelfth Plan. Linking with the approach to Universal Health Care, converging the health, child care and education systems, ensuring a continuum of care and development, the Twelfth Plan strategy for inclusive development is unique.

23.287. The Twelfth Plan reiterates that Nutrition is crucial for the fulfillment of human rights—especially those of the most vulnerable children, girls and women, locked in an inter-generational cycle of multiple deprivations. Critical priority is accorded to prevent under-nutrition as early as possible, across the life cycle, to avert irreversible cumulative growth and development deficits that compromise maternal, child and adolescent health and survival, achievement of optimal learning outcomes in education and gender equality. It is envisaged that this synergy of multi-sectoral action, led by panchayats in partnership with communities—will enable the Twelfth Plan to realise our vision of Nutrition Security for all for faster, more inclusive and sustainable growth.

23.288. Convergent action will make the defining difference to the lives of children and women—especially for reaching the most vulnerable among them. It will translate Twelfth Plan commitments into effective policies and programmes that touch the lives of women and children—in the families and communities, where they live, grow and develop.

23.289. The total outlay for the Women and Child Development Sector (including Nutrition) is ₹1,17,707 crore which includes an outlay of ₹1,08,503 crore for the ICDS flagship programme.

A Call for Multisectoral Action for Children and Women

Indicative Action

1. Ministry of Women and Child Development

- Lead and convene Multi-sectoral Action for Children, Women and Nutrition with multi-sectoral commitments to Children embodied in the Results Framework Documents and Five year Strategic Plans of concerned ministries, Programme Implementation Plans and reviewed.
- Mainstream the rights based approach and gender perspective in Policies and Programmes.
- Harmonization of child-related legislative provisions and child-sensitive jurisprudence.
- Updation of the National Policy For Children in harmony with the Twelfth Plan and National Policy for Nutrition.
- Development and implementation of National/State/District Plans of Action for Children, with monitorable outcomes, based on the updated policy, building on the Twelfth Plan.
- Focused interventions to improve the Child Sex Ratio, within an overall National Strategy for Care and Protection of the Girl Child and longer term interventions for gender equality.
- Designing a strategic approach to respond holistically to the emerging needs of children of excluded socio-religious community groups such as SC, ST, particularly vulnerable tribal groups, Minorities, other disadvantaged communities, including urban poor communities.
- Development of National ECCE Policy, curricular framework and standards.
- ICDS Restructuring as per framework evolved.
- Strengthening the early care, development and learning continuum.
- Strengthening the protective environment for all children—with a focus on prevention of vulnerability to abuse and exploitation, including in conflict and disturbed areas.
- Ensuring fulfillment of children's rights to achieve full development potential and quality education-including the one in ten differently-abled child.
- Institutionalizing child participation through incorporation of children's views into mainstream policy and programme formulation, implementation and monitoring processes.
- Valuing and recognizing the work of AWWs and AWHs—demonstrating the commitment to gender equality that is being advocated.
- Strengthening institutional capacity and partnerships between government sectors, civil society, panchayati raj institutions, families and communities for fulfilling children's rights.
- State and district level nutrition multi-sectoral action plan framework for 200 high burden districts, especially linking with NRHM 264 high focus districts.
- State and District level Nutrition Councils to be set up in the above, along with inter-departmental coordination committees, thematic working groups.
- Institute mechanisms to ensure that infant and young child feeding and nutritional support interventions are free from commercial influence and conflict of interest.
- Roll out of RGSEAG SABLA and IGMSY, with an evaluation framework, with likely scaling up of IGMSY, as linked to the Draft National Food Security Bill 2011.
- Mandating an Impact Assessment of relevant sectoral policies and programmes on children as a part of the Mid Term Appraisal of the Twelfth Plan.

2. Ministry of Health and Family Welfare

- Progressively move towards universal health and child care; enhancing efforts to address the persistently high levels of mortality, morbidity and under-nutrition across the life cycle, focusing on addressing maternal, neonatal, infant and child mortality and malnutrition.
- Reduce regional disparities; address the inter-generational cycle of poor health, under-nutrition and gender discrimination faced by girls and women.
- Ensure universality with quality and inclusion of the most vulnerable and deprived communities, women and children—such as SC, ST, particularly vulnerable tribal groups, minorities and others.
- Improve efficiency, effectiveness and accountability of health care, especially women and child care delivery systems, and increase community and women's ownership of delivery systems.
- Address adolescent health holistically—with skilled counseling support at drop-in clinics in identified health facilities. This will also affect issues related to mental health, substance abuse, living in insecure environments and preventing and addressing HIV/AIDs.

- Address the adverse and steeply declining child sex ratio through a multi-layered approach, responsive to different state/city/district contexts.
- Proactively address gender differentials in infant and under five child mortality rates—especially in states where this is high or increasing, using the Mother Child Tracking System.
- Set up necessary health infrastructure for ensuring maternal and child care, emergency obstetric care, sick newborn care, referral support and child care corners in health facilities and ensure that progressively all maternity facilities are “baby friendly”.
- Position Nutrition Status of children under 3 years as a lead progress indicator of NRHM.
- Strengthen the Nutrition component of NRHM PIPs—especially in 264 NRHM high focus districts, in synergy with 200 high burden districts identified for multi-sectoral nutrition action.
- Utilise VHNDs, antenatal care, institutional delivery (JSY) and immunisation contact points with mothers and infants for strengthening nutrition interventions.
- Strengthen NRHM Village Health Sanitation and Nutrition Committees as sub committees of panchayats and strengthen such linkages similarly at block, district and state levels.
- Ensure timely and complete Universal Immunisation and improve the prevention and management of common neonatal and childhood illnesses such as diarrhoea and acute respiratory infections, which impact significantly on Child Nutrition.
- Strengthen the implementation of programmes addressing Micro-nutrient Malnutrition (including Vitamin A Deficiency, Anaemia and Iodine Deficiency Disorders) including the use of Double Fortified Salt in government feeding programmes.
- Create National/State Resource Centres or Centres for Excellence for Maternal and Child Health Nutrition within existing institutions and/or in partnership with professional networks.
- Ensure that Health Surveys provide timely quality national, state and district level data on nutrition status (anthropometric indices) and micro-nutrient status for the effective monitoring of key nutrition outcomes.

3. Ministry of Human Resource Development: Department of School Education and Literacy

- Provide free and compulsory education to all children at elementary level as envisaged under RTE Act 2009.
- Ensure Universal Access to quality school (elementary and secondary) and adult education.
- Ensure Equity—inclusion of disadvantaged and more vulnerable community groups such as SCs, STs, minorities and vulnerable child groups such as first generation learners, children with different abilities.
- Strengthen education infrastructure and institutional capacity in districts with a high concentration of vulnerable groups such as in Tribal sub plan areas, Minority concentrated districts linked to MSDP and so on.
- Strengthen initiatives focused on the girl child and women such as KGBV, NPGEL, linked to longer term interventions for gender equality.
- Ensure Quality and improve standards of education—also making it child friendly and gender sensitive.
- Strengthening the protective environment for all children—with a focus on prevention of vulnerability to abuse and exploitation.
- Introducing Child Tracking systems especially in left wing extremism affected areas—helping retain children in school and bringing them back to school.
- Linking with Ministry of Labour to address Child Labour holistically.
- Establish linkages with RGSEAG, for addressing under-nutrition and anaemia in both out-of-school and school going adolescent girls, also giving out-of-school girls a second chance.
- Strengthen ICDS convergence and linkages with primary schools for supporting the early care, development and learning continuum, synchronization of timings/location of AWCs, where feasible and appropriate. This will also provide child care support, releasing girls from the burden of sibling care to be retained in schools.
- Strengthen linkages of ICDS SNP with Midday Meals in schools and specific piloting of community kitchens in innovative models within the 200 high burden districts initiative.
- Strengthening of gender sensitive, child friendly concepts and nutrition education components in school curriculum and Sakshar Bharat.
- Mandate assessment of “inclusiveness of the most vulnerable child groups” in sectoral reviews and missions.

4. Ministry of Agriculture

- Strengthen improvement in food and nutrition security for children, women and their families through improved agricultural productivity, better cropping patterns, improved procurement and distribution, the National Food Security Mission, National Horticulture Mission (NHM) and Horticulture Mission for North East and Himalayan States (HMNEH).

- Strengthen convergence of Rashtriya Krishi Vikas Yojana with other schemes such as MGNREGA, BRGF, SGSY for improving livelihood and food security of nutritionally vulnerable groups to improve social protection of children and women.
- Support for kitchen gardens in AWCs as village demonstration sites.

5. Ministry of Consumer Affairs, Food and Public Distribution

- Expedite finalisation of draft National Food Security Act, with other sectors, thereby enhancing social protection to women and children of the families covered.
- Include universal maternity protection within the purview of the same—impacting directly upon maternal and infant nutrition and care.
- Ensure food and nutrition security at the household level by making the essential food grains (rice, wheat, and coarse grains), edible oils and sugar available through the Targeted Public Distribution System.
- Effective implementation of TPDS along with reform measures, tools/measures for strengthened monitoring, on an ongoing basis.
- Support for piloting of community grain banks in high burden districts, based on district plans in identified 200 high burden districts.

6. Ministry of Food Processing Industries

- Promote processing of locally available nutritious foods through training of women's SHGs/Federations (564 FPTCs in 2010–11) and use this for nutrition communication.
- Cater to cluster development for nutritious food preparation.
- Enable women's SHGs to become nutrition educators and change nutrition related behaviour within their own families and communities.

7. Ministry of Rural Development

- Engender major flagship programmes such as MGNREGA and make them more child friendly (as detailed earlier) for ensuring social protection. For example by increasing the participation of women, introduction of more women friendly activities, technologies and tools, ensuring equal remuneration for equal work, (with greater responsiveness to older women or those with challenging health conditions or during pregnancy and lactation).
- Improve livelihoods and strengthen social protection for families, their women and children through MGNREGA, SGSY/NRLM.
- Create institutional capacity for incorporating gender and child related concerns in training, programme management and monitoring—such as by creating Women and Child Resource Units in SIRDs.
- Provide social assistance to the elderly and widows with empathy and dignity.
- Strengthen implementation of the enabling provisions for women, maternal and child care under MGNREGA, with piloting of crèches cum AWCs in remote and tribal areas.
- Amendment of MGNREGA guidelines to include greater diversity of work and AWC construction as a permissible work.
- Encourage use of BRGF funds for strengthening nutrition interventions, AWC and HSC construction.
- Integrate concerns for gender, children and nutrition in the training of programme managers, functionaries and women's SHGs.
- Link Women's SHGs/NRLM with provision of SNP in ICDS where locally feasible.
- Mandate Gender assessment as an integral part of all programme reviews and fora.

8. Ministry of Drinking Water and Sanitation

- Progressively ensure provision of toilets and safe drinking water supply in all AWCs. HSCs and schools, including measures for ensuring water quality. Separate toilets for girls in schools with requisite facilities to be promoted.
- Ensure that women's work sites and sites used by adolescent girls are covered with appropriate facilities.
- Ensure involvement of women and Village Health Water Sanitation and Nutrition Committees in micro-planning and decision on location of facilities.
- Cover AWCs running in rented premises with toilets through TSC revolving fund or enhanced rent and for covering all AWCs in govt./community/public buildings with drinking water facilities, as facilitated also by new MGNREGA guidelines.
- Strengthen IEC component for both NRDWP and TSC to be more child friendly with children as protectors of the environment and change leaders in their communities. Hygiene improvement under TSC to be better integrated with other IEC campaigns.

- Training and IEC activities under TSC, NRDWP, NRHM and ICDS to be linked and coordinated, including training of Village Health Water Sanitation and Nutrition Committees.

9. Ministry of Panchayati Raj

- Support States in the effective devolution of powers to PRI s-funds, functions and functionaries, as Women and Child Development is a part of the Eleventh Schedule (Article 243 G) of the 73rd Constitutional Amendment.
- Enable States to implement 50 per cent reservation for women in PRIs, with requisite support for capacity development.
- Build on work initiated to recognize and incentivize panchayats that improve the Child Sex Ratio through additional flexible resources.
- Institute Rashtriya Gaurav Gram Sabha Awards for the above.
- Mainstream Nutrition in the training of PRIs—especially Women panchayat members for malnutrition free panchayats, earmarking certain wards to them.
- Support the development of innovative district models run by PRIs within the 200 high burden districts initiative.
- Share best practices to support the devolution of powers related to nutrition programmes—to PRIs in all states.
- Special Gram Sabha meetings dedicated to Nutrition and also to the Girl Child in every gram sabha and with Mahila Sabhas being constituted.
- Especially in disturbed and other special areas Gram panchayats should be the actual delivery agency for PDS of food grains; Ward Sabha and Ward members should take up issues of absentee school teachers, dropout children and missing children—including girls. Supervision and monitoring to be led by gram panchayat or its sub committee.
- States which do not have gram panchayats like bodies should constitute the same.
- Ensure that the proposed Rajiv Gandhi Panchayati Sashaktikaran Abhiyan integrates concerns for gender and children in the training curriculum/packages being envisaged and those institutions that train PRI members include faculty resources on Gender and Children.
- Move towards the concept of ‘Women and Child Friendly Panchayats’ where the rights of children and women are protected and end violence against children, girls and women.

10. Ministry of Housing and Urban Poverty Alleviation

- Allocation of land/building for AWC especially in urban poor settlements.
- Inclusion of nutrition safety nets in resettlement plans for migrant and unrecognized urban poor groups.
- Support the development of innovative city model/s run by ULBs within the 200 high burden districts initiative, linked to JNNURM.
- Piloting of community canteens for urban poor, based on plans.
- Actions to be effected through State Governments, as Urban Water Supply and Sanitation is a State Subject and a function of the Urban local bodies.

11. Ministry of Urban Development

- City planning to also be made child friendly—as a key indicator of good governance.
- Replicate with urban local bodies what the Ministry of Panchayati Raj has done with PRIs.
- Inclusion of child care as a ‘basic service’ which cannot be denied to communities living in unrecognized urban poor areas—with no legitimacy or security of tenure.
- Progressively ensure access to health care, education, skill development, livelihoods for urban poor families with social protection for women and children and physical amenities like potable water supply, sewerage, sanitation and drainage for all.
- Nutrition related concerns to be integrated in the second phase of JNURM with the incorporation of child-friendly criteria.

12. Ministry of Social Justice and Empowerment

- Ensure that priority is accorded to concerns for children and women of the specific community groups addressed (that is Scheduled Castes, OBCs) within the different schemes.
- Ensure gender disaggregated tracking of beneficiary oriented programmes for SCs, others.
- Constitute a multi-sectoral National Task Force on Childhood Disability—prevention, early detection, intervention, community-based management, rehabilitation and inclusion, including civil society and parent networks.
- Set up Childhood Disability Resource Centres in relevant National Institutes such as NIMH, NIHH, NIOH, NIVH, in key national/state institutions responsible for training NRHM, ICDS and SSA personnel and development of core training modules for integration in respective training programmes.

- Enable relevant flagship programmes to include specific earmarked allocations for reaching out to and including children with special needs, as was initiated with Sarva Shiksha Abhiyan.
- Special interventions to be taken up for children subjected to substance abuse and with multiple vulnerabilities to violence and exploitation.
- Strengthen nutrition interventions in existing MSJE schemes, with appropriate budgetary allocation MSJE may obtain technical advice and engage with technical institutions such as NIN, FNB on the quality and nutritional value of food being provided in institutions.
- Piloting of community destitute feeding centres, based on district plans.

13. Ministry of Labour and Employment

- Amend the Child Labour (Prohibition and Regulation) Act in line with the RTE.
- Ensure that provisions of relevant legislations are implemented for women.
- Address support for women working in the unrecognized sector and recognize 'unrecognized care economy'.
- Strengthen implementation of provisions for maternity protection and child care support.
- Undertake review relating to provisions for special target groups like women and children, seasonal/migrant labour to strengthen women and child care and nutrition related components.
- Strengthen implementation of Rashtriya Swasthya Beema Yojana and also use RSBY cards as an opportunity for nutrition education/IEC to BPL families.

14. Ministry of Information and Broadcasting

- Ensure normative standards are in place so that media and internet material/usage is gender and child sensitive.
- Facilitate a nationwide IEC and intensive media campaign along with MoWCD.
- Review of Up linking/Down linking guidelines 2005 to consider making it mandatory for the private satellite television channels to carry advertisements/public messages in the public interest.
- Allocate free time for communicating nutrition messages during the prime time on Doordarshan.
- Facilitate use of Community Radio Services for conveying important messages on health.

15. Ministry of Tribal Affairs

- Ensure that priority is accorded to concerns for children and women of the specific community groups addressed (that is Scheduled Tribes) within the different schemes.
- Nutrition interventions for Tribal Areas to be reflected as a part of Tribal Sub Plan—especially in selected high burden districts.
- Special focus to be given to PTGs (particularly vulnerable tribal groups).
- Construction of AWCs as a comprehensive mother and child care centre, and HSCs to be funded from Tribal Sub Plan—especially in LWE areas with large infrastructure gaps.
- Engage with technical institutions, such as NIN, FNB on the quality of food and their nutritional value being provided in institutions being run under the Ministry.

16. Ministry of Minority Affairs

- Ensure that priority is accorded to concerns for children and women of the specific community groups addressed (that is Minorities) within the different schemes.
- Incentivisation of sectors, States and panchayats where social inclusion indicators related to children of socio religious communities—including minorities—improve, with peer learning/motivation through sharing of best practices, within and across States/Districts.
- Specific interventions for girls education and skill development to be accelerated in MSDP, with study centres at community level—with inclusion.
- Ensure disaggregated tracking of beneficiary oriented flagship programmes by beneficiary group (Minorities) and gender so that multiple vulnerabilities are addressed.
- Construction of physical infrastructure for Anganwadi services and Health care services under MSDP.

17. Ministry of Environment and Forests

- Capacity Development (through schools, colleges) of children as protectors of the environment.
- Inclusion of nutrition safety nets in resettlement plans for displaced populations.
- Review and strengthen steps for enhancing nutritional security through improved forest/crop diversification and environmental security.

18. Ministry of Youth Affairs

- Mobilise youth groups for communication campaigns related to nutrition and the girl child.
- Strengthen youth groups for supporting malnutrition free panchayats/communities through training/orientation.

19. Ministry of Statistics and Programme Implementation

- Institutionalize disaggregated tracking of key monitorable targets and progress of beneficiary oriented flagship programmes by community groups and gender to ensure social inclusion.
- Share best practices/examples of the use of MPLADs funds for addressing the child sex ratio and for nutrition interventions, AWC construction and so on.
- Position nutrition status of children under 3 years as a lead progress indicator for reviews at national/state/division/district levels, for relevant sectors.

20. Ministry of Home Affairs

- To ensure a safe and secure environment for children, women and their communities, with the implementation of various provisions for security, and anti trafficking.
- Ensuring gender-sensitive and child-friendly law enforcement institutions and mechanisms.

Social Inclusion

INTRODUCTION

24.1. Planning has traditionally focused on the need to provide special support to historically disadvantaged groups. The Scheduled Castes (SCs) and Scheduled Tribes (STs), have a special status under the Constitution. Other disadvantaged groups needing special support are Other Backward Classes (OBCs), Minorities and also other marginalised and vulnerable groups which suffer from handicaps such as Persons with Disabilities, senior citizens, street children, beggars and victims of substance abuse.

24.2. Across social groups, the incidence of poverty has been most pronounced among the SCs and STs (Table 24.1). Even though the incidence of poverty among these groups has declined over the years, the headcount ratio (HCR) for SCs and STs remains higher than the national average. However, it is encouraging to note from recent poverty estimates that poverty has declined at an accelerated rate between

2004–05 and 2009–10 for SCs and STs. The annual rate of decline of HCR for SCs and STs in the period between 2004–05 and 2009–10 has been higher than the overall annual rate of decline of HCR. For SCs, the annual rate of decline accelerated sharply from 0.80 percentage points per annum in the period between 1993–94 and 2004–05 to 2.25 percentage points per annum in the period between 2004–05 and 2009–10. The annual pace of poverty reduction amongst STs was disappointingly low in the period between 1993–94 and 2004–05 (0.34 percentage points per annum). However, in the period between 2004–05 and 2009–10, the annual rate of decline increased steeply to 2.98 percentage points per annum, exceeding the pace of overall poverty reduction.

24.3. Over the years several steps have been taken to bridge the gap between these marginalised groups and the rest of the population. But gaps still persist and further efforts are needed. The social justice

TABLE 24.1
Incidence of Poverty across Social Groups

Social Group	RURAL					URBAN				
	Headcount Ratio			Annual Rate of Decline		Headcount Ratio			Annual Rate of Decline	
	1993–94	2004–05	2009–10	1993–94 to 2004–05	2004–05 to 2009–10	1993–94	2004–05	2009–10	1993–94 to 2004–05	2004–05 to 2009–10
SC	62.28	53.53	42.26	0.80	2.25	51.16	40.56	34.11	0.96	1.29
ST	66.02	62.28	47.37	0.34	2.98	39.46	35.52	30.38	0.36	1.03
All India	50.19	41.79	33.8	0.76	1.60	31.45	25.68	20.9	0.52	0.96

Source: Planning Commission.

objectives of the Twelfth Plan can be achieved with full participation in the benefits of development on the part of all these groups. This calls for an inclusive growth process which provides opportunities for all to participate in the growth process combined with schemes that would either deliver benefits directly or more importantly help these groups to benefit from the opportunities thrown up by the general development process.

24.4. This Chapter reviews the efforts made by the Government for the socio-economic development of each of these disadvantaged groups in the Eleventh Plan and presents the new initiatives that will be taken during the Twelfth Five Year Plan period (2012–17) towards their empowerment.

24.5. The Eleventh Five Year Plan (2007–12) adopted a three pronged strategy:

1. Social Empowerment—removing existing and persisting inequalities besides providing easy access to basic minimum services with a top priority assigned to education as the key factor in social development;
2. Economic Empowerment—promoting employment-cum-income generation activities with an ultimate objective of making them economically independent and self-reliant; and
3. Social Justice—striving to eliminate all types of discrimination with the strength of legislative support, affirmative action, awareness generation and change in the mind-set of the people.

24.6. The effectiveness of this strategy in terms of the results achieved and implications for the Twelfth Plan are discussed for each group in turn.

SCHEDULED CASTES (SCs)

24.7. The Scheduled Caste population constituted 16.2 per cent of the total population in census 2001 and has increased marginally around 16.9 per cent in census 2011. People belonging to SC communities, by and large, are spread all over the country, with about 80 per cent of them living in the rural areas. Around half of the SC population is concentrated in the five States of Uttar Pradesh, West Bengal, Tamil

Nadu, Andhra Pradesh and Bihar. Recognising that the Scheduled Castes have historically suffered grave social disabilities and educational and economic deprivation, the Constitution provides special provision for advancement of their interests.

Scheduled Caste Development: An Overview

Education

24.8. Expansion in education in general was a major thrust of the Eleventh Plan and this was accompanied by several schemes aimed specifically at educational development among SCs especially women and girl children. The 7 individual scholarship type schemes are described below. The allocation and expenditure in each scheme in the Eleventh Plan is presented in Table 24.2.

TABLE 24.2
Eleventh Plan Allocation and Expenditure for Special Schemes for SCs

	(₹ in crores)	
	Allocation	Expenditure
1. Post Matric Scholarship	4,082.00	7,344.93
2. Pre-Matric Scholarship to those engaged in Unclean occupations	200.00	264.25
3. Top Class Education for SC Students	204.00	44.36
4. National Overseas Scholarship Scheme	125.00	18.32
5. Rajiv Gandhi National Fellowship	574.70	518.98
6. Upgradation of Merit	10.00	10.74
7. Scheme of Free Coaching	43.00	27.09
8. Total	5,238.70	8,228.67

Source: Ministry of Social Justice and Empowerment.

Post Matric Scholarship

24.9. This is the single largest intervention by the Government of India for educational empowerment of SCs. It provides scholarships to about 48 lakh SC students for pursuing higher education in various courses beyond matriculation. Under the scheme, 100 per cent Central assistance is provided to States/UTs over and above their committed liability except

for North-East States where committed liability is not applicable to them. The Scheme was revised in December 2010. In addition to increasing the rate of scholarship the income ceiling of parents whose children would be eligible to avail the scholarship was raised from ₹1.00 lakh to ₹2.00 lakh per annum.

Pre-Matric Scholarship to Children of those engaged in Unclean Occupations

24.10. This scheme, being implemented since 1977–78, provides financial assistance to children of manual scavengers, tanners, flayers and sweepers who have traditional link with scavenging, to enable them to pursue pre-matric education. The scheme was revised in 2008 changing the Central share from 50 per cent to 100 per cent over and above the committed liability and increase in the rate of scholarships. Scholarship @ of ₹110 per month is provided under the scheme to children studying in classes I to X. In addition, ad-hoc grant of ₹750 per annum is also provided to these children. However, children studying in classes III to X and staying in hostels are provided scholarship @ of ₹700 per month and also ad-hoc grant of ₹1,000 per annum. About 7 lakh children benefit under the scheme annually.

Top Class Education for SC students

24.11. This scheme aims to promote quality education amongst SC students, by providing full financial support for pursuing studies beyond 12th class in premier institutions of the country. The maximum number of slots for new scholarships each year is 1,250. Scholarships are granted to the students studying in 205 premier institutions for pursuing 182 courses including Engineering, Medical/Dentistry, Law, Management and other Specialised Streams. SC students who secure admission in the notified institutions (according to the norms prescribed by the respective institutions) and whose total family income is ₹4.5 lakh (recently revised upwards from ₹2 lakh), are eligible for the scholarship.

National Overseas Scholarship Scheme (NOS)

24.12. Under the Scheme, scholarships are provided to selected students for pursuing higher studies for Master level courses and Ph.D programme

in specified fields. Until 2009–10, this scheme was restricted to the fields of engineering, technology and science only but in 2010–11, the scope was broadened by including additional disciplines, including medicine, agricultural science and management. A total of 30 scholarships are awarded annually under the scheme, with 9 scholarships (30 per cent) earmarked for women candidates. The scheme provides for fees charged by institutions, monthly maintenance allowance, passage and visa fee, contingency allowance and so on. The scholarship is awarded to those candidates who are not more than 35 years of age and whose parental/guardian's income is not more than ₹25,000 per month.

Rajiv Gandhi National Fellowships (RGNF)

24.13. The Scheme was launched in 2005–06 as a special incentive to extend scholarships to SC students to pursue higher studies and research degrees such as M. Phil and Ph.D. The scheme is implemented through University Grants Commission (UGC) and the benefits are comparable to Junior Research Fellowships (JRF) and Senior Research Fellowships (SRF) of UGC. The Scheme was revised in 2010–11 and the number of fellowships has been increased from 1,333 to 2,000 to benefit more SC students. The income ceiling for availing the Scholarship is ₹3.00 lakh per annum.

Upgradation of Merit

24.14. This scheme has been in operation since 1987–88 and provides funds to educational institutions for conducting remedial and special coaching to SC students in Class IX to XII so that their merit is upgraded into professional and technical courses.

Central Sector Scheme of Free Coaching

24.15. The scheme, being implemented since Sixth Five Year Plan, provides coaching to students belonging to Scheduled Castes and those coming from socially and economically disadvantaged sections to sit for competitive examinations. The examinations cover Group A and Group B categories in the Central/State Governments, Officers grade examinations for PSUs, Banks, and so on and soft skill development programmes for employment in private sector covering areas like call centres, BPO,

retail management, information technology, and so on. The income ceiling under the Scheme is ₹2.00 lakh per annum. The scheme was revised in April 2007. The outlay for the Scheme in Eleventh Plan was ₹43.00 crore and the likely expenditure is of the order of ₹27.09 crore benefitting around 19,500 individuals.

Babu Jagjivan Ram Chhatravas Yojana (BJRCY)

24.16. The objective of the Scheme launched in 1963–64 (and renamed subsequently as Babu Jagjivan Ram Chhatravas Yojana w.e.f 01.01.2008) is to reduce the high dropouts and to increase the retention rates amongst SC students. Facilities in the form of hostels for SC boys and girls are provided, to pursue studies from middle school to the university level. Central assistance is provided for construction of hostel buildings on matching basis (50:50) to States and 100 per cent to UTs and 100 per cent to States for SC Girls Hostels (since 2007–08). 98 girls' hostels were constructed covering 6,379 beneficiaries and 125 boys' hostels were constructed covering 9,603 beneficiaries during the period, 2008–09 to 2010–11.

Economic Development

24.17. Economic empowerment of SCs is an important mechanism for achieving inclusion and education is obviously a key element of economic empowerment, but in addition, this objective is achieved through various programmes for economic support for SCs with a focused attention on women, manual scavengers and most backward communities. Review of the implementation of major schemes for economic development of SCs is presented below:

National Scheduled Castes Finance and Development Corporation (NSFDC)

24.18. NSFDC was set up in 1989. It provides financial and other support to beneficiaries for taking up various income generating activities. The Corporation has introduced an Education Loan Scheme since December, 2009. The authorised share capital of NSFDC is ₹1,000 crore and cumulative share capital is ₹676.80 crore. As on 31.3.2012, the Corporation has disbursed ₹2,302.91 crore benefitting 7.95 lakh SCs.

State Scheduled Castes Development Corporations

24.19. The Scheme of State Scheduled Castes Development Corporation (SCDC) was launched in 1979 with an objective of participating in the equity share of the Scheduled Castes Development Corporation (SCDC) in the ratio of 49:51 (49 per cent by MSJE and 51 per cent by the respective State Governments). The main function of SCDC include identification of eligible SC families and motivating them to undertake economic development scheme, sponsoring the schemes to financial institutions for credit support, providing financial assistance in the form of margin money at low interest rates and subsidy in order to reduce repayment liability and providing necessary tie up with other poverty alleviation programmes. SCDCs finance employment-oriented schemes and cover agriculture and allied activities including minor irrigation; small scale industry; transport and trade and services.

24.20. The NSCFDC and NSKFDC continue to depend only upon governmental funding, whereas they are expected to work as independent financial supporting mechanism with a social mandate. This raises a question regarding the viability of economic activities identified by the Corporation. On the whole, there is a need to restructure the Scheme so that these Corporations become financially more viable and sustainable.

National Safai Karamcharis Finance and Development Corporation (NSKFDC)

24.21. NSKFDC was set up in 1997 with the aim to promote social and economic development of Safai Karamcharis by way of providing financial assistance at concessional rates of interest to promote self-employment in alternative occupations and scheme of skill development. The channelising agencies for identification of beneficiaries and disbursement of loans are the State Scheduled Caste Development Corporations (SCDC). No income ceiling is fixed under the Scheme for availing financial assistance. Priority is, however, accorded to economic development and rehabilitation of scavengers, whose income is below double the poverty line besides women and persons with disabilities among the target group.

Authorised share capital of the corporation was enhanced from ₹300 crore to ₹600 crore in January, 2012. Cumulative disbursements since incorporation of NSKFDC till 31.3.2012 are ₹724.24 crore which benefitted 2.31 lakh beneficiaries.

Pradhan Mantri Adarsh Gram Yojana (PMAGY)

24.22. This Centrally Sponsored Scheme was launched in March 2010 as a pilot scheme for integrated development of 1,000 SC majority villages. The scheme is presently being implemented in five States viz. Assam (100 villages), Bihar, Himachal Pradesh, Rajasthan and Tamil Nadu (225 villages each). The objective of the Scheme is to ensure integrated development of the selected 1,000 villages with more than 50 per cent SC population into 'model villages'. Integrated development of selected villages is to be achieved primarily through implementation of existing schemes of the Central and State Governments. Each village covered was provided with ₹10 lakh as the Central assistance which was raised to ₹20 lakh in 2011–12.

Other Important Schemes Benefiting SCs

24.23. Besides the programmes of the Ministry of Social Justice and Empowerment, there are various other programmes of the Government that are not targeted exclusively for the SCs but which benefit the SCs often in proportion which exceed their population share. Some of these programmes form part of 'Bharat Nirman' and include other flagship programmes such as Integrated Child Development Services, Sarva Shiksha Abhiyan, Mid-Day Meal, National Rural Health Mission and the Mahatma Gandhi National Rural Employment Guarantee Scheme and so on.

Elimination of Manual Scavenging and Rehabilitation of Manual Scavengers

24.24. Towards rehabilitating the manual scavengers and dependents, National Scheme for Liberation and Rehabilitation of Manual Scavengers (NSLRMS) has been in operation since 1992. A total of 7.70 lakh

manual scavengers are to be rehabilitated through NSLRMS. By the end of 2006, about 4.28 lakh beneficiaries were to be rehabilitated. Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS) was introduced in January, 2007 with the objective of rehabilitating the remaining 3.42 lakh manual scavengers and their dependents by March, 2009. Under the Scheme, identified beneficiaries are provided a loan, at subsidised rate of interest (4–6 per cent per annum) and credit linked upfront capital subsidy (@50 per cent of the project cost, for projects up to ₹25,000 and @ 25 per cent for projects above ₹25,000, with a minimum of ₹12,500 and maximum of ₹20,000) for setting up self-employment projects costing up to ₹5.00 lakh. The SRMS originally envisaged rehabilitation of all manual scavengers in alternative occupations by March 2009. Subsequently this deadline was extended up to March 2010. However, 16 States and 2 UTs reported the existence of 1,18,474 manual scavengers and their dependents, who were to be rehabilitated in alternative occupations till end-March 2010. All 18 States/UTs confirmed rehabilitation of all eligible and willing beneficiaries, identified by them.

24.25. 'The Prohibition of Employment as Manual Scavengers and their Rehabilitation Bill, 2012', has been introduced in the Parliament. Survey of Manual Scavengers in the rural areas is underway as a part of the Socio-economic Caste Census (Rural). Steps for a similar survey of manual Scavengers in the urban areas have been initiated. Steps have also been taken for the revision of the Self Employment Scheme for Manual Scavengers (SRMS).

Protection Measures

24.26. Two important protective legislations in operation for people belonging to SCs are (i) the Protection of Civil Rights Act, 1955 and (ii) the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989. Despite these protective legislations, atrocities and crimes committed against SCs, especially against

their women, have been reported in all parts of the country in varying degrees.

24.27. The Governments of Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh have identified certain atrocity prone areas in their respective States. State Governments have been specifically asked to carefully identify atrocity-prone areas and evolve special strategies as preventive measures, along with steps for their development including appropriate income generating beneficiary-oriented schemes, promotion of Self Help Groups especially for women and upgradation of infrastructure facilities like link roads.

Scheduled Castes: Strategy for the Twelfth Plan

24.28. The Twelfth Plan must strive harder to achieve the overall improvement in socio-economic conditions of the weaker sections by extending a well balanced prioritisation of efforts made for social development and economic empowerment based on the actual needs and problems of these communities. The principal goals for the Twelfth Plan, towards empowerment of the Scheduled Castes, will be:

1. To ensure the security and dignity of all persons belonging to the scheduled castes, especially women and put a complete end to all forms of 'untouchability' and discrimination against them.
2. To bring members of the SCs—both men and women—at par, to the maximum possible extent, with their non-SC/ST counterparts, in terms of all developmental indices viz.—education, health, nutrition, housing, income generation and employability.
3. To empower SCs to participate in society and in nation-building, on an equal basis with others.
4. To effectively implement SCSP as the essential instrument for accomplishing inclusive growth.

Education Development

- Education will continue to be the most important instrument to uplift the status of the SCs as it will help maximise the participation of SC students in

new economic opportunities. Access to and participation of SC students should be enhanced to ensure that they have access to quality education. Special efforts need to be made to promote educational development by providing needed support in the form of scholarships for different levels of education; increasing the hostel facilities for boys and girl students; upgradation of Anganwadis by including high-quality pre-school institutions with qualified teachers; setting up a network of residential schools of high quality throughout the country so that all SC girls and boys are covered by them and receive quality education up to Class XII; ensuring that SCs are able to secure full quota of reservation and also enter the merit quota in higher education; and revising the rates of scholarships every two years, based on increase in cost of living index or Consumer Price Index (CPI). The endeavour in the Twelfth Five Year Plan will be directed towards taking up the following steps:

- The Pre-matric scholarship scheme at present exists only for children of those engaged in manual scavenging. A new pre-matric scholarship scheme has been introduced for SC students studying in Class IX and X during 2012–13. This scheme needs to be extended to SC students studying in Class I to VIII during the remaining period of the XII Five Year Plan so that all the SC students from class I to X will start getting pre-matric scholarship by the terminal year of the Twelfth Plan. Special attention needs to be paid not only to retention in schools but also to provide the children with quality education through incentives like free supply of books, mid-day meals, hostels, and so on to SC children especially the SC girls.
- The scheme of Post-Matric Scholarships for SCs provides scholarships to SC students for pursuing higher education in various courses beyond matriculation. The scheme should also have the provision for a laptop or other suitable computing device for all SC students passing Xth or XIIth Board Examination by scoring the benchmarked higher percentage in the exams, as may be fixed.
- Rajiv Gandhi National Fellowship (RGNF) for SC was increased to 2,000 students in 2010–11. There is a need to further increase the number of these fellowships.

- The number of scholarships under the scheme of 'National Overseas Scholarship' needs to be increased substantially without any restriction as regards the field of study for which the scholarship would be available.
- SC students need to be encouraged more vigorously to prepare for various competitive examinations. 'Free coaching to the SC students' should be expanded to cover Premier Entrance Exams to professional institutions like IITs, JEE, AIEEE, CPMT, CLAT, CAT, and so on under the scheme of coaching for SC students. The scheme should be comprehensively revised to make it more beneficial to SC students. Upgradation of Soft/Communication Skills for SC students is a major challenge and should be addressed suitably.
- State Governments need to upgrade the hostels to a satisfactory level using funds provided by the Finance Commission and other agencies. It is envisaged to have additional Hostel capacity of 2 Lakh seats for SC students with a minimum of 50 per cent for SC girls. Central assistance to States/UTs for construction of boys hostels need to be increased appropriately. Babu Jagjivan Ram Chhatrawas Yojana will be revised so as to provide assistance for creating additional seats for SC students in integrated hostels too, besides for constructing hostels exclusively for SC students.
- Access to good quality schools/residential schools still remains much below the actual requirement for SC students, especially for SC girls. Various steps have been taken to universalise elementary education and increase the numbers of Navodaya Vidyalayas and Kasturba Gandhi Balika Vidyalayas, along with earmarking the stipulated reservation for SCs therein. However, the problem of limited access continues. Therefore, good quality residential schools for SC boys and girls need to be set up in blocks with high SC concentration so as to ensure that all meritorious SC girls and boys have access to such residential schools, as early as possible. The percentage of SCs in such schools should be at least 50 per cent.

Economic Development

24.29. Economic empowerment through employment and income generation programmes must be

given special emphasis in the Twelfth Plan. Various financial institutions viz., National Scheduled Caste Finance and Development Corporation (NSFDC), National Safai Karamcharis Finance and Development Corporation (NSKFDC) set up for promoting economic development among the respective target groups are facing major problems in channelising their funds through the States Channelising Agencies (SCAs). The loan recovery rates of these agencies are very low, but State Governments are not willing to provide the block guarantee required for advancing the loans. The national level Corporations need to consider alternative Agencies to channelise credit to SCs and Safai Karamcharis so as to meet their targets in all the States. Regarding equity support to Scheduled Castes Development Corporations (SCDCs), NSKFDC should assist at least one lakh beneficiaries under its various schemes during Twelfth Five Year Plan. A major focus should be on organising skill development programmes.

24.30. In order to implement economic development programmes with assured outcome as intended and to mobilise institutional credit at concessional rates, SCDCs need to focus on capacity building, network linking with micro-financing, risk sharing, risk mitigation and selection of viable economic ventures. Further, there is a need to devise effective mechanisms for recovery of loans to improve loan recovery. An element of professionalism in managing the SCDCs is also needed to be inculcated through continuous capacity building training of staff and computerisation. The operations of SCDCs are not economically viable at the existing rate of recovery to meet the cost of operations. Therefore, efforts need to be made to improve the functioning of SCDCs to enable them to function as viable and independent supporting financial mechanisms.

24.31. Landlessness amongst Scheduled Castes is much higher than in the non-SCs. Intensive efforts need to be made to distribute surplus government land to landless SC agricultural labourers in the rural areas. The land distribution needs to be completed in a time bound manner, so as to enable a larger number of landless SC families to improve their lot at the earliest.

24.32. Both the Central and State Governments implement various Schemes for the social and economic well-being of SCs. However, there is also a need for creating a National Fund to finance various innovative activities for their development which do not fall under any of the existing Schemes, for example development and training of talented SC artisans and artists. It would be desirable to have a National Fund for Innovative Development Activities for SCs—for supporting SC talent and potential in diverse areas, otherwise not covered under the existing Schemes. The Scheme may be implemented through National Scheduled Castes Finance and Development Corporation (NSFDC).

24.33. SC artisans and entrepreneurs face a serious problem in marketing their products. In the past, certain initiatives have been taken by the Ministry of Social Justice and Empowerment and the National Scheduled Castes Finance and Development Corporation to enable them to showcase and market their products by facilitating their participation in various fairs, exhibitions and so on. However, the ambit of such initiatives has been rather limited. There is, thus, a need to create a strong institutional mechanism to facilitate the SC entrepreneurs/artisans in marketing their products in an institutionalised manner. A National level organisation may be set up in the Twelfth Plan as a permanent marketing institution, on the lines of TRIFED, for marketing of products manufactured by Scheduled Caste entrepreneurs/artisans.

SCHEDULED TRIBES

24.34. The Scheduled Tribes (STs), with a population of 84.33 million as per 2001 Census constituted 8.2 per cent of the country's population. Unlike the SCs who are dispersed throughout the country, STs have traditionally been concentrated in about 15 per cent of the country's geographical areas, mainly forests, hills, undulating inaccessible areas. The fact that most of them live in isolated groups in relatively remote areas has made it more difficult to deliver essential services to them and has also made it much more difficult for them to benefit from the acceleration of overall growth than is the case with SCs. Out of the total ST population, 2.59 million (3.07 per cent)

belong to Particularly Vulnerable Tribal Groups (PVTGs) earlier referred to as Primitive Tribal Groups (PTGs). There are 75 identified PVTGs spread across 17 States/UTs.

Scheduled Tribe Development: An Overview

24.35. Because of the remoteness of location of most of the ST population, the extent to which they can benefit from general development programmes is more limited and the need for special programmes is greater than for SCs. The need for special efforts to ensure an adequate flow of benefits to the Scheduled Tribes has been recognised in all Plans beginning with the First Plan. Over time this strategy has evolved to a multi pronged strategy culminating in the objective enunciated in the Eleventh Plan that the benefits of inclusive growth must extend fully to the STs.

24.36. The Human Development Report 2011 of the Planning Commission candidly admits that though the consumption expenditure of Scheduled Tribes has been rising overtime, the rate of increase was lower than the all India average. Further, while there has been a divergence in Monthly Per Capita Consumption Expenditure (MPCE) from the national average for STs and Muslims during 1999–2000 and 2007–08, they are also diverging from the national average in terms of female malnutrition during 1998 from the national average in terms of female malnutrition during 1998–99 and 2005–06. Only one-third STs and around half of SCs reside in pucca houses compared to 66 per cent for all India. Over time, ST households, due to a slower pace in improvement have experienced a growing divergence from the national average of households residing in pucca houses.

24.37. Poor implementation of existing schemes in the tribal regions has meant that not only poverty continues at an exceptionally high levels in these regions, but the decline in poverty has been much slower here than in the entire country, as shown in Table 24.3.

24.38. Thus the gap has been steadily rising, with the result that between 1993–94 and 2004–05 the share of the tribals amongst the poor in the country increased

TABLE 24.3
Rural Population Living Below Poverty Line (1993–94, 1999–2000 and 2004–05) (in %)

Category	1993–94	1999–2000	2004–05
Total	50.19	27.09	41.79
STs	66.02	45.86	62.28
GAP	15.83	18.77	20.49

Source: PP Division, Planning Commission.

from 15.83 to 20.49 per cent. Lagging of scheduled tribes reflects the fact that geographical seclusion has limited their access to new self-employment opportunities and as labour supply has remained abundant in the remote villages with negligible out-migration, agricultural wages for this group did not grow to the same extent as they did for the scheduled castes.

24.39. Similar gaps continue between literacy levels and health indicators of STs and the general population and have widened over the years. The continuing gap between literacy levels of STs and the general population is shown in Table 24.4 and Table 24.5.

TABLE 24.4
Literacy Rates of STs and Total Population (in %)

Category	1971	1981	1991	2001
Total Population	29.45	36.23	52.21	65.38
Scheduled Tribes	11.30	16.35	29.60	47.10
GAP	18.15	19.88	22.61	18.28

Source: Ministry of Human Resource Development.

TABLE 24.5
Female Literacy Rates of STs and Total Population (in %)

Category	1971	1981	1991	2001
All	18.69	29.85	39.29	54.16
STs	4.85	8.04	18.19	34.76
GAP	13.84	21.81	21.10	19.40

Source: Ministry of Human Resource Development.

24.40. Thus the gap in literacy levels, both for tribal men and women, has not declined significantly despite the fact that the largest proportion of

centrally sponsored programmes for tribal development are related to the single sector of education. The gap would be wider if the north-eastern states are excluded from the above table, as education and health standards of tribals in that region are much above the national average. There are districts in India where the female literacy among adivasis is less than 10 per cent.

24.41. The dropout rate is a critical indicator reflecting lack of educational development and inability of a given social group to complete a specific level of education. In the case of tribals, dropout rates are still very high—31.33 per cent in Classes I to V; 58.3 per cent in Classes I to VIII; and 76.9 per cent in Classes I to X in 2008–09 (Source: Selected Educational Statistics 2008–09 of India, Ministry of Human Resource Development).

24.42. The 16th Joint Review Mission of the SSA done in 2012 notes with some concern that enrolment of SC and ST and Muslim children in the 6–14 population has reduced. Among the social categories, the enrolment rate is lowest among the scheduled tribes. As per DISE data, the enrolment of SC children has reduced from 19.81 per cent in 2009 to 19.06 per cent in 2010–11. Similarly enrolment for ST children for the same period has reduced from 10.93 per cent to 10.70 per cent. Reports of Monitoring Institutes also observed that there were noticeable gaps in learning achievement levels of SC, ST and Muslim children in almost all the states.

24.43. The health status of both SCs and STs are far worse than that of other sections of society. Since access to health care is limited for STs and SCs, barely 42 per cent of pregnant SCs could access a doctor for ante natal care and only 28 per cent could access an Auxiliary Midwife Nurse (AMN). But 64 per cent of others obtained ante natal care from a doctor. Again, since most STs live in remote rural areas, barely 18 per cent of all STs had deliveries in a health facility, compared to 51 per cent among other communities. There is, however, a failure of governance, which has multiple dimensions and is not confined to the inefficiency of the health delivery system only. See Table 24.6.

TABLE 24.6
Mortality and Undernutrition

Mortality and Undernutrition	SC	ST	Others
1 Child Mortality (per 1,000 live births)	83	84	62
2 Infant Mortality	39	46	22
3 Proportion (per cent) of Children with Anaemia	78	79	72
4 Proportion (per cent) of Underweight Children	21	26	14

Source: Planning Commission: NFHS 2005–06 Report.

24.44. Since most of the tribal habitations are located in isolated villages and hamlets in undulating plateau lands coinciding with forest areas, they have limited access to critical infrastructure facilities such as roads, communication, health, education, electricity, drinking water and so on. This widens the gap between the quality of their life and the people in the country.

Education Development

24.45. Education continued to receive high priority in the Eleventh Plan to facilitate educational development among STs by providing educational facilities, incentives and support especially focusing the ST girls. The expenditure in the Eleventh Plan, compared with the allocation is given in Table 24.7.

TABLE 24.7
Eleventh Plan Allocation and Expenditure for Special Schemes for STs

	₹ in Crores)	
	Allocation	Expenditure
1. Post Matric Scholarship	1,496.30	2,118.36
2. Hostels for ST girls/boys	272.96	322.00
3. Upgradation of Merit	*	5.28
4. Free Coaching for STs	300.00	229.76
5. Scholarship for Top Class Education	73.80	15.96
6. Ashram Schools	147.60	231.00
7. Strengthening Education among ST girls	298.75	162.05
Total	2,589.41	3,084.41

* Allocation included in Post matric Scholarship scheme

Source: Ministry of Tribal Affairs.

Post Matric Scholarship

24.46. The Post Matric Scholarship Scheme for ST Children is a centrally sponsored scheme providing financial assistance to the Scheduled Tribe students pursuing higher education beyond matriculation levels. The scholarships are awarded through the Government of the State/Union Territory where he/she is domiciled and 100 per cent Central assistance is provided to States/UTs over and above their committed liability. For North-East States committed liability is not applicable. The Scheme was revised in December, 2010. The income ceiling of parents for their children availing the scholarship has been raised from ₹1.00 lakh per annum to ₹2.00 Lakh. The Commercial Pilot License Course (CPL) is also included in the scheme and 10 Scholarships are to be given to the eligible ST students per year.

Hostels for ST Girls/Boys

24.47. The objective of the scheme is to facilitate ST students to continue their studies at distant places by extending hostel facilities to those who were otherwise unable to continue their studies due to remote location of their villages. The Eleventh Plan allocation for the hostels scheme was ₹272.96 crore. The scheme was revised on 1 April 2005 to provide 100 per cent funding for construction of hostels for both boys and girls in left wing extremism affected areas. Evaluation studies have pointed out that infrastructure facilities in most of the hostels are poor; maintenance of the buildings is also not up to the mark; and construction of hostel buildings is often hampered due to non-receipt of proper/complete proposals of the States. These problems need to be resolved in the Twelfth Plan.

Upgradation of Merit of ST Students

24.48. The objective of the scheme, which functions under the umbrella of the Post Matric Scholarship Studies, is to upgrade the merit of Scheduled Tribe students including PVTG students in classes IX to XII by providing them with facilities for all round development through education in residential schools so that they can compete with other students for admission to higher education courses and for senior administrative and technical occupations.

The Scheme was revised with effect from the financial year 2008–09. Under the Scheme, 100 per cent financial assistance is provided to the States and UTs for implementation of the scheme. A revised package grant of ₹19,500/- per student per year is provided from 2008–09 which includes the honorarium to be paid to the Principal or Experts imparting coaching and also to meet incidental charges. Coverage under the scheme reached to 1,053 ST students in the last year of the Eleventh Plan (2011–12).

Free Coaching for STs

24.49. The Scheme of Free Coaching for STs has been in operation since the Sixth Five Year Plan and provides free coaching to ST students to enhance their competitive capabilities to face various competitive examinations. Coaching is provided through State Governments/Universities/NGOs/private Coaching Institutes for competitive examinations of Group A and Group B categories in the Central/State Governments, Officers grade examinations for PSUs, Banks, and so on and soft skill development programmes for employment in private sector covering areas like call centres, BPO, retail management, information technology, and so on. Apart from coaching fee, stipend is also provided to the students @ ₹1,500/- per month for outstation students and ₹750/- per month for local students. The income ceiling under the scheme is ₹2.00 lakhs per annum.

Scholarships Scheme of Top Class Education

24.50. The Central Sector Scholarship scheme of Top Class Education for ST Students was launched in 2007–08. The scheme aims at promoting quality education amongst ST students, by providing full financial support for pursuing studies beyond XII class in premier institutions of the country. Maximum number of slots for new scholarships each year is 1,250. There are 125 institutes approved under the scheme in both the Government and private sectors covering the subjects of management, medicine, engineering, law and commercial courses. Physical coverage achieved under the scheme, is very poor as only 1,085 ST students are expected to have benefited through the scheme in the Eleventh Plan against the target of covering 10,105 beneficiaries.

Ashram Schools

24.51. The scheme of Ashram Schools in Tribal Sub Plan areas spread over in 22 States and 2 Union Territories has been operational since 1990–91 and was revised in 2008–09. The objective is to promote and extend educational facilities to Scheduled Tribe students including PVTGs in tune with their social and cultural milieu. Ashram Schools provide education with residential facilities in an environment conducive to learning. The State Governments are eligible for 100 per cent Central Share for construction of Girls' Ashram Schools and also for construction of Boys' Ashram Schools in left wing extremism affected areas. For the other Boys' Ashram Schools, the funding to State Government is on 50:50 basis. In case of UTs, the Central Government bears the entire cost of construction of both Boys' and Girls' Ashram Schools. Ashram Schools are regular schools having the same curriculum as prescribed by the State Board of Secondary Education. The expenditure incurred on construction of hostels was ₹231.00 crore exceeding the Eleventh Plan outlay of ₹147.60 crore. The physical achievement in terms of number of seats in the Ashram School indicates nearly 5 fold increase (49,334 seats) over the Eleventh Plan Target of 10,000 seats only.

24.52. A review of the implementation of the scheme reveals that delays in construction of school buildings affects the programme and prospects of aspiring ST students adversely. Several schools are reported to be poorly maintained with little or no infrastructural facilities. Unless basic facilities are provided in Ashram Schools, children will be discouraged from continuing in these schools and their focus on education and training will be adversely affected. It is also noticed that textbooks are either not provided or are provided quite late after the session has started which defeats the purpose for which the textbooks are supplied free of cost to these students. Ideally, books and teaching medium up to the primary level should be in tribal dialects to the extent possible and the teachers should also be drawn from local tribal communities.

Strengthening Education among ST Girls

24.53. The Scheme of Educational Complexes in the Low Literacy Pockets was revised in 2008–09 and renamed as Strengthening Education among ST Girls in Low Literacy Districts. The revised scheme is being implemented in 54 identified low literacy districts where the ST population is 25 per cent or more and ST female literacy rate is below 35 per cent. The revised scheme envisages convergence with Sarva Shiksha Abhiyan (SSA) and Kasturba Gandhi Balika Vidyalaya (KGBV) schemes of the Ministry of Human Resource Development (MHRD). It meets the requirement of primary-level students as well as middle/secondary-level students and provides residential facilities to ST girl students facilitating their retention in schools. Besides formal education, the scheme also takes care of skill upgradation of ST girls in various vocations. Establishment of the District Education Support Agency (DESA) is also taken up in each low literacy district, which is required to make efforts to ensure 100 per cent enrolment and also play the role of a monitor and facilitator and support linkages with various institutions.

Rajiv Gandhi National Fellowships

24.54. The scheme of Rajiv Gandhi National Fellowships (RGNF) was launched in 2005–06 as a special incentive to extend scholarships to ST students to pursue higher studies and research degrees such as M.Phil and Ph.D. The scheme is implemented through UGC and the benefits are comparable to JRF and SRF of UGC. The scheme was revised in 2010–11 and number of fellowships has been increased from 1,333 to 2,000 to benefit more ST students.

National Overseas Scholarship

24.55. The scheme of National Overseas Scholarship launched in 1954–55 was earlier implemented as a non-Plan scheme. In the year 2007–08 the scheme was converted to a Central Sector Plan scheme whereby financial assistance is provided to meritorious ST students for pursuing higher education abroad at the level of Masters and Ph.D. The scheme envisages awarding 30 overseas scholarships every year, of these, 30 per cent are earmarked for ST finalists. Grants are given to the selected candidates on

100 per cent basis directly by the Ministry through the Indian Missions. The Eleventh Plan target was to award 50 overseas scholarships to ST students. In the first four years of the Eleventh Plan, only 8 scholarships could be awarded (2 per year). 15 scholarships were envisaged in the year 2011–12. Specified field of study under the scheme have been revised for the selected year 2010–11 in order to broaden the scope and benefit more students, the disciplines like Medicine, Pure Sciences, Engineering, agricultural science and Management have been covered under the scheme.

Tribal Research Institutes

24.56. There are 17 Tribal Research Institutes (TRIs) located in various states and UTs conducting relevant research, student surveys and training and providing necessary inputs for formulating suitable policies and programmes. The potentialities of these institutions are not being harnessed fully. TRIs with their technical and professional manpower can be directed to take up action research participatory approach, especially with respect to PVTG development and livelihood programmes. In order to ensure coordinated efforts of these TRIs, it is necessary to designate a TRI as a nodal agency representing the respective region—East, West, South, North-East and Central. There are eight sub-schemes under the umbrella scheme of TRIs (Information Technology, Monetary Evaluation and so on).

Economic Empowerment

24.57. Economic development among the tribals largely depends upon agriculture and its allied activities. Besides, forest resources and minor forest produce contribute substantially to the tribal economy. Since more than one-fifth of the ST population depends on agriculture and forests, their ability to cope with the changing economic scenario, especially in taking advantage of the new economic avenues is minimal. This calls for capacity building in diversifying their livelihood sources. Economic empowerment of the STs is being promoted through implementation of various income and employment generating programmes focusing PVTGs. The details of the economic development programmes are given below:

National Scheduled Tribes Finance and Development Corporation

24.58. National Scheduled Tribes Finance and Development Corporation (NSTFDC) is a Government of India owned undertaking under the ministry of Tribal Affairs. It provides financial assistance for income generating schemes for the economic development of scheduled tribes. The broad objectives of NSTFDC are identification of economic activities of importance to the scheduled tribes so as to generate self-employment and raise their level of income, upgradation of skills and processes used by the scheduled tribes by providing both institutional and on the job training. The eleventh plan outlay under the scheme is ₹260 crore but no expenditure was made during annual plans of 2007–08 and 2009–10 and outlay of ₹70.00 crore has also been allocated for 2011–12. Although a target of about 7.56 lakh STs were envisaged to be benefitted through NSTFDC during eleventh plan, only 3.88 lakh could be covered.

Market Development of Tribal Products

24.59. Market Development of Tribal Products/Produce is a Central Sector Scheme under which the Ministry of Tribal Affairs extends Grant-in-Aid to Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) for four main activities: (i) Retail Marketing Development Activity; (ii) Minor Forest Produce (MFP) Marketing Development Activity; (iii) Vocational Training, Skill Up-gradation; and (iv) Capacity Building of ST Artisans and MFP; and Research and Development/Intellectual Property Rights (IPR) Activity.

24.60. TRIFED is now functioning both as a service provider and market developer for tribal products. Further, in its role as a capacity builder, it imparts training to ST Artisans and Minor Forest Produce (MFP) gatherers. TRIFED is marketing its products through 39 outlets (26 outlets are its own and 13 outlets are on a consignment basis in association with state-level organisations). During 2007–12, the turnover only through retail marketing activities was ₹36.96 crore.

Grants-in-aid to State Tribal Development Cooperative Corporations

24.61. The Central Sector Scheme Grants-in-Aid to State Tribal Development Cooperative Corporations (STDCCs) for Minor Forest Produce and so on for MFP Operations was launched in 1992–93 to help these State-level organisations. Grants-in-Aid are extended to these organisations under this Scheme for increasing the quantum of MFP handled by setting off operational losses; if need be; strengthening the share capital base of the Corporation for undertaking MFP operations thereby increasing the quantum of MFP presently handled; setting up of scientific warehousing facilities, wherever necessary; establishing processing industries for value addition with the objective of ensuring maximum returns on the MFPs for the tribals; giving consumption loans to the tribals; and supplementing Research and Development (R&D) activities.

Vocational Training Centre in Tribal Areas

24.62. The Scheme of Vocational Training Centre in Tribal Areas was launched in 1992–93 to develop skills among the ST youth to enable them to gain employment and self-employment opportunities and improving their socio-economic conditions by enhancing their incomes. Under the scheme, the training for trades including modern trades are being provided through ITIs Polytechnics, Computer Training Centres. Besides, training on vocational trades are being provided through institutions/organisation who are running projects affiliated under 'Modular Employable Skills' and 'Craftsmen Training Scheme'. The scheme was revised in April 2009 and provides enhanced financial norms and a time schedule for submission of proposals. The scheme makes the organisations responsible for establishing linkages with placement services and arranging easy micro-finance/loans for trained youth through financial institutions, the NSTFDC and banks.

24.63. Special Central Assistance to Tribal Sub-Plan (SCA to TSP) is a special area programme, provided by the Ministry of Tribal Development to the State Governments as an additive to the State Plan to bring

about a more rapid economic development of tribals in the States (Details on SCA to TSP are furnished in the sub-chapter on SCSP and TSP).

Social Justice and Protection

24.64. Owing to their isolated existence, the tribals are not equipped to deal with the ever changing and complex socio-economic developments engulfing them. They are also susceptible to exploitation, atrocities and crimes, alienation from their land, denial of their forest rights and overall exclusion either directly or indirectly from their rightful entitlements. The PVTGs are the worst affected lot among the tribals.

24.65. The Protection of Civil Rights Act, 1955, (PCR Act) and the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989, (POA Act) are two important legal instruments to prevent all types of social discriminations like untouchability, exploitation and atrocities. The National Crime Records Bureau Report 2007 states that highly endemic crimes/atrocities are being reported in the states like Madhya Pradesh (27.01 per cent), Rajasthan (20.01 per cent), Andhra Pradesh (13.06 per cent), Chhattisgarh (11.01 per cent), Orissa (7.01 per cent) and Jharkhand (4.08 per cent).

24.66. In order to ensure early prosecution of cases under the SC/ST Prevention of Atrocity (Act), 1989, 151 exclusive special courts have been set up in Andhra Pradesh (12), Bihar (11), Chhattisgarh (7), Gujarat (10), Karnataka (7), Madhya Pradesh (43), Rajasthan (17), Tamil Nadu (4) and Uttar Pradesh (40). State governments, such as Bihar, Jharkhand, Madhya Pradesh and Chhattisgarh have also set up special police stations for registration of complaints of offences committed against SCs/STs; 77 such special police stations have been set up so far incidents of crime against STs registered a decline of 4.5 per cent during 2006–07.

24.67. A scheme for development of Particularly Vulnerable Tribal Groups (PVTGs) was launched in 1998–99 towards survival, protection and development of the PVTGs in view of their fragile living conditions and declining trend of their population.

There are 75 identified PVTGs living in varied conditions and require PVTG specific attention to their distinct problems and needs. The scheme is, therefore, flexible in attending to diverse, living conditions of PVTGs having specific welfare and developmental needs as relevant to their socio-cultural environment. In the above lines, Conservation-cum-Development (CCD) Plan is prepared for each PVTGs. Activities undertaken include housing, land distribution, land development, agricultural development, cattle rearing, poultry, link roads, social security through insurance policy and so on. An amount of ₹670.00 crore was allocated for the Eleventh Plan for the scheme against which the likely expenditure to be incurred would be ₹614.00 crore which accounts for nearly 92 per cent utilisation. Besides supporting CCD based activities 22,400 PVTG families were covered under Janashree Bima Yojana.

24.68. Grants-in-Aid under Article 275(1) as 100 per cent financial assistance is being provided to the states through the nodal Ministry of Tribal Affairs. The objective of the scheme is promotion of welfare of the STs and upgradation of the level of administration in tribal areas. The funds are released based on specific projects, such as raising critical infrastructure and enhancing Human Development Indices of STs for bridging the gaps between STs and the general population. The Eklavya Model Residential School scheme has been in operation since 1997–98; it is run out of the funds under Article 275(1) for providing quality education to ST students in the tribal areas. To improve educational infrastructure and standard of education in tribal areas, these schools are modelled on the lines of Navodaya Vidyalayas. The likely expenditure during the Eleventh Plan would be ₹3,326.04 crore which is 82 per cent of the allocation of ₹4,059.00 crore for the same period.

PESA: Panchayat Extension to Scheduled Areas Act (1996)

24.69. Article 243M of the Constitution of India states that nothing in Part IX of the Constitution relating to Panchayat shall apply to Scheduled Areas referred to in Clause (1) of Article 244, that is, areas included in the Fifth Schedule that today lie in the 9 States of Andhra Pradesh, Chhattisgarh, Gujarat, Himachal

Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Orissa and Rajasthan. However, Article 243M(4)(b) goes on to say that ‘Parliament may, by law extend the provisions of this Part to the Scheduled Areas’ and this was done in 1996 when Parliament enacted ‘The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996’ (PESA). However, the extension of Part IX was—subject to certain exceptions and modifications. The most significant of these relate to definition of a Village and Gram Sabha, rules, responsibilities and powers of the Gram Sabha, Principle of Subsidiarity and Consistency of other Laws with PESA.

PESA Implementation

24.70. PESA has been very poorly implemented across the nine States. One major impediment in operationalisation of PESA is the absence of a proper administrative definition of the village that is in consonance with the Act. All States, without exception, have continued with their earlier revenue definitions of the village. Thereby, not only does a village at times consist of 10–12 scattered hamlets, but several revenue villages are clubbed together to form a Gram Panchayat. This effectively precludes the functioning of a ‘face to face’ community as envisaged in PESA and eliminates the likelihood of a functioning Gram Sabha, which could shoulder the responsibilities of a unit of self governance. This calls for some remedial steps.

24.71. The success of PESA hinges crucially on the effective functioning of the Gram Sabha. Today, even in tribal areas, there is no automaticity to the functioning of the Gram Sabha and there is a large measure of exclusion of women. With growing socio-economic differentiation within and across Adivasi communities, there is also exclusion of those who are poorer or whose voice is weaker. To ensure that Gram Sabhas actually meet and become a vibrant fora of participatory democracy, as visualised under PESA, there is a need to facilitate this process by giving energy to it. This requires a *dedicated cadre of social mobilisers* at each GP level, specifically assigned with the task of mobilising the Gram Sabha and ensuring the effective participation of the marginalised, as also spreading greater awareness of laws such as PESA

and Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act and key flagship programmes of the government.

24.72. *Land Alienation and Land Acquisition:* A clear and categorical provision should be made in the Panchayati Raj Act or the Revenue Law through a notification under Para 5(1) of the Fifth Schedule to empower the Gram Sabha to restore the unlawfully alienated land to its lawful owner.

24.73. *Community Resources:* The term ‘community resources’ which is used in section 4(d) of PESA has not generally been defined. Section 129c (iii) of Madhya Pradesh Panchayat Raj Act does, however, provide a definition that could be commended to other States: ‘natural resources including land, water and forest within the area of the village’.

24.74. *Mines and Minerals:* The mineral rules should be amended on the pattern of Madhya Pradesh transferring all quarries with annual lease value up to ₹10 lakhs to the Gram Sabha and panchayats at different levels. This dispensation should cover all minor minerals. The consent of concerned Gram Sabha before awarding a lease should be made mandatory as per the directions of the Ministry of Mines and Minerals dated 26th December 1997. The practice of outright purchase of mineral bearing land by the mining companies should be stopped as the Mining Act envisages only a lease in these cases.

24.75. *Intoxicants:* A clear and categorical provision should be made in the Panchayati Raj Act or the excise law through a notification under para 5(1) of the Fifth Schedule to empower the Gram Sabha, on the same lines as in the Madhya Pradesh Excise Act fully empowering the Gram Sabha in all aspects mentioned in section 4(m)(i) of PESA. In all matters concerning intoxicants such as establishment of liquor shops, manufacturing units and so on, the views of women members in the Gram Sabha should be decisive, irrespective of the strength of their presence in the relevant meeting. In addition some broader changes may also be required for meaningful and effective implementation of PESA and protection of Adivasi rights.

24.76. Non-Timber Forest Produce (NTFP): There is great scope to set up an NDDDB-type institution (with deep pockets) to become a major player in the market for NTFPs that can support collectors of minor forest produce. Currently, in both nationalised and de/pre-nationalised regimes, these collectors are (i) disorganised (ii) very poor (iii) retain very little of the final value of their produce (iv) are at the bottom of value chains linked to fairly stable consumption patterns (for example tamarind, sal seed, mahua) but (v) can climb up the value chain and retain more value with appropriate interventions.

24.77. Traditional Non-Timber Forest Produce (TNTFP) policies have often been aimed at maximising state revenues and not the welfare of gatherers. The issue of bargaining power is crucial. Even where Adivasi collectors of NTFPs were organised into Self Help Groups (SHGs), they were unable to influence terms of trade for long. Local traders deployed a variety of tactics (commercial and otherwise) to ensure that SHGs were unviable as traders and gave little additional value to collectors through aggregation and collective bargaining. In some cases, where SHGs were persistent, traders, through unscrupulous tactics, ensured that these SHGs lost credibility with their own members. There is a need to visualise a new and powerful institution in the 'social entrepreneurship' mode to help primary collectors climb up the value chain and retain more value through professional sorting, grading, processing, packaging, branding and positioning. Such an institution would need to be committed to protecting Adivasi interests and must operate with great autonomy on strict business principles. Like the National Dairy Development Board (NDDDB), it must have the requisite capacity to absorb inevitable losses in initial years when it will have to take risks and counter entrenched trading interests with competitive action. It is eminently possible to come up with a road map (work in this direction is already ongoing) to make NTFPs commercially profitable for the primary gatherers while also ensuring PESA compliance.

24.78. Effective Administrative Mechanism: It is abundantly clear that the existing administrative structures have been found inadequate in the process of implementation of PESA. It may be time now to consider the setting up of a permanent empowered

body in each Fifth Schedule Area to oversee and monitor compliance with PESA and Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act. The details of such a body, including its powers, its constituents and its precise relationship with and accountability towards existing constitutional bodies, would each need to be carefully worked out.

24.79. Institutionalised Mechanism of Conflict Resolution: There is also need to facilitate creation of institutional mechanisms of conflict resolution in India of the kind that exist across the world in countries which have faced conflicts over use of natural resources, especially in the context of indigenous people. A conflict resolution framework designed to suit our specific circumstances, would help mitigate conflicts before they reach a point of no return. By creating win-win scenarios for all stakeholders concerned, many conflicts that become the breeding ground for Maoism can thereby be taken care of. This would also help in moving forward the momentum of industrialisation in the hinterlands.

Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act

24.80. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, popularly known as the Forests Rights Act (FRA), was enacted in 2007 through the Ministry of Tribal Affairs (MoTA) to correct the 'historic injustice done to forest-dwelling communities'. These communities were cultivating/occupying forest land and using forest produce since ages but had no tenurial security, as their rights of occupation and usage were not recorded during the settlement process. The Act recognises and vests individual forest-dwellers with forest rights to live in and cultivate forest land that was occupied before 13 Dec 2005 and grants community forest rights to manage, protect, regenerate the forest and to own and dispose minor forest products from forests where they had traditional access.

24.81. According to the findings of a government Committee¹ set up to study implementation of the Act, most States have concentrated almost entirely on implementing the provisions for individual forest rights (IFRs) and some States have achieved significant progress in granting individual rights. However,

implementation of the Community Forest Rights (CFR) aspect of the FRA has been very poor in all states and therefore its potential to achieve livelihood security for collection of minor forest products and changes in forest governance along with strengthening of forest conservation, has hardly been achieved as indicated below.

Individual Titles

24.82. More than 31.3 lakh claims have been filed till 30th June, 2011, out of which 26.8 lakh (86 per cent) claims have been disposed of. A total of 11.9 lakh titles (34 per cent of those disposed of) have been distributed and the rest have been rejected. In eleven States the implementation process has not yet started. This includes the north-eastern states (except Tripura), Bihar, Uttarakhand, Himachal Pradesh and Goa. In Tamil Nadu because of restrictive orders by the High Court on a petition filed, the progress has been slow. Some states (such as Jharkhand) have lagged behind in terms of both getting a plausible number of claims and in processing the received claims.

Community Rights

24.83. The progress of implementation of the Community Forest Rights (CFR) under FRA is abysmally low. In all states, the CFR process has not even got off the ground, due to lack of awareness, amongst communities, civil society organisations, or relevant officials. The main reason is that State Governments have not adequately publicised the CFR provisions or even internalised their importance themselves. Most communities are not even aware of the groundbreaking CFR provisions in the FRA. In addition, the forms are flawed, as they do not mention the relevant sub-sections of the Act. Given the serious inadequacies in implementation of CFR at all levels, there is a need for a second phase implementation of FRA in all states with primary focus on CFR. Both MoTA and MoEF need to take the lack of implementation of CFR with the seriousness it deserves.

Checking Displacement of Tribals

24.84. Land and forest are the most important concerns of tribals. Therefore, the guiding principle should be that tribals should not be dislocated from

wherever they inhabit. Should it become absolutely necessary to dislocate them, it must be by way of exception rather than rule and they; must be settled with their informed consent. Treating compensation as a panacea of all the ills associated with tribal land alienation should be discouraged completely.

24.85. The compulsory acquisition of land for public purposes and for public sector or private sector companies displaces tribals, forcing them to give up their home, assets, means of livelihood and vocation and to reside elsewhere and start their life all over again. The disproportionately large impact of displacement of tribals is evident from the fact that least 55 per cent of all displaced people are tribals and in States like Gujarat the proportion is 76 per cent. It has been an important reason for their pauperisation, often leading them to a state of shelterless and assetless destitution. The presumption that displacement is an inevitable consequence of all developmental efforts needs to be reassessed in the light of the enormous cost of human suffering in such projects. The need to avoid such large-scale displacement, particularly of tribals and in cases of unavoidable displacement, their comprehensive resettlement and rehabilitation (R&R) has become one of the central issues of the developmental process itself.

24.86. Today, project affected people are no longer in a mood to suffer passively. Consequently, there has been growing protest and militancy leading to tensions, conflict and violence. Unsatisfactory arrangements for their rehabilitation and resettlement creates opposition to acquisition of land and ultimately the costs involved in delayed acquisition of land is much more than the cost that would be incurred in case of a satisfactory compensation and rehabilitation. A well intended, liberal and comprehensive resettlement and rehabilitation policy is therefore required not only to protect the interests of the displaced or adversely affected people but also in the public interest to ensure quick acquisition and faster access to such acquired land.

24.87. Experiences of displacement and rehabilitation in India have revealed a long history of lack of rehabilitation or ill-planned, badly executed,

inadequate and inappropriate rehabilitation. Even according to Government estimates only 29 per cent of the affected have been rehabilitated leaving almost 13.2 million people uprooted from their homes (Roy 1994). All that the displaced persons are left with is their labour—most often unskilled and are therefore desperate for whatever work comes their way for survival. In addition, displacement of tribals from their land amounts to violation of the Fifth Schedule of the Constitution as it deprives them of the control and ownership of natural resources and land essential for their way of life.

Condition of Tribal Women

24.88. Tribal women are among the most vulnerable people in India. They are faced with a double discrimination of being tribal and being women within the tribal households. In LWE areas women are battered and raped by both the government and the rebels and there is no system of security or redressal for the same. As tribal women move out of their households to find work as domestic workers, they are exploited in their work-space too.

24.89. The figures for literacy among tribal women are extremely low. The levels of awareness about government services, health issues like AIDS, avenues for employment and so on are also extremely low among tribal women and as a result of this, they neither are able to access the services available nor are they able to explore their potentials to the fullest.

24.90. Basic amenities are completely absent from tribal settlements. Absence of electricity and basic sanitation facilities impacts the women the most. Only 15.2 per cent of ST households have drinking water which further spells out the burden on the women.

Excise and Alcoholism

24.91. Tribal communities traditionally brew liquor from rice or other food grains for their consumption which is also related to certain rituals or social occasions and festivities. The initiation of commercial vending of liquor in tribal areas has started impoverishing the tribal population leading them to suffer from indebtedness and exploitation of various types.

In 1975, the then Ministry of Social Welfare issued guidelines to the States and UTs regarding Excise Policy in Tribal Areas which included discontinuing commercial vending of liquor in tribal areas; permitting the tribal communities to brew traditional rice beer for their consumption; and weaning them away from the habit of alcohol consumption. Although the States and UTs have broadly accepted the guidelines, effective follow-up action is not taken for their implementation. More important, States with a view to augmenting their revenue tend to persist with and even extend commercial vending of liquor in the tribal areas ignoring the harmful effect on the tribal population.

Intellectual Property Rights

24.92. The tribal communities are mostly dependent on biological resources related to plants and animals/birds. Their livelihood and life style often depends upon and is shaped by these resources. Therefore, their survival and sustenance is intricately linked to conservation and utilisation of these resources. Corporate protectionism in terms of patents and intellectual property rights (IPR) arising out of various international treaties/instruments on trade and common property resources such as TRIPS under WTO represents a real threat to economic livelihood of these communities as well as a source of potential exploitation of their resource base as bio-diversity expressed in life forms and knowledge is sought to be converted into private property and treated as an open access system for free exploitation by those who want to privatise and patent it. There is an urgent need to provide appropriate legal and institutional arrangements for recognising and acknowledging the rights of tribal communities to such resources and knowledge.

Unrest in Tribal Areas: Left Wing Extremism

24.93. The majority of tribal districts are facing problems of violence during the last couple of decades. Chhattisgarh, Jharkhand, Bihar, Maharashtra, Andhra Pradesh, West Bengal, Uttar Pradesh and Madhya Pradesh are the worst-affected States. Of the 76 left-wing extremist-affected districts in the country today, 32 are PESA districts. The LWE districts extend across significant parts of

Bihar, Jharkhand, Orissa, Chhattisgarh and Andhra Pradesh, leading to the term, 'The Red Corridor'. However, some analysts pertinently argue that the analogy of 'The Speckled Band' more aptly describes the Maoists' area of influence, given they have control over some selected forested pockets in the districts stretching across the heart of central India. This includes the epicentre of the banned party's base in the Dandakaranya region, a vast forested area on the borders of Andhra Pradesh, Chhattisgarh and Orissa. While the senior leadership of the party is mostly drawn from non-tribal communities, much of the rank and file comes from local villages and has built on their grievances emanating from the non implementation of PESA.

Scheduled Tribes: Strategy for the Twelfth Plan

24.94. The perpetuation of socio-economic backwardness among the STs, inspite of the efforts made so far, presents a formidable challenge demanding effective and result-oriented steps in every developmental sector in the Twelfth Plan. The approach of the Twelfth Five Year Plan must be to achieve overall improvement in the socio-economic conditions of the Scheduled Tribes. To this end the following must be key elements:

- Relaxing the normative prescriptions about taking up a programme or a scheme in the Tribal majority areas.
- Administrative strengthening of the implementing agency so as to enable taking up implementation of these programmes in the scheduled/tribal areas. This may also require a clear cut personnel policy with regard to posting of officials in those positions, fixity of their tenure and incentivising these officials for having rendered their services in those areas for a prescribed period.
- Preferring engaging people from the tribal community itself in the areas predominantly inhabited by tribals for government efforts at spreading education, health and extension services, nutrition, public distribution, and so on. If necessary, the basic minimum qualification for such engagements could be relaxed for a specified period (say

during the Twelfth Five Year Plan period). For example, engaging a +2 student from the nearby locality for teaching tribal students in primary classes.

- Sensitising officials detailed for serving in the tribal areas so that they become empathetic to the sensitivities of tribal lives and their traditions.
- Reorganising basic services such as nutritional interventions, education, health services, public distribution system, employment generating activities under MGNREGA with posting adequate staff with surety of tenure and assurance of funds to implement these programmes.
- Emphasis on education, health and livelihood support. For education, schools must be opened wherever necessary and for matriculation and above, facilities at designated places should be created. For health, necessary extension work and facilities for preventive medical-care should be ensured. For livelihood support, apart from the land and forest based activities under MGNREGA imparting of skills and creating employment opportunities near their habitations should be encouraged. For this skills relevant to the tribals should be identified on the basis of a socio-economic survey and then necessary skills training should be provided to them.
- No post in the implementing agencies in scheduled areas/areas with tribal majority should be left vacant; every post must be filled up and wherever necessary, additional posts should be created for effective implementation.
- Implementation of the schemes must be monitored closely at prescribed periodicity. Implementation should not be made to suffer on account of problems associated with transfer of funds.
- Better coverage in roads for tribal areas (population of 500–1,000), with population up to 100 being covered in LWE to be connected.
- Better connectivity through railways in LWE and tribal areas.
- Land acquisition of tribal land to be addressed as required under PESA and displaced tribal population to be resettled and rehabilitated.
- Tribal communities to have full right to minor forest produce.

- Converge MGNREGA with artisanal work to provide livelihood to tribals, many of whom are engaged in artisanal work.
- Land and Tenancy Reform: Deal with outstanding matters of tribal ownership.
- Increase coverage of the most vulnerable within the STs in the health sector. Increase cadre of health workers to better serve tribals.
- Plan within a plan of the Twelfth Plan: Suitable programmes for Central Indian Tribal Belt, border and backward areas and those who suffered discrimination like DNTs.
- Better and speedy implementation of PESA and FRA Institutional Mechanism of Conflict Resolutions.

Educational Development

24.95. A number of development projects viz. industrial, power or irrigation facilities are setup in the tribal areas. Though these projects offer tremendous opportunities for the economic advancement for the tribal people living in these areas, very little of the benefits actually accrue to tribals due to lack of adequate and eligible candidates for the jobs created. Tribal youth must be equipped with necessary education and skill abilities to take advantage of job opportunities in their areas and elsewhere. Otherwise, the opportunities will go in favour of outsiders, leaving a feeling of deprivation and discontent among the tribal youth.

24.96. Although school coverage has increased, STs continue to lag far behind the rest of the population. A special problem is that the STs use a language which is typically different from that of the State and this hampers their ability to do well in the educational system.

24.97. To deal with the low levels of literacy among tribals and to bridge the gap between dropout rates between tribals and non-tribals, there is a need to focus on elementary education. Therefore, there is a need to start a scheme of Pre-Matric Scholarship for all ST children across the country. The objectives of the proposed scheme are to support parents of ST children for education of their wards studying in classes' I-X so that the incidence of drop-out,

especially in transition from the elementary to the secondary stage, is minimised.

24.98. The scheme of Vocational Training Centres in Tribal Areas is to upgrade the skills of the tribal youth in various traditional/modern vocations depending upon their educational qualification, present economic trends and the market potential, which would enable them to gain suitable employment or enable them to become self-employed. The scheme is exclusively for benefit of the Scheduled Tribes as well as PVTGs. Vocational training, including women's training, should be an important complementary part of the elementary and secondary stages. At least one ITI/Polytechnic should be established in each development block of TSP areas. Other training centres should include women's community polytechnics undertaking rural and community development activities through application of science and technology.

24.99. The Centrally Sponsored Scheme of Post-Matric Scholarship (PMS) to ST Students is the single intervention by the Government of India for educational empowerment of STs—involving 100 per cent central assistance to States over and above their earlier committed liability are awarded to all eligible ST students to pursue studies beyond matriculation and in all courses. The recommendations for the scheme's continuance in the Twelfth Five Year Plan include:

- The rates of scholarship and income ceiling should be revised at regular intervals in line with the price index each year. The income ceiling of parents should also be enhanced as would be appropriate from time to time.
- Possibility of paying College fees directly should be explored and students should not be asked to pay for any fees under the scheme. The fee should be paid promptly during the academic year so as to avoid any harassment to ST students.
- Scholarships to students either as day scholars or hostellers should be paid on a monthly basis to defray their expenses through an online system or remitted into the bank accounts of students.

- The number of awards allotted to each State Government per annum should be increased under the scheme of Upgradation of Merit for ST students for improving the capability of the students belonging to STs to enable them to compete more effectively for admission to professional colleges/institutions or to overcome educational deficiencies.

24.100. In order to promote education among ST girls and boys facilitating them to continue studies without dropping out of school, there is a need to expand the Scheme for Hostels for ST Girls and Boys, especially focusing the deficit areas across the States especially girls hostels. Evaluation studies have pointed out that infrastructure facilities are poor in most of the hostels; maintenance of the buildings is not up to the mark; and construction of hostel buildings is often hampered due to non-receipt of proper/complete proposals from the States. Infrastructure facilities and maintenance of the hostels needs constant improvement. There is a need to reduce the time taken for the construction of hostels from five to two years.

24.101. Under the Scheme of Ashram Schools in TSP areas, as of now, State Governments are eligible for 100 per cent central share for constructions of all Girls' Ashrams Schools and also for constructions of Boys' Ashram Schools in naxal affected areas. It is recommended that:

- It would be desirable that 100 per cent grant-in-aid is given for Establishment of Ashram Schools and Hostels for ST Boys also even in the non-Naxal areas.
- Qualified teachers belonging to the local tribal communities should be trained and placed in position as teachers in Ashram Schools.

24.102. The Rajiv Gandhi National Fellowship (RGNF) scheme for ST students was launched in 2006 with the objective of providing financial assistance to ST students pursuing M. Phil and Ph.D. Under this scheme, 667 fellowships are provided annually to ST beneficiaries. There is a justified need

to increase the number of fellowship from 667 to 1,000 made available under the scheme.

24.103. The Scheme of scholarship for Institutes of Excellence/Top Class Institutes is to provide liberal financial support to a maximum 625 ST Students per year admitted in premier professional educational institutes. Larger coverage of ST candidates with special coaching would help enhance the effectiveness under the scheme as more candidates would be qualified to avail admission into the designated premier institutions.

24.104. National Overseas Scholarship (NOS) scheme for ST students awarded to 15 students for pursuing higher studies abroad leading to Master-level courses and Ph.D. programme in specific field of Engineering, Technology and Science. The number of awards under the scheme should be increased to give a fair share to ST students. Income ceiling for eligibility under the scheme should be enhanced to ₹5 lakhs per annum. The scheme should be extended so as to cover all disciplines of higher education. Orientation procedure should be facilitated at Centre, State and district level.

Health

24.105. The Tribal Affairs Ministry operates the scheme of Grant-in-aid to Voluntary Organisations (VOs) working for the Welfare of STs, to NGOs for running 10 or more bedded hospitals and Mobile dispensaries in Tribal Areas. There is also a need for taking up health programmes/projects in a big way through Public-Private Partnership especially for running Primary Health Centres in remote tribal areas.

24.106. Tribals have traditionally depended on their traditional methods of healing/treatment for minor day to day ailments and the major ones too. There is a need for evolving a new strategy of combining the indigenous tribal medicine with other medical systems. A systematic effort need to be made to document this traditional tribal knowledge of medicinal/herbal plants, standardising it and recognising it as an independent system of medicine. The local tribals especially the traditional healers can be trained and

be entrusted with the responsibility of treating the people on remuneration and so on.

24.107. To prevent the problem of malnutrition, local cereals, along with pulses and oils in adequate quantity should be ensured to the tribal families. In this context, the system of public distribution should be modified appropriately in tribal areas. The management of PDS and Anganwadi Centres should involve local tribals, especially women and ensure that acceptable local food is provided to the children. The vulnerable PVTGs should be assured of food security by gradually initiating them into agriculture and other income generating activities.

24.108. Tribal areas suffer from the problems of non-availability or scarcity of safe drinking water. All tribal habitations should be provided with safe drinking water supply sources and sanitation facilities by the end of the Twelfth Plan period. Efforts also need to be made to ensure sanitation facilities to prevent health hazards envisaging from the unhygienic living conditions. To this effect, panchayat members and the community may be provided training to handle situations at the time of epidemics, to maintain sanitation and hygiene in the village and also to clean the water to make it safe for drinking.

24.109. Frequent immunisation campaigns may be taken up at regular intervals in tribal areas publicising them widely through public address system and mobile health units. Regular IEC programmes on health related behaviours, gender bias and wrong customary practices like adverse impact of early child-bearing, smoking, drug-addiction, alcohol, malnutrition factors, unsafe sex and so on.

Mahatma Gandhi National Rural Employment Guarantee

24.110. Extensive implementation of MGNREGA in tribal blocks should be ensured for extension of the benefits envisaged under it and particularly to prevent distress migration and trafficking. Effective monitoring, social audits and their reviews should be conducted specially to ensure if ST women are getting the cards and employment.

24.111. MGNREGA works should be decided by the Gram Sabha according to PESA. But, in practice, they are being decided top down by government officials and line-departments mostly targeting promotion of plantations on adivasi lands, using MGNREGS money to force down programmes of planting rubber, palm oil, biofuel, cashew nut, coffee and so on. Such actions are contrary to the policy and law and should attract punitive action.

24.112. The higher participation of the STs among the beneficiaries of the MGNREGA scheme is an indication of the fact that this section of the society needs more attention in this regard. There is need to incorporate a TSP component in the implementation of the Scheme in order to meet the objective of inclusive growth. The TSP component should not be based merely on the population share, but rather on the extent of deprivation and need arising there from.

24.113. Limit of providing maximum 100 days employment to a household in a given financial year under NREGA should be removed, as in tribal areas work of agriculture labour is available only for a period of 2-3 months during the year.

Entrepreneurship

24.114. Entrepreneurship among tribal youngsters should be developed. One of the reasons as to why tribal communities are not economically advanced in spite of their land holdings is that they have no skill in business. Efforts need to be made to encourage tribal entrepreneurship in small and large-scale businesses. Funds should be made available for them to set up enterprises in rural and urban areas. Export of tribal handicrafts should be encouraged by the government which will give more jobs to people thereby improving their economic condition.

Land

24.115. Land is the primary livelihood asset of tribals, but over decades it has been going out of their possession because of their ignorance of laws and because of deceit, coercion and other methods followed by mis-appropriators of tribal land, all in violation of laws, often in collusion with elements in the

official machinery and elements in the political leadership of State Governments. The nodal Ministry needs to take necessary steps to ensure proper implementation of land alienation laws. Uncultivable land of tribals should be made cultivable under the affirmative action of MGNREGA. Irrigation is a critical input for higher productivity and higher production. Small and not-so-small irrigation projects (avoiding large projects) are required in tribal areas. Five Year Plans should be drawn up (some may exist already) for comprehensive irrigation and implementation in a staggered fashion. The irrigation schemes will not only increase agricultural productivity but also provide employment to tribal men and women. Efforts should be directed towards the hitherto neglected large tracts of agriculturally unexploited tribal areas keeping in view the advantages and merits of the indigenous seeds, practices and traditional techniques and methods.

24.116. A crash programme for providing land to the landless tribals should be undertaken. Convergence among various subsidy and loan schemes of central and state governments for STs should be ensured, so that both subsidy and low interest loans are available to STs especially their women.

24.117. Acquisition of tribal land should only be allowed with full statutory protection already existing under land alienation laws and the provisions of the Fifth Schedule. No tribal land should be acquired without explicit and informed consent of the affected tribals, keeping in mind the provisions of the PESA Act.

Atrocities on STs

24.118. Effective implementation of all legal provisions such as the Juvenile Justice Act (JJ) Act, Bonded Labour Abolition Act and Protection of Women against Domestic Violence Act, SC/ST Prevention of Atrocities Act (POA), Immoral Trafficking Prevention Act (ITPA), and so on to provide protection to tribal women and children should be ensured. For this adequate grievance redressal mechanisms should be put in place especially to deal with non-registration of FIRs and for providing time bound

relief and guidance to tribals. A District Level Committee comprising of credible NGOs/Advocates and other stakeholders should be constituted to monitor and support these initiatives. NCST needs strengthening through improvements in the functioning of the Commission and placement of requisite manpower at its Headquarter and Regional offices.

Geographical Exclusion and Human Resource Management

24.119. Tribal Areas suffer from geographical exclusion which impacts upon the availability of physical and social infrastructure and quality of services rendered to the people. Social facilities do not function because service providers are unwilling to work in the area. Measures taken from time to time to incentivise these services have failed to change the situation. The main reason for persistence of this problem is centralised recruitment to various posts and eligibility conditions for competing for the posts which enable non-tribals from urban/developed areas to compete and get recruited. However, as they have no inclination to work in remote tribal areas and a centralised cadre management of these service providers. The solution lies in identifying suitable individuals from tribal areas where services are deficient and sponsor them for courses in specialities required and recruiting them on successful completion of these courses. Also, a change in the recruitment rules and eligibility criteria for this purpose is required so that local persons can acquire necessary qualifications and can get recruited.

24.120. There is a need to decentralise cadre management of these services from state level to district level and where necessary even lower. This would enable transfer and postings to take place within the district and prevent outsiders from grabbing jobs. Another suggestion is to decentralise delivery of basic services to the community. This would inter alia involve capacity building for the Gram Sabha. The Gram Sabhas should be legally and operationally empowered to conduct social audit of tribal development programmes to enforce people's participation, transparency and accountability of the implementing agencies and officials.

Protection of tribal Women

24.121. Tribal women suffer double disadvantage and intra-household disparities as well. There needs to be a concentrated effort to empower tribal women. Some suggestions are as follows. Vocational training, including women's training, should be an important complementary part of the elementary and secondary stages. At least two ITIs/Polytechnics should be established in each development block of TSP areas. Other training centres should include women's community polytechnics undertaking rural and community development activities through application of science and technology. To prevent the problem of malnutrition, local cereals, along with pulses and oils in adequate quantity should be ensured to the tribal families. In this context, the system of public distribution should be modified appropriately. The management of PDS may be handed over to the tribal community through its own institutions. In Anganwadi centres also, acceptable local food should be provided to the children. The Anganwadi Centre should be managed by local tribal women. Convergence among various subsidy and loan schemes of central and state governments for STs should be ensured, so that both subsidy and low interest loans are available to particularly ST women. Special programmes for extension and provision of agri-implements, capital and technology, particularly irrigation technology, to ST women should be commissioned. Krishi Vigyan Kendra (KVKs) under State Agriculture Universities should be deployed to promote dissemination of such practices to ST women. Mapping of the jobs in the public sector companies reserved for STs (for example drivers in Road Transport Corporation) should be undertaken and ITIs should take up special programmes for ST youth and women to provide skill trainings for those jobs.

Research, Information and Mass Education, Tribal Festivals and others

24.122. The objective of the ongoing scheme of 'Research, Information and Mass Education, Tribal Festivals and Others' is preservation and promotion of tribal culture; capacity building and awareness generation; and monitoring and evaluation of various welfare and development programmes

implemented by the Ministry. During the Twelfth Plan period, the proposal is to continue focusing on the core areas and shall include preservation, protection and promotion of tribal culture; capacity building of various stake holders and advocacy; improved delivery system through effective monitoring and evaluation—forge partnership with the Traditional Tribal Institutions (TTIs)/Community Based Organisations (CBOs) where ever feasible. The scheme would cater to the needs of information and knowledge for the policy makers and implementers as well as to the beneficiaries and citizens at large.

SCHEDULED CASTE SUB PLAN (SCSP) AND TRIBAL SUB PLAN (TSP)**Background**

24.123. Despite Constitutional directives and a number of legislative and executive measures taken by the Government since independence, there are large gaps between the living conditions of the general population and those of SCs and STs. Successive Five Year Plans have attempted to reduce these gaps and while there is some evidence of convergence, the gaps still remain at a level that is unacceptably high.

24.124. The persistence of socio-economic backwardness of the SCs and the STs in spite of the development efforts had warranted a special and focused strategy, inter alia, to enable them to share the benefits of overall economic growth in a more equitable manner. This has been sought to be achieved through the Special Component Plan (SCP) for Scheduled Castes, now known as Scheduled Caste Sub Plan (SCSP) and the Tribal Sub-Plan for Scheduled Tribes.

Schedule Caste Sub Plan (SCSP)

24.125. The prime objective of Scheduled Caste Sub Plan (SCSP) is to channelise funds and benefits through identified schemes, for which the States/UTs and Union Ministries have to earmark funds in proportion to the SC population in the State/UTs and the country respectively. The Special Component Plan which contains details of financial and physical targets is expected to form an integral part of Plan documents of States/UTs and Centre. Some of these schemes are envisaged to help the poor SC families

through composite income generating programmes. Such family oriented programmes are expected to cover all major occupational groups amongst Scheduled Castes such as agricultural labourers, small and marginal farmers, share croppers, fishermen, sweepers and scavengers, urban unorganised labourers below the poverty line, and so on. In addition, the Special Component Plan seeks to improve the living conditions of Scheduled Castes through provision of drinking water supply, link roads, house-sites and housing improvements, establishment of such services as primary schools, health centres, veterinary centres, panchayat ghars, community halls, nutrition centres, extension of electricity, common work places, common facility centres, and so on.

Tribal Sub-Plan (TSP)

24.126. The prime object of the Tribal Sub Plan is development of tribal areas. The TSP concept, thus, aims on one hand, at the quantification of investment in the Sub-Plan areas commensurate with its size and on the other, at an all-round development of the tribal communities, in accordance with their needs. Keeping in view the distinct tribal situation, the TSP has set the twin objectives: (i) socio-economic development of STs; and (ii) protection of tribals against exploitation. Through realisation of these objectives, the ultimate aim of the TSP strategy is to narrow the development gap of the tribals with the rest of the country.

24.127. The development of tribal economy under TSP is envisaged through sectoral efforts including (i) Agriculture and allied activities, through provision of minor and medium irrigation facilities supplemented by programmes for animal husbandry, dairying, poultry, and so on; (ii) improvised credit and marketing facilities so as to ensure adequate return of the produce of the tribals in respect of agriculture and minor forest products; (iii) special training programmes for tribal farmers for agricultural extension supported by the provision of agricultural infrastructure; (iv) preparing suitable forestry programmes ensuring tribals' participation as equal partners; (v) promoting agricultural production through improved method of cultivation and rural electrification to promote small scale industry.

24.128. Provision of basic infrastructure for speeding up the socio-economic development of the tribal areas under TSP is another priority. Growth centres, communication network, schools, health centres, rural electrification, drinking water and other facilities and so on are being provided to the tribals. Protection of tribals against exploitation is sought to be done through land laws prohibiting transfer of tribal lands to non-tribals, law regulating money lending in tribal areas and laws for acquiring monopoly rights of collection and marketing of forest produce. The TSP pays special attention to the welfare and development of Particularly Vulnerable Tribal Groups (PVTGs) and tribals with special problems.

Special Central Assistance (SCA) to SCSP and TSP

24.129. The scheme of Special Central Assistance (SCA) to SCSP and TSP, launched in 1979, extends financial assistance to States/UTs as an additive to their SCSP and TSP programmes. It is meant to support the efforts of States/UTs for the overall development of SCs and STs. The funds provided under SCA to the States/UTs are intended to augment their efforts for economic development. SCA is a lump-sum amount received from the Planning Commission and is allocated to States/UTs by the nodal Ministries that is, Ministry of Tribal Affairs and the Ministry of Social Justice and Empowerment.

24.130. Under the Special Central Assistance (SCA) to SCSP, 100 per cent grant was initially given to fill the critical gaps by providing the missing inputs in family oriented income generating schemes. To enlarge the scope of the utilisation of SCA to SCP, new guidelines were issued in 1993. As per the new guidelines, SCA could also be used for infrastructural development in the blocks having 50 per cent or more of SC population subject to the condition that SCA allocation is made use of in such a way that it encourages larger efforts for development of SCs. SCA is released to the States/UTs on the basis of following criteria:

- i) (a) On the basis of SC population of States/UTs: 40 per cent
- (b) On the basis of relative backwardness of the States/UTs: 10 per cent

- ii) (a) On the basis of percentage of SC families in the States/UTs: coverage by composite economic development programmes in the Plan to enable them to cross the poverty line. 25 per cent
- (b) On the basis of the percentage of SCP to the Annual Plan as: Compared to the SC population percentage in the States/UTs. 25 per cent

24.131. SCA to SCSP which made a modest beginning with a token provision of ₹5.00 crores in 1979–80 has been expanded to enhance its allocation to ₹2,805.00 crore in the Eleventh Plan. As per the available information, nearly 64 lakh SC families were provided with assistance to pursue viable economic activities and cross the poverty line during the first four years of the Eleventh Plan (2007–08 to 2011–12). At present, SCA is released to 27 States/UTs.

24.132. The Special Central Assistance (SCA) to TSP is extended to States/UTs as an additive to supplement and fill the gaps in their Plan outlay. It is also meant for the family-oriented income generating schemes in the sectors of agriculture, horticulture, minor irrigation, soil conservation, animal husbandry, forestry, education, cooperation, fisheries, village and small scale industries as well as the Minimum Needs Programme and so on.

24.133. The criteria for allocation of SCA to TSP have been fixed on the basis of certain norms and Integrated Tribal Development Projects (ITDPs), Modified Area Development Agency (MADA) Pockets, Particularly Vulnerable Tribal Groups and dispersed Tribal Groups. After setting apart 10 per cent of SCA for dispersed tribals, the balance amount is allocated broadly on the basis of ST population, geographical areas and inverse proportion of per-capita Net State Domestic Product. The total SCA released to States/UTs under TSP in the Eleventh Plan was in the order of ₹2,872.10 crore. About 15 lakh STs were assisted to cross the poverty line during the Eleventh Plan.

Review of Implementation of SCSP and TSP

24.134. Despite the fact that strategies of TSP and SCSP had been in operation for more than three decades, they could not be implemented as effectively as desired. The expenditure in many of the States/UTs was not even 50 per cent of the allocated funds. No proper budget heads/sub-heads were created to prevent diversion of funds. There was no controlling and monitoring mechanism and the planning and supervision was not as effective as it should be.

24.135. In order to examine the issues related to TSP and SCSP, to revitalise/re-activate these strategies, especially to ensure that population-proportionate funds flow for the development of STs and SCs, a Central Standing Tripartite Committee was constituted in May, 1999, inter alia, with the following mandate:

1. to look into the reasons for not implementing the Guidelines concerning SCSP and TSP and to suggest specific measures for their compliance;
2. to identify specific schemes which would benefit SCs and STs under various developmental sectors and their prioritisation along with earmarking of funds for them; and
3. to review the progress of implementation, impact assessment and monitoring of SCSP and TSP and utilisation of SCA to SCSP and TSP and the Grant-in-Aid under Article 275(1) and advise the Planning Commission on measures which would serve the interests of these communities more effectively.

24.136. The Committee, besides suggesting certain remedial measures, also advise the concerned Central Ministries to tie up effectively with the concerned State Governments. So far, six States, viz. Andhra Pradesh, Bihar, Madhya Pradesh, West Bengal, Punjab and Gujarat could have such Committees at their level. As the institutional set up of the CTC for monitoring the implementation of SCSP and TSP has not proved effective, it would be replaced with a new high level committee, which will be pro-active and meet at least once in a quarter to address the issues relating to SCSP/TSP.

Task Force to Examine and Revise the extant of guidelines for Implementation of SCSP and TSP

24.137. The Planning Commission constituted in 2010 a Task Force under the Chairmanship of Dr. Narendra Jadhav, Member, Planning Commission, to review the operational difficulties in implementing TSP/SCSP and suggesting necessary remedial measures by re-examining the existing guidelines and revising the same appropriately for effective and meaningful implementation in future.

24.138. The Task Force has recommended that Central Ministries/Departments should categorise Plan Expenditure under TSP and SCSP into two broad categories that is (i) Expenditure on poverty alleviation and individual beneficiary oriented programmes; and (ii) Expenditure on other schemes which are incurred in: (a) ST and SC concentration areas respectively, that is in the villages, blocks and districts having more than 40 per cent ST/SC population and (b) in other areas, in a way that demonstrably benefits the STs/SCs.

24.139. For earmarking funds under SCSP and TSP the Central Ministries/Departments have been divided into four categories that is (i) Ministries/Departments with no obligation for earmarking funds under TSP/SCSP; (ii) Ministries/Departments required to do partial earmarking; (iii) Ministries/Departments which will be required to earmark between 7.5 per cent to 8.2 per cent for TSP and 15 to 16.2 per cent for SCSP of their Plan Outlays; and (iv) Ministries/Departments which will be required to earmark more than 8.2 per cent for TSP and 16.2 per cent for SCSP of their Plan Outlays. The Task Force also recommended that administrative mechanisms in Central Ministries/Departments needs to be adequately strengthened so that they properly implement SCSP/TSP.

24.140. The Task Force recommendations are under consideration. Pending a final decision, the process of earmarking funds under SCSP and TSP has already been initiated during 2011–12. Budget Head(s) have been created as Code 789 for SCSP and Code 796 for TSP. Planning Commission and the Central Ministries/Departments have started indicating earmarked allocation under SCSP/TSP in the

Statement of Budget Estimates jointly signed by the Planning Commission and the concerned Central Ministries/Departments.

SCSP and TSP: Strategy for the Twelfth Plan

Towards a Paradigm Shift: From 'Post-facto Accounting' to 'Pro-active Planning for SCSP/TSP'

24.141. In keeping with the objective of more inclusive growth, steps will be taken to reform the Scheduled Caste Sub-Plan (SCSP) and the Scheduled Tribe Sub-Plan (TSP). These Plans have the potential to become effective mechanisms in closing the development gap between the Scheduled Castes, Scheduled Tribes and other sections of the society. Towards this goal, the Twelfth Plan proposes a set of key implementation measures to strengthen the SCSP/TSP planning process. These include earmarking of SCSP/TSP funds from the total plan outlays well in advance of the commencement of the financial year, preparation of pro-active planning documents as Sub-Plans, an appraisal and approval mechanism for the Sub-Plans so formulated, and a robust mechanism for monitoring and evaluation of outcomes. An Institutional framework to effectively implement these changes will be set up in the Planning Commission. At the State level, there will be an apex body headed by the Chief Minister and designated Nodal Department, which will appraise the SC/ST Sub-Plan for the State.

24.142. The efforts made in pursuance of the Task Force recommendations have finally brought about some visible changes in the formulation and implementation of SCSP and TSP. Evidently, for the first time in 2011–12, 25 and 28 Central Ministries and Departments have categorically earmarked funds under SCSP and TSP, respectively. Having made a beginning in the Annual Plan 2011–12, there is need to further consolidate and improve upon the implementation of SCSP and TSP across sectors, ensuring not only optimal earmarking of funds under SCSP/TSP as per the guidelines, but also utilising the same in achieving the outcomes in measurable terms. The Ministries of Social Justice and Empowerment and Tribal Affairs need to spearhead the task of formulation, implementation and monitoring of SCSP/TSP as nodal coordinating agencies.

24.143. Based on the experience of implementing the SCSP/TSP by the Central Ministries/Departments, the guidelines issued by the Planning Commission will be reviewed to remove any shortcomings, so as to ensure that at least 16.2 per cent of the Central Plan outlay is earmarked under the Schemes/Programmes that benefit the SC community demonstratively, and 8.2 per cent of the Central Plan outlay is earmarked under the Schemes/Programmes that benefit the ST community demonstratively.

OTHER BACKWARD CLASSES (OBCs)

24.144. Other backward Classes (OBCs) comprise the castes and communities which are found common in the lists of the Mandal Commission Report and the Lists of the individual State Governments. The NSSO survey conducted during 2004–05 (61st Round), estimated that the OBC population constituted 41 per cent of the total population.

Constitutional Safeguards

24.145. The Constitution does not make any specific provisions for OBCs, but Article 15 of the Constitution empowers the States to make any special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes. Article 16(4) also empowers the State to make provisions for reservations in appointments in favour of any backward class of citizens which in the opinion of the States is not adequately representative in the services under the State. The Directive Principles of State Policy of the Constitution (Article 46) also state that ‘The State shall promote with special care the educational and economic interests of the weaker sections of the people and, in particular, of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitation.’ It also empowers the State to appoint a Commission to investigate into the conditions of socially and educationally backward classes (Article 340).

Overview of OBCs: Review of the Eleventh Plan

Educational Development

24.146. The aim of the scheme of Pre-Matric Scholarship launched in 1998 was to motivate children of

OBCs studying at pre-matric stage. As such, scholarships are awarded to students belonging to OBCs whose parents/guardian’s income from all sources does not exceed ₹44,500 per annum. Although the rates of Pre-Matric Scholarships for OBCs have been fixed by the Central Government, there is a variation in rates among the States.

24.147. The Scheme of Post-Matric Scholarship being implemented since 1998 is intended to promote higher education by providing financial support to OBC students studying at post-matric/post-secondary levels including Ph.D. degrees. The scheme was revised in August, 2011 w.e.f 01.07.2011. As per the revised scheme, the parental income ceiling was raised from ₹44,500 to ₹1 lakh. A total of 58 lakh OBC students are estimated to have received Post-Matric Scholarships during the first four years of the Eleventh Plan. The Scheme of Assistance for Construction of Hostels was instituted in 1998 for extending better educational opportunities to students belonging to Other Backward Classes (OBCs) by providing hostel facilities to boys and girls to continue their studies and thus ensure their retention and prevent dropouts. The scheme was revised in December, 2010. A total number of 22,375 hostel seats were sanctioned in the first 4 years of the Eleventh Plan. Under the revised Scheme, priority is given to uncovered regions and districts/towns having educational institutions. An outlay of ₹180.00 crore was provided for the ‘Scheme of Hostels for OBC Boys and Girls’ for the Eleventh Five Year Plan (2007–12). Against the outlay provided, the expenditure anticipated was to the order of ₹126.96 crore.

Economic Development

24.148. The National Backward Classes Finance and Development Corporation (NBCFDC) was set up in the year 1992. The Corporation provides additional channel of finance to Backward Classes for economically and financially viable schemes and projects for upgrading the technological and entrepreneurial skills of individuals or groups belonging to Backward Classes. NBCFDC assists a wide range of income generating activities, which include agricultural and allied activities, artisan and traditional occupations, technical trades, small scale and tiny industry, transport services and so on. Entrepreneurs with annual

income less than double the poverty line are provided concessional finance.

24.149. The major focus of the NBCFDC would be, inter alia, to address the skill requirement needs of youths belonging to the OBCs. Accordingly, a window, in the form of a new scheme, will be opened up to provide funds to the Corporation by the Ministry for this new venture.

24.150. The NBCFDC allocates a notional amount each year to State Channelising Agencies (SCAs) at the beginning of the year. However, due to weak infrastructure of the SCAs, low recovery from the SCAs and non-availability of Block Government guarantee from the State Governments, the Corporation has not been able to disburse loans as per allocation to the States.

OBCs and the Twelfth Five Year Plan; the Way Ahead

Educational Development

24.151. For ensuring educational development amongst OBCs, schemes for providing scholarships for pursuing Pre-Matric, Post-Matric and other higher education, supported with hostel facilities will be taken up on priority basis. Appropriate revision of the Pre-Matric Scholarship Scheme in respect of the sharing pattern of assistance (being raised from 50 per cent to 100 per cent), rate of scholarships and parent/guardian income limit for eligibility (from ₹44,500 p.a. to ₹1 lakh p.a.) will be given priority in the Twelfth Five Year Plan. Hostel facilities for boys and girls which are at present very limited and inadequate would be increased substantially.

24.152. National Overseas Scholarship Scheme for OBCs could also be formulated similar to those for SCs and STs so that OBC students can also go abroad for educational and professional courses which are generally not available in the country. There is a demand for Rajiv Gandhi National Fellowship (RGNF) scheme on the pattern available to the SC and ST students to be introduced for OBC students during the Twelfth Five Year Plan.

Economic Development

24.153. To meet the marketing needs and to facilitate providing a marketing platform for artisans and handicraft persons belonging to OBCs, a Marketing Federation on the lines of TRIFED may be set up. The main activities of the Federation would include cluster development of the artisans engaged particularly in arts and craft, training for upgradation of their skills, exhibition of their products to showcase their work both in India and abroad, opening of marketing outlets to appreciate, reward and popularise successful models which can be replicated by others and establishing a brand name for the products to be sold under the proposed Marketing Federation.

EMPOWERMENT OF MINORITIES

24.154. The Indian Constitution is committed to the ideas of equality and protection and assurance of rights of minorities, which cover five religious communities, viz., Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis). These communities accounted for 18.4 per cent of the population in 2001. The largest proportion was Muslims (13.4 per cent), followed by Christians (2.3 per cent), Sikh (1.9 per cent), Buddhists (0.8 per cent) and Zoroastrians (0.0069 per cent). Depending on their distribution across States, these communities may actually be a 'majority' in some States, for example Muslims are in majority in the Union Territory of Lakshadweep and in the State of Jammu and Kashmir as are Christians in Nagaland (90 per cent), Mizoram (87 per cent) and Meghalaya (70.03 per cent) and Sikhs in Punjab (60 per cent).

24.155. While India has experienced accelerated growth and development in recent years, not all religious communities and social groups (henceforth socio-religious communities—SRCs) have shared equally the benefits of the growth process. Among these, the Muslims, the largest minority in the country, are seriously lagging behind on all human development indices. There is also widespread disparity within different SRCs, supporting the view that each SRC is a differentiated category with multiple identities and different socio-political and economic aspirations.

Socio-economic Condition of Minorities

24.156. Until the Eleventh Five Year Plan, there were no substantive developmental programmes specifically attending to the minorities. The programmes implemented during the Eleventh Five Year Plan, have been in operation for too short a period and it is too early to estimate their impact. However, a broad assessment of the situation of religious minorities as reflected in their socio-economic status, especially regarding education, health and so on, on the basis of the available data is reflected in this section.

Poverty and Alienation

24.157. Muslims, who constitute the largest religious minority comprising about 13.4 per cent of the total population and about 73 per cent of the total Minority population of the country, lag behind others in terms of economic, health and educational indices. According to the latest Planning Commission estimates, the poverty ratio for Muslims was 33.9 per cent in urban areas, especially on account of states such as Uttar Pradesh, Gujarat, Bihar and West Bengal. In rural areas, the poverty ratio for Muslims was very high in States such as Assam, Uttar Pradesh, West Bengal and Gujarat. The literacy rate and work participation rate amongst the Muslims is low as compared to other minority communities. The majority of them are engaged in traditional and low paying professions, or are mostly small and marginal farmers, landless agricultural labourers, small traders, craftsmen and so on. Only a few of them are reported to have benefited from various developmental schemes. The other Minority communities on the whole enjoy a comparatively better socio-economic status, although there are segments among the Christians and Buddhists, Mazhabi Sikhs and even sections of Zoroastrians/Parsis who are disadvantaged.

24.158. An important concern vis-à-vis the Muslim community is the perception of discrimination and alienation. This needs to be appropriately addressed in the Twelfth Plan. Innovative steps are needed such as expanding facilitators in Muslim concentration villages and towns to act as interfaces between

the community and the state institutions. Youth leadership programmes should also be initiated to strengthen this process.

Education

24.159. The importance of educational empowerment assumes special importance in the context of minorities, especially Muslims, who have been lagging behind the rest. Reports of the Sachar Committee and the Ranganath Mishra Commission have dealt at length with the educational status of the minorities, particularly Muslims. As shown in Table 24.8, the literacy rate among the Muslims is significantly lower than among other communities although it is higher than among SCs and STs. Also see Table 24.9.

24.160. The high rate of admission at primary levels shows the intense desire of the minorities to seek modern education. Lower percentages at other levels show that the community starts lagging behind from the secondary level onwards. Scholarships should thus target this band and be top-heavy, while continuing to support the primary levels. Neighbourhood schools and schools up to middle level need to be provided in minority concentrated blocks, large villages and urban minority concentrated settlements. In rural areas, schools for girls up to senior secondary level should be made mandatory to ensure that girls continue their

TABLE 24.8
Literacy Rate among Religious Communities,
SCs and STs

Community/Caste	Male	Female	Total
India	75.3	53.7	64.8
Hindu	76.2	53.2	65.1
Muslim	67.6	50.1	59.1
Christian	84.4	76.2	80.3
Sikh	75.2	63.1	69.4
Buddhist	83.1	61.7	72.7
Others	60.8	33.2	47
Scheduled Castes	66.64	41.9	54.7
Scheduled Tribes	59.17	34.76	47.1

Source: Census 2001.

TABLE 24.9
Educational Levels among Different Communities

Community	Secondary Level	Sr. Secondary level	Graduation	Unclassified
All Religions	14.13	6.74	6.72	0.02
Hindus	14.25	6.92	7.01	0.01
Muslims	10.96	4.53	3.6	0.05
Christians	17.48	8.7	8.71	0.01
Sikhs	20.94	7.57	6.94	0.02
Buddhists	14.09	7.65	5.7	0.01
Others	11.24	4.55	4.35	0.01

Source: Working Group Report on the Empowerment of Minorities, Twelfth Five Year Plan.

education. There is a need for village level centres to target the rural drop out girls, or girls out of school, in the age group of 8–16 years. This should be linked to schemes such as the Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls. The education level attained by different religious communities also reveals the sharp gap between the representation of Muslims in higher education and that of other communities. Moreover, student drop-out rates tend to peak at the senior secondary levels. Scholarships should, thus, target this band and be top-heavy.

Health

24.161. As per the National Family Health Survey–3 (2005–2006), the Infant Mortality Rate by community is as follows: Buddhists/Neo-Buddhists (53), Muslims (52), Sikhs (46) and Christians (42). All the figures are better than the national average of 57. Christians and Sikhs have relatively low mortality rates at all ages under five years. With respect to Perinatal Mortality, the figures are 47 for Muslims followed by 40 for Christians and 31 for Sikhs. The figure is 49 for all-India.

24.162. With respect to pregnant and lactating women, the NFHS-3 report states that Muslim women are among the least likely to purchase iron and folic acid tablets. Births in a health facility are most likely among, Buddhist/Neo-Buddhist mothers (59 per cent) and Sikh mothers (58 per cent). Births to Muslim mothers (33 per cent) are much less likely to take place in a health facility. The report also states

that births to Muslim women are least likely to be followed by a postnatal check-up. This could in part reflect social and economic circumstances of Muslims, as well as their hesitation in approaching state institutions due to a real or perceived sense of discrimination. Hindu and Muslim children are about equally likely to be undernourished, but Christian and Sikh children are considerably better nourished.

24.163. Among the religious minorities, the percentage of households covered by a health scheme or health insurance is as follows: Christian (7.3), Buddhist (6.6), Sikh (6.5). It is abysmally low for Muslims at 2.1. The all-India average is 4.1 per cent. The number of women who have ever experienced domestic violence is the maximum for Buddhists at 40.9 per cent, followed by Muslims (34.6 per cent), Christians (27.8 per cent) and Sikhs (26.1 per cent). The all India average is 33.5 per cent.

Sex Ratio

24.164. As per Census 2001, the sex ratio of 1,009 for Christians, 953 for Buddhists, 936 for Muslims and 992 for other religions is above the national average of 933 for entire country. The figure however is alarmingly low for Sikhs at 893. The child sex ratio (age group 0–6) for the same period is 976 for other religions, 964 for Christians, 950 for Muslims, 942 for Buddhists, which are all above the national average of 927. It is however 786 for Sikhs, highly indicative of the disturbing trend of sex selective abortion.

Work and Employment

24.165. The Work Participation Rate (WPR) for all religious communities was 39.1 per cent in the Census of 2001. Buddhists had 40.6 per cent WPR (31.7 per cent for women), Christians 39.7 per cent (28.7 per cent for women), Sikhs 53.3 per cent (20.2 per cent) and Muslims 31.3 per cent (14.1 per cent for women). The gender gap in the work participation rate is large among Muslims (33.4 per cent points) and Sikhs (33.1 per cent points). The gender gap in WPR is 26.1 per cent points at the national level.

24.166. As per Table 24.10, 49.1 per cent Muslims, 52.8 per cent Christians and 47.3 per cent Sikhs are employed as 'other workers'. The 'other workers' category includes workers in service, manufacturing, trade and commerce and allied activities. The NSSO in their 61st Round of survey found that more than half of the workers in the rural areas were self-employed, the proportion being the highest among the Muslim workers both Males (60 per cent) and females (75 per cent). Since a large section of the Muslim, Christian and Sikhs workers are engaged in other workers category, skill development and credit related initiatives need to be tailored for the economically weak among these religious minorities.

24.167. According to the High Level Committee to Examine the Socio-Economic and Educational Status of the Muslim Community in India, the participation

TABLE 24.10
Percentage Distribution of Workers by Category

Name of Religion	Percentage to Total Workers			
	Cultivators	Agricultural Labourers	Household Industry	Other Workers
Hindus	33.1	27.6	3.8	35.5
Muslims	20.7	22.0	8.7	49.1
Christian	29.2	15.3	2.7	52.8
Sikhs	32.4	16.8	3.4	47.3
Buddhists	20.4	37.6	2.9	39.2
Other religions	49.9	32.6	3.2	14.3
India	31.7	26.5	4.2	37.6

Source: Census 2001.

of Muslims in salaried jobs is low at only 13 per cent. In urban areas, less than 8 per cent are employed in the formal sector against a national average of 21 per cent. More than 12 per cent of Muslim male workers are engaged in street vending as compared to the national average of less than 8 per cent. Muslim workers are also found to be in a majority in the industrial sectors of tobacco (41 per cent), wearing apparel (30 per cent) and textiles (21 per cent). The figures indicate that Muslim workers are largely concentrated in the informal sector which is characterised by low wages, bad working conditions and little or no social security. Hence, at the macro level, policy focus on improving the lot of the economically weaker and socially marginalised sections in the unorganised workforce must be increased in order to bring in employment related dividends for Muslim workers. In the Twelfth Plan, specific interventions would need to be devised for up-gradation of skills and educational level of these workers to equip them for employment in the organised sector. To this effect, the Jan Shikshan Sansthan scheme of MHRD could be used in providing vocational training to illiterate, neo literate youth in MCDs.

Challenges for the Empowerment of Minorities

24.168. As stated earlier the eleventh Plan was the first plan to introduce a number of schemes aimed at improving the conditions of the minorities. These are listed in Box 24.1. In spite of considerable efforts made towards raising the socio-economic status of Minorities, many challenges remain which need to be addressed during the Twelfth Plan so that the lot of minorities can be improved in a time bound and effective manner.

Institutional Challenges

24.169. A programme is as good or as bad as its implementation and the quality of implementation is largely dependent on the institution implementing the programme/scheme. The Twelfth Plan should therefore consider systemic modifications to the existing system, which include participation of communities in planning and monitoring and the appointment of government 'facilitators' to improve access.

Box 24.1
Eleventh Five Year Plan Schemes

1. **Prime Minister's 15 Point Programme** was launched in 2005 with the aim of allocating 15 per cent of specified Centrally Sponsored Schemes for Minorities.
2. **Multi-sectoral Development Programme (MsDP)**, formulated for 90 Minority Concentration Districts (MCDs), was designed for addressing the 'development deficits' of these districts and bring them at par with the national average. Projects taken up under MsDP involve mainly construction activities like polytechnic buildings, industrial training institutes, hostels, inter-colleges, residential schools, additional class room, health centres, water supply facilities, Anganwadi Centres, rural housing and so on.
3. **Pre-matric Scholarship Scheme** was launched in the year 2008–09, the second year of the Eleventh Five Year Plan. The scheme provides scholarships to minority students studying in Class I to X.
4. **Post-matric Scholarship Scheme** was launched in the year 2007–08. The scheme covers minority students from Class XI right upto PhD level.
5. **Merit-cum-Means Based Scholarship Scheme** was launched in the year 2007–08. The scheme covers students pursuing technical and professional courses at the UG and PG level.
6. **Maulana Azad National Fellowship for Minority Students** was launched in 2009–10 to provide integrated five year fellowships to pursue M. Phil. and Ph. D. in the Universities and institutions recognised by UGC.
7. **Grant-in-aid to Maulana Azad Education Foundation** was established in July, 1989, as a voluntary, non-political, non-profit making society registered under the Societies Registration Act, 1860, to formulate and implement educational schemes for the benefit of the educationally backward amongst the minorities. The schemes of MAEF are of two types: (i) Grant-in-Aid to NGOs for infrastructure development of Institutes/colleges/schools and (ii) scholarships to meritorious girl students.
8. **Free Coaching and Allied Scheme for Minorities** was launched to assist students through coaching institutions for enhancing their skills and capabilities to make them employable in different sectors. The review of the scheme reveals a similar discrepancy regarding physical and financial targets as with all other schemes. This will be comprehensively corrected in the Twelfth Plan.
9. **Scheme for Leadership Development of Minority Women** was launched by the Ministry in 2010, but could not be implemented due to anomalies in process of selection. A revised version of the scheme will be introduced in the Twelfth Plan.
10. **Grant-in-aid for Equity contribution to NMDFC**: an allocation of ₹500 crore was made under the Eleventh Plan for making equity contribution to NMDFC to help it fund its various schemes.
11. **Scheme of Grants-in-aid for strengthening the infrastructure of SCAs of NMDFC** aims to make SCAs a more effective instrument.
12. **Scheme for the Computerization of Records of the State/UT Wakf Boards** was introduced in order to streamline record keeping, introduce transparency, computerize the various functions/processes of the Waqf Boards and develop a single web based centralized application. The Joint Parliamentary Committee (JPC) on Waqf, in its Ninth Report submitted to Parliament on 23 October 2008, recommended computerization of the records of the State Waqf Boards with Central financial assistance. The scheme was implemented with effect from December, 2009.

24.170. As in the case of other disadvantaged communities a three-pronged strategy is needed, which will focus on (i) social empowerment; (ii) economic empowerment; and (iii) social justice.

Educational Empowerment

24.171. Non-availability of adequate resources and poor implementation has meant that scholarships are not provided to all eligible minority students. It is therefore imperative to ensure that financial allocations are made so that all eligible minority students

are ensured much needed scholarships without any denial or deprivation. All the procedures starting from the application stage to award of scholarships, regular payment of scholarships and renewal of scholarships must be simplified so that award of scholarships to eligible students becomes automatic and hurdle-free. Assured payment of scholarships in time should be ensured through opening of Bank or Post Office accounts in the name of the awardees. Representatives of civil society, where required, should be encouraged to act as facilitators.

24.172. Under the Pre-matric scholarship scheme at present, hostellers studying in Class I–V do not receive scholarship allowances. Provision of maintenance allowance to hostellers as deemed appropriate should be considered. The rates of maintenance amounts will be revised in accordance with the changes taking place in the Consumer Price Index on a regular basis. The upward revision of the ceilings for course fees will be done rationally in order to match the actual fee costs.

24.173. In the Eleventh Five Year Plan, the Physical achievements of the Pre-matric, Post-matric and Merit-cum-Means scholarship schemes far exceed physical targets. However, financial achievements for those same years surprisingly were less than the assigned targets. This indicates that even while more students were being given scholarships, they were concentrated in groups which required less fees, or were mostly day scholars. This will be reviewed in the Twelfth Plan and scholarships equitably distributed as per demand. In the Post-matric scholarship scheme, many students were affected by scholarships not being regularly renewed. Rationalisation through integrated scholarships awards will be introduced in the Twelfth Plan, such that students do not have to drop out.

24.174. Similar scholarship schemes implemented by different Ministries follow different norms both in regard to eligibility criteria and the scholarship rates. These will be harmonised and parity in norms across Ministries implementing similar scholarship schemes will be established. The Online Scholarship Management System will be further strengthened and fully implemented during the first two years of Twelfth Five Year Plan.

24.175. School drop-out rates especially among Muslim girls are very high in Class IX and X, as they have no easy access or transport to reach distantly located institutions. Therefore, a programme through which bicycles are provided to the minority girl students to facilitate the continuance of their studies will be introduced in the Twelfth Five Year Plan. Some States are already implementing schemes to provide bicycles; the envisaged new scheme at the Central

level will be rationalised and converged appropriately with the State scheme(s). Also see Box 24.2.

Recommendations for the Twelfth Five Year Plan

24.176. The empowerment of minorities in the Twelfth Plan is envisaged through their active participation in the developmental process as participants and not as passive recipients of developmental benefits. The Twelfth Plan vision for faster, more inclusive and sustainable growth mandates that bold and creative affirmative action must be undertaken to ensure inclusion of different socio-religious communities and to ensure fulfilment of their social, economic and political needs. The inclusion and empowerment of different socio-religious communities should not be viewed only as a welfare measure undertaken as a consequence of economic growth, but as a critical development imperative.

Monitorable Targets

24.177. The following monitorable targets could be adopted:

1. The literacy rate of religious minorities should be increased as quickly as possible to be at par with the national average, wherever applicable.
2. The participation of religious minorities in graduate and post graduate studies should be proportionate to their population (2011), with special focus on the economically weaker sections.
3. IMR, MMR, Institutional Deliveries, Child Immunisation and Vaccination of religious minorities should be brought at par with the national average, with special focus on the economically weaker and the socially marginalised sections.
4. Work participation rate of religious minorities in the organised sector should be increased to be at par with other communities. This is specially relevant for Muslims and other socially and economically disadvantaged groups.
5. Representation of religious minorities in all forms of Government employment should be increased in proportion to their population (2011).
6. Share of total number and total amount of bank loans given to all religious minorities, with special focus on Muslims and other economically

Box 24.2
Vision for the Twelfth Five Year Plan

The vision for the Twelfth plan consists of a series of bold and creative measures that build upon, but also go beyond the achievements of the Eleventh plan.

INCREASE ALLOCATION: Increase the scale of key interventions by greater financial outlays across the board to include MsDP and also bringing a larger number of schemes within the scope of the 15 PP, by making educational scholarships demand-driven and by initiating key pilot programmes to develop best practices for the future.

DIRECTLY TARGET MINORITIES: Re-vamp the design, expand the scope and strengthen implementation structures of key initiatives like the MsDP and 15 PP such that minority settlements and people are directly targeted; such direct targeting should be made a condition for approval of all block and district level plans.

INSTITUTIONALISE ROBUST MONITORING: Create internal accountability and impact-based monitoring systems that go beyond purely physical and financial monitoring, and also involve CSOs and peoples' groups in conducting time-bound social audits of schemes and create democratic dialogues between minority groups and state institutions at the grassroots level. All data of a district will be available with the district welfare officer (facilitator) and available in the public domain.

DEVELOP TRANSFORMATIVE LEADERSHIP: Build transformative leadership, through training and capacity building schemes, among minority communities on a large scale, especially among minority women and youth, so that they can themselves create accountability at the local level to help the State provide better neighborhoods, jobs, education, health, housing, hygiene, skills and incomes.

FOCUS ON SKILL BUILDING FOR EMPLOYABILITY: Develop skills to generate employability among minority youth in all MsDP blocks and towns through direct linkages with the National Skill Development Mission.

INITIATE PILOT SCHEMES FOR MINORITIES: Recognising that we need to constantly learn and innovate to respond to the changing needs of minorities in the context of the changing landscape of the country, the Twelfth plan should institutionalise a 'hub of innovation', through restructuring the Maulana Azad Education Foundation, wherein a range of experiments in educational and livelihood initiatives (including artisans) among minorities can be undertaken. Civil society engagement with Muslims should be revived urgently through grants-in-aid mechanisms.

weaker and socially marginalised groups, should be increased to be at par with that of the general population.

7. There should be 100 per cent financial inclusion, including access to sources of formal credit and finance for all eligible persons belonging to religious minorities.

Prime Minister's 15 Point Programme

24.178. At present, a limited number of schemes are included in the 15 Point Programme. The Twelfth Plan proposes inclusion of additional schemes from the Ministries of Small and Medium Industries, Youth Affairs, Agriculture and Rural Development (especially MGNREGA). Further, in order to ensure adequate funds and benefits reach the minorities, the existing guidelines of earmarking '15 per cent of funds wherever possible' should be revised to '15 per cent and above' in proportion to the size of the

minority population. This would facilitate coverage of all minority concentrated areas under the Prime Minister's Programme, which were otherwise excluded.

24.179. All achievements under 15 PP will be disaggregated to enable monitoring and to ensure that minority settlements and beneficiaries gain directly. Monitoring guidelines will be suitably revised to ensure ground level impact-based monitoring rather than monitoring of physical and financial outlays. Annual targets and/outlays of 15 PP of the Central Ministries should be broken down to the natural settlement/hamlet/ward level, which should become the basis for reporting achievements. The Vigilance and Monitoring Committees at the Districts and the State level should have members from the minority communities to oversee effective implementation of the schemes/programmes meant for their

benefit and provide the much needed feedback on the implementation of these programmes. To improve the methodology of impact evaluation, data disaggregated for SRCs should be generated across line Ministries under the PM's 15 PP. This will help evaluate the benefits accrued by individuals/families/communities across different sectors. See Box 24.3.

Multi-sectoral Development Programme (MsDP)

24.180. To ensure more focused targeting of the minorities, Blocks with minority population concentration subject to backwardness parameters as applied for Minority Concentrated Districts (MCDs) under MsDP will be adopted as the new area unit in the Multi-sectoral Development Programme. Also, the population criterion to identify MCDs will be brought down from 25 per cent to 15 per cent. MsDP programmes have left out huge minority areas including towns, urban conglomerates and isolated villages/hamlets. Additionally, the programme will adopt a *projectised* approach in order to reach individual beneficiaries among the minorities and also their localities.

24.181. For the Area Development plan, it must be a guiding principle that any assets created benefit minorities. MsDP guidelines will be revised to re-focus the programme away from topping up

existing Centrally Sponsored Schemes under the 15 PP. Instead, MsDP will take up works that are need-based, rather than preferring projects that aim to saturate coverage of already existing national programmes, particularly infrastructure projects (IAY/ICDS/PHC buildings/classroom). *Revised MsDP guidelines will remove this emphasis on 15 PP and instead emphasise local need-based plans to overcome local development deficits.* This would enable poor settlements of minorities to identify what they believe are their most urgent needs and to focus resources on these, which could be drinking water, drainage, livelihoods support, electrification, support to dying vocations such as handlooms and handicrafts, innovations in skill-based education, training to artisans with backward and forward linkages into new markets, equipping technical institutes with adequate equipment and infrastructure, remedial school support for children of first-generation learners, education using new media for training and advocacy and so on. MsDP and 15 PP will work in synergy rather than the former duplicating the latter, such that 15 PP will take care of sectoral investments/ongoing CSS across the country and MsDP will fill gaps that particular communities/or settlements face and which are not being covered by existing CSS.

Box 24.3

Specific Interventions under PM's 15 PP

Following are three interventions proposed to be undertaken by line Ministries during the Twelfth Five Year Plan.

The traditional systems of education, viz., Buddhist Monastic education, training in the areas of drawing, painting, clay art and craft, music, dance, and so on needs to be preserved. To this effect, necessary support and assistance will be provided by the Ministries of Culture, Labour and Human Resource Development. As regards the modernisation of Madarsas, the ongoing schemes of Ministry of Human Resource Development with ensured support and assistance financially and otherwise will be strengthened.

Urdu assumes importance as a prominent language and medium of thought, learning, communication and culture of the nation beyond social, religious and regional boundaries. Therefore, necessary support and efforts will be made to promote Urdu as a living language. The appointment of Urdu teachers in this context will be carried out in an expanded manner with adequate funding not only to Madarsas, but also in promoting the language in more mainstream schools and colleges.

In order to provide the best quality education, the endeavour in the Twelfth Plan will be towards having one Residential School along the lines of Jawahar Navodaya Vidyalaya and Kasturba Gandhi Balika Vidyalaya. It will be established in a phased manner in minority concentration Blocks and minority concentration towns/cities. Norms in these schools need to ensure admission to at least 50 per cent children belonging to minorities. Model Schools and Inter-colleges under the existing scheme of MoHRD should also cover minority concentrated blocks and minority concentrated wards in urban areas. Efforts should also be made that MHRD schemes for interest subsidy on education loans adequately covers the minority communities.

24.182. Since the entire scheme rests on the suitability of the district plans prepared by the District level committees, these will be preceded by prior dissemination of information throughout the minority concentration areas (hamlet/ward). Such information dissemination will include traditional and locally accessible forms of communication (nukkad-nataks, community radios and so on) and not remain restricted to placement of information on the website of the concerned department/government. Further a wide and visible series of public consultations, in the minority concentration areas (hamlet/ward) of the District will now be a part of the pre-condition for plan approval by the Ministry of Minority Affairs.

24.183. MsDP and PM's new 15 PP Guidelines should mandate a specific number of social audits to be undertaken during the implementation period of each specific project. Detailed procedures and institutional support should be provided for social audits as in MGNREGA. Community/social audit conductors should have access to natural settlement/hamlet/ward annual targets and outlays. These should also be placed on websites for full transparency. Oversight and monitoring guidelines should include public accountability procedures including proactive disclosure of information at all levels (natural settlement/hamlet, block and district). Local NGOs should be formally engaged to build community-centred monitoring processes, including capacity building of local communities to conduct such monitoring on their own. Quarterly review meetings for MsDP and 15PP should also involve civil society representatives. Funds for the afore-mentioned interventions could be made available from the administrative costs for monitoring and evaluation under these programmes.

24.184. District Planning Committees (which are the same for both MsDP and PM's new 15 PP must be operationalised on a mandatory basis, with guidelines clearly instructing the inclusion of people's representatives especially from the minorities, local NGOs or development activists. In this regard, training shall also be imparted to elected representatives (ER) to PRIs, especially women and first time ERs from religious minorities. To make the implementation of the

schemes transparent and involve the targeted beneficiaries, all the data of a district will be available with the district welfare officer (facilitator). It should also be available in the public domain for the benefit of elected or community representatives and civil society practitioners.

24.185. MsDP and PM's new 15 PP should also be implemented with a vision to provide all minority settlements, rural and urban, with the following minimum basic services: ICDS, health care, education and skill development, clean drinking water, individual sanitation and sewage and drainage. This assurance of basic services should be demand driven, in that the appropriate government would be responsible to provide these services, on demand from any settlement.

24.186. Direct targeting of minority populations and minority habitations (hamlets) should be made a specific condition for approval of all plans under PM's 15 pp and MsDP. It is desirable to compile socio-economic data, to the extent possible, at the level of habitations. The Assessment and Monitoring Authority may oversee this task.

24.187. In order to cover the minority concentrated pockets and villages that remain outside the identified MCDs under MsDP and are deprived of the developmental benefits, there is an urgent need to ensure that such development deficit villages and towns with 50 per cent or above minority population are provided with developmental inputs through a special programme in the Twelfth Plan. A comprehensive list of all villages and towns—with 50 per cent or above minority population and with development deficits—will be prepared and appropriate funds allocated in order to bridge the identified development deficits during the Twelfth Five Year Plan. These interventions will encompass a variety of structural, conceptual and monitoring measures to increase the pace of progress, participation and empowerment of the minorities. There is a need, however, to constantly assess these strategies against the evolving contexts and to make policies relating to the minorities—to people more generally—open to change as per the needs of those it seeks to serve.

Scheme for Life, Livelihood and Leadership Development of Minority Women

24.188. The Scheme for Leadership Development of Minority Women that was approved in the Eleventh Plan with a small allocation is yet to be rolled out. This pilot scheme will be re-designed and rolled out in the Twelfth Plan. The scheme, which involves local NGOs in its operational plan, will also go a long way in helping NGOs and civil society to overcome their lack of experience of working with Minorities as a deprived socio-economic group and begin the process of constructive and sustained engagement with these groups.

24.189. The Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme of the Ministry of Micro, Small and Medium for assistance to illiterate and semi-literate women of rural and urban areas for self-employment would need to be extended to marginalised minority women under the 15 Point Programme to enable entrepreneurship development amongst women.

Implementation of the Recommendations of Sachar Committee

24.190. Report of the Justice Rajender Sachar Committee in 2006 had made special recommendations for the development of Muslims. While most of the recommendations have been translated into action in the Eleventh Plan period, there are certain recommendations that need to be put into action in the Twelfth Plan. These include (i) Disadvantaged minority students living in congested urban areas will be put into study centres by having the same set up as the existing school building to function after regular school hours; (ii) More public sector bank branches will be opened in minority concentration districts and the list of such bank branches will be placed by the Ministry of Minority Affairs on its website and (iii) Special programmes for providing education along with skill and vocational training in the minority concentrated towns will be initiated.

Institutional Changes:

1. Strengthened Systems at the Centre and State levels

- (a) The Twelfth Plan proposes the immediate augmentation and restructuring of the Ministry of Minority Affairs to address the current human resource shortages that are faced by the Ministry.
- (b) All State Governments will be asked to have a separate well endowed Department for Minorities welfare. MoUs will be signed with States so that they are able to enjoy more flexibility and assume more responsibility and accountability. In the minorities sector, an administrative chain of command should be developed with an empowered officer, who may act as a facilitator between the community, PRIs and across the various departments who will handhold the minorities in the areas of education, area development and economic advancement. Districts should have a separate Minority Welfare or Facilitation Officer, who may be the nodal officer responsible for coordination and implementation of all schemes relating to the welfare of minorities for the District. A clear chain of command and accountability should be designed right from the level of the nodal officer to the level of chief secretary of the State.
- (c) Village, block and district level Committees will be established with representations from the local government, elected representatives and minority communities to identify the development deficits and prioritise the interventions in addressing the development deficits. At the State level, separate Committees will be formed to ensure proper monitoring and effective implementation of schemes. Government functionaries involved in the implementation of schemes and the new 15 Point Programme will be sensitised as well as apprised of the various schemes and programmes of the government for minorities.

2. Structure of implementation of MsDP

In order to cut down delay and establish accountability, the plan and implementation of MsDP schemes will be delegated to local authorities through the states. MoMA will perform the

role of overall management and monitoring of the Programme. This will ensure direct accountability of the major stakeholders.

3. Skill Development

Schemes promoting skill development amongst minorities to enhance their potential for employment deserve special attention. The ever proliferating MsDP basket of schemes should be consolidated with greater emphasis on skill development. It is also observed that the State Governments are reluctant to accept ITI and Polytechnic schemes for the simple fact that they feel that they will become liabilities for the State exchequer right from day one. Therefore, these schemes will now have in-built provision for a lump-sum amount for maintenance/cost of these institutions for at least five years. Skilling of minorities will also be accorded priority through initiatives of the National Skill Development Coordination Board, attached to the Planning Commission.

4. Access to resources for entrepreneurial activities

The National Minority Development and Finance Corporation (NMDFC) will take up skill development programmes. It will also give marketing assistance to artisans. Economic Empowerment of Minorities will be done through infusion of capital at the right levels. Priority Sector Lending (PSL) ratio has shown constant and steady rise with 10.6 per cent in 2007–08, 12.41 per cent in 2008–09, 13.01 per cent in 2009–10 and 14.16 per cent in 2010–11 of total PSL going to minority communities. There should be priority sector lending based on BPL and doubly disadvantaged BPL families. NMDFC will also be comprehensively restructured.

5. Scholarship programmes of MoMA to be 'Demand Driven'

The goal will be for all eligible minority students to be covered under different scholarship schemes of MoMA in time. This will be coupled with suitable enhancement of scholarship

amounts along with total simplification of procedures for fresh and reasonable cases.

6. The Maulana Azad Education Foundation (MAEF)

The Maulana Azad Education Foundation (MAEF) needs to be comprehensively restructured. An evaluation study of the Maulana Azad Education Foundation (MAEF) was carried out by the Indian Social Institute, New Delhi in 2010. The findings of the study revealed that the Foundation was performing a good role in promoting education among the educationally backward minorities. However, in order to give further impetus to the functioning of the MAEF, there is a felt need for institutional restructuring of the MAEF, transforming the Foundation from its current charity/welfare mode towards empowering practices. The objective should be to turn MAEF into an independent hub of excellence for incubating innovations, pilots that may be up-scaled and dissemination of best practices for minority empowerment, cutting across sectors and schemes within the broad framework of ending social exclusion, promoting integration and citizenship rights.

24.191. The MAEF may undertake these pilot initiatives through grant-in-aid mechanisms in a broad range of educational arenas such as community based education, innovations in skill-based education, training to artisans with backward and forward linkages into new markets, training for empowerment of women and youth, equipping technical institutes with adequate equipment and infrastructure, remedial school support for children of first-generation learners, capacity building for good governance, education for civic empowerment, education for advocacy and so on. Institutional restructuring of this kind will require developing a blue print of changes in governance, including structures and processes of decision making and in the management for implementing these decisions; including the creation of a new organisational structure, roles and positions, criteria for the allocation of resources to various activities, the allotment of tasks to various units and regular performance evaluation.

7. **Sensitisation of Citizens and Functionaries at the Centre and State Levels**

- Government functionaries involved in the implementation of schemes and the new 15 Point Programme should be sensitised as well as apprised of the various schemes and programmes for the minorities. A capacity building project will need to be introduced in the Twelfth Five Year Plan, which can support the requirements of all stakeholders.
- NGOs with proven record of working for communal harmony will be engaged to prepare modules for democratic education. The values of the Indian Constitution will be propagated through specially designed campaigns specially targeting the younger generation from all communities. Larger social mobilisation and public education campaigns will also need to be undertaken.

8. **Data Collection and Management System**

In order to address the needs and problems of the minorities living in diverse situations and geographical areas, especially in the Himalayan region, there is a need to have disaggregated data bases on their socio-economic conditions. To this effect, a baseline survey covering district/blocks/villages/occupational clusters/agricultural activities needs to be conducted especially at the grassroots levels, with the participation of the Ministries concerned. The developmental activities to be undertaken should be based upon the demands and needs as arise from the survey data. Employment data must also be compiled to better understand the current position of employment for minorities in the Government as well as the Private sector. This is necessary to ensure equitable representation from minority communities in civil, defense, administrative, judicial and other services, as well as in the private sector.

9. **Monitoring of Schemes and Programmes that concern Minorities**

Social Audit needs to be built into all programmes and to make the implementation of schemes transparent all the data of a district

should be available with the District Welfare Officer. It will also be available in the public domain for the benefit of elected or community representatives and civil society practitioners. The Twelfth Plan strategy for monitoring should include:

- Development of the National Data bank, as suggested by the Sachar Committee.
- Tracking selected Monitorable Targets disaggregated by social religious communities, in respect of beneficiary oriented programmes.
- Suggest inclusion of socio-religious communities, especially minorities, as an agenda for review in Plan discussions with States, reviews with State Chief Ministers and State Chief Secretaries and State reviews with District Collectors and Chairpersons/CEOs of Zila Parishads.
- Support reporting of disaggregated indicators related to minorities by the relevant flagship programmes in their existing programme review mechanisms such as Annual Common Review Missions for NHRM and SSA, half yearly/annual reviews with States and social audits such as for MGNREGA,
- Incentivisation of States and Panchayats (through Additional Central Assistance) where social inclusion indicators related to minorities improve, with peer learning through sharing of best practices, within and across States/Districts.
- National Resource Centre/s would need to be established, with expertise on development planning for different social religious communities—including minorities—linked to a support network of institutions, universities and voluntary agencies. This network may expand to State Resource Centre/s as needed, based on implementation experience during the Plan period.
- Development of monitoring systems, processes and tools for assessing and reporting on the inclusiveness of growth as mentioned above.
- An assessment of social inclusion of different socio-religious communities, including

minorities, should be conducted as part of the Mid-Term Appraisal of the Twelfth Plan.

10. The Assessment and Monitoring Authority

The Assessment and Monitoring Authority was set up following the recommendations of the Sachar Committee and anchored in the Planning Commission. This Authority needs to evaluate the extent of development benefits, which accrue to different Socio-Religious Communities (SRCs), through various programmes and perform a watch-dog function to closely monitor the participation of SRCs in programmes at all levels of governance, namely the Rural and Urban local bodies, Districts, States and the Centre. The Assessment and Monitoring Authority (AMA) also needs to institutionalise the mechanisms for assessment and monitoring at all levels, through effective generation and analysis of data and commissioning of qualitative and quantitative studies. The Authority needs to be given the requisite power and resources to monitor that necessary priority is accorded to different socio-religious communities—particularly minority communities—in policies, programmes and capacity development interventions. This will also enable effective implementation of the monitoring interventions recommended above.

New Schemes for the Twelfth Five Year Plan

24.192. The Twelfth Plan will introduce six new schemes in addition to the existing ones. These will address the issues of leadership development, preservation of culture, counseling services, education, training for civil services examinations and decline of population of the Parsi community.

1. Pilot Scheme for Leadership Training for Young Leaders among Minorities

24.193. There is a strong need for perspective building, sensitisation, community mobilisation and awareness generation among people regarding the right of equal development of minorities. Towards this end, a pilot scheme for leadership training of youth belonging to religious minorities will be introduced in the Twelfth Five Year Plan. The scheme would train 20,000 young men and women leaders across the

country every year to become equipped in responding to perceptions of alienation as well as actual instances of discrimination and hostility by encouraging participation and introducing innovative ways to counter the sense of insecurity and despair. The scheme will also provide training in IT-based and new media for advocacy and communication; it will train youth as practitioners of social audit processes, develop skills to provide technical support to community mobilisation/project planning/audit and to become trainers for capacity building of members of village/district/state committees (of 15 PP/MsDP). The scheme will thus provide an active link between local government and the community towards successful implementation of government schemes. It may be linked to the Centre for the Study of Social Exclusion and Inclusive Policy set up by UGC in the Eleventh Plan period.

2. Support for students clearing Prelims under Civil Services Examination

24.194. Participation of minorities in decision making is vital for their development. Therefore, to encourage aspiring candidates from the minority communities, who clear Prelims under Civil Services Examination for Grade A and B of both UPSC as well as State Public Service Commission will be given incentives in the form of direct financial support to help them to bear the cost of coaching and other expenses.

3. Scheme for Promotion of Education in 100 Minority Concentration Towns/Cities

24.195. A sizeable minority population in towns and cities is socio-economically disadvantaged and requires a whole range of special initiatives to improve their living conditions and opportunities. It is therefore necessary to initiate special programmes for the promotion of education, including skill and vocational education, in such backward towns/cities for empowering members of minority communities, among others.

4. Pilot Scheme for Urban Youth Support Lines

24.196. There is an urgent need for intervention that helps the Youth belonging to minorities in building their human, cultural and social capital. This can best

be done by leveraging technology for the rebuilding of social and institutional networks and linkages, creating space for dialogue between community and state actors and recognising and overcoming trauma/psychosocial concerns. This intervention will specifically include information dissemination on career counseling and employment opportunities to youth from poor and working class backgrounds. A pilot scheme will be introduced using a 'hub and spoke' hybrid technology model with an Urban Youth Support-line (UYSL) as the hub, supported by community outreach nodes that serve as spokes. The services that will be provided by the proposed UYSL include career guidance (education, vocational training), access to Government Schemes/Programmes, placement services, facilitation for certification, institutional linkages (financial and so on), general counseling (women's issues, health issues, legal issues, identity, security) and location based outreach services in co-ordination with NGOs/CBOs/Ward Offices.

5. Scheme for Protection and Projection of Minority Culture and Heritage

24.197. The culture of the minorities manifested in various forms—paintings, monuments, literature, artefacts, festivals, institutions and so on—gives strength and a sense of identity to people following different faiths, even as they live in different parts of the country. These expressions of culture and history of the minorities are inseparable parts of our national heritage. Therefore, efforts with adequate fund support should be made to protect and revive both material and non-material cultural traits of the minorities.

6. Linguistic Minorities

24.198. Linguistic Minorities (LMs) consist of heterogeneous linguistic groups spread across the country having concentration in the Inter-State borders. A sizeable population of LMs belongs to various occupational and artisan groups and their source of livelihood and the occupation relating thereto is closely linked to their culture. Thus, for LMs the culture and economy are inseparable. A large number of LMs remain backward socially and economically for being numerically small and marginalised. The

Constitutional commitment for protecting their culture and language should therefore be attended in a comprehensive manner by not only protecting their source of livelihood, which is an integral part of their culture, but also through protective measures ensuring their all-round well-being and development.

24.199. To conclude, the interventions proposed in the Twelfth Five Year Plan encompass variety of structural, conceptual and monitoring measures to increase the pace of progress, participation and empowerment of the minorities. However, there is a need to constantly assess these strategies against the evolving contexts and to provide an enabling policy environment that is responsive to the needs of communities—particularly minorities and the most vulnerable and marginalised communities—that it seeks to serve.

OTHER VULNERABLE GROUPS

24.200. The social scenario in the country is changing rapidly due to industrialisation and the increasing flow of the rural population to the already crowded cities and towns in search of employment, leading to overcrowding, emergence of pavement/slum dwellings, breakdown of joint family system, unemployment, poverty and so on. In this process of social transformation, certain categories of population, who are unable to cope with these rapid changes, have become especially vulnerable. These vulnerable groups include Persons with Disabilities (PwDs) (that is, locomotor, visual, hearing, speech and mental and so on), Older Persons, Beggars and Victims of Substance Abuse and Alcoholism. All these categories need special attention of the State because of their vulnerabilities and the disabilities that they suffer from.

PERSONS WITH DISABILITIES

An Overview

24.201. About 2.11 per cent of the population as per 2001 census comprises of persons with disabilities having one or multiple disability. Though the number is small, the need of these members of our society deserves special attention. Disabilities present probabilistic outcomes which can affect anyone

and it is appropriate that society does whatever it can to assist this segment to play a full part in society. There was a paradigm shift in policy towards Persons with Disabilities since the Ninth Five Year Plan, from the earlier welfare based approach to a rights-based approach. The Tenth Five Year Plan focused on effective implementation of various provisions of legislation and National Policy for Persons with Disabilities. It advocated a multi-sectoral and multi-collaborative approach. The Eleventh Five Year Plan (2007–12) had aimed at inclusive growth. It was expected to achieve inclusiveness through significant improvements in literacy/education, health, greater employment opportunities and sharper focus on disadvantaged groups. The Eleventh Plan emphasised upon the rights-based approach to empower the PwDs inter alia through: (i) delineating clear cut responsibility between the concerned Ministries/Departments; (ii) formulating detailed rules and guidelines by concerned Ministries/Departments; and (iii) monitoring mechanism at various levels. A new Department, namely Department of Disability Affairs has been set up in the Ministry of Social Justice and Empowerment on Twelfth May, 2012 to act as the nodal Department for the overall policy, planning and coordination of programmes for persons with disabilities.

24.202. In consonance with the policy of providing a complete package of services and to deal effectively with the multi-dimensional problems of the disabled population, the Ministry of Social Justice and Empowerment has been implementing a variety of programmes for their treatment, rehabilitation, empowerment and development. The seven National Institutes viz., the National Institute for the Visually Handicapped, Dehradun (1979); National Institute for the Orthopedically Handicapped, Kolkata (1978); Aliyavur Jung National Institute for the Hearing Handicapped, Mumbai (1983); National Institute for the Mentally Handicapped, Secundrabad (1984); and National Institute for Multiple Disabilities, Chennai and Swami Vivekanand National Institute of Rehabilitation, Training and Research, Cuttack (1984) and Pt. Deen Dayal Upadhyaya Institute for the Physically Handicapped, New Delhi (1960) continued to develop technical manpower through

full-fledged courses in various aspects of prevention, education, treatment and rehabilitation of the disabled and provide outreach and extension activities to needy areas such as slums, tribal belts, semi-urban and rural areas. In addition, a National Centre namely, Indian Sign Language Research and Training Centre has been set up in 2011 to propagate and develop Indian Sign Language.

24.203. The National Handicapped Finance and Development Corporation (NHFDC) was set up on 24th January, 1997 as an apex level body with an authorised share capital of ₹400.00 crore. The objective of the Corporation is to promote economic development activities and self-employment ventures for the benefit of Persons with Disability. The Corporation has so far released equity contribution by the Ministry as paid up capital to the extent of ₹161.80 crore. The Corporation extends credit facilities to beneficiaries through channelising agencies in States/UTs. It provides loans at concessional rate for education, skill development and self-employment ventures to Persons with Disabilities of 40 per cent or more and whose annual income does not exceed ₹5.00 lakh per annum in urban areas and ₹3.00 lakh in rural areas. NHFDC also provided loans to Parents Associations of mentally retarded persons to set up income generating activities. The Eleventh Plan outlay was ₹30.80 crore. However, on the basis of budgetary provisions made on year to year basis, a total of ₹125.00 crore was provided for the scheme in the Eleventh Plan against which the likely expenditure is ₹112.00 crore benefitting 34,461 disabled persons.

24.204. The Artificial Limbs Manufacturing Corporation of India (ALIMCO) was set up in 1972. The authorised share capital and paid up capital as on March 31, 2010 were ₹300.00 lakh and ₹196.50 lakhs respectively, for manufacturing and supplying durable, sophisticated, scientifically manufactured modern and ISI standard quality assistive aids and appliances that can promote physical, psychological, social, economic and vocational rehabilitation by reducing the effect of disabilities and enhancing potential for self-dependence. ALIMCO is the premier and the largest manufacturer of quality Aids and Appliances in entire South Asia. The Corporation

has been exporting its products to Afghanistan, Angola, Bangladesh, Bhutan, Cambodia, Ghana, Hong Kong, Israel, Namibia, Nepal, Philippines, Sri Lanka, Tanzania, UAE, Uzbekistan and USA. Besides Government's efforts, NGOs are also contributing towards physical, economic and social rehabilitation of the persons with disabilities. Please refer to Box 24.4.

24.205. The scheme of setting up of Composite Regional Centres (CRCs) is a part of overall strategy to reach out to the PwDs in the country and to facilitate the creation of the required infrastructure and capacity building at Central, State and District levels and below for awareness generation, training of rehabilitation professionals, service delivery and so on. At present there are six CRCs functioning at Sundernagar, Srinagar, Lucknow, Guwahati, Patna and Bhopal. Another one has been set up at Ahmedabad (Gujarat) during the year 2010–11, which became functional from 16 August 2011 and one more CRC has been set up at Kozhikode (Kerala) on 17.02.2012. Additional Centres need to be set up at locations where the existing infrastructure for providing comprehensive services to persons with disabilities are inadequate and where such centres are needed the most.

24.206. The objective of the District Disability Rehabilitation Centres (DDRCs) is to facilitate the creation of infrastructure and capacity building at district level for awareness generation, rehabilitation, training and guiding rehabilitation professionals.

The Scheme is a joint venture of the State and Central Government. The DDRCs are funded through the 'Schemes for Implementation of the Persons with Disabilities (Equal Opportunity, Protection of Rights and Full Participation) Act, 1995 for an initial period of 3 years (5 years in case of North Eastern Region, J&K, A&N Islands, Puducherry, Daman & Diu and Dadra & Nagar Haveli) and thereafter the funding is made through the Scheme of Deendayal Disabled Rehabilitation Scheme (DDRS). DDRC guidelines have been revised with effect from April 1, 2010. The revised guidelines include revision of honoraria, recurring and non recurring items of expenditure and so on 199 DDRCs have been sanctioned out of which 181 are functional and are providing rehabilitation services to persons with disabilities. 21 new DDRCs have been set up in 2010–11 In the financial year 2011–12, grant amounting to ₹196.28 lakh was released for setting up of 12 new DDRCs at Warangal (Andhra Pradesh), Supaul (Bihar), Sitamarhi (Bihar), West Champaran (Bihar), Sabarkantha (Gujarat), Banaskantha (Gujarat), Bharatpur (Rajasthan), Bhilwara (Rajasthan) Aligarh (Uttar Pradesh), Bulandshahr (Uttar Pradesh), Bardhaman (West Bengal), Purulia (West Bengal).

24.207. The main objective of the Scheme of Assistance to persons with disabilities for Purchase/Fitting of Aids/Appliances (ADIP) is to provide grant-in-aid to the various implementing agencies (NGOs/ District Disability Rehabilitation Centres/ALIMCO/ State Handicapped Development Corporation/other local bodies) to assist the needy disabled persons in

Box 24.4 **The Jaipur Foot Story**

The Bhagwan Mahaveer Viklang Sahayata Samiti, Limb Centre, S.M.S. Hospital/Medical College, Jaipur (hereinafter called the Society) is a non-governmental, voluntary, non-religious, non-sectarian, non-political Society for helping the handicapped, particularly the resourceless. It was set up by Mr. D.R. Mehta in March, 1975 as one of the long-term human welfare projects. It has branches in Bikaner, Jodhpur, Kota, Bharatpur, Ajmer, Pali, Udaipur, Hyderabad, Ambala, Srinagar, Indore, Chennai, Patna and Ahmadabad. The Society (Jaipur Foot/Limb and Calipers) supplements efforts in making disabled persons functional by providing artificial limbs, calipers, other aids and appliances, economic assistance free of charge. This enables them to regain their self-respect and human dignity as also to become normal and useful members of the community. The Jaipur Limb is so efficient that after this limb is fitted, a person can walk like a normal person without a stick or support, and even run, ride a bicycle and climb a tree. Many of the patients can, after the fitment, go back to work in the fields, factories, shops and offices. Jaipur Foot has also been fitted to landmine victims and others in foreign countries like Afghanistan, Bangladesh, Indonesia, Lebanon, Nigeria, Nepal, Nairobi, Pakistan, Panama, Philippines, Somalia, Sudan, Zambia, and Zimbabwe.

procuring durable, sophisticated and scientifically manufactured, modern, standard aids and appliances that can promote their physical, social and psychological rehabilitation, by reducing the effects of disabilities and enhance their economic potential. The aids and appliances supplied under the Scheme must meet ISI standards. The Scheme also envisages corrective surgeries, whenever required, before providing an assistive device. From the year 2007–08, a new approach for district-wise allocation of funds to organise camps for persons with disabilities for distribution of aids and appliance has been adopted to ensure coverage throughout the country. The procedure has been further amended for promoting the involvement of Red Cross Societies, District Disability Rehabilitation Centres and State Government Corporations/Boards.

24.208. The Scheme of Deendayal Disabled Rehabilitation Scheme (DDRS) has been implemented since 1999 with the objective of ensuring effective implementation of the Persons with Disabilities Act, 1995, by creating an enabling environment and encouraging non-governmental organisations through financial assistance for undertaking projects for the empowerment of the disabled. The DDRS guidelines, applicable since 1 April 2003, include 18 model projects covering various services provided by voluntary agencies which can be supported through grant-in-aid. The services provided include: (i) programmes for pre-school and early intervention; (ii) special education; (iii) vocational training and placement; (iv) community based rehabilitation; (v) manpower development; and (vi) psycho-social rehabilitation of persons with mental illness. The guidelines of Deendayal Disability and Rehabilitation Scheme were revised in 2009. It includes revised cost norms for honoraria, recurring items and non-recurring items of expenditure. Besides enhancement of cost-norms, rationalisation and merger of manpower categories in the various model projects have been carried out. As against 80 categories in the original Scheme, the revised list contains 66 manpower categories. 14 new trades that can be offered in Vocational Training Centres (VTCs) have been added considering the demand for new skills like computer applications and programming,

web-designing, internet management, mobile repairing and so on District Disability Rehabilitation Centres set up by the Ministry are also funded under this Scheme. The outlay under the Eleventh Five Year Plan was ₹500.00 crore and likely expenditure is to the order of ₹369.10 crore accounting for 83 per cent utilisation of the allocation. Under the Scheme, 530 NGOs were assisted during 2007–11 covering an average of 2.3 lakh beneficiaries every year.

24.209. The Scheme of Incentives to Employers in the Private Sector for Providing Employment to Persons with Disabilities was launched in 2008. Under the Scheme, the Government of India provides the employer's contribution for Employees Provident Fund (EPF) and Employees State Insurance (ESI) for the first 3 years, for employees with disabilities employed in the private sector on or after 1 April 2008, with a monthly salary upto ₹25,000. Under the scheme, 392 (upto 31 March 2012) and 918 (upto 29 September 2012) persons have been registered by Employees Provident Fund Organisation (EPFO) and Employees State Insurance Corporation (ESIC) respectively till September 2010. The incentive scheme is basically voluntary in nature. Wide publicity has been given to sensitise and encourage the employers in private sector to avail the benefit of the Scheme.

Persons with Disabilities: Strategy for the Twelfth Plan

24.210. Persons with Disabilities continue to face discrimination in education, employment, transport and in terms of access to sports, recreation, and so on. To counter this, the Twelfth Plan must adopt a two-pronged strategy incorporating—(i) service delivery and (ii) generation of public awareness about disability rights. In the area of service delivery the challenges to be addressed include: making a large number of products, public services and information services accessible to PwDs, improving participation and completion rates of students with disabilities at various stages of education (elementary, secondary and tertiary), reducing disproportionate incidence of poverty among the persons with disabilities, enhancing condition of nutrition, health and housing at least upto a reasonable level, identifying exclusive

implementing agencies for programmes meant for persons with disabilities in States and strengthening of existing agencies. Another major area of challenge pertains to public awareness about disability rights and issues and stepping up of the level of awareness among the persons with disabilities about legislative provisions and development programmes available to them. The problems and needs of the most vulnerable among the persons with disabilities such as women, homeless and those with severe/or multiple disabilities require special and intensified focus in the Twelfth Plan.

24.211. There is need for modernisation and expansion of production units of ALIMCO to enhance the quantum of production to match/meet the demand for improved products. Efforts, therefore, need to be made to ensure provision of modernised artificial limbs and appliances for the needy persons with disabilities with greater coverage.

24.212. The Twelfth Five Year Plan will look into the three key aspects: (i) Recognition; of the extent to which the development, competence and emerging personal autonomy of Persons with Disabilities are enhanced through the realisation of the various agreed National and International Conventions and Programmes; (ii) Empowerment; in term of denoting the rights of persons with disabilities to respect their capacities and by transfer of various legal rights; (iii) Protection acknowledging that Persons with Disabilities have 'un-evolved' capacities as a consequence of their disabilities and thereby have rights to protection; on the part of parents, community and the State from abuse and from participation in activities likely to cause them harm. In all three cases, there are obligations on States to respect, protect and promote the right of the Persons with Disabilities.

24.213. Municipalities and Panchayats need to be specially enabled and empowered to perform their assigned role for the empowerment of Persons with Disabilities, increased sensitisation and awareness level of different stakeholders and the community; re-designing products, processes, public places and services so as to make them accessible to persons with disabilities; improved delivery and monitoring

mechanism; the development of an integrated management system for the coordination of disability planning, implementation and monitoring in the various line functions at all spheres of government; and establishing of National, State and subsequent District structures that will continuously update and link strategy and policy developments with operational planning initiatives involving all role-players (District Project Officers [DPOs], government, the private sector).

24.214. To accomplish the above task, the Twelfth Plan needs to adopt the strategy of: (i) Involvement of Persons with Disabilities in evolving strategies of the government and involving organisations of persons with disabilities and their representatives in the decision-making processes and (ii) Inclusion of Persons with Disabilities in the strategies and activities of all government programmes as would be relevant.

24.215. As per the provisions of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, 3 per cent reservation in employment is being provided to the persons with disabilities. All Central Ministries/ Departments, especially those concerned with infrastructure, social sector and poverty alleviation corresponding Departments of State Governments and Panchayats, Municipalities and other Urban Local Bodies should earmark reasonable amounts in their Plan outlay for disability related interventions. An appropriate mechanism should be put in place for this purpose for programmes empowering PwDs and monitoring of their utilisation at all levels—Central, State, District, City/Town, Block and so on.

24.216. Education plays a pivotal role in socio-economic empowerment of Persons with Disabilities. Emphasis in the Twelfth Plan will be on educational development through: (i) Pre-Matric Scholarships for students with disabilities; (ii) Post-Matric Scholarships for students with disabilities; (iii) free coaching for students with disabilities; (iv) Special/ Residential school for students with severe and multiple disabilities, in districts not having Government special schools; (v) Hostels for existing Government

special schools not having hostels and augmentation of seats in existing hostels of Government special schools; (vi) Support for establishment/modernisation/capacity augmentation of Braille Presses; (vii) Scholarships for 'Top Class' education for students with disabilities studying in premier higher education institutes (like IITs, NITs and so on); (viii) Rajiv Gandhi National Fellowship for persons with disabilities; (ix) National Overseas Scholarship for persons with disabilities; (x) establishment of a college for deaf in each of the five regions of the country and (xi) establishment of National Accessible Library.

24.217. There is a need to give special focus on the requirement of persons with disabilities especially for Cerebral Palsy, Autism and Mental Retardation. For this purpose, the National Trust for the welfare of persons with Autism, cerebral palsy, mental retardation and multiple disabilities should emphasise on prevention, early detection, treatment and rehabilitation of the target groups in its programmes.

24.218. To make sports more accessible to Persons with Disabilities and to encourage their participation in the sports, there is a need for a Centre for Disability Sports.

24.219. In order to address the needs of differently challenged persons efforts need to be made for universal coverage of disability friendly infrastructure and facilities in Universities, Hostels and other such institutions. Adequate attention needs to be given towards providing adequate disable friendly space/facilities in all modes of transport viz. rail, buses and airplanes and so on During Twelfth Plan, efforts will be made to provide barrier free environment in important Government buildings and to make government websites accessible to persons with disabilities. A National centre will be established to facilitate and support the development of universal design and barrier free environment.

24.220. In the Twelfth Plan efforts also need to be directed to provide needed support and assistance for (i) Rehabilitation Centres for treating mentally ill persons; (ii) Model multi-disability

independent living centres; (iii) setting up of State Spinal Injury Centres; (iv) provisioning accessibility in State Government institutions; (v) making State Governments' websites accessible; (vi) preparation of comprehensive database and online State depository of resources on disabilities; (vii) establishment of State Missions and District Coordinators; (viii) awareness generation and publicity; (ix) training of care-givers: In-service training and sensitisation of State Governments, local bodies and other service providers; (x) Establishment of National Institute of Mental Health Rehabilitation; (xi) Establishment of State Disability Resource Centres; (xii) Establishment of Micro-enterprises Incubation Centres for persons with disabilities; (xiii) grant of Association for Rehabilitation Under National Trust Initiative of Marketing (ARUNIM) for supporting its marketing activities and (xiv) Research on disability related technology, products and issues. Overall, the Central Ministries/Departments and State Governments need to provide adequate support to implement various programmes as per the provisions of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. There is need for greater support to National Handicapped Finance Development Corporation for providing subsidies on loan for education/self-employment and grant for skill development training and so on. Further there is an urgent need to restructure and modernise ALIMCO to enable it to produce a large number of cost effective aids and assistive devices. The scheme for Incentives for Employing Persons with Disabilities in private sector needs to be suitably revamped to encourage employment and retention of persons with disabilities in private sector.

24.221. The existing laws on disability such as Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, Rehabilitation Council of India Act, 1992, National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999, Mental Health Act, 1987 and other laws that concern or address disability issues like Right of Children to Free and Compulsory Education Act, 2009, Protection of

Child Rights Act, 2005, The National Commission for Women Act, 1990, Apprenticeship Act, 1961, National Rural Employment Guarantee Act, 2005, Criminal Procedure Code, 1973, Indian Evidence Act, 1872 would need to be reviewed and if necessary amended or replaced in order to harmonise them with the provision of United Nations Conference on Rehabilitation of Persons with Disabilities (UNCRPD).

24.222. The existing machinery in Central and State Governments for implementing disability related programmes is generally weak both in terms of numbers and professional capability. Delivery of disability related programmes is unlikely to improve materially unless the delivery system is suitably strengthened. Therefore, the machinery attending to the rehabilitation, development and empowerment of persons with disabilities needs to be strengthened qualitatively and quantitatively.

24.223. There is a need to adopt a facilitating approach for intensive and time-bound implementation of programmes ensuring expected outcomes, dedicated implementation mechanism and management structure, adequate allocation of resources together with autonomy and accountability, intensive monitoring and regular evaluation, bringing together all concerned organisations, agencies, partners, stakeholders and community at large, high visibility through awareness generation, media, extensive use of technological inputs, and so on. To this end, National and State level Missions for Empowerment of Persons with Disabilities may be considered with full-time Mission Director and supporting staff, on the pattern of SSA, NRHM, JNNURM and so on.

24.224. All Schemes and Programmes under the envisaged Mission(s) needs to be implemented in close partnership with Panchayats, Municipalities, other Urban Local Bodies, NGOs and the community and with active involvement of persons with disabilities.

24.225. The State Mission will function in close coordination with the State Government and the State

Directorate. The State Government and the Directorate will continue to have the overall administrative, regulatory and policy making role in the State. On the other hand, State Mission for Empowerment of Persons with Disabilities (SMEPWD) will be responsible for integrating and well coordinated implementation of various programmes and schemes for persons with disabilities.

24.226. To accomplish empowerment of the Persons with Disabilities, especially in making them self-reliant, independent and productive, it is imperative to ensure that they have equal and rightful access and entitlement to the services provided by the concerned Ministries/Departments of both Central and State Governments. An illustrative list of what is possible is indicated in Box 24.5. Please refer to Box 24.5.

SENIOR CITIZENS

24.227. General improvement in the health care facilities over the years has resulted in increase in life expectancy and continuing increase in proportion of population of senior citizens. The number of senior citizens of 80 years and above has been increasing. As a result the old Age Dependency Ratio has been steadily rising during the past three decades viz. 12.0 in 1981, 12.2 in 1991 and 13.1 in 2001. The needs of the older (80+) persons are different from those senior citizens in the age group of 60 years and above. Increasing attention will have to be given to this category of senior citizens. This will be addressed in the new policy for Senior Citizens which is under preparation.

24.228. The Maintenance and Welfare of Parents and Senior Citizens Act, 2007 was enacted in December 2007 to ensure need-based maintenance for parents and senior citizens and their welfare. Twenty-five States namely Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttarakhand and West Bengal have notified the Act and all seven UTs have also notified the Act. Rest of the States which are yet to take necessary

Box 24.5**Possible Actions by Central Government Ministries to Benefit Those with Disabilities**

Actions which Central Government Ministries can take to benefit those with disabilities. Similar action could be contemplated by the States.

Ministry of Communication, Information and Technology—Information, communications and other services, including electronic services and emergency services should be made accessible and disabled friendly.

Ministry of Civil Aviation—The Ministry should lay down standards for safe and non-discriminatory air travel of persons with disabilities in order to implement the provisions of the UNCRPD and other air travel related international conventions. Standards for procurement of equipment, materials for ensuring safe and non-discriminatory air travel of persons with disabilities should also be laid down. Adapt buses, vessels and aircrafts in such a way as to permit easy access to persons with disabilities. Adapt toilets in vessels, aircrafts and waiting rooms in such a way as to permit the wheel chair users to use them conveniently.

Ministry of Health and Family Welfare—The health care needs for people with disabilities include the provision of accessible hospitals and health centres, trained and sensitised human resource in the field, affordable and reasonable health insurance and establishment of community care centres.

Ministry of Human Resource Development—As for any other group, education is critical to expanding the life prospects of people with disability. In addition, the socialisation of children with disabilities through education assumes unusually important roles in societies such as India where social exclusion of persons with disability is significant. Government schools including all Kendriya Vidyalayas and Navodaya Vidyalayas should ensure barrier free environment. School facilities such as toilets, drinking water, class rooms, furniture and fixtures, library, hostels (both boys and girls), canteens, playgrounds, labs, kitchen, auditorium, lift, extracurricular activities must be made accessible.

Ministry of Labour and Employment—Training and development of Modular Employable Skills of people with disabilities under the Skill Development Initiative Scheme should be taken up on priority basis. The Ministry should establish an Accessible National Portal allowing people with disabilities to register and search for jobs.

Ministry of Railways—All multi-level and multi-platform railway stations and one coach in every class of mail and express trains should be accessible and prepare rail compartments, toilets in rail compartments and waiting rooms in such a way as to permit the wheel users to use them conveniently.

Ministry of Rural Development—Livelihood and Poverty Alleviation Programmes like Mahatma Gandhi National Rural Employment Guarantee Programme; Sampoorna Grameen Rozgar Yojana; Swarnjayanti Gram Swarozgar Yojana; New Initiative for employment in the Private Sector; Rural Housing—Bharat Nirman Indira Awas Yojana; National Social Assistance Programme and Associated Programmes.

Ministry of Women and Child Development - The Ministry should refine the norms of WCP to prioritise the most vulnerable as beneficiaries, particularly SC, ST women, Muslim women, single women, differently-abled, and HIV-positive women, among others.

steps required under the Act such as Notification of Rules, maintenance officer, maintenance tribunal and appellate tribunal must take up the matter on priority.

24.229. The Scheme of Integrated Programme for Older Persons (IPOP) is being implemented since 1992. Under the Scheme financial assistance up to 90 per cent of the project cost is provided to non-Governmental Organisations (NGOs) for running and maintenance of Old Age Homes, Day Care

Centres and Mobile Medicare Units. The Scheme has been revised w.e.f. 1 April 2008. Besides an increase in amount of financial assistance for existing projects, Governments/Panchayati Raj Institutions/Local Bodies have been made eligible for getting financial assistance. An outlay of ₹128.00 crore was provided in the Eleventh Plan and the expenditure incurred was ₹74.23 crore benefitting 1.50 lakh beneficiaries. There are three Regional Resource and Training Centres (RRTCs) functioning under the Scheme of IPOP.

Strategy for Twelfth Plan

24.230. The major focus in the Twelfth Plan will be the consolidation, expansion and strengthening of the various programmes into comprehensive coordinated systems to fulfill the aspirations of these vulnerable sections of the society. The Twelfth Plan approach and strategy sector-wise is briefly given in the subsequent paragraphs.

24.231. As a general rule, the elderly do not want to be separated from their homes and familiar surroundings and prefer to live in their own homes. But due to the widening generation gap, most elders feel lonely and need the company of peers and elders association, for active participation in life enriching activities. For such elders, day care/enrichment centre provides a meeting place to fulfill their physical, emotional and social needs and for spending their day in a meaningful way. Therefore, efforts need to be made to ensure that day care/enrichment centres for the elders receive focused attention under the scheme of Integrated Programme for Older Persons (IPOP). The scheme of IPOP needs to be revised to make it more effective so that all facilities can be provided to the elders, for example day care/enrichment centres and so on.

24.232. With the rising demand for caregivers and also to ensure quality of service of personnel employed in old age homes funded under IPOP, there has been manifold increase in training activities. Regional Resource and Training Centres (RRTCs) funded under IPOP can play an important role in this direction. Existing RRTCs funded under the IPOP need to be strengthened. In addition, steps should be taken to ensure that at least one RRTC is established in every State during the XII Plan.

24.233. A new National Policy on Senior Citizens will be formulated and implemented during the XII Plan period focusing on the following areas:

1. Mainstreaming of all the senior citizens, especially the older women and bring their concerns into the national development debate.
2. Promote the concept of 'Ageing in Place' or ageing in own home.

4. It should recognise that care of senior citizens has to remain vested in the family which would partner the community, government and the private sector. Institutional care should be the last resort.
5. Schemes should be formulated for providing housing, income-security, homecare services, old age pension, access to healthcare, insurance schemes and other programmes and services to facilitate and sustain the concept of dignity in old age. The thrust of the policy would be preventive rather than curative.
6. Keeping in view the rising longevity of our population, there is a need to focus on all aspects of care for the Oldest Old (80+ years) namely, social, financial, health care and the need for shelter.
7. Since India is a signatory to the Madrid Plan of Action and Barrier Free Framework, the Policy will aim to work towards an inclusive, barrier-free and age-friendly society.
8. Recognise that senior citizens are a valuable resource for the country and create an environment that provides them with equal opportunities, protects their rights and enables their full participation in society.
9. Long term savings instruments and credit activities will be promoted to reach both rural and urban areas.
10. Employment in income generating activities after superannuation will be encouraged.
11. Organisations that provide counselling, career guidance and training services will be supported and assisted.
12. The Maintenance and Welfare of Parents and Senior Citizens Act, 2007 will be implemented effectively and Tribunals will be set up so that elderly parents, unable to maintain themselves, are not abandoned and neglected.
13. States will set up homes with assisted living facilities for abandoned senior citizens in every district of the country and will set apart adequate budgetary support for this purpose.

24.234. The National Institute of Social Defence (NISD) is the nodal training and research institute in the area of social defence. The objective of

the Institute is to strengthen and provide technical inputs to the social defence programmes of the Government of India and to develop and train the manpower resources required in the area of social defence. NISD needs to be strengthened to take the lead in training the requisite human resources for caring of the senior citizens of the country, during the Twelfth Plan period.

24.235. The Maintenance and Welfare of Parents and Senior Citizens Act, 2007 was enacted to ensure need based maintenance for parents and senior citizens and their welfare. So far, 25 States and all Union Territories have notified the Act. However, it has been noticed that State Government functionaries are not fully aware of the consequential steps/actions required to be taken. Therefore, Ministry of SJ&E would prepare a suitable Action Plan in the Twelfth Plan to ensure effective implementation of the Act by creating awareness among public about the various provisions of the Act through aggressive media campaign as well as involving Panchayati Raj Institutions/Municipalities/local bodies in the campaign to reach out to rural areas as well. Workshops may be organised with State Governments, NGOs, Senior Citizens Associations, and so on to ensure that the various provisions of the Act are clearly understood and effectively implemented in letter and spirit.

24.236. In sum, with a view to ensure the well-being of senior citizens especially indigent senior citizens, by strengthening their legitimate place in society and extending support for financial and food security, health care, shelter, equitable share in development, protection against abuse and exploitation and other needs, efforts need to be made in the Twelfth Five Year Plan for: (i) setting up a National Commission for Senior Citizens to look into their grievances on priority for redressal and ensure that services and facilities meant for them are being provided; (ii) establishment of Old Age Homes for Indigent Senior Citizens with integrated multi-facility centre of varying capacity (25, 60 and 120) in 640 districts of the country, through State Government; (iii) setting up of a Helpline and District level help lines for

older persons; (iv) setting up of Bureau for Socio-Economic Empowerment of Senior Citizens at district level; (v) creation of National Trust for the Aged; (vi) issue of 'Smart' Identity Cards for senior citizens; and (vii) health insurance for senior citizens.

NOMADIC, SEMI-NOMADIC AND DENOTIFIED TRIBES (DNTs)

24.237. The Nomadic, Semi Nomadic and De-notified Tribes cover the 200 communities that were identified by the colonial Government as 'Criminal Tribes' under a notorious legislation called 'Criminal Tribes Act (CTA) 1871.² CTA 1871 was annulled after Independence and communities identified under CTA, 1871 have been referred to thereafter as the De-notified, Nomadic and Semi-Nomadic Tribes (DNTs, SNTs and NTs). There is no authentic data on DNTs and no Census enumeration was conducted for them, though they are found in almost all the States and belong mostly to the OBC category in some large States. They are also spread across the SC and ST categories in other States. Some communities are not covered by any of the three SC, ST and OBC categories. Even those covered under the three categories are often not able to avail the benefits because of either not having caste certificates, or because the quotas are exhausted by the non-nomadic/non-de-notified communities in the reserved categories. A number of States have not prepared lists of the De-notified or Nomadic communities and the status of such people is unknown.

24.238. The quick and most effective way of extending developmental support for DNTs would be to provide special and relevant support and facilities for these communities within the existing facilities for ST, SC and OBC categories as applicable. Access to scholarships and hostel facilities, need to be given priority. The existing schemes for scholarships and hostel facilities need to be revised to extend their coverage to nomadic, semi-nomadic and DNTs. For economic empowerment and development of DNTs capacity building programmes for skill development and marketing, loans for economic empowerment need to be given priority. Specific strategies and mechanisms will also be put in place to ensure flow of

funds for the welfare and development of nomadic, semi-nomadic and Denotified Tribes (DNTs). For social empowerment of DNTs an enabling environment needs to be created so that they are able to utilise the reservation benefits in education and employment. DNTs do not have permanent residential locations due to various social, political and cultural reasons; as a result, they are unable to avail the benefits of the various schemes of the Government. Therefore, an effective rehabilitative approach, supported with an equally effective plan for the socio-economic development of the DNTs needs to be adopted and implemented especially by establishing habitations/villages for them. This would be given emphasis during the Twelfth Plan period.

24.239. The existing legislations such as Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989; Habitual Offenders Act, 1952; The Prevention of Begging Act, 1959; The Bombay Prevention of Begging Act, 1959; Prevention of Cruelty to Animals Act, 1986; Wildlife Protection Act, 1972 and the Forest (Conservation) Act, 1980; and Excise Law and so on need to be reviewed to ensure the dignity and the livelihood of DNTs.

Economic Empowerment

24.240. A nation-wide survey of DNT settlements needs to be conducted urgently. This could form the basis, inter alia, for introducing a suitable shelter programme for homeless DNTs. Free or subsidised housing may be provided to eligible DNT households in a phased manner—by adopting special measures like a ‘Rajasthan’s Galaria Lohar Community Housing Scheme’. Given the high incidence of homelessness among DNTs, a proportion of the current outlay for Indira Awaas Yojana (IAY) should be earmarked for DNTs. Within DNTs, the nomadic communities need to be assisted financially to construct dwelling units by receiving priority under the on-going housing programmes of the Central Government. Therefore, it is suggested to create a Cluster Development Fund for assisting the DNTs for the construction of houses, for providing land to them and for creating infrastructure, and so on so that proper clusters can be developed for them.

24.241. The skill development initiatives of the States and Central Government need to give priority to cover the unemployed youth among the DNTs with a view to provide them employable skills. A suitable Action Plan for the rehabilitation of the nomadic, semi-nomadic and DNTs as well as to meet the infrastructure needs including basic amenities of their areas needs to be prepared. The requirement of funds for the purpose will be met out of the proposed Cluster Development Fund. The Finance and Development Corporations under the Ministry of Social Justice and Empowerment will be tasked to address the skill development of the DNTs.

24.242. An Integrated Infrastructure Development Programme also needs to be especially designed to provide basic amenities such as roads, schools, electricity, drinking water, community centres, and so on in the existing settlements of the DNTs.

SUBSTANCE (DRUG) ABUSE AND ALCOHOLISM

24.243. The problem of incidence of alcoholism and substance abuse is assuming alarming magnitude and poses potential threat to the society. Besides ill effects on physical and health, drug addiction is emerging as a major social problem with increasing incidence of crime among drug/alcohol addicts. Drug addiction causes immense financial and psychological problems for the addict and his/her family. This takes the issue out of the domain of individual behaviour and locates it at the centre of the community, whether it is the family or the larger society. Therefore, there is an urgent need for effective counter measures through an approach which is comprehensive and also takes up programmes in convergence mode. Further, various Central Ministries viz., Ministry of Health and Family Welfare, Ministry of Information and Broadcasting, Ministry of Home Affairs, Ministry of Rural Development, Ministry of Panchayati Raj, Ministry of Finance and Ministry of Women and Child Development are attending to different aspect relating to these vulnerable groups. A better coordination and convergence in this regard is called for. All existing schematic and non-schematic interventions made by the Ministries need to be integrated under a Mission Mode programme.

24.244. There is a need to make an accurate assessment of the extent, pattern and trends of substances abuse in the country and identify vulnerable groups and areas. Preventive measures need to be taken to reduce both supply and demand and Universal access to preventive treatment and rehabilitation of alcoholism and drug abuse.

24.245. The Narcotic Drugs and Psychotropic Substances Act, 1985, was enacted, inter alia, to curb drug abuse. Section 71 of the Act (Power of Government to establish centres for identification, treatment, and so on of addicts and for supply of narcotic drugs and psychotropic substances) provides that:

The Government may, in its discretion, establish as many centres as it thinks fit for identification, treatment, education, after-care, rehabilitation, social reintegration of addicts and for supply, subject to such conditions and in such manner as may be prescribed, by the concerned Government of any narcotic drugs and psychotropic substances to the addicts registered with the Government and to others where such supply is a medical necessity.

24.246. Accordingly the Ministry of SJ&E has been supporting Integrated Rehabilitation Centre for Addicts (IRCA) under the Scheme of Assistance for the Prevention of Alcoholism and Substance (Drugs) Abuse and for Social Defence Services run by voluntary organisations.

24.247. India is signatory to three United Nations Conventions, namely: (i) Convention on Narcotic Drugs, 1961; (ii) Convention on Psychotropic Substances, 1971; and (iii) Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988. Thus India also has an international obligation to curb drug abuse. The demand reduction strategy consists of education, treatment, rehabilitation and social integration of drug addicts for prevention of drug abuse.

BEGGARS

24.248. There is no firm and authentic information regarding number of beggars in the country.

According to the un-published data of Census 2001, there were 7.03 lakh beggars and vagrants out of which 6.31 lakh were in non-worker category. Some States viz. West Bengal, Assam, Chhattisgarh, Tripura, Orissa, Punjab, Rajasthan, Andhra Pradesh, Jammu & Kashmir, Madhya Pradesh and Uttar Pradesh have much higher population of beggars in proportion to their total population as compared to other States/UTs.

24.249. The States are responsible for taking the necessary preventive and rehabilitative steps. Neither is there any specific Central Act on prevention of begging and rehabilitation of beggars, nor is there a clear policy on how the problem is to be tackled. There are, however, general legislations having provisions for prevention of beggary. These include: Indian Penal Code (IPC), the Juvenile Justice (Care and Protection of Children) Act 2000 and Indian Railway Act 1989.

24.250. The States are responsible for taking the necessary preventive and rehabilitative steps. There is neither any Central Act on prevention of beggary and rehabilitation of beggars, nor a National Policy on beggary. There is therefore, an urgent need to formulate a National Policy so that there is uniformity of approach in dealing with the problem of beggary. Various studies and surveys have brought out that the prime reason for soliciting alms has been poverty. Significant proportions of such persons suffer from various types of disabilities, including mental illness and so on. A number of such persons are also addicted to various substances and require immediate medical/psychiatric attention. In order to be able to provide help and support to such persons, there is a need for adoption of a more humane approach. 20 States and 2 UTs have enacted their own anti-beggary laws or adopted laws enacted by other States. Even these States/UTs which have adopted anti-beggary legislation do not implement them uniformly. Further, the provisions of these legislations differ from one state to another. Therefore, there is a need to bring out a Model Legislation on Beggary at the Central level which can be suitably adapted by States/UTs.

24.251. At present, there are no central schemes directly related to beggary. However, there are programmes for welfare and development of older persons, physically challenged and drug abuse covering the issues/problems of beggary. Therefore, it would be desirable to address the problem in a holistic manner at the National Level.

24.252. Direct intervention through a new programme/scheme like the Integrated Programme for Rehabilitation of Beggars can be made. The Programme may include items like Night Shelter-cum-Work Production Centre; Multiple Skill Training; Mobile Health Care; Counselling; Awareness Generation; and Sensitisation programmes. Training of Human Resources, Research and Documentation, and so on will be given special attention in the Twelfth Five Year Plan. In addition, convergence of existing programmes for the Vulnerable Groups implemented by the Ministries of Social Justice and Empowerment, Rural Development, Urban Development and Poverty Alleviation, Women and Child Development will also need to be looked into.

PLAN OUTLAY

24.253. In the Twelfth Plan, a tentative Gross Budgetary Support of ₹32,684 crore has been earmarked

for the Ministry of Social Justice and Empowerment for the welfare and development of SCs, OBCs, DNTs, PwDs and other vulnerable groups. Similarly, tentative allocations of ₹7,746 crore and ₹17,323 crore have been made for the Ministry of Tribal Affairs and Ministry of Minority Affairs, respectively for the welfare and development of STs and Minorities, The allocation indicated for the Ministry of Tribal Affairs does not include SCA to TSP and grant-in-aid under Article 275 (1) of the Constitution. In addition to this, social welfare programmes receive Plan financial Support from the State sector as well.

NOTES

1. National Committee on Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, Ministry of Environment and Forest, December, 2010.
2. Six categories of communities were identified under CTA 1871. These included: (i) petty traders moving from village to village selling commodities like salt, forest produce on animal's back; (ii) entertainers through public performance such as musicians, dancers, singers, storytellers, acrobats, gymnasts, puppeteers and tightrope walkers and so on; (iii) entertainers with the help of performing animals; (iv) pastoral groups, hunters, gatherers, shifting cultivator communities and so on; (v) artisans working with bamboo, iron, clay and so on; and (vi) nomadic individuals who subsist on charity, fortune telling, traditional faith healing services and so on.