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INDIA INFRASTRUCTURE REPORT 2009

Land—A Critical Resource for Infrastructure



3iNetwork

INDIA INFRASTRUCTURE REPORT 2009

List of Contributors

Name of Author	Affiliation	Place	Email Ids
B.R. Balachandran	Alchemy Urban Systems Private Limited	Bangalore	bala@alchemyurban.com
K. Balagopal	Human Rights Forum	Andhra Pradesh	kbalagopal1952@gmail.com
Shirley Ballaney	Enviromental Planning Collaborative	Ahmedabad	shirleyb@hcp.co.in
Jyotsna Bapat	Consultant	New Delhi	jbapat2002@yahoo.com
Samantha Bastian	Indian Institute of Management	Ahmedabad	samantha@bastian.in
Rumjhum Chatterjee	Feedback Ventures Pvt Ltd	New Delhi	rumjhum@feedbackventures.com
Tarun Choudhary	Infrastructure Development Finance Company Ltd	New Delhi	tarun.choudhary@idfcski.com
Sankar Datta	Indian School of Livelihood Promotion	Hyderabad	dattasankar@basixindia.com
Biswanath Debnath	Asian Development Bank	Manila, Phillipines	bdebnath@airtelmail.in
Nitin Desai	Indian Council for Research on International Economic Relations	New Delhi	desaind@gmail.com
Ashok Emani	Infrastructure Development Finance Company Ltd.	New Delhi	ashoke@idfc.com
Sanjiv Garg	Rail Vikas Nigam Ltd.	New Delhi	sanjivgarg.rvnl@gmail.com
Manisha Gulati	Infrastructure Development Finance Company Ltd.	Mumbai	manisha.gulati@idfc.com
Ravikant Joshi	Consultant	Mumbai	ravikant.joshi@gmail.com
Mandar Kagade	Alliance Corporate Lawyers	Mumbai	mandar.kagade@gmail.com
Ram Kumar Kakani	Xavier Labour Relations Institute	Jamshedpur	kakani@xlri.ac.in
C.K.Koshy	Enviromental Planning Collaborative	Ahmedabad	ckkoshy@gmail.com
Beena Mahadevan	Government of India	Ernakulum	beena.mahadevan@rediffmail.com
Vijay Mahajan	BASIX	Hyderabad	vijaymahajan@basixindia.com
Nirmal Mohanty	National Stock Exchange of India	Mumbai	nirmal.mohanty@gmail.com
Sebastian Morris	Indian Institute of Management	IIM, Ahmedabad	morris@iimahd.ernet.in
Ramakrishna Nallathiga	Center for Good Governance	Hyderabad	ramanallathiga@yahoo.co.uk
Matthias Nohn	Enviromental Planning Collaborative	Ahmedabad	nohn@post.harvard.edu
Ajay Pandey	Indian Institute of Management	IIM, Ahmedabad	apandey@iimahd.ernet.in
Bimal Patel	Enviromental Planning Collaborative	Ahmedabad	bimal@hcp.co.in
Shalaka Patil	Government Law College	Mumbai	shalaka.patil@gmail.com
Shreemoyee Patra	Lucid Solutions	New Delhi	director@lucidsolutionsonline.com
George E. Peterson	Consultant to World Bank	United States	gpeterso06@gmail.com
Vidyadhar K. Phatak	Urban Planner Consultant	Mumbai	vphatak@vsnl.net
Tata L. Raghu Ram	Xavier Labour Relations Institute	Jamshedpur	raghutata@xlri.ac.in
G. Raghuram	Indian Institute of Management	Ahmedabad	graghu@iimahd.ernet.in
Swati Ramanathan	Janaagraha Centre of Citizenship and Democracy	Bangalore	swati@janaagraha.org
Sanjukta Ray	Consultant	New Delhi	ray.sanjukta@gmail.com
R. Maria Saleth	Madras Institute of Development Studies	Chennai	rsaleth@gmail.com
Runa Sarkar	Indian Institute of Technology	Kanpur	runaiitk.ac.in
V.K. Sharma	National Highway Authority of India	New Delhi	vksharma@nhai.org
Dhiraj Shetty	Indian Institute of Management	Ahmedabad	shettydhiraj79@gmail.com
C.D. Singh	Government of India	New Delhi	cdsingh1987@rediffmail.com
Ashok Kumar Singha	CTRAN Consulting Pvt. Ltd.	Bhubaneshwar	ashoksingha@gmail.com
Chandrima Sinha	Infrastructure Development Finance Company Ltd.	New, Delhi	chandrimasinha@gmail.com
Satyam Shivam Sundaram	Indian Institute of Management	Ahmedabad	sss@iimahd.ernet.in
Nutan Shashi Tigga	Xavier Labour Relations Institute	Jamshedpur	nutan@xlri.ac.in
Piyush Tiwari	University of Aberdeen	United Kingdom	p.tiwari@abdn.ac.uk
Videh Upadhyay	Legal Consultant	Mumbai	videhup@gmail.com

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Land—A Critical Resource for Infrastructure

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Foreword

Land is the heart of infrastructure development. The first *India Infrastructure Report (IIR)*, which was brought out in 2001, identified the process of land acquisition as the most important structural constraint to the development of infrastructure. This year we have devoted the entire *IIR 2009* to examine various facets of ‘land for infrastructure’.

The most contentious aspect is land acquisition and unless there is a sustainable resolution of the underlying issues, it will be a major obstacle to building new infrastructure. It has, indeed, emerged as the single most important reason for project delays and consequent cost escalation. The acquisition of land by government using its *eminent domain* powers has drawn resistance in many cases due to inadequate compensation for the land as well as for involuntary displacement of people and loss of their livelihood. Yet, it is important to strike a balance between the need for land for developmental activities and the need to protect the interests of those impacted by the acquisition of the land—landowners, tenants, landless labourers, and others whose livelihoods depend on the land. The *IIR 2009* examines this issue with sensitivity to the displaced persons, not least because we have an impressive array of authors deliberating on these issues from historical, legal, economic, and sociological perspectives. Their suggestions are also timely as there are proposed legislative bills pending in Parliament. Beyond legislation, though, corporates should view resettlement and rehabilitation of displaced persons as their social responsibility, as some have already started doing. Some corporates, without the expertise to handle many of these issues in-house, have started involving professional development agencies to bring all stakeholders together. More equitable forms of benefit-sharing are also being considered by them.

Government on its part, needs to strengthen the institutional framework, including land records and land titling, and remove undue regulatory constraints to the proper development of land markets. State Governments which act more quickly on these fronts stand to gain by attracting more industry and commerce, and also planned urbanization.

Another important aspect that this report looks at is leveraging land for infrastructure development. A growing trend worldwide is the use of land as a means of financing infrastructure and there is now a rich menu of land-based financing instruments. There are several advantages of these techniques, as they help to overcome the financial constraints of urban local bodies and capture the value of the developed land. It also helps to pass on the incidence of incremental infrastructure costs (as well as the building of associated access infrastructure) to private developers. While there may be some practical difficulties in their application currently in India, there is a need to address these issues as such techniques offer enormous potential.

I am particularly pleased that the *IIR 2009* reports on innovative measures to overcome land constraints. One such method is participatory land pooling and readjustment that has been successfully applied in Gujarat and other places. Looking ahead, much more thought, planning, and design of infrastructure will have to be based on land-saving technologies, such as offshore airports, elevated rail systems and so on. We can learn from international experiences such as that of the Japanese, who have been front-runners in such developments; however we also need to encourage indigenous solutions to our needs and circumstances.

I would like to congratulate those who contributed to the production of this report, under the aegis of the 3iNetwork.

RAJIV B. LALL

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This report would not have been possible but for the authors, who made major contributions through not only their papers but also their valuable insights in the Writers' Workshop held at IIM Ahmedabad on 1–2 November 2008. While we acknowledge the contributions of all the authors to this report, it is needless to say that we own up the errors or omissions in the report arising in the course of editing or finalizing the report.

Credit is due to the editorial team of last year's report (India Infrastructure Report 2008) and in particular Anupam Rastogi and Prem Kalra for organizing the Brainstorming Session during which the theme 'Land—A Critical Resource for Infrastructure' was selected for the India Infrastructure Report 2009 (*IIR 2009*). Both Anupam Rastogi and Prem Kalra have been pillars of support for the India Infrastructure Reports (*IIRs*) right from the beginning of the 3iNetwork started way back in 2001. Anupam left Infrastructure Development Finance Company (IDFC) to pursue academic interests after initiating this *IIR 2009*, but we as editors would like to place on record his contribution to the continued publication of the *IIRs*.

We would like to thank Rajiv B. Lall, Managing Director and CEO, IDFC, for his support to the publication of *IIR 2009* and to the 3iNetwork. He also took great interest in a debate organized around land acquisition, compensation, resettlement, and rehabilitation issues, and acted as a moderator in the debate. We would also like to thank the participants of the debate, namely, Jerry Rao, Nitin Desai, Arun Nanda, Ajit Gulabchand, Vasudha Dhagamwar, Vijay Mahajan and Abhijit Guha. Part of the success of the debate can be attributed to Shirley Ballaney, Prakash Hebalkar, N.K. Nayar, Latha Venkatesh, Manju Sood, Mandar Kagade, Nasra Roy, Tarun Choudhary, Vinayak Mavinkurve, Santosh Parab, A.K.T. Chari, Ravi Muthreja, and Parminder Panesar. The debate was subsequently televised on UTVi in the second half of March.

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NIRMAL MOHANTY
RUNA SARKAR
AJAY PANDEY

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Abbreviations

AAI	Airports Authority of India
ACA	Additional Central Assistance
ADB	Asian Development Bank
ADC	Access Deficit Charge
AERA	Airports Economic Regulatory Authority
AMC	Ahmedabad Municipal Corporation
AAOV	Average Annual Output Value
APDRP	Accelerated Power Development and Reform Programme
AT&C	Aggregate Technical and Commercial
ATF	Aviation Turbine Fuel
AUDA	Ahmedabad Urban Development Authority
BA	British Airways
BIAL	Bangalore International Airport Limited
BOT	Build-Operate-Transfer
BOOST	Build-Own-Operate-Share-Transfer
BOOT	Build-Own-Operate-Transfer
BLRC	Bombay Land Revenue Code
BMIC	Bangalore Mysore Infrastructure Corridor
BPL	Below Poverty line
BSNL	Bharat Sanchar Nigam Limited
BST	Bhilai Steel Plant
BRTS	Bus Rapid Transit System
BT&AL Act	Bombay Tenancy and Agricultural Lands Act
BWA	Broadband Wireless Access
BWSSB	Bangalore Water Supply and Sewerage Board
CA	Compensatory Afforestation
CAG	Comptroller and Auditor General of India
CBM	Confidence Building Measure
CEC	Central Empowered Committee
CEE	Central and Eastern Europe
CEO	Collective Economic Organizations
CGG	Centre for Good Governance
CIDCO	City and Industrial Development Corporation
CIL	Coal India Limited
CLSRI	Community-led Sustainable Rehabilitation Intervention
CLTs	Community-led Total Sanitation
CMDA	Chennai Metropolitan Development Authority
COAG	Council of Australian Governments
CPRs	Common Property Resources

CPT	Cochin Port Trust
CRZ	Coastal Regulation Zone
CSR	Corporate Social Responsibility
CSS	City Survey Superintendent
DBFOT	Design, Build, Finance, Operate and Transfer
DIAL	Delhi International Airport Limited
DDA	Delhi Development Authority
DDP	Desert Development Programme
DFC	Dedicated Freight Corridor
DGW	Director General of Water
DILR	District Inspector of Land Records
DJB	Delhi Jal Board
DLC	District Level Committee
DLP	Derived Land Productivity
DLPC	District-level Purchase Committee
DoT	Department of Telecommunications
DP	Development Plan
DP-TP	Development Plan – Town Planning
DRC	Development Right Certificate
DPSA	Diversified Portfolio Subsistence Activities
DPR	Detailed Project Report
DPW	Dubai Port World
DTL	Delhi Transco Limited
EAC	Expert Appraisal Committee
EDC	External Development Charge
EIA	Environmental Impact Assessment
EMP	Environment Management Programme
EPC	Environmental Planning Collaborative
ESG	Environmental Support Group
ESL	Essar Steel Limited
EWS/LIG	Economically Weaker Sections/ Low Income Groups
FA	Framework Agreement
FAC	Forest Advisory Committee
FAR	Floor Area Ratio
FCCs	Full Cost Carriers
FDI	Foreign Direct Investments
FIPB	Foreign Investment Promotion Board
FP	Final Plot
FPIC	Free, prior, and informed consent
FSI	Floor Space Index
GDP	Gross Domestic Product
GIC	Global Infrastructure Consortium
GIDC	Gujarat Industrial Development Act
GLD	Guided Land Development
GLT	Guaranteed Land Title
GMB	Gujarat Maritime Board
GNCTD	Government of National Capital Territory of Delhi
GO	Government Order
GoI	Government of India
GOM	Government of Maharashtra
GQ	Golden Quadrilateral
GTPUDA	Gujarat Town Planning and Urban Development Act

xviii Abbreviations

GUDC	Gujarat Urban Development Company Limited
GUDP	Gujarat Urban Development Project
HDA	Haldia Development Authority
HLC	High-level Committee
HPPL	Hazira Port Private Limited
HPRCL	Hardisapur-Paradip Railway Company Limited
HUDA	Haryana Urban Development Authority
HDRUA	Haryana Development and Regulation of Urban Areas Act
ISA	Initial Social Assessment
ICTT	International Container Transshipment Terminal
IDCO	Industrial Development Corporation Limited
IEX	India Energy Exchange
IFC	International Finance Corporation
IGR&SS	Inspector General of Registration and Superintendent of Stamps
IGT	India Gateway Terminal
IIR	India Infrastructure Report
IGIA	Indira Gandhi International Airport
IT	Information Technology
IMG	Inter Ministerial Group
IOC	Indian Oil Corporation
IPTV	Internet Protocol TVs
IR	Indian Railways
IR	Involuntary Resettlement
IPTV	Internet Protocol TV
ISA	Initial Social Assessment
ISPs	Internet Service Providers
IWMS	Integrated Waste Management Service
J&J	Jhuggi Jhompari
JSW	Jindal Steel Works
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
JV	Joint Venture
JVLR	Jogeshwari – Vikhroli Link Road
KIADB	Karnatak Industrial Areas Development Board
KSEA	Karnataka State Environment Agency
K-SHIP	Karnataka State Highway Project
LAA	Land Acquisition Act, 1894
LAC	Land Acquisition Collector
LAL	Land Acquisition Law
LCCs	Low Cost Carriers
LDCs	Lower Division Clerks
LPR	Land Pooling and Readjustment
L&T ECC	Larsen and Toubro Engineering Construction Contracts
LURS	Land Use Rights System
LVIT	Land Value Increase Tax
MARG	Multiple Action Research Group
MAW	Minimum Agricultural Wage
MCA	Model Concession Agreement
MCGM	Municipal Corporation of Greater Mumbai
MCX	Multi Commodity Exchange
MDG	Millennium Development Goals
MIAL	Mumbai International Airport Limited

MIB	Ministry of Information and Broadcasting
MIDC	Maharashtra Industrial Development Corporation
MLA	Multilateral Agencies
MLP	Multimodal Logistics Parks
MMRDA	Mumbai Metropolitan Regional Development Authority
MNP	Mobile Network Portability
MNO	Mobile Network Operator
MNRE	Ministry of New and Renewable Energy
MOA	Memorandum of Agreement
MoCA	Ministry of Civil Aviation
MoEF	Ministry of Environment and Forests
MoP	Ministry of Power
MoRD	Ministry of Rural Development
MoR	Ministry of Railways
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MPP	Minimum Purchase Price
MR&TP	Maharashtra Regional and Town Planning Act
MSP	Minimum Support Price
MTNL	Mahanagar Telephone Limited
MTPA	Million Tonnes Per Annum
MUTP	Mumbai Urban Transport Project
MVNOs	Mobile Virtual Network Operators
NAC	Non-Agricultural Use Clearance
NBW	National Board of Wildlife
NCDEX	National Commodities and Derivatives Exchange Limited
NDP	National Development Plans
NGOs	non-governmental organizations
NHA	National Highway act
NHAI	National Highway Authority of India
NHDP	National Highways Development Project
NICE	Nandi Infrastructure Corridor Enterprises
NIPFP	National Institute of Public Finance and Policy
NMDP	National Maritime Development Programme
NOC	No Objection Certificates
NRRP	National Rehabilitation and Resettlement Policy 2007
NRVY	National Rail Vikas Yojana
NPCIL	Nuclear Power Corporation of India Limited
NPV	Net Present Value
NSG	Nuclear Supply Group
NT	New Tenure
NUSP	National Urban Sanitation Policy
NUTP	National Urban Transport Policy
NWAI	National Waterways Authority of India
OD	Operational Directive
OESD	Office of Environment and Social Development
OMDA	Operations, Management and Development Agreement
OP	Original Plots
OT	Old Tenure
PAF	Project Affected families
PAH	Project Affected Households

xx Abbreviation

PAP	Project Affected Persons
PDF	Project Displaced Families
PDS	Public Distribution System
PESA	Panchayats (Extension to the Scheduled Areas) Act, 1996
PIL	Public Interest Litigations
POSCO	Pohang Steel Company
PMGSY	Pradhan Mantri Gram Sadak Yojana
PPP	Public Private Partneeship
PR Plot	Reconstitution
PWD	Public Works Department
PXI	Power Exchange India
R3i	Railways' Infrastructure for Industry Initiative
RAPDRP	Restructured Accelerated Power Development and Reform Programme
RD	Revenue Development
REC	Rural Electrification Corporation
RFQ	Request for Qualification
RFP	Request for Proposal
RGCT	Rajiv Gandhi Container Terminal
RLDA	Rail Land Development Authority
RoW	Right of Way
RPAC	Rehabilitation and Periphery Development Advisory Committee
R&R	Rehabilitation and Resettlement
RRAP	Resettlement and Rehabilitation Action Plan
RT	Restricted Tenure
RVNL	Rail Vikas Nigam Limited
SAG	State Advisory Group
SCLR	Santacruz- Chembur Link Road
SDO	State Development Officer
SF	Semi-Final
SEZ	Special Economic Zones
SH	State Highway
SIA	Social Impact Assessment
SIDCs	State Industrial Development Corporations
SLBs	Service Level Benchmarks
SLCRR	State-level Council on Resettlement and Rehabilitation
SLDC	State-load Despatch Centres
SPV	Special Purpose Vehicle
SUARAJ	State Urban Agenda for Rajasthan
SUPLM	Streamlining Urban Planning and Land Management
TAMP	Tariff Authority for Major Ports
TDP	Tribal Development Plan
TDR	Transferable Development Right
TEU	Twenty-foot Equivalent Unit
TMC	Thousand Million Cubic meters
ToR	Terms of Reference
TPO	Town Planning Officer
TPS	Town Planning Scheme
TRAI	Telecom Regulatory Authority of India
UBDRAR	Urban Buildings Demolition Relocation Administration Regulations
UDCs	Upper Division Clerks
UD&UHD	Urban Development and Urban Housing Development
UDF	User Development Fund

1 Overview of the Report

Runa Sarkar

Ask an infrastructure developer what is the single biggest constraint to speedy execution of infrastructure projects and he or she will answer: 'land'. Indeed, an official review of projects that have been delayed indicates that 70 per cent of the 190 delayed projects are on account of land acquisition problems.¹ The study shows that 60 projects being implemented by the Indian Railways (IR), 40 by the National Highways Authority of India (NHAI), and 28 power projects across the country are facing difficulties in acquiring land. This view is corroborated by an Infrastructure Outlook Survey conducted by the Confederation of Indian Industry (CII) which has revealed that amongst the factors responsible for delays in project implementation, land acquisition continues to be the top most concern for project developers.² As much as 81 per cent of the respondents felt that land acquisition was the most important impediment to infrastructure project implementation.

Land, whose supply is limited by its very nature, has been subject to rising and competing demands over the years. The economy and the society have not been able to cope with the increasing relative scarcity of land because of two interrelated reasons. First, a large part of the land mass is held by households who earn their livelihood from land. This means that if incremental demand were to be met, invariably some households have to give up land. Second, generally speaking, the bulk of the people dependent on land (through agriculture and related activities) do not have the skills to survive without land; nor are there enough job opportunities to absorb unskilled labour. So the transition to an industrial or service economy

from an agrarian economy is not easy for most people. This is, in fact, one of the main reasons why there is growing social discontent relating to land acquisition. Add to that poor compensation and an undervalued market price of land and therein lies the recipe for many a dispute by the affected population, thereby impacting land acquisition.

Can the market resolve this conflict? Nothing could be socially more desirable than voluntary transactions to meet the rising demand for land. But the market does not always work, sometimes because of some inherent characteristics of land and at other times because of the government's misplaced regulations. One aim of the *India Infrastructure Report 2009* (IIR 2009) is to examine the reasons for land market distortions and explore ways to reduce them.

Governments, the world over, possess eminent domain powers, by which the state can acquire land for public purposes without the landholders' consent. There is a growing perception in India that these powers are frequently abused and that the compensation provided by the laws is inadequate. This has led to popular protests against development projects and has also caused uncertainties and delays in project execution with consequent cost escalation. The deficiencies lie not only in the legal and policy framework but also in implementation. The issues centering around land acquisition and compensation are now occupying the attention of policymakers and the Parliament. Identifying the issues relating to the use of eminent domain and evaluating different solutions to these problems is another aspect of the report.

¹ See 'Land Acquisition Woes Delay Most Projects', *Mint*, 18 March 2009 and 'The Land Hurdle Again', *Business Standard*, 27 March 2009.

² More details of the survey can be found at http://cii.in/full_story.php?menu_id=78&news_id=1786

2 India Infrastructure Report 2009

A third set of issues relates more specifically to urban land constraints. According to the Ministry of Urban Development, the urban population in India is expected to reach a staggering total of 575 million by 2030 from an estimated 325 million in 2005 (UN Population Database). Without major urban land reforms, our cities will not be able to support the inevitable urbanization in a planned way. The urban land market is plagued by numerous regulations. Further, raising finance for urban infrastructure has been a challenge. A number of innovative solutions have been attempted in India and abroad to leverage land for development. The third motivation for the IIR 2009 is to report on innovative measures to overcome land constraints in urban areas and to unlock land values.

The IIR 2009 has been organized into seven sections, a summary of which is given below.

I. Land Markets in India

There are certain peculiar characteristics of land, such as unique physical features of each piece of land, absence of mobility, and widespread emotional attachment of land owners to their land—which impede the natural emergence of a well functioning market. However, this problem can be overcome by creating an appropriate legal and regulatory framework. Therefore, the state plays a significant role in the efficient functioning of the land market, which in turn is determined by three factors viz. land management, transaction costs, and participants allowed in the land market.

While the rationale for reforms in land management is well recognized, the progress made towards this end has been inadequate. Most initiatives at the state level thus far have focused on computerization of revenue records and improvement of the registration records and processes. No state so far has done much on the issue of legal security of tenure. However, despite attempts at computerization, land records continue to be outdated, inaccurate and incomprehensive, giving rise to disputes and litigation. As a result, industrial and infrastructure projects prefer to avoid market negotiations and opt instead for a solution where the state acquires land on their behalf and delivers it to them. Further, there are widespread uncertainties relating to land titles. This is because the Registration Act, 1908 provides for registration of deeds, which establishes public records of only the transaction, but not the validity of the transaction. The registrar's office is neither under an obligation to check the veracity of title claims nor does it have access to land records and cadastral maps to do so, because of lack of connectivity. This has resulted in lack of clarity in land title and has created scope for fraud,

disputes, and litigation. Morris and Pandey as well as Ramanathan recognize this as a major deficiency in India's land market.

Ramanathan emphasizes the need for land reforms across rural and urban India in three areas—land registration, record keeping, and land rights. These reforms can be achieved through the amendment of the Indian Registration Act of 1908 to mandate registration of title. She has pointed out the need for better co-ordination between the multiple institutions dealing with land related issues and establishing an efficient land data-bank technology allowing on-line access to information and registration of title. Finally, she argues for giving priority to reforms in the urban areas, because of the rapid pace of urbanization in the country.

Morris and Pandey emphasize the need to reduce transaction costs. Despite reduction in recent years by some states, stamp duty continues to be in the range of 9–10 per cent of property value, which is very high compared to international standards (1–2 per cent). This often leads to underreporting of transaction values or informal agreements between transacting parties, to reduce or avoid the payment of stamp duties. A further cut in the stamp duty would give an impetus to the market as well as boost to state revenues. They have also argued for the removal of restrictions of participation in the land market. They cite the examples of Maharashtra and Gujarat where agricultural land can be purchased only by farmers.

Similarly, Upadhyay and Sinha highlight the restriction in sale of land from tribals to non-tribals (to avoid landlessness among tribals). They conclude that the laws to this effect have, however, been largely ineffective and land alienation persists in large areas of the country. They cite the case of Dhenkanal, Ganjam, Koraput, and Phulbani districts in Orissa where about 56 per cent of the total tribal land was lost to non-tribals over a 25–30 year period. Balagopal also reports the occurrence of this phenomenon in Khammam district of Andhra Pradesh, where hamlets and fields belonging to needs tribals are being cleared so that coal can be extracted from that area.

An important source of distortion in the land market relates to the restrictions on the transition of land from agricultural to non-agricultural use, which can potentially raise the value of land several fold. Morris and Pandey have drawn attention to 'non-agricultural use clearance' (NAC), the instrument through which this regulation is carried out. The NAC is given (when no acquisition is involved) typically only to the owner who comes up with a concrete proposal for putting the agricultural land to use in a non-agricultural activity. However, in case of land acquisition by the state by use of its eminent domain power,

the NAC is issued to the land requiring body subsequent to the acquisition process. Thus, while farmers get a value for their land which is determined by its agricultural use, the project proponents realize value determined by non-agricultural use.

This feature of the land market regulation depresses the price of agricultural land relative to their true (potential) values and creates a major distortion in the investment decisions related to projects involving land because entrepreneurs may simply be motivated by the transfer of wealth rather than the project *per se*. Morris and Pandey have recommended the elimination of this restriction.

Saleth draws attention to an important but somewhat less directly addressed issue of land and water use and management. Land and water resources have some naturally defined technical and functional linkages, with access and control of water resources being determined by access and ownership of land. Therefore, he proposes an alternate system where the two resources can be de-linked at the ownership stage through a non-land based water rights system. In such a system, water is allocated to all people irrespective of land ownership. Such allocation can be in the form of either a fixed volume or a fixed share, but varying volume depending on annual supply variations. Such systems where water and water rights can be transacted independent of land have been introduced in countries such as Chile, Australia, and United States (in states such as Alaska, Arizona, and Colorado). Kagade and Patil describe these systems.

II. Land Acquisition: Policy and Processes

The genesis of land acquisition in India lies in the Bengal Regulation Act I of 1824 which was enacted to promote the commercial interests of the British. Ray and Patra describe the evolution of the current Land Acquisition Act (LAA), 1894 which was initially intended to acquire land for public purpose. Subsequently, it was amended in 1962 to allow land to be acquired by government for companies as well, provided they are engaged in industry or work for a public purpose. However, 'public purpose' was not defined in law; it was sufficient for the state to declare it to be so. The end of colonial rule, therefore, neither brought about a significant change in the LAA, 1894 nor led to an end to the discord between the government and the Project Affected Persons (PAPs) in the event of land acquisition. Moreover, this discord has gained prominence post-1991 with the government increasingly acquiring land for the private sector.

Mohanty discusses this contentious issue—the scope of eminent domain powers. He points out that since the interest of the community overrides that of the individual,

the use of eminent domain (equivalently the undermining of private property rights) is justifiable for projects serving a public purpose. He, however, argues that market transactions need to be given priority even for public purpose projects and the use of eminent domain powers for land acquisition for such projects is justified only when the market fails. He also argues that in India, 'public purpose' has been very liberally interpreted, which has led to the misuse of eminent domain and has been the cause of popular protests. Accordingly, the government has proposed to amend the LAA, 1894 to provide for a stricter definition of 'public purpose' that is restricted to strategic purposes, government's own infrastructure projects, and acquisition of land for a 'person' (which includes any company or association or body of individuals), if the person requires land for a purpose which is useful to the public and has already lawfully acquired up to a minimum of 70 per cent of the total land required for the project. In other words, the proposed amendment requires that the market route is exhausted by companies in a legally prescribed way before eminent domain can be used.

An important feature of land acquisition in India is that it is a concurrent subject under the Indian Constitution, so state governments can also legislate on the matter. Upadhyay and Sinha review the policy and regulatory framework governing land acquisition at the state level. They find that most states have adopted the LAA, 1894 for application within their respective jurisdiction with amendments to only some procedural aspects of the law. In addition to the basic land acquisition law, many states have introduced special enactments which separately empower the relevant authorities to acquire land for designated purposes such as town planning and improvement and development of slum areas. The authors suggest that there is significant scope for rationalization of these legislations.

Choudhary points out some of the process-related deficiencies in the LAA, 1894. These include significant discretionary powers of the government and the collector, scope for delays in the completion of the acquisition process at various stages, and absence of level playing field between government and non-government companies. The last one arises because the procedures prescribed for acquisition for private sector companies are far more cumbersome than those for public sector companies. Some of these deficiencies are sought to be addressed by the proposed reforms outlined in the Land Acquisition (Amendment) Bill, 2007, such as providing a definite procedure for the collector to assess the market value of land and stricter time limits for the acquisition process. The proposed reforms also seek to do away with Chapter VII of the Act which

provides for separate procedures for acquisition of land for companies. This would eliminate the dichotomy between government and non-government companies. Another aim of the Bill is to build more transparency into the process by making a summary of the acquisition process open to public. To achieve this much desired transparency, Andhra Pradesh has introduced an e-monitoring system for land acquisition and rehabilitation and resettlement (R&R) in irrigation projects. Nallathiga illustrates how this system has brought in transparency and efficiency in land acquisition and R&R activities by eliminating subjectivity and the human bias in the compensation assessment process.

The eminent domain powers to acquire land for national highways are provided by a separate law called the National Highway Act (NHA), 1956. Sharma and Choudhary point out that this Act differs from the LAA, 1894 in a few significant ways. For example, the compensation package for the land acquired under the NHA, 1956 is less attractive and there is no 'Urgency' clause in the NHA, 1956 unlike the LAA, 1894. They further discuss the practical difficulties encountered in timely acquisition of land for national highways and suggest some corrective measures. They recommend building enhanced institutional capacity at the design stage for land acquisition and resettlement. They also recommend sensitization of public and revenue officers, updating of land records, and allowing all clearances (environmental, forest, and wildlife) to be processed simultaneously.

Another area where land acquisition falls under the purview of a different legislation is forest land. The Forest (Conservation) Rules, 2003 (Rules) framed under the Forest (Conservation) Act, 1980 (Act) regulate the diversion of forest land for non-forestry purposes including infrastructure development. Singh points out that compensatory afforestation (CA) by project proponents is one of the most important conditions stipulated under these Rules for approving forest land diversion. It is a matter of great concern, however, that the CA achieved has fallen significantly short of the CA stipulated.

III. Compensation and R&R

Compulsory acquisition of land for implementation of development and infrastructure projects displaces people from their homes, land, and/or their means of livelihood. Displacement also has psychological and socio-cultural consequences. Therefore, where displacement is unavoidable, there is a need to handle, with forethought, issues relating to R&R of PAPs with their active participation. Effective R&R involves, among other things, compensation for the loss of land and associated assets as well as for the

loss of livelihood of PAPs and expeditious implementation of the rehabilitation process.

Unfortunately, the LAA, 1894 makes no reference to R&R. In the absence of any legally-guaranteed right to R&R, the PAPs, whose lives and livelihoods are disrupted, are left to fend for themselves. This gap is sought to be filled by a national policy, called National Policy of Rehabilitation and Resettlement 2007 (NRRP-2007). The NRRP-2007 addresses several weaknesses in the preceding R&R policy framework (the National Policy on Resettlement and Rehabilitation for Project Affected Families, 2003) which had limited provisions for ensuring livelihood security of the affected families and lacked a more participatory and transparent process for the entire R&R exercise. Yet, there is a widespread view that the absence of legal backing for the NRRP-2007 has resulted in inadequate compensation and neglect of R&R of the PAPs. Not that the NRRP-2007 provides for compensation on all counts although it recognizes psychological and socio-cultural consequences on the PAPs.

This section reviews the policy framework for R&R at the central and state levels, compares it with best international practices of multilateral agencies (MLAs), and provides a critical assessment of the proposed reforms. Several authors then look at the underlying reasons for social discontent of the PAPs, and suggest what it would take to make the process smooth and sustainable. Two common threads run through many of the papers. The first is the need for a more consultative and inclusive approach which relies on community participation and involvement and builds confidence and trust between the PAPs and project proponent. The second is a more equitable benefit sharing.

Choudhary looks at the challenges faced by policymakers in providing a comprehensive legal and policy framework for the R&R of the displaced people. He critically analyses the proposed amendments concerning compensation and R&R issues as provided by the twin amendment bills introduced in the Lok Sabha in 2007. Choudhary points out some outstanding issues and inconsistencies in the amendment bills such as an apparent disconnect between the objectives and the bill provisions, a 'land-for-land' policy that caps the amount of land given, a possible loophole in the applicability provision for mandating R&R so that the project falls below the required threshold for providing R&R, and the constraints of the administrator in dutifully executing his functions by the time he gets appointed.

Emani's comparison of the R&R policies of MLAs such as the World Bank and the Asian Development Bank (ADB) with the NRRP-2007 shows that, while an

improvement over the past policy, the NRRP-2007 still falls short of the policies and practices advocated by the MLAs. This is so particularly with respect to the threshold level for applicability of R&R benefits and emphasis on time line for implementation of R&R plans.

Upadhyay and Sinha examine the R&R policies at state levels. Similar to the Central level, the R&R frameworks at state levels are generally not backed by laws. Some states—such as Maharashtra, Madhya Pradesh, and Karnataka—have enacted legislation mandating R&R of PAPs. But these legislations are usually project-specific and do not enjoy universal acceptability in the state.

Datta, Mahajan, and Singha attempt to create a deeper understanding of the livelihood and compensation issues associated with R&R. They point out that the LAA, 1894 recognizes only ownership rights and not land usage rights (such as grazing, gathering grass, or merely squatting), but there are many whose livelihood, depends on the land that they do not own. They recommend a shift to a community-based approach as well as recognition of usership rights of the landless. In assessing success of R&R policies in practice, they propose that the compensation be such as to assure that future income flows are not less than the PAP's previous income. Lump sum payments often lead to unsustainable expenditure patterns by PAPs. They also consider it essential that the location value of land (in addition to productive value) be used for determining the compensation. Part of the windfall gains should be mopped up for investment in natural capital (like afforestation), physical capital (like schools and roads), human capital (like vocational skills) and social capital (like self-help groups). Project-affected persons (PAPs) should be given assistance by specialized R&R agencies in all these processes.

Raghu Ram and Kakani illustrate that land acquisitions, whether for state sponsored development or for private business projects, face opposition for three key reasons, viz. environmental concerns, social well-being concerns, and benefit sharing concerns. By internalizing these concerns into project proposals, the promoters can improve the chances of smooth implementation as well as commercial viability of their projects.

Patra provides a case study of the Magarpatta township, where a change in land use did not entail a change in ownership. While the project promoters were farmers, the actual management of the project was handled by qualified professionals. Since the landowners themselves became project proponents, there was no scope for exploitation, agitation, and disruption.

Chatterjee makes a strong case for community engagement in the acquisition process through the application

of Community-led Sustainable Rehabilitation Intervention (CLSRI). The approach involves participation from all stakeholder groups and retains the 'voice' and 'choice' of the community in the R&R package, while ensuring that the land acquisition process is smooth, timely, and equitable. Effective implementation of this approach requires the involvement of professional development agencies who can credibly take on the task of bringing all stakeholders of the project on the same platform.

Bapat recommends that project promoters set up effective channels of communication with PAPs and accept them as equal partners through a long-term strategic alliance. One way to do this is to use the tool of Corporate Social Responsibility (CSR) creatively. In the next section, we report how an infrastructure developer, by viewing R&R as a social responsibility assisted the transition of displaced persons, thereby earning the goodwill of the PAP.

Kakani, Raghu Ram, and Tigga examine the land acquisition strategies of several large projects by private businesses spanning a period of about one and half decades (1994–2008). They conclude that gaining prior, free, and informed consent from the local communities is a key determinant of success or failure of land acquisition for businesses. The chances of success in gaining social consent appear to increase when project proponents opt for more equitable benefit sharing, directly negotiate with stakeholders, avoid alignments with political forces, and rent seeking agents, and maintain smooth communication channels.

Desai advocates a Land Purchase Act that specifies a process for negotiation between the buyer and the affected community in case of land acquisition because an agreement cannot be negotiated separately with each affected household. He acknowledges that there will be difficulty in determining who will represent the community at such negotiations and recommends referring to labour negotiations to find a solution to this problem.

IV. Land Acquisition Experiences

This section presents some experiences of land acquisition for projects in sectors such as rail, port, airport, and roads. The actual experiences presented here exemplify some of the issues discussed in the preceding sections. Finally, this section also brings out the experience of diversion of forest land for developmental activities.

Garg narrates the experience of the IR in acquiring both government and private land for the Haridaspur–Paradip New Line Project, which was meant to provide rail connectivity to mines to enable iron ore export from Paradip Port. The unhappy experience underscores some

of the issues raised in the previous sections, viz. valuation of land and compensation to displaced persons who are not title holders of land. The private landowners, in this case, resented the poor compensation they were given in relation to the rates paid for state government land which were as much as ten to twenty times higher in some villages. The price of government land was fixed on the basis of homestead or urban land, that is, implying higher value due to a change in land use from agricultural land. A second issue brought out by this experience is the demands from 'squatters' raising crops on the government land for compensation at the same levels as given to title holders of private land. The new Bill proposes to cover all displaced persons, even non-title holders. Garg discusses other difficulties faced by the land requirer and concludes that in the absence of full co-operation of the state government, railway projects can be unduly delayed and viability affected.

In a second case, the Surat–Hazira New Rail Line Project, Garg shows that the project cost doubled and the total grant required to maintain viability of the project quadrupled as a result of both delays and an eventual increase in the length of the rail line to avoid going through a Special Economic Zone (SEZ). The Rail Vikas Nigam Limited (RVNL) had to undertake frequent alignment surveys for this railway line, as the surveys were repeatedly discarded by the state government and the owner of the SEZ through which the rail line was to pass. Garg concludes the problem could have been avoided if the state government had planned for a rail corridor to the Hazira Port.

Mahadevan draws lessons from the case of land acquisition for rail connectivity for the International Container Trans-shipment Terminal at Cochin. What stands out starkly is that the average size of land holdings is so small that acquisition of only 4.3 ha of land affected as many as 261 families. The forced eviction of families residing on that land led to wide public protests, which compelled the state government to consider an R&R package even though the number of families fell below the benefit threshold as defined in the NRRP 2007. This case also demonstrates that R&R packages are more acceptable if they are offered in terms of land-for-land and the land offered is in close proximity to where the displaced lived.

Gulati narrates the experience of the Delhi International Airport Limited (DIAL) with land evacuation and R&R, and demonstrates how, by viewing R&R as their social responsibility, the corporate sector can earn the good will of PAPs. Delhi International Airport Limited (DIAL), a joint venture consortium with the GMR Group as the largest shareholder, provided assistance to the villagers

living on the land which was being evacuated by way of transportation facilities and provision of labour. Further, in partnership with the GMR Group's CSR arm, it ensured support in terms of medical facilities and basic amenities at the land being evacuated as well as at the rehabilitated site.

Singh analyses the extent of diversion of forest land for non-forestry purposes. The analysis indicates that land diversion has fallen significantly after the Act came into being. He concludes that though it is not possible to compare forest land diversion for infrastructure before and after the Act, there is no doubt that the Act ensured a more optimal use of land for development activities. He illustrates this through the experience of the Itanagar Airport and the Rowghat iron ore mining project.

V. Overcoming Land Constraints in Urban Planning

Urban land issues are somewhat different, as land supply is constrained by excessive regulatory requirements and a dominant public-sector presence in land arrangements. The regulations have restricted private land supply and given the state enormous powers to intervene in the urban land market. As a result of controlling regulations, limited financial resources and capacity of urban local bodies to implement the master plans, and loopholes in the regulations that have enabled rent-seeking, urban *physical* growth has stagnated or grown in a haphazard sprawl. In recent years, some states have instituted measures to reduce barriers to private supply of land, such as abolition of Urban Land (Ceiling and Regulation) Act, 1976, and Rent Control Act reforms. Besides these gradual measures, two other initiatives are being tried in a few states to overcome the existing constraints. These are: (i) township development and (ii) land pooling and readjustment. This section covers these initiatives and discusses issues of urban land management. It ends on a futuristic note of design of land-saving urban infrastructure.

Joshi argues that the first best solution to meet the growing requirement of land for urban centres and urban infrastructure is to free the supply of land by removing constraints such as legislations on rent control, high stamp duty and development charges, restriction on sale or conversion of agriculture land, and weak land title/record and protection system. However, these measures will take considerable time to implement, given the political economy of urban governance. In the interim, an integrated township policy appears to be an appropriate instrument, as it can facilitate market-based supply of land for integrated townships and create pressures for

municipalities to improve their own performance in delivering urban governance and service quality. States such as Gujarat, Maharashtra, and Rajasthan have adopted such a policy in an attempt to mobilize the private sector for the supply of land for urban housing, infrastructure, and other public purposes. Under this mechanism, instead of relying on the LAA, 1894 to acquire land, the developer assembles land by paying private landowners the prevalent market price. He plans development as per the town planning norms in force, builds houses and infrastructure, and sells the plots and houses at market rate. The role of the public sector in this process is that of a facilitator and a regulator of town planning and environmental and social welfare norms instead of a controller and provider of land for urban growth.

Gujarat, particularly, has made remarkable progress in the area of Urban Land Management. The Government of Gujarat is committed to managing the growth and transformation of cities by using market mechanisms and energies of the private sector. Towards this end, it commissioned a study ‘Streamlining Urban, Planning and Land Management Practices in Gujarat’ that investigated urban land management laws and practices in the state and made recommendations to improve the system. Patel, Ballaney, Koshy, and Nohn have presented the findings and recommendations on this study.³ One of the key findings is the lack of a unified and accurate Cadastre in the urban areas for which no one has been assigned responsibility. The absence of this cadastral system increases the risk involved in land transactions as well as the possibility of corruption.

Gujarat has also implemented an innovative mechanism called ‘Development Plan–Town Planning Scheme’ (DP–TP mechanism) under the Gujarat Town Planning and Urban Development Act (GTPUDA), 1976. The scheme, which is based on a participatory land pooling and land readjustment mechanism, helps to (i) adhere to a development plan in the face of a strong tendency towards unplanned growth; (ii) remove the disparity between those who lose land for infrastructure projects and those living in close vicinity of the project, who are not displaced and gain from the capital appreciation; and (iii) capture the incremental value of land resulting from development projects and use it to finance such projects. Ballaney and Patel give details of the DP–TP mechanism and identify the factors that contribute to its efficacy. They conclude that the Town Planning Scheme is a powerful and well coordinated statutory tool which involves: (i) a detailed

land appropriation, land readjustment, and infrastructure development plan and (ii) a mechanism for financing and implementing the plan, involving the landowners in the process. They have also found evidence that the DP–TP mechanism can be more effective than the LAA, 1894 for land acquisition. Balachandran provides a case study of Sardar Patel Ring Road in Ahmedabad to illustrate how this scheme works.

The design of urban infrastructure itself should be predicated on efficient land use given the limited availability of urban land. Modern technology and management systems can significantly reduce the demand for land. Bastian, Shetty, and Raghuram report on some of the domestic and international best practices, especially in the area of transportation. The Japanese have excelled in the area of land saving technologies, pioneering manmade offshore airports, capsule hotels, multilevel and automated car parking, and high-speed rail line on elevated tracks. Some key lessons drawn from their experience are the need to shift from capital-saving to land-saving technologies as land becomes relatively more scarce, and the importance of long-term planning with sufficient open space and green cover to provide quality of life for urban dwellers. The Bus Rapid Transit System, which has begun to gain popularity in India, is another example of land saving technology. The authors emphasize the need for public policies to create incentives for more optimal utilization of land and land saving innovations as well as to support shifts in demand to the new infrastructure facilities by users.

VI. Leveraging Land for Development

It is well known that land is a critical physical resource necessary for development activity. The discussion thus far has been on this aspect of land. But there is also a need to examine the growing trend of land-based financing techniques to finance infrastructure projects. This section therefore examines how land/land-based instruments could be used for achieving infrastructure development.

Peterson observes that the scale of land-based financing for urban infrastructure is surprisingly large in developing countries, especially in fast growing cities. He discusses three categories of land-based financing of infrastructure: developer exactions, value capture, and land asset management. Developer exactions require developers to build external infrastructure (such as trunk lines for delivery of water, access highways, etc.) in addition to building infrastructure at their own site. In this way, incremental

³ Three of the authors—Bimal Patel, Shirley Ballaney, and C.K. Koshy—were part of the original project team that prepared this study.

infrastructure costs are passed on (as an impact fee or development charge) to private developers who, in turn, may pass on the costs to the purchasers of the developed sites. Value capture refers to the capture of gains in land value created by infrastructure investment. It can be done through a betterment levy (a one-time tax on gains in land value) or sale of public land whose value has been enhanced by infrastructure investment. China has used this instrument on a large scale to finance infrastructure. Finally, land asset management recognizes that the balance sheets of many public entities are already top-heavy with urban land and property assets. Under these conditions it can make sense for public authorities to exchange underused and vacant land for infrastructure.

Nallathiga discusses the potential of a variety of land and land-based instruments for development of urban infrastructure in the Indian context with examples. The Town Planning legislation of Indian states provide for urban infrastructure development in the framework of a Master Plan which serves as blueprint for city's development. Zoning is an important constituent of a Master Plan; it lays down not only the nature and use of land in a city but also the extent of development on a given piece of land. He observes that the Master Plan framework has not been effective in fostering infrastructure development especially in the suburban areas and argues that instead of using zoning as a negative or controlling instrument, it should be used to create incentives for desired land uses and development. The use of market based instruments such as incentive zoning and transferable development rights can help to better achieve the Master Plan objectives.

Phatak explores the rationale for the state to exact part of the rent in the economic sense (that is, returns attributable to land) for public use and outlines the evolution of the concept of development rights. While he acknowledges that there is a rich menu of instruments that can be used to finance urban infrastructure, he discusses the practical difficulties in each case in the Indian context. The impact fee and betterment charge have problems in measurement and attribution, whereas the area-linked development charge lacks revenue buoyancy. With respect to the sale of development rights, he raises some fundamental questions such as how the state acquired the development rights in the first place and that the premium on development rights arises because of the extreme scarcity created by zoning and low Floor Space Index (FSI) regulations. He urges that, before such financing instruments are made popular, it would be useful to settle the legal issues and ensure that the initiatives are not at the cost of distortions in the land market.

Garg highlights the experience of IR which has used excess land available with it to finance its projects. The IR holds a substantial amount of land that is not required for operational purposes in the foreseeable future. Of about 4.3 lakh hectares of land owned by the IR, about a quarter is either vacant or under miscellaneous uses such as afforestation. To facilitate the development of railway land for commercial use, the Rail Land Development Authority (RLDA) was set up. Garg discusses the possible revenue models for RLDA as well as initiatives that have been taken by the Ministry of Railways, Container Corporation of India Ltd., and Indian Railway Catering and Tourism Corporation Ltd. (IRCTC) to put railway land to better use.

Raghuram and Sundaram present a case study of the Bangalore Mysore Infrastructure Corridor, a pioneering project that leverages land to finance itself. Beginning in 1988, the project involved building an expressway connecting Bangalore and Mysore and developing townships around the expressway by the same developer. The potential revenues from leasing the properties in the townships so developed would act as incentive for the developer to build the expressway. However, the project is still incomplete. A review of the events that impacted the course and pace of the project reveals that such projects can be highly vulnerable to rent-seeking behaviour by the government. Inadequate transparency in the project development processes and lack of clarity and conviction on the part of the government led to controversies, judicial intervention, and ultimately excessive delay. The acquisition of huge amounts of land entailed by the project undoubtedly contributed to the aggravation of the governance issues.

VII. International Experience in Managing Land

Most efforts to increase land market efficiencies have concentrated on one or more aspects of the land administrative system: judicial, regulatory, fiscal, and information management. Tiwari reviews international experiences and innovations aimed at making land markets efficient. He argues that traditional approaches centred on four aspects of the land administrative system have produced mixed results. Land as an asset is associated with a bundle of legal rights such as right to own, right to use, right to develop, and right to lease. Efficient land markets require development of systems that can unbundle these rights and allow them to be assigned for productive purposes. Once competencies to fragment and transact land rights develop, efficient use of land starts to happen. Such developments require that the role of government is

much more than rigid administration of land to develop systems that accommodate interests of various parties through clarity of purpose, flexible planning system, and decentralization of administrative agencies involved in land management.

Debnath and Choudhary have documented the land administration, acquisition, and compensation practices

in three countries: China, Ethiopia, and Mozambique, where the land is owned by the state and the law recognizes only land use rights. It is interesting to note that these countries also encourage a land-for-land compensation policy for rural households affected by development projects.

Section I

LAND MARKETS IN INDIA

2

Land Markets in India Distortions and Issues[†]

Sebastian Morris and Ajay Pandey

The Problem Today

Uncertainties, risks, and delays resulting from protests and resistance on the part of the people displaced due to land acquisition have become one of the most important bottlenecks for investments, especially in the infrastructure sector, as evidenced by the recent spate of protests in Bengal, Orissa, Kerala, UP, and Maharashtra. Land acquisition and rehabilitation have been issues around which much popular mobilization and protests against the state have taken place in India and continue to do so. These protests reflect not only equity concerns (of project-affected people) but also ecological concerns; several environmental protests that have had a mass following had their roots in the problems of land acquisition that sought to change the concept of land use. Popular concerns for both equity and ecology stemming from land acquisition and the consequent delays, cost overruns, and risks have increasingly impacted the viability of several projects.

There has been a tendency in recent years by most project promoters to acquire land by using the eminent domain powers of the state, rather than through market negotiations. Typically, people whose lands and habitation are taken over without their consent by the Indian state are deeply aggrieved and their protests, while ineffective, have resulted in much social loss and evoked the sympathy of the civil society, which now views all development projects with suspicion. Such 'anti-developmental' attitudes have taken deep roots. The situation today is such that almost no large

project which may have the potential to bring significant social gains is possible without risking impoverishment of the people displaced by the project. Development today is seen as being 'anti-poor' in a direct, easily recognized sort of way. Even if many other poor (usually in much larger numbers) gain out of developmental projects, they are neither organized nor vocal. In other words, development projects in India violate the core principle of having to be at least a Pareto-improvement, that is, not hurting some people while leading to substantial income generation for many others.

While there are many issues relating to inequities and violation of human rights in the land acquisition process, it is often not recognized that they can be significantly addressed if the land markets are made to function more efficiently. There are characteristic problems with the functioning of land markets, which have been exacerbated by state interventions in India in the name of protecting vulnerable segments of the population or for achieving orderly growth of industries and urban areas. These policies and interventions, together with the colonial legacy of viewing land as a source of revenue, have resulted in distorting the land market, which is manifested by depressed land prices at some places and inflated prices at others and widespread possibilities of regulatory arbitrage. Most significantly, they have tended to make market transactions relatively unattractive as compared to the use of eminent domain powers. This chapter focuses

[†] This chapter focuses on problems in functioning of land markets outlined in an earlier essay of ours titled 'Towards Reform of Land Acquisition Framework in India' published in *Economic and Political Weekly*, 2–8 June 2007. While there are new arguments and ideas developed in this chapter, there are parts which are common to both the essays.

on the distortions in land markets with specific reference to Indian situations. In the second section, 'Problems with Regard to Land Markets' of this chapter, we outline some inherent characteristics of land, which impede a well-functioning market for it. Land market distortions in India are discussed in the third section, 'Land Market Distortions in India' is followed by a critique on the 'Regulatory Constraints on Land Use' in the fourth section. The last section concludes the chapter.

Problems with regard to Land Markets

IMPERFECT SUBSTITUTABILITY OF LAND

There are significant imperfections in the land markets. The most important source of imperfection is the lack of substitutability. No two pieces of land are the same, unlike most produced goods and services. Even between two adjacent pieces of land, there can be differences in terms of size, shape, access to irrigation, soil quality, etc., partly because land is immobile. In other words, each parcel of land has some unique characteristics, which reduce its substitutability and give the landowner some degree of monopoly power. While for most pieces of land, there is some degree of substitutability—albeit less than perfect—for the same use, there are tracts of land, where there is no scope for substitution for a given use; for example, a particular piece of land can be considerably suited for mineral extraction or for strategic use. Furthermore, market imperfections emerge on account of constraints on switching from one use to another for the same piece of land. For example, since the sunk costs in case of infrastructure projects are very high, the investments required for subjecting a plot of land on which physical infrastructure has been built to another use can be prohibitively high. The barriers to switching to a different use can also be regulatory in origin (see below), where some changes in the legal and regulatory framework can help overcome the problem of imperfect substitutability and make the land market function more efficiently.

PRIVATE VALUE VERSUS MARKET VALUE

The lack of perfect substitutability also means that there could be a private value associated with a given piece or parcel of land, which is different from its market value. While the market value of a given land depends upon the society's expectations of economic profits from the land, determined partially by the land's specific location, and the environment around it, the private value is determined not only by the landowner's expectations of future economic benefits from that land or its opportunity costs for him (expected income from an alternate asset that he can buy

in exchange for his land), but also other additional factors such as fear of displacement, emotional attachment of the owner, subjective utility derived from the specific land/residence, and the extent to which his social identity is determined by his land ownership. This framework explains why market fails in certain cases, particularly why some people refuse to sell land even when the market price (or even a premium over the market price) is offered to them. It also explains why people react negatively if there are plans for changing land use in a neighbouring area which would increase congestion or pollution in the area.

LAND VALUE IS DEPENDENT ON USE-PATH

Both the private and economic value of any given piece of land is contingent on the developments in the area surrounding the land. If an area, for example, gets urbanized, then economic activities in the area increase and in the process land values also increase. Path dependence of values comes from the fact that once an alternative economic activity gets started in the neighbouring areas, it acquires a momentum of its own and creates incentives for changes in land use in that area, which tend to influence the land price. At any given point of time, the price of a given piece of land reflects the probability of alternative activities taking place in that area that can potentially alter its use. This is the reason why land prices change due to development of infrastructure in an area. In this case, the problem arises because the regulatory framework often does not allow the use change to happen freely nor does so with a lag.

AGRICULTURAL DEPENDENCE AND SURPLUS LABOUR

In several developing economies, a large part of the land is devoted to agricultural use and the bulk of the farms are operated by family labour. The marginal product of labour in such farms is close to zero, because of typically small land holdings and large family size. Here, some members of the family work on the farms without adding to the farm's productivity. This phenomenon is known as 'disguised unemployment'. The implication is that if imputed labour costs (prevailing market wage rate) are taken into account, several farms would be making a loss. This means that market prices of land, which are based on 'economic profits', would be less than the value ascribed by those who are dependent on land.

Nevertheless, the disguised employment in farming is highly efficient in the social sense since it allows employment of more labour than capitalist farms maximizing profits alone would do. The system is socially desirable because for most farms in developing economies, land holding is the limiting factor in maximizing land productivity and

labour the surplus factor. The problem arises when the system is disrupted by acquisition, because the 'surplus labour' makes it extremely difficult for the organized sector to provide jobs to all the land-dependent people displaced by projects and to compensate them for their loss of livelihood.

THE HOLD-OUT PROBLEM

One of the important problems recognized with regard to the functioning of land markets, especially in urban areas, is the 'hold-out' problem. This occurs when a large piece of contiguous land is required for a certain use, which involves the acquisition of land from a large number of land holders, some of whom may be unwilling to sell (that is, hold-out). Hold-outs often occur because it is in some landowners' interest to 'hold-out' in the expectation of being able to extract a higher price for their land once the acquirer has already incurred costs by acquiring a significant fraction of land required for the project. Economists recognize this rent-seeking behaviour as a justification for the use of eminent domain powers of the state, under which the state can take over land without consent of the owners and hand it over to the new entities to pursue socially beneficial activity.

Land Market Distortions in India

POOR LAND ADMINISTRATION

A significant reason that explains the preference among many proponents of industrial and infrastructure projects to acquire land using eminent domain powers of the state, is incomprehensive, outdated, and inaccurate land records in India, which give rise to disputes (over ownership) and litigation. Since these projects require large amounts of land and land holding in India is typically small, project proponents have to deal with a large number of landowners and consequently face substantial risk of litigation. In case of use of eminent domain, however, land vests completely unencumbered in the government, which then hands it over to the requiring body. This makes acquisition through the State more attractive than the market.

Why is land record administration so poor in India? There are some legacy issues here. Since the aim of land administration during the British time was to boost land revenue, which was a major source of revenue generation, the focus was on use rather than on individual ownership. Records were prepared only for agricultural land and not residential lands in the villages and the urban lands. Spatial records (maps) were particularly neglected. In the post-independence period, land revenue declined in importance; sometimes the cost of revenue collection

exceeded the revenue. Not surprisingly, the revenue staff gave low priority to the maintenance of land records. Further, there are deficiencies in the institutional framework. There are multiple agencies handling land records (Revenue Department, Survey Department, Panchayats, Stamps and Registration Department, etc.) and there is no interconnectivity among these agencies. As a result, when one agency updates records, records in others become outdated.

Computerization of land records was launched as a centrally-sponsored scheme in 1998–9. The progress has varied widely across the states. Focus, however, has been more on computerization and less on creating a system that maintains accurate and up-to-date records.

A related issue is the widespread lack of clear land titles in India. Purchase of land property entails huge risks since the buyers are accountable for problems with the title even though they may not have been aware of such problems despite their best efforts and due diligence at the time of purchase. This arises because land records that are relevant in determining the title can go indefinitely backwards, and there is no option for a private person to 'commutate possible objections to the title' by appropriate legal action and notification. In other words, there is no legal provision for a land holder to register his land with a particular notified authority, so that through announcement and due legal process, he can commutate possible objections to his title and thereby, achieve clarity on his title. Since this facility is not there, there is always a risk that a seller does not have clear unencumbered title to the land. This puts a downward pressure on the price of land in relation to its true value.

But why are titles unclear in the first place? The simple answer is that the legal system that puts the rights in land on public record is inadequate in India. There are two ways of putting the rights on record: deed registration and title registration. Under the deeds system, the potential buyer is supposed to investigate whether the seller's title is genuine, while under the title registration, there is no need for such investigation since the titles are already verified for the potential buyers by the registry system (World Bank 2007). The Registration Act, 1908 provides for registration of deeds, which establishes public records of only the transaction, but not the validity of the transaction. Nor does it imply any inference that the parties are legally entitled to carry out the transaction. This makes land titles in India 'presumptive' and not 'conclusive'. The Registrar's office is not only under no obligation to check the veracity of title claims, but also does not have the access to land records and cadastral maps to do so, and this is because of lack of connectivity. This creates scope for frauds, disputes,

and litigation.¹ In August 2008, the Government of India (GoI) has taken a decision to move decisively towards title registration (see Box 2.1), which would create more secure private property rights than the current system. To set the stage for title registration, the Government has introduced a nation-wide scheme called the ‘National Land Resource Modernization Programme’.²

HIGH TRANSACTION COSTS

The ratio of annual transactions in land to the total stock of land is very small, reflecting a thin land market, which impedes the process of price discovery. Another dimension of the same phenomenon is that liquidity in the land market is very low compared to other asset classes. The

Box 2.1 The Torrens System

The title registration is also known as the Torrens System, named after Robert Richards Torrens, who introduced the system in South Australia through the introduction of the Real Property Act, 1858 or the Torrens’ Act. Under the system, a Registrar of titles is appointed and the Registrar itself serves as the primary source of ownership. For transfer of title, registration is mandatory and title is conclusive proof of ownership. Under the system, the buyer becomes the rightful owner, even when the seller—who did not own the land in the first place—has sold him the land fraudulently. The aggrieved person in such a case can get compensation from the State, but not restitution of his land. To ensure that the State carries out its responsibility of paying compensation, the title registration system is normally associated with a guarantee fund. The system is based on the following three principles:

- (i) the mirror principle indicating that the situation in the registry is the exact reflection of reality;
- (ii) the curtain principle, implying that anybody interested in inquiring about the title status of a given property will not have to engage in a lengthy search of documents, but can rely on the evidence from the title registry being definitive; and
- (iii) the assurance principle according to which the government will indemnify for damages incurred as a consequence of errors in the registry.

Source: World Bank (2007).

Reforms that strengthen the land-related information management system would not only increase the relative attractiveness of market negotiations vis-à-vis use of eminent domain, but also make land administration more affordable, accessible, and efficient, and thereby help to: (i) provide secure land tenure for landowners, thus encouraging them to invest and manage this asset in a sustainable manner; (ii) facilitate low cost transfers that allow land to move from less to more productive producers through rental or sale; (iii) provide a basis for the use of land as a collateral for effective operation of financial markets; (iv) allow spatial planning for issues ranging from the provision of infrastructure such as roads and utility lines to environmental protection; and (v) enable local and central government to effectively implement programmes and collect revenue (World Bank 2007).

land mortgage market operates only at a large discount and the reverse mortgage in land is all but absent. High transaction costs are one of the main factors that have prevented the development of an efficient land market. Even though some states have recently reduced stamp duties, in other states, the average stamp duty is still in the range of 9–10 per cent of the transaction value, which is very high by international standards.³ Since stamp duties are to be paid on all documents that are registered, high stamp duties have led the transacting parties to either avoid registration through various means including informal agreements or underreport the transaction value. This not only reduces the revenue of the states but also undermines the land administration system.

High transaction costs are also iniquitous; they deter the small investors from treating land as a pure asset with the sole intention of making a profit, but not the

¹ ‘India’s property title system and market practices present considerable difficulties in establishing clean title to property. The deeds registration system is not guaranteed by the State and is inconclusive; typically leaving buyers with 30 years of title deeds to assess. . . . Anecdotal evidence from legal advisors indicates that the level of fraud in Indian real estate transactions is very significant; and the court system is notoriously slow’, see http://www.firstam.com.hk/newsletter/fam-e-news0206_2.htm

² For more details, please visit the website of Department of Land Resources, Ministry of Rural Development, Government of India.

³ The stamp duty rates in Uttar Pradesh and Haryana are 14.5 per cent and 12.5 per cent of transaction value, respectively, see <http://www.indiahousing.com/stamp-duty-india.html> In contrast, ‘. . . the maximum rate levied in most developed markets whether in Singapore or Europe is in the range of 1–2 per cent’ <http://www.indianground.com/legal.aspx>

major players. This is so, because agreement to buy or sell through instruments such as ‘power of attorney’, which can help bypass registration and hence payment of stamp duties, can be enforced through muscle power, which the small players in the land market do not have and are at a disadvantage. This is why very few small players use power of attorney to enter into land transactions and if they do, they run huge risks. One of the important reasons for *mafias* to emerge in the land business is their ability to ‘enforce’ such agreements.

Regulatory Constraints on Land Use

In land, more than in any other business, the value is affected in many ways by regulatory controls over use. Typical regulations in the urban context include zoning, regulated densities, and building bye-laws and to some extent are ‘inevitable’ if urban planning has to take place to overcome the large negative externalities that can result from haphazard and unconstrained land use. Many times, however, these restrictions destroy value. In India, for example, ratios of floor space to land area of buildings have been kept low through regulations. One fall-out of this is that it has made low cost public transport unviable.⁴ Some of the important restrictions involving agricultural land are discussed below.

NON-AGRICULTURAL USE CLEARANCE

In India, perhaps the biggest depressing effect on agricultural land arises out of the restrictions (sometimes referred to as ‘ban’) on use of agricultural land for non-agricultural purposes. Non-Agricultural Use Clearance (NAC) from the local/state government is necessary before agricultural land can be considered for other uses. Consider for instance, the land with area (A) which could potentially have been put to a non-agriculture use, say for urban housing and related activities. It is convenient to think in terms of an annulus around the periphery of a city of built up area B (see Figure 2.1).

Now, if B is entirely built up and A is entirely devoted to agricultural use, the value of a unit of land in A (V) is the rental yield of the land in agriculture (R_a) multiplied by the probability of land continuing to be used for agriculture ($1-P$) plus the rental value of the land in non-agricultural use (R_{na}) multiplied by the probability of the land being used in non-agriculture (P) use. This is the case when the value of land in agricultural use is less than that in non-agricultural use. Now, P is a function of the area’s

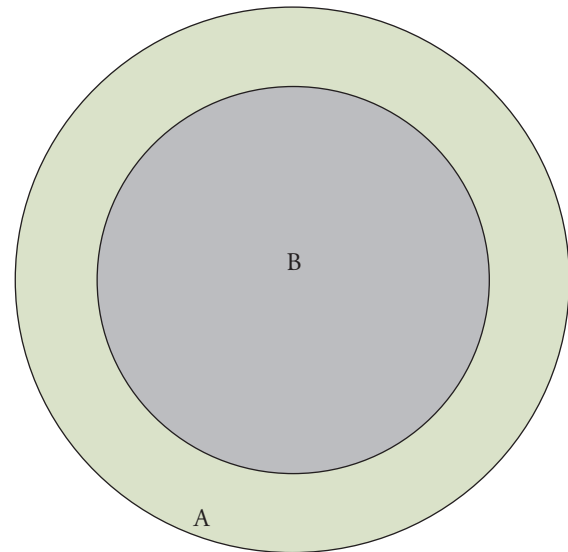


FIGURE 2.1 Valuation of Pre- and Post-taking in the Periphery of a Central Place

proximity to B and the growth rate of the urban area. P is typically large in an area in the urban periphery (say 0.5 at the time land is sought for an alternate use) and R_{na} is typically many times (usually 10–20 times) higher than R_a . Thus, for an annulus like A in the immediate periphery of the built up area, the value of A is determined almost in all cases by the expected rental value in non-agricultural use. Assuming R_a as X, and R_{na} as 12X, V is $0.5 \cdot 12X + 0.5 \cdot X = 6.5X$. If there is a compulsory acquisition of a portion of the land A and its land use is changed, then its market price would jump close to 2 times (from 6.5X to 12X), the price that would be prevalent in case there were no restrictions on land use.

Now consider the situation created by the need for NAC, as in India. Prior to acquisition, the probability P is close to zero, because there is a requirement of NAC, which is granted only after acquisition or after concrete proposals for non-agricultural use are shown to the authorities; the possibility of the latter is generally remote (see below). Therefore, the price that the land holders can realize is a little more than X. Now, post-acquisition, the price would be 12X, which would be realized by the requiring body.

DISTORTIONS DUE TO NAC

Non-agricultural Use Clearance (NAC) is normally not granted to a farmer who wants to continue to use the land for agriculture while looking for a buyer. NAC is given

⁴ For detailed discussions on state intervention in the urban land market, please see ‘Integrated Townships as a Policy Response to Changing Supply and Demand Dynamics of Urban Growth’ by Ravikant Joshi in this Report.

(when no acquisition is involved) typically only to the owner who comes up with a concrete proposal for putting the agricultural land to non-agricultural use. Since farmers typically neither have the ability to produce such proposals nor the capacity to pursue alternate uses, they cannot benefit out of the value accretion, resulting from (potential) non-agriculture uses even when no acquisition is involved. The requirement of NAC, therefore, means large rents to the purchaser of agricultural land at the cost of the agriculturalist who normally cannot think of getting NAC for his land. In case land is acquired through market negotiations, it is possible for the farmer to bargain some part of the value creation due to anticipated use change. In case of compulsory acquisition, however, the entire value creation on account of aggregation of land holdings and change in land use pattern, accrues entirely to the requiring body.

This phenomenon of ‘regulatory arbitrage’ amounts to the state mediated transfer of wealth—through a regulation—to the buyer from what is legitimately due to the farmers. This feature of the Indian land market regulation, more than anything else, depresses the price of agricultural land relative to their true (potential) values. At the same time, it creates a major distortion in the investment decisions related to projects involving land, because the entrepreneurs may simply be motivated by the transfer of wealth referred to above, rather than the project per se. This is especially true if the land is acquired through the use of eminent domain powers. The result is sub-optimal project choice as well as a tendency to acquire excess land. In the recent SEZ investments, the ‘arbitrage’ of land use restrictions has been one of the important reasons for ‘entrepreneurial’ interest. Also, many public sector units, universities, and other institutions have a tendency to acquire excess land through compulsory acquisition, which remain unutilized for several years. The (perverse) incentives to do so are too strong to resist for many.

OTHER RESTRAINTS

Another factor that keeps the price of agricultural land low is the ban on its purchase by people other than farmers,

which is in force in some states including Maharashtra and Gujarat. Many people who are not traditional farmers are often willing to pay higher than market prices for lands used as orchards, farmlands near tourist locations, scenic lands, and lands having potential for corporate farming. But they are barred from participating in the market, leading to reduced demand for agricultural land. The restriction reduces the market’s ability to allocate land to its highest value use, accentuates the urban–rural divide, and clearly hurts the farmers the most.

Conclusion

There are certain inherent problems with land because of its peculiar characteristics, which impede the natural emergence of a well-functioning market. The legal and regulatory framework can potentially overcome these problems. In India, despite some reform efforts, the land market continues to be highly distorted and inefficient. Land records are inaccurate, outdated, and incomprehensive. There are widespread uncertainties relating to land titles, which have hurt the market. Transaction costs are significantly high by international standards, which have discouraged formal land transactions. Initiatives which could have made the market function better have not been taken; while some regulations have been introduced which have introduced or magnified the distortions in the market. A major negative consequence of this underdeveloped and distorted market is that promoters of industrial and infrastructure projects have eschewed market negotiations for land acquisition and have favoured the use of eminent domain powers. While reforms have begun in many areas, an area that has been left untouched relates to regulatory restraints on land use. The most notable has been the requirement of NAC. Because the clearance is typically given after land is transferred from one party to another, there is a significant transfer of wealth from farmers to project proponents, which has been the source of a great deal of social discontent. The elimination of this restriction on land use would go a long way towards making the land market a great deal more efficient than it is now.

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3

Security of Title to Land in Urban Areas

Swati Ramanathan

Introduction

In India, the seeds of democratic capitalism were laid sixty years ago with the establishment of the state and its judicial arms cementing the role of the state as constitutional arbiter of most issues. However, the impact of the interaction of three forces—federal democratic state, modernizing market, and a traditional society—is still being felt on many fronts, one of which is land. Indeed, nowhere is the tension between market, state, and society greater than when related to land.

This chapter focuses on land title, with particular reference to urban areas. There are two important aspects to land title that make the role of the state significant in the functioning of the market: first, the formal recognition by the state of property rights through a system of titles; and second, the facilitation by the state of efficient trade in rights, through a process of registration.¹ Both these elements exist in India, but in incomplete form.

In a landmark development in October 2008, the Governor of Rajasthan signed into Ordinance a Guaranteed Land Title Bill, which effectively completed all processes on making this an official statute in the state. Once it is placed in front of the new Assembly and signed into as an Act, Rajasthan would be the first state in the country to put in place a legislation that will facilitate a critical land reform in the area of land title. However, passage of the Act is uncertain given the change in government. Against the backdrop of this development, this chapter attempts to highlight the importance of providing security to land title not only as a social imperative but also for the efficient

functioning of land markets especially in urban areas, and examines the implementation issues relating to land title based on the Rajasthan experience.²

The Case for Secured Land Titles in India

RATIONALE FOR STRENGTHENING THE PROPERTY RIGHTS SYSTEM

With globalization, several countries including India have moved inexorably towards becoming modern states with a modern market system. It has been widely recognized that in establishing a modern market, including land markets, a key challenge is the resolution of the issue of immovable property rights, which has to be backed by associated institutions, laws, and processes. Without these prerequisites, the free market system would not work efficiently. Referring to the Soviet's dramatic shift from centralized planning and resultant black market instead of the free-market, Greenspan states that '...they (black markets) are not supported by the rule of law. There is no right to own and dispose off property backed up by the enforcement power of the state. The linchpin of a free-market economy, property rights, is missing'.³ For the emerging economies that depend on capital inflows for growth, the issue is particularly important, since these economies have to deal with the associated requirements for global trust in their respective statutes protecting contractual rights and agreements.

¹ Tony Burns at the World Registration Congress in 2001.

² The author was the Advisor to the Government of Rajasthan on implementing guaranteed land title in Rajasthan.

³ Alan Greenspan (2007), *The Age of Turbulence*, pp. 138–9.

In the discussion on property rights, land occupies the centre stage, because it has been the principal source of sustenance or wealth for a wide cross-section of the human society: communities, industrialists, and developers. How important are secure land rights for sustaining high economic growth? A report by McKinsey in 2001 identified the distortions in the land market due to lack of clarity on title as one of the key factors impeding India's economic growth. According to the report, India loses an estimated 1.3 percentage points of GDP growth because of this factor.⁴

Guaranteed title systems that protect rights to land and property have been developed in most of the democratic, developed economies. There is considerable theoretical and empirical support to the benefits from strengthening the title systems. Hernando De Soto, a Peruvian economist, popularized the idea that land titles allow the poor to access credit through formal banking systems, thus converting locked assets into liquid assets. Paul Dower and Elizabeth Potamites⁵ affirm the role of title for access to credit, not just as collateral, but also as a source of important insight for the lender vis-à-vis a loan applicant who has taken the trouble to get land title. Their survey in Indonesia showed that with a land title, the likelihood of successful loan applications increased by 60 per cent and the loan size by 29 per cent.

Lanjouw and Levy (2002) provide evidence that transaction uncertainty in the absence of real property titles impedes market transactions. On the basis of the response of owners to questions relating to their ability to sell their property, they show that owners with informal rights have difficulties selling their homes as potential buyers fear they could reassert their ownership after the sale. In this context, 'titling' should increase the number of transactions. This is confirmed by Macours, de Janvry, and Sadoulet (2005), who show that the insecurity of property rights in the Dominican Republic's rural areas reduces activity in the rental market, and by Deutsch (2006) who observes that titling

in Phnom Penh was followed by an increase in the number of land sales.⁶

In Andhra Pradesh, where there is a considerable amount of land without clear title, there is evidence that providing a clear *patta* or deed certificate can significantly increase land values, by 15 to 20 per cent for privately owned land and by 30 to 45 per cent for assigned or occupied land. Moreover, having a clearly defined right also increases the probability of a plot of land being rented out, thereby providing indirect benefits to the poor.⁷

ABSENCE OF LEGAL SUPPORT

The Constitution of India had originally included the right to property as a fundamental right, but the 44th Amendment to the Constitution in 1978 reduced the right to property to the status of a legal right, no longer enjoying the fundamental right to constitutional remedies. This position is in contrast to the one in the United States, which has enshrined the right to property in the Fifth Amendment, as a fundamental right,⁸ shoulder-to-shoulder with the right to life and liberty.

Thus, while Indian law requires compulsory registration of sale of land through the Indian Registration Act of 1908, the same Act does not ask the registration authority to verify the history of the land or its ownership from the seller, thus weakening the protection to the buyer. Hence, land registration is not registration of title, but of deed of transaction. It is treated merely as a fiscal instrument for the state, allowing it to collect a 'fee', but not providing the statutory support of certainty to the title. The verification of ownership is not required by the Transfer of Property Act, 1882 either.

Further, Sec. 18 of the Registration Act does not demand compulsory registration of all land-related transactions. State acquisition of land, court decrees, land orders, heirship partitions, mortgages, agreements to sell, etc. do

⁴ Amadeo M. Di Lodovico, William W. Lewis, Vincent Palmade, and Shirish Sankhe (2001), 'From Emerging to Surging', *The McKinsey Quarterly, Emerging Markets*, No. 4, p. 4; the other two factors being government market regulations and government ownership in businesses.

⁵ Paul Dower and Elizabeth Potamites (2006), 'Signalling Creditworthiness: Land Titles, Banking Practices, and Access to Formal Credit in Indonesia', available at <http://homepages.nyu.edu/~eap244/indonesia.pdf>

⁶ Alain Durand-Lasserre and Harris Selod (2007), 'The formalisation of urban land tenure in developing countries', World Bank Symposium, p. 27, available at <http://selod.ensae.net/doc/039%20Durand-Lasserre%20Selod%202007.pdf> For the references in the quote above see R. Deutsch (2006), *Beneficiary Assessment of Land Title Recipients under the Land Management and Administration Project (LMAP) in Cambodia*, prepared for the Ministry of Land Management Urban Planning and Construction; J. Lanjouw and P. Levy (2002), 'Untitled: A Study of Formal and Informal Property Rights in Urban Ecuador', *Economic Journal*, Vol. 112, pp. 986–1019; K. Macours, A. de Janvry and E. Sadoulet (2005), 'Insecurity of Property Rights and Matching in the Tenancy Market' (mimeo).

⁷ World Bank Report, *India: Land Policies for Growth and Poverty Reduction*.

⁸ John Adams, 'The moment the idea is admitted into society that property is not sacred as the laws of God, and that there is not a force of law and public justice to protect it, anarchy and tyranny commence'.

not require mandatory registration. The provision related to land in the Indian Contract Act of 1872 also does not require contracts to be registered.

All these lacunae combine to weaken land records and security of tenure. What we have in India today is a presumed ownership to land which is questionable and can be challenged on multiple fronts: ownership, extent of boundaries, financial encumbrances, inheritance subdivisions, etc.

ISSUES ARISING FROM UNCERTAINTY IN TITLES

The impact in urban centres of lack of clarity on records and rights is felt most acutely in three areas: in urban policies, urban planning, and urban management. The important issues in each of these areas are described below.

Urban Planning

In cities, planning decisions for infrastructure such as transit systems or road connectivity are often fraught with difficulties because of shortage of land with clear ownership records. Planning is also affected because of artificial constraints on land availability due to factors such as litigations on land (that prevent productive use) and the lack of information on government land assets (that can be utilized for social housing or public amenities). All these factors tend to distort the land market, as developers are forced to either purchase land that has questionable ownership rights, or pay exorbitant prices for land with clean records. The search for land with clear ownership and affordable prices drives people further into the city's peripheral areas. The government is then constitutionally forced to extend urban amenities regardless of the scale inefficiencies.

The emergence of informal housing (such as illegal encroachment on public land where the urban poor have made homes) causes a dilemma in relation to planning processes since there is no clarity on whether or not to formally recognize them in plans. Similarly, the clustering of illegal enterprises along roads makes plans ineffective in improving the quality of life and convenience. Planning is also degraded when tanks and wetlands are illegally filled and buildings constructed. Often, the lack of affordable housing results in illegal settlements that impact urban drainage systems and water bodies. Development controls will be ineffective in such situations. Without a clear distinction in ownership of public and private land and legal and illegal land, even the best of urban plans will be ineffective.

Policy

Urban policies directed towards economic growth, environmental protection, etc. are often impacted by weak land administration. The following is an example of a controversial policy initiative that owes its origin partly to gaps in land title. To overcome policy and administrative hurdles including those on land, India has opted for special—but controversial—instruments such as Special Economic Zones (SEZ).⁹ More than the tax holiday or infrastructure development, the SEZ's most valuable service to successful applicants is the access—through government acquisition on their behalf—to land that is free of litigation and carries indisputable *tabula rasa* ownership!

Further, as urban centres expand, they require more land, water supply, and electricity. They also generate greater amounts of waste, ozone-depleting carbon, and often destroy forests and biodiversity. All these lead to a disregard for wetlands, valleys, water bodies, and topography. While some states have developed excellent environment policies and Environmental Impact Assessment (EIA) procedures, the lack of clear cadastre records impedes progress on their implementation.

Governance

The negative impact of title is felt almost ubiquitously on urban governance. While the planning and policy processes stop with the report they are printed on, enforcement of these plans and policies on the ground is an impossible task without dependable land records. This is true for the provision of municipal services as well. The quantity and quality of land-related data that needs to be collected and managed at the municipal governance level is enormous.

In addressing the needs of the vulnerable, government programmes for the poor are often linked to their place of residence. For example, the Public Distribution System (PDS) is directly linked to the geographic identity of a formal postal address. Migratory flows and temporary residence make tracking those below the poverty line (BPL) a gigantic task without data on property records.

Inadequate management of land records also results in enormous corruption and patronage, and inefficient delivery systems, where even the simplest projects get delayed. Land for urban use is today at its highest premium. The optional nature of registration on land-related transactions creates multiple and conflicting recording of data within the government. In addition, the country is

⁹ Laura Bloodgood (2007), 'Competitive Conditions for FDI in India', Publication 3931, Staff Research Study 30, US International Trade Commission, July, available at <http://hotdocs.usitc.gov/docs/pubs/332/pub3931.pdf>

witnessing increasing social cost, with enormous delays in dispute resolution on land-related legal cases.

Focus of Reform Efforts

It is not that the Indian policy makers have overlooked the need for land tenure reforms. Planning Commissions, over the past few decades have repeatedly emphasized the need for reform on land records. In rural areas, many states have begun the process of migrating to an electronic system of maintaining records. Indeed, all the government initiatives in India have been almost exclusively focused on rural land reforms and management. With the exception of political and administrative leadership in repealing the Urban Land Ceiling Regulatory Act,¹⁰ initiatives directed towards implementing reforms on issues of urban land are negligible.

More recently, some land administration reforms are being leveraged through the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) of the Government of India, introduced in December 2005. The Mission has inserted reform conditions on states and cities that wish to access central grants for funding infrastructure projects. Implementing guaranteed title is included as one of the optional reform conditions under the Mission. Optional reforms do not mean that the entire reform is optional—it is just that the state government has the option of deciding when to implement over the entire mission period, which ends in 2012.

Meanwhile, the urgency required to address the issues of urban land is increasing, with rising urbanization and rapid emergence of urban agglomerations. The challenges of planning and land management are greater in urban areas than in rural areas given the large number of properties (because of smaller size of landholdings) and greater frequency of transactions. In rural areas, it could be assumed that communities are aware of tenureship rights and extent of each other's land parcels because of the social structure, resulting in a greater degree of clarity on tenureship. In urban areas, such clarity is generally missing. In any case,

it is useful to define a set of land management reforms that cuts across both urban and rural land. A variety of reasons may be cited for such an approach; the significant among them include: (i) the increasing transformation of land from rural to urban at the urban edges; (ii) the initiatives towards genuine decentralized district planning; and (iii) the integration of economic and spatial planning of rural and urban and so on.

If such an integrated approach is to be taken, there has to be a minimum set of land reforms across rural and urban India in three areas—what could be called the three 'R's of Land Management':

- Registration (land registration processes),
- Records (survey and settlements, revenue) and
- Rights (land rights—security of titles).

These three R's form a logical framework for land management and tenure reforms, because of their interdependence. For example, to provide guaranteed title, the registration process must record all changes to ownership or extents of land and property. Similarly, all mutations must be recorded into the revenue and tax records. Robust urban land records and land registration are thus prerequisites for the success of land title, and hence, need to be evaluated.

ASSESSMENT OF REFORMS IN REGISTRATION, RECORD-KEEPING, AND LAND RIGHTS AT THE STATE-LEVEL

Reforms at the state level in the three R's were studied and evaluated as part of a study conducted by Luthra and Luthra for the Government of Rajasthan under the State Urban Agenda for Rajasthan (SUARAJ) initiative. The study revealed that most state initiatives thus far have focused on computerization of revenue records and improvement of the registration records and processes. However, no state so far has done much on the issue of legal security of tenure. We do not have a system of guaranteed land title, which guarantees ownership.¹¹ The registration deed and revenue receipts are only documents of presumed title,

¹⁰ As of December 2007, only two states have yet to repeal ULCRA: Andhra Pradesh and West Bengal

¹¹ 'Land is the most valuable natural resource whose planning and development offer major prospects for increases in output and incomes for the people, especially for those who are near or below the poverty line. For efficient land planning and optimum use, it is essential that there be clarity and certainty about title to land. In India, land records are in very poor shape and there is maximum litigation in rural and urban areas about ownership. It has been estimated by reputed agencies that India loses 1.3 per cent economic growth annually as a result of disputed land titles, which inhibit supply of capital and credit for agriculture. It is, therefore, exceedingly important that a fundamental change is brought about in the way land records are maintained. The conversion of the present system of presumptive titles to land into conclusive titles is the only sensible solution of this problem. Bold political direction alone can bring about reform of this magnitude, which will bring our country in the mainstream of a world-wide trend, enhance the marketability of land, reduce the stupendous social cost of litigation, and give a boost to agricultural production and urban and industrial development' (D.C. Wadhwa 2002, 'An Open Letter to Mr Arun Shourie', *Guaranteeing Title to Land*, 22 November, available at <http://www.indiausp.org/files/Guaranteeing.pdf>, p. 1).

and these have been rejected by the Supreme Court as not counting for legally valid documents of ownership.¹²

While states have initiated electronic land revenue records management in rural areas, this work has not translated to urban land records due to a variety of factors. One central factor is that urban land parcels are much smaller, with attributes that are very different from rural parcels (land-use, zoning, built-up area, etc. are the relevant parameters, rather than soil type, crops, bank loans, etc). Given the small size of land holdings in urban areas and the transaction frequency, the volume of information to manage is enormous, especially in large metros. Hence, solutions to land records management will require a technology-based solution, preferably linked to a GIS system. This requires the establishment of Spatial Data Centres, with proper protocols on data generation, management, updation, and sharing with various users of such information. City surveys done earlier cover a smaller footprint and have not been updated in most cities.

Revenue departments in rural areas hold land records and play an important role in the management of land ownership. This practice of revenue records continues in spite of the now near negligible collection of land revenues. It could also explain the neglect towards maintaining the hygiene of land records. Once transactions are registered, it is a standard practice for the new owner to enter any mutation into the records' register—*patta*, *khasra* or *jamabandi*. The records department comes under the revenue department that is under the district collector in rural areas. However, in urban centres, the revenue department has a limited role in land management. Here, once transactions are registered, recording mutation with the municipality for property tax records, or with the authority that has distributed the land, is very often not done. Since it is not a mandatory process, most people do not even realize that it is an important documentation of property rights in the absence of a land title system. Hence, there are no comprehensive records of rights in urban areas and property lawyers look at the registration records, *pattas* of revenue collecting departments, and municipal tax records in order to stitch together a history of ownership.

GUARANTEED LAND TITLE IN RAJASTHAN

The implementation of guaranteed title, which is gaining increasing attention in policy discussions, is being attempted in just a handful of states. In a landmark initiative, Rajasthan passed a Guaranteed Land Title Ordinance in October 2008, which is discussed below.

The key transitioning principle guiding the guaranteed title initiative in Rajasthan is that this is not a mandatory system. Applying a market-based view similar to the dematerialization exercise of shares in the stock market in 1998, the title system in the state will make the application to guaranteed title a voluntary decision by property holders. The Government of Rajasthan and municipalities will gradually move property under state purview completely into a system of state guaranteed title. The move to a largely guaranteed title system for the state is expected to take place over an extended period of time—perhaps 15 to 20 years. Market forces are expected to encourage the transition into a near 100 per cent title system by making guaranteed titles more marketable, hassle free, and attractive for mortgaged loans. The government could also introduce incentives such as reduced property tax and stamp duty to encourage property holders to apply for guaranteed titles.

The salient features of the Guaranteed Land Title (GLT) in Rajasthan are:

- Addressing the challenges of urban land title separately from rural land title;
- Making GLT entirely a voluntary process. Those who want to retain their land-holdings in the current form can continue to do so. Letting market forces drive demand is the principle—dematerialization of shares from paper to electronic is a good parallel;
- Taking an incremental approach—get all government distributed land and developments under guaranteed title and simultaneously incentivize private owners through tax rebates. The state is prepared for the process of conversion to land title to take a decade or more;
- Making only the owners who have converted their land from leasehold to freehold eligible for guaranteed land title;
- Creation of a new Act for guaranteed land title instead of amendments in multiple acts;
- Linking the registration process to GLT given that the Central Registration Act does not allow registration to verify ownership in transactions;
- Mapping in complete detail the processes related to title on land: change in proprietorship, change in property, financial charges and lien, and inquiry on land;
- Using technology as the backbone to maintain records and manage the title system. The process of actual issuance of freehold and guaranteed title will depend on the quality of the documents held by the owners—the clearer the documents, the easier the issuance of the freehold and title papers. What it allows is building a database of land records and create a negative system that in itself will create a check;

¹² Rajasthan has made a pioneering effort in the area of guaranteed land titling and its experience is showcased below.

- Granting provisional title for two years that converts to indisputable title if unchallenged. A 1 per cent DLC (land price recommended by the District Level Committee) fee is charged that goes into an indemnity escrow;
- Designing an institutional structure that moves towards a single repository of all records, transactions, and surveys related to land rights and extents;
- Starting with a pilot of Jaipur, expanding to 11 other cities and then scaling across the state and integrating with rural registration, records, and rights management.

Implementing Security of Land Title: Challenges and Suggested Ways Forward

As stated earlier, each of the three R's of land registration, records, and rights is related to the others. These define the minimum set of reforms that are not only doable in a federal polity, but also sufficient to trigger a domino effect of larger change.¹³ Seven key challenges to implementing a system of security of title have been identified. These are presented below with the suggested means of addressing them.

CHALLENGE 1: GOVERNMENT LEADERSHIP

The first challenge posed by a reform of this magnitude and complexity is to engage sustained support at the highest levels of government. At the Union level, this would entail state incentives for reform and support for amendments to key statutes impacting the reform.

At the state level, it requires the appetite for change and leadership from the political leadership as well as the key state administrators, to drive outcomes and deliverables. If strengthening the title system solves the targeted problems effectively, it can develop public confidence in the system and build political support for scaling, regardless of party and leadership.

CHALLENGE 2: INSTITUTIONAL DESIGN

This challenge relates to the design of institutional links between existing departments that deal with land issues. Implementing guaranteed title is directly linked to processes of land registration, records, survey and settlement, revenue collection, and municipal collections and services. The key institutions dealing with urban and peri-urban land are Development Authorities, Stamps and Registration Departments, District Revenue Departments, Departments of Settlement and Survey, Municipal

Corporations, Housing Development Boards, and Industrial Boards. Today, these departments work in silos, where neither their administrative processes nor their data are linked or shared.

There is thus a need to link Registration, Record of Rights (Title), and Revenue and Settlement and Survey to create an integrated system of cadastre data management, which in turn can be linked to GIS maps and used by other departments providing services or collecting data such as water, power, voter lists, etc. In order to implement any successful model of security of records and title, decisions on who will administer such a linked system will have to be made with clarity on the access to and ownership of this data. There are three options:

- An existing government department—Stamps and Registration; Revenue; Survey and Settlements; and Local Governments. The Revenue Department's role is limited to rural land and its role has diminished over time with the diminishing tax collection from revenue land. Given that rural and urban records of title will be integrated at some point, it would be logical that the Stamps and Registration Department play the role;
- A new quasi-government department such as a Land Title Authority that is autonomous but linked to the registration records, rural revenue records, survey, and municipal tax/mutation records; and
- A private market player such as an insurance company that collects existing data from government records and supplements and maintains these records through private surveyors and lawyers.

CHALLENGE 3: ENABLING STATUTES

The third challenge is to adequately reflect in statutes the framework of reforms towards guaranteed title. These can be in the form of new Acts, or Amendments to the existing ones with the rules and regulations accompanying them.

Amending the Indian Registration Act of 1908 by the Union Government to mandate registration of title instead of registration of deed will immediately give this reform a boost across all states. The registration department contributes substantially to the state coffers and has been transformed in many states with investment in technology. In addition, if the Registration Act also mandates registration of all transactions on land, then mortgages and liens will get registered as will inheritance of land, dramatically improving security of land transactions and reducing litigations on land. The following are the

¹³ Swati Ramanathan 'White Paper on Urban Reforms,' Identification of 'Domino' Reforms.

Central Acts that need amendment to support states in enacting guaranteed title:

- a. Amendment to Indian Registration Act, 1908 (IRDA), requiring compulsory registration of title instead of deed;
- b. Amendment to Transfer of Property Act, 1882 requiring verification of ownership;
- c. Amendment of the Indian Evidence Act that requires revenue records to be conclusive rather than presumptive;
- d. Resolving the conflicting role of the Revenue Department as protector of government lands as well as adjudicator of rights against government;
- e. Amendment to Sec. 18 of Indian Registration Act, 1908 requiring compulsory registration of all land-related transactions—land acquisition, court decrees, land orders, heirship partitions, mortgages, agreements to sell, power of attorney, etc.; and
- f. Amendment to the Indian Contract Act of 1872, requiring contracts to be registered.

The above amendments must be taken up at the earliest. In the meantime, states could revise their own statutes to implement title. Amending the many state laws that get impacted by introducing a system of title could prove to be more cumbersome than introducing a new state Act for Title that supercedes existing clauses in other Acts. In the case of private title insurance, the sanction from Insurance Regulatory and Development Authority will be a prerequisite before states can take any steps.

Additionally, the financial implications of cost of transactions, indemnification management, etc need to be projected. The fear of liability that justifiably concerns states in providing a state-guaranteed system is valid more for urban land than for rural land. This is because across the country the urban records and processes are highly disputable. In rural areas, record keeping is more reliable for two reasons: first, because there has been a concerted attempt over the last decade towards electronic data; and second, because in a village system people know each other's land extents and rights. Neither of these elements exists for urban records. The resultant weakness in urban land records leads to reluctance by many states to provide a state-guaranteed title.

A system of 'provisional title' could be used to both safeguard the state for a defined period of time after the due diligence on verification for title, and speed up the

process of conversion to title. In Victoria, Australia, the notions of 'identified folio', 'limited folio,' and 'possessory conditional folio' were introduced to tag the elements of ownership or property data still under verification. This enabled ready conversion to a title system. India could use a similar process where all applications for title could be recorded under a provisional title until the verification is complete and adequate time is provided for rival claims to surface. This would still provide a measure of certainty to purchasers and property holders will have their rights upgraded to a full title once the prescribed time frame elapses after application.

Putting in place an indemnity fund that is generated through a small fee on all title transactions and searches, could provide an adequate corpus to take care of any compensation that the state would be required to make.¹⁴

CHALLENGE 4: PROCESS MAPPING

A fourth challenge relates to creating a records and title management process and detailing it comprehensively and unambiguously. This includes defining all parameters of property details, ownership, and transaction types (or changes to land and property). It also includes identifying the departments concerned in each transaction type and ownership of updating data.

Given the sizable quantity of urban land and property and frequent transactions on these, there is a need not only for accurate recording, but also maintenance of records in a manner that is easy to search by specific parameters as well as a quick and secure management of land transactions.

CHALLENGE 5: DEVELOPING THE RIGHT TECHNOLOGY

Technology is a key enabler in driving a title system that provides institutional linkage. A close parallel in the search for a suitable technology to manage land is the technology for share registries and the dematerialization of shares in the Indian Stock Market in the late 1990s. Given the large number of transactions and the changing variables in land—boundaries, rural or urban categorization, and subdivisions—technology will need to provide speed, security, and reliability of transactions. It will also need to enable online information access across geographic boundaries and potentially enable electronic transactions in the course of time. The initial planning and selection process will need to include the correct software and integration

¹⁴ The Land Registry in Victoria takes over AUS\$1 billion in fees per year but pays out less than AUS\$250,000 in claims on the State guarantee in any year. In the United Kingdom, the indemnification fund was abolished in 1971 given the negligible claim on it (John Barry, Department of Sustainability and Environment, Land Titles Office, Victoria).

choices that work with what states already have, and to cope with what will be built upon completion.

Establishing a highly efficient land data-bank technology linking multiple players will provide a multi-layer system for the delivery of land management. A significant advantage of online access to information and registration of title is the elimination of geographic restrictions. Site Maps are a critical link of spatial representation of title.

CHALLENGE 6: INTEGRATING RURAL AND URBAN SYSTEMS

States considering a state guarantee of title have to take into account the unique challenges of both rural and urban land. Special consideration will be needed for land that lies in the periphery of urban areas, which is often agricultural land, but in the jurisdiction of the development authority of the adjacent city. When rural land is converted to urban land, there is a certain amount of confusion on the process of maintaining the records, mutations, and collection of revenue. At the time of the expansion of the geographic extent of the development authority, the ownership of state government land within the new boundary is transferred to the local urban development authority. Private land, however, continues to be in the records of the revenue department under the District Collector as long as it is used for agricultural purposes, and the revenue department continues to collect revenue record mutations and maintain the record-of-rights of agricultural land. However, once land that is designated under the urban boundary is converted into a non-agricultural purpose, such as industrial or residential development, mutation ceases to be maintained in the revenue records. Currently, there is no reliable process by which records for this land are maintained or mutations managed under the urban umbrella. The registration department's role is important in such instances, if it is expected to provide accurate and reliable data on title rather than just deed.

Given the challenges of rural–urban differences in administration jurisdiction and processes, in the interim, states might consider transferring the records from the revenue department to the city development authority as soon as the development authority boundaries are extended.

CHALLENGE 7: PUBLIC ACCEPTANCE

Land title involves social change and it is important that people embrace this. An important consideration will be whether the state adopting the title system shall mandate

all conveyance in land to be only through title, or whether it will make such a title system optional. A voluntary system could allow not only a greater acceptance by the public but also time for the state machinery to set in motion the required processes. Market forces will operate to make the properties with title more valuable and more attractive as mortgage instruments. State governments could create incentives for acceptance of guaranteed titles and electronic titles through rebates on property tax, lower registration fees, etc. Current levels of registration fees in many states are around 8–10 per cent of property value, sometimes higher with surcharges and duties. Like most taxes, lower rates could result in greater compliance and increased revenues.

While guaranteed title is the accepted mainstream system in the UK and New Zealand, both countries have had to overcome resistance to their ambitious online service. Many users, as in the case of demat shares, are more comfortable with reports. They have to be convinced of the value of the time savings, efficiency, and accuracy of the online availability of the documents. Reducing the fees can help make them willing to try. Both the UK and New Zealand have a reduced fee structure for their online services.

It will take time to build the database, verify documents, conduct surveys, convert report documents into electronic images, and educate users. Taking a long-term approach in converting to a title system is important, both in changing mindsets and in developing robust systems.

Conclusion

The acceptance of a framework of a modern state/market system requires reforms in almost every aspect of public governance—in the statutes, organizational structures, and processes. One of the key areas of reforms relates to a title system for ensuring security of tenure to land and property. In this respect, while there is a need to embark on a reform strategy to cover the entire country, there are compelling reasons for giving priority to reforms in urban areas, not the least because with liberalization, India is getting transformed from a predominantly rural country to a rapidly urbanizing one.

A review of states' performance in introducing reforms in land administration shows that states have generally neglected the urban areas and have tended to focus on rural areas. With increasing complexities of urban management, the centrality of clear property records and title is becoming impossible to ignore. In the absence of a systematic approach, the state and municipal governments will be forced willy-nilly to address the management of

records and ownership. How they choose to do go about it will define the success or failure of the administration of the initiatives.

Some state governments are beginning to recognize the challenges and are committing themselves to reform.

It is now imperative for states to frequently share their experience—challenges and successes—along different dimensions. This will lay the framework and the ground rules to succeed in one of the most important and complex reforms that the country needs to adopt.

4

Land-dominated Approach to Water Policy

Influence, Effects, and Relevance

R. Maria Saleth

Introduction

Land and water resources are closely linked both in physical as well as functional sense. Not surprisingly, therefore, the issues related to their use, management, and sustainability are intertwined and need to be dealt with simultaneously in most contexts, be it at the policy level or at the more tactile level of practical use. Such linkages are evident both in the generation of water resources as also in the joint utilization of land and water resources. Land—in the form of either forest areas or general landscapes—absorbs and stores water to be used for meeting *in situ* ecosystem functions and also for supporting production systems created by humans. From the perspective of agricultural production, land productivity depends crucially on water and the productive use of water depends on land. As a result, it is not reasonable to separate the two resources, especially in the context of production and management. But, this position cannot hold where the land-dominated approach assumes an extreme form of linking the ownership, access, and use of water with that of land. This is actually the prevailing situation not just in India but also in many other countries which do not have a separate rights system for water.

Although India lacks a formal water law, manifestation of the land-dominated approach is rather pervasive in legal systems, state policies, and even in common perception with far reaching equity and ethical implications. In fact, these implications emerge not because land and water are treated in conjunction with each other but because a land-dominated approach makes it impossible

to consider water as a separate resource in its own right. Unfortunately, neither the true nature of this problem nor the actual magnitude of its impact is fully understood either in academic or policy circles. An urgent need exists for a vigorous policy debate on the issue of linking water with land and its socio-economic, institutional, and legal effects. The central question is: how far can land and water resources be dealt with together and at what point does it become imperative to treat water resources separately in policy and resource management contexts. This chapter intends to contribute to this important debate.

Objectives

When analysing land–water linkages and their effects, several questions present themselves. What is the origin and nature of the problem? What are its socio-economic, institutional, and ethical effects? How do they originate from the policy and legal practices rooted in an extreme form of the land-dominated approach? What roles do factors such as water scarcity, socio-economic conditions, and farm and engineering technologies play in exacerbating these negative effects? Is it possible to minimize these effects? Is there a feasible analytical approach to delimit when the two resources are to be treated together and where they are to be de-linked? Are there successful examples of the application of such approaches on the ground? The overall objective of this chapter is to provide answers to these and related questions based on a review

of existing literature, legal, and policy documents. The specific objectives are to:

- explain the historical and evolutionary origin of the land-dominated approach to water management;
- review the extent to which this approach pervades and distorts present water-related laws, policies, and informal practices;
- discuss the economic and ethical effects of this approach on water access, allocation, use, and management and the way these effects are mediated by changing resource conditions, development process, local institutions, and water technologies;
- outline an analytical approach that will delineate the boundary where land and water can be linked and de-linked, indicate the technical and political feasibility, and practical applicability of this alternative approach; and
- conclude by summarizing the main points and highlighting the implications for public policy and future research.

Although this chapter focuses primarily on India, many aspects highlighted here are generic and have relevance in the context of other countries as well. As to its organization, the chapter is structured more or less on the lines of the specific objectives listed above.

Land-dominated Approach: Evolution and Rationale

The physical and functional relations between land and water resources are at the genesis of many social norms and conventions, which have emerged over time to govern the access to, and use of, both resources. While the two resources are mutually dependent from a fundamental perspective, water is more critical for the obvious reason—its indispensability to the existence of life. But, despite this universally recognized fact, many deep-rooted social norms and conventions have treated land and not water as the dominant resource and the access to and use of, water is defined essentially in relation to the dominant resource. As human society evolved, economic, political, and legal arrangements codified these norms into formal rules and water laws. This explains the cultural basis for the ‘dominant heritage’ principle that underlies the existing legal systems in India and elsewhere that treat water as an ‘easement’ (or benefit) that is intricately connected to and, therefore, inseparable from the dominant resource, land.

Admittedly, the land-dominated approach cannot be dispensed with altogether because it does have some

important practical, organizational, and historical bases. As noted already, from a practical perspective, since water as a resource does not have a separate existence apart from the land on or in which it dwells, especially in the context of agricultural production, it has to be necessarily linked with land for its productive use. In an organizational sense, the land-dominated approach was also reinforced by the development of administrative systems, including that of land registration and revenue collection, which are calculated on land-based rather than water-based units. It was considered easier to control the access to and use of, water through land settlement and ownership patterns rather than directly. But, still more important is the larger historical context in which the land-dominated approach has emerged. This historical context represents a particular resource, development, and technology paradigm, which assumes that water is free and plenty and, unlike land, there is no need (or it is more difficult) to have a direct physical control of water. But, with widespread water scarcity, unequal land ownership, and changing social ethos and technologies, these assumptions are no longer valid, and hence this paradigm has become less relevant at present.

With binding hydrological limit, growing financial and environmental costs, and increasing allocation conflicts, water can no longer be considered plentiful or free. Meanwhile, changing resource conditions and technological and organizational advances are making it feasible to move water far beyond the landscape of origin and to exert considerable physical control on the allocation and use of water resources. Besides the scope for large scale inter-basin transfers, the increasing share of water for direct use in urban and industrial consumption is also constantly weakening the land-dominated approach, which is still very strong in agricultural use. Even more important are the socio-economic forces, especially in the rural areas, that create a permanent wedge between land ownership and water access. Dominant among them is the effect of the dual process of land concentration and landlessness. Since the approach of linking water access with land ownership aggravates existing rural inequity by reinforcing land inequity with water inequity, it has major equity and ethical effects. These effects get magnified by the emergence of water markets, as these markets tend to legitimize the *de facto* water control of large farms with deeper wells. Notably, since energy is indispensable for operating present day groundwater pump technologies, energy pricing and supply-based regulations have emerged potentially as an alternative to the land-based approach to water allocation.

Land-dominated Approach: Influences on Law and Policy

Despite its serious problems and limitations, the land-dominated approach has a deep influence on water law, policy, and practice that has continued from the colonial times till today. For instance, the Easement Act of 1882, which addressed the question of water in the particular context of land settlement and ownership patterns, recognized water as an easement or added benefit inextricably linked with land under the dominant heritage principle (Singh 1991 and 1992). The easement notion of water got further consolidation in the Transfer of Property Act IV of 1882 and the Land Acquisition Act of 1894, which particularly addressed the connection between land and groundwater (Singh 1991).¹ Since groundwater is treated as an easement to land, these laws asserted that the easement cannot be transferred apart from the dominant heritage. While this may be reasonable for groundwater in view of its subterranean connection with the overlying land, the easement notion also has its close counterpart even in the case of spatially fugitive surface water. This is the well-known riparian doctrine, where persons owning land abutting upon a stream or other water bodies have the rights to use the water with the added proviso of 'beneficial use' principle, which stipulates that such use should not disturb similar benefits to other riparians. Notably, the Privy Council in 1932 and the Patna High Court as late as in 1954 have accepted the riparian rights as natural rights, possibly on the basis of the natural and functional linkages between land and water.

Admittedly, the land-based approach under the easement notion and dominant 'heritage principle' can be more practical means for jurisprudential conceptualization. But, from an equity perspective, it is clear that the easement rights and riparian rights that emerge under this approach do implicitly deny the rights to water of others either without land or with land but not abutting the water source. Even though there are caveats and exceptions to an explicit insistence of land ownership for

water access and ownership, they are essentially nominal without any real effect. For instance, for the customary and group rights recognized in the Easement Act, the apparent criteria involved are customs and long use.² Nevertheless, land access and ownership still underlie these customary rights. Similarly, in artificially created canals and other diversion schemes, where riparian rights are not recognized, the rights to use water can be obtained by 'express grant or prescription' from the government. Although an immediate connection to water source is not necessary in this context, land access and ownership is still very much needed for realizing water under state grants and prescriptions.

The influence of the land-dominated approach is also very strong in several public policies and common practices related to water. While the instances are many, we can note a few of them here. First, land is either an explicit or implicit criterion for determining the water shares in almost all water-related treaties or agreements among the riparian states and regions.³ Second, at the micro level, land access and ownership are the only criteria for water access and use both in the groundwater and canal regions. Specifically, irrespective of whether it is a canal or groundwater source, the actual extent of water access and control is determined by farm size or land area. This is so, notwithstanding the kind of water allocation mechanisms, which are used at present. Even in the case of the *Warabandi* system practised in canal regions, where water is apparently allocated by turn and time duration, land size is the ultimate factor that determines the actual water access and use by individual farmers. Third, the pricing policy is invariably linked to land, even though crop, season, and project also play a role in determining the levels of water charges. As water rates are charged for a unit of land for any given crop, season, and project, larger farms usually pay proportionately more than smaller farms. But, since these rates are fixed, they do not have any relationship either with the volume or the value of water used.

Besides these law and policy-related practices noted above, there are also policy proposals that consider land

¹ The Land Acquisition Act, 1894 states that the expression 'land' includes benefits arising out of land, and things attached to the earth or permanently fastened to anything attached to the earth (Sec. 3a) and '...a person shall be deemed to be interested in land if he is interested in an easement affecting the land' (Sec. 3b).

² Notably, the role of customs as criteria for water access has tended to wane with the consolidation of land and water-related laws and codes. Initially, colonial legislations and court judgements followed, more or less, the common law tradition of recognizing the role of customs in the access to and use of, water. But, as colonial legislations got tightly codified, especially after the Transfer of Property Act IV of 1882 and the Land Acquisition Act of 1894, the courts began to rely less on customs but more on formal laws and statutes (Singh 1991 and 1992).

³ Apparently, this is reasonable partly because the major share of water in most contexts is used by the land-based activity of agriculture and partly because other criteria such as need (as determined by population) also supplement land. Nevertheless, one cannot deny the fact that land-dominated criteria may not necessarily capture economically the most important issue of water value or productivity.

as the basic criterion for allocating water. For instance, the Model Groundwater (Control and Regulation) Bill of 1970⁴ formulated by the then Union Ministry of Agriculture and Irrigation and circulated among states for its enactment has postulated a kind of water permit system (GoI 1970). While such a permit system looks better on surface, it is still linked with land access and ownership in an indirect but an importance sense. This is because the proposed water permits will be defined over the wells and hence land ownership. Since there is no express provision for water permits for those without land, the proposed permit system is not likely to be an improvement over the present situation. Similar exclusion problem of the landless is also evident in the proposal set forth in the Report of the National Commission on Agriculture (GoI 1976: 23). Even though the National Commission has made an important contribution to the debate on the issue of establishing a formal water rights system, especially in groundwater regions, the main criterion that it has advocated for the allocation of these rights is still land ownership. But, as we will argue below, such an allocation system directly contributes to inequity when land ownership is skewed and landless persons are substantial in number. This system will also be inefficient when water exchanges are not allowed or are absent.

Land-dominated Approach: Effects and Implications

Some of the positive and negative effects of the land-dominated approach and its dominance in legal and policy practices have already been noted in different contexts. But, some of these effects, especially the negative economic and equity effects as well as the analytical and policy implications need to be elaborated upon so as to drive home their true magnitude and seriousness. Before doing so, we may also note the practical and administrative advantages of the land-dominated approach. Since land resources are more amenable to legal treatment under the present legal system and have well-established enforcement institutions, it is obviously easier to deal with water through land rather than directly and separately. Such an approach is also justifiable as over 90 per cent of the water resources are used in conjunction with land-based production activities such as agriculture. The technologies and institutions necessary for the separate treatment of water are too costly to create and maintain. Since land-related institutions are well developed, administratively, it is less costly to manage water within the broader context

of managing and administering land. Understandably, it is these practical and transaction cost-based reasons that have justified the persistence of the land-dominated approach.

However, as we have already established, with increasing scarcity of water, changing technologies, and escalating economic and equity costs of the land-dominated approach, there is a strong case for moving towards a more direct approach to water management. Since the land-dominated approach to water access and use excludes millions of landless people and leads to inefficient water use, the social costs—capturing both the equity and efficiency effects—are rather heavy. Although it is difficult to exactly quantify these costs due to conceptual and data limitations, it is still possible to indicate their magnitude. The equity component of the social costs can be indicated by the degree of inequity in land ownership and the extent of landless in the country. The total area being cultivated at present is about 142 mha, which represents 46 per cent of the total land and 53 per cent of the area that has the potential for vegetation. The distribution of this cultivated area is rather skewed. For instance, 7 per cent of the total farms in the country have an average size of over 12 hectares while 61 per cent of the total farms in the country have an average size of just 0.4 hectare (Padhi 2007). Under these conditions, it is obvious that the approach of linking water access to land could reproduce similar, if not greater, inequity in the water access as well. Much more serious than such inequity across land-owning groups is the inequity between the land-owning and landless groups since about 43 per cent of the rural population in India is absolutely landless or nearly so.

The effects of inequity generated by the approach of linking water access with land access are aggravated by a number of factors, especially in groundwater regions. Dominant among these are the crop and pumping technologies and emerging institutions such as water markets and groundwater regulations. With the advent of the Green Revolution and the subsequent development of commercial agriculture, the actual water withdrawal and use by larger farmers have increased manifold, especially relative to small farmers. This is because large farms generally opt for water-intensive but economically lucrative crops such as banana and sugarcane whereas small farms tend to focus more on food or other field crops. With the emergence of modern pumping technologies, the water extraction capacity of larger farms has also increased as they can afford to invest in more than one well as also dig deeper wells, accessed via high capacity pumps. Although

⁴ The same Bill, with very little modifications, was also circulated again in 1992 by the Ministry of Water Resources (GoI 1992a).

groundwater regulations on well spacing, permission for power connection, and farm credit for well development are generally considered to be ineffective, in areas and contexts where they are effective, they tend to block new entrants, who are invariably the small farmers (Dhawan 1975). As a result, instead of realizing their original intent of controlling over-extraction, these regulations serve as an effective means for protecting the water access and control of only existing users.

The inequity effects of water markets, though somewhat subtle, are rather fundamental. On the surface, these markets actually promote equity in the access to water, especially by countering the water inequity generated by the land tenure. But, beneath these equity effects of water use, the water markets actually promote inequity in water ownership and also lead to some serious legal and ethical issues. To make this point clear, let us compare the situation under the current conditions without any specific withdrawal limits with that under an assumed system of withdrawal permitted in proportion to land ownership. If the proportional or correlative system is strictly enforced, and a farmer wants to sell water, he can do so only by saving groundwater specified in his right either through efficient use or non-use on his own farm. In this context, the water markets can provide powerful incentives for water use efficiency and conservation. But, when there is no withdrawal limit, there is no incentive for water conservation; and water sellers can extract water for individual use as also for purposes of sale. In this sense, they actually infringe upon the water shares of those without well/pumpset/land. Still worse, so long as the water payment is in excess of the extraction, investment, and operating costs, the sellers are in effect, charging the very groups for buying water whose water rights got infringed in the first place (Saleth 1994).⁵

The economic and equity effects noted above also have a legal and ethical dimension. There is no ethical basis for charging the water buyers more than the extraction and service costs either from a common property perspective or under the proportional system. While every user has a theoretical right under the common property system, they have a fixed share under the proportional system. Under this condition, it is legally and ethically incorrect to charge for water as such, though the charge can cover the reasonable extraction, investment, and service costs.⁶ The

fact that water sellers are able to charge more than these costs implies that the water markets actually legitimize the open access system in terms of water ownership, control, and use. Since large and well-endowed farmers are able to fare far better than their smaller and poorer counterparts in open access conditions, the water markets actually tend to further reinforce and aggravate the original water inequity generated by the land-dominated approach in the first place. From another perspective, water markets are also counter to the easement notion of water, since water as an easement right cannot be used for making profit (Singh 1991: 31). In other words, the non-profit requirement embedded in the easement notion of groundwater appears to suggest the water markets as extra-legal. In this sense, one may also note that the water markets, which are observed today, not only reinforce but also implicitly justify an extreme version of the land-dominated approach to water access and control.

Towards an Alternative Approach

From an overall perspective, there are reasons to argue that the real costs—representing the ethical and legal issues—and the economic and equity costs—representing the efficiency and distributional issues—associated with the land-dominated approach, will far outweigh its practical and administrative benefits. This means that from a theoretical perspective of institutional transaction cost theory, the net social costs of the land-dominated approach are substantial enough to justify the emergence and adoption of an alternative approach, whose social benefits can very well cover the full economic and institutional transaction costs involved in the implementation and enforcement of the alternative approach. For international experience on an alternate approach, please see Annexure. Despite such an economic justification, an alternative to the land-dominated approach is yet to be developed or adopted so far, because of two obvious and related reasons. The first relates to the political inertia in changing a deep-rooted approach with pervasive technical, legal, and institutional implications. The second relates to the fact that the economic and social outcomes of the land–water linkages have not received the level of research attention that they actually deserve. These two reasons are related in the sense that more research on the analytical and practical aspects of land–water linkages can reduce the prevailing

⁵ In this way, the sellers also expropriate, either fully or partially, the Ricardian ‘rent’, that is, the difference between the pumping and other related costs on the one hand and the value of the additional output on buyer’s land due to the application of purchased water on the other, that would have legitimately gone to the buyer under the correlative rights system, that too, without having an explicit legal ownership right.

⁶ This is the conceptual basis for viewing the so-called water markets as rental markets for wells/pumpsets (see Saleth 1996).

political inertia both by demonstrating the tremendous social benefits as well as by minimizing the political costs of changing or adjusting the land-dominated approach. While it is incorrect to say that the existing literature is oblivious to the issue of land–water linkage, the issue has been addressed only in passing and tangentially rather than in-depth and directly. The economic, ecological, and social effects of the land-dominated approach did receive attention in the literature from different perspectives and in varying contexts. For instance, Dhawan (1975 and 1982) has attributed the ill-defined system of water rights as the cause of groundwater mining. Shah and Raju (1988) have argued for a reform in water rights structure to correct the existing skewed distribution in well and pumpset ownership. Singh (1991) and Saleth (1993 and 1996), who addressed the issue somewhat more directly, have evaluated the legal and economic implications of the practice of linking water access with land ownership. But, none of these studies has gone to the logical next step of looking for an alternate approach that can minimize land dominance while maximizing focused attention on water and other economically and socially relevant factors. Let us try to outline one of the approaches that can feasibly replace the extreme form of the land-dominated approach that determines water access and use at present.

One immediate proposal for the alternate approach can be the one based on volumetric allocation as it brings the focus more directly on water *per se* and enhances the roles of other socio-economic and resource-related variables in determining water access and use. But, the volumetric approach implied in the proportional or correlative system proposed for groundwater by the National Commission on Agriculture as well as the system proposed by the Vaidyanathan Committee for canal water (GoI 1992b) have an underlying influence of land ownership. As long as the volumetric allocation is based on needs, land will continue to have either direct or indirect influence on water access, though it is possible to allow a role for non-land related factors. Besides, given the physical and functional connections between the two resources, especially in the agricultural context, and the administrative and institutional connections in the management of land and water, it will not be possible to completely de-link land and water and, thereby, eliminate the role of land altogether. Although volumetric allocation will certainly be a part of the solution, it is not the solution in itself. Nor does the actual solution lie in the complete repudiation of the role of land. The real solution is in the appropriate demarcation of the sphere of its influence so as to allow for the role of other socio-economic and resource-related

factors. It is this analytical demarcation that is the heart of the alternate approach.

The first step involved in the analytical demarcation is to distinguish and separate three stages in the access to, and use of, water that is, use stage, ownership stage, and management stage. As we know, the two resources are functionally linked at the use stage, which occurs essentially at the micro or end-use level. Similar linkages are also there at the management stage, where water and land resources are linked for planning and management purposes either within a regional or basin-based framework, and also for promoting integrated land and water management. In these two stages, the practice of linking water with land obviously has advantages and beneficial effects and, therefore, the water will continue to be linked with land in these stages. But, the actual or *de facto* legal linkage that has developed in the ownership and control of the two resources is neither necessary nor desirable. Since most of the negative economic and equity effects emerge from the ownership stage, it is at this stage that the role of land has to be limited and the roles of other socio-economic and resource-related factors are to be enhanced. This kind of demarcation of the areas where the two resources are to be linked and where they are to be de-linked provides the basic framework of the proposed alternative approach.

Turning now to the critical questions of how the alternative approach will work in practice and what are the technical and institutional requirements, we can begin to contemplate the following rudimentary system under simplifying conditions. Given the allowable amount of annually extractable water for agriculture for a given regional unit—either hydro-geologic or administrative—as determined by the prevailing aquifer or project conditions, water is allocated to all people irrespective of land ownership. Such allocation can be in the form of either a fixed volume or a fixed share but varying volume depending on annual supply variations. Leaving the technical and administrative issues involved in fixing the volume or share for the moment, the main point to note here is that the proposed allocation system provides water ownership and access to both the land owning and landless groups. If it is possible to establish such an allocation, water can be de-linked from land ownership and, more importantly, the most serious inequity present in the current pattern of water access can also be corrected. But, unless the water shares of the landless are used in the land, neither can this group benefit economically nor can the resource be used efficiently. Thus, for completing the equity correction and promoting efficient use, the water with the landless group has to be exchanged with the land-owning groups with insufficient water. Herein comes the

role of the true water market, where the water volumes or shares of users are fixed and competition among the users will ensure the most efficient and productive use of water. In this way, under the alternative approach, the allocation of water shares (water rights) de-links land and water at the ownership stage whereas the exchange of water shares (water markets) links water with land at the use stage.

The alternative approach is obviously not that easy in view of the immense technical, institutional, and political challenges involved in establishing a non-land based water rights system on the one side and in ensuring the operation of water markets for a large and varied country such as India on the other. But, it is also not that difficult and impractical as is held widely. In fact, the alternative approach is actually the basis of the *Pani Panchayats* being practised in the Purandhar *taluk* of Pune district in Maharashtra since the 1970s (see Box 4.1).⁷

The emergence and successful operation of the *Pani Panchayat* not only vouches for the practicability of the alternative approach but also indicates the kind of legal and institutional conditions necessary for the application of this approach in practice. Although the non-land-based allocation of water share is an informal arrangement, it has the legitimacy of acceptance within the community as if it is a legal doctrine. Such a situation may be easy to achieve through consensus in smaller and relatively uniform communities settled in a water-scarce environment. But, to replicate such a system in larger and varied communities, there is a clear need for external

stimulus and interventions such as formal laws and policy guidelines for establishing water withdrawal limits and water sharing arrangements.⁸ Of the two key institutional components of the alternative approach, that is, the water rights system and the water markets, the former is more critical partly due to its technical, informational, and legal requirements and partly due to the fact that water markets and the underlying institutions will emerge automatically once a clear water rights system is established.⁹ But, beyond the institutional aspects, there is also a need for huge investment in the redesign of water infrastructure to allow volumetric water allocation and also in the creation or reorientation of myriad organizations, especially those that are needed in the interface between the state water administration and local water organizations. While huge amount of water data is available, the new approach still requires them to be presented for each use at different regional scales going down to the micro level of local communities.

Concluding Remarks

This chapter has made an attempt to address one of the most important but somewhat less directly addressed issues in the existing literature on land and water use and management. Although land and water resources have some naturally defined technical and functional linkages, the extension of such linkages to extreme policy and legal positions can lead to undesirable social, economic, and equity consequences. This is precisely what has happened

Box 4.1

Land–Water Relation in *Pani Panchayat* System

In the *Pani Panchayat* system, water shares of users are based not on farm size but on family size. Specifically, each family member is entitled to half an acre of irrigation, but the total water share of a family will not exceed two and a half acres. Since the water share is not attached with land, when land is sold, water share reverts to the system. More importantly, the landless also have water share, which they can use to become sharecroppers with the landowners requiring additional water (Keremane et al. 2006). This represents a form of implicit water market, where water payments correspond to the net income derived from sharecropping. In this way, the *Pani Panchayat* system is able to de-link water from land at the ownership stage with the need-based allocation of water shares, but link the two resources at the user stage with an implicit water market.

Source: Thakur and Patnaik (2002) and Keremane et al. (2006).

⁷ For the origin and operation of the *Pani Panchayats*, see *Gram Gaurav Pratishthan* (1983 and 2005). For a detailed socio-economic review and evaluation of this system, see Deshpande and Reddy (1990), Thakur and Patnaik (2002), and Keremane et al. (2006). For a brief legal review, see Singh (1991: 35).

⁸ Such formal interventions are also needed to make local initiatives such as *Pani Panchayats* to be independent of the persons who are behind them. For instance, the decline of *Pani Panchayats* (the number of small schemes with this system declined from 59 at one point to 19 in 2005) is attributed to the election loss of Vilasrao Salunkhe, who was behind the emergence of this system but was said to have lost interest after the 1985 Maharashtra Assembly election (see Thakur and Patnaik 2002; Keremane et al. 2006).

⁹ But the key feature of the water rights system should be that it is locally managed and enforced, though within formal regional guidelines and national regulations. Given the tremendous level of information and institutional potential, the establishment of such locally managed systems of water rights will not be that difficult. For details, see Saleth (2007).

with the land-dominated approach that links water access and control with land access and ownership. Notably, this approach was due to not any deliberate design or policy but an evolutionary process that occurred with informal conventions, prior development of land-related institutions, and water surplus conditions. Although this approach is not formal but essentially *de facto* in nature, it has a pervasive influence on many water-related law and policy practices with far-reaching socio-economic and ethical consequences. In the emerging conditions of extreme water scarcity and the increasing scope for developing more direct water-related institutions, it is now time to replace the land-dominant approach with an alternative approach that will be more efficient, equitable, and practical.

This chapter has proposed an alternative approach based on an analytical delineation of the areas where land and water can be linked from the area where the two resources should be de-linked. Under this approach, the two resources will be de-linked at the ownership stage through

a non-land-based water rights system but linked at the use and management stage through real water markets and basin or region-based framework. As a result, it will be able to preserve the benefits of the present land-dominated approach while correcting its equity and efficiency defects by providing water access to the landless and incentive for water use efficiency. Although the technical and institutional demands of the alternative approach are indeed tremendous, it is not at all that impractical as is held in popular and policy circles. This is because the practicability of this approach is amply demonstrated by the operation of the *Pani Panchayat* system, which also underlines the increasing feasibility of replicating such a system with the introduction of formally defined but locally managed water rights system. Further research and pilot experiments are likely to enhance the prospect of formal adoption of this approach as a legal and policy basis for a more efficient and equitable management of water resources.

Annexure

YOU CAN OBSERVE A LOT BY WATCHING

Mandar Kagade and Shalaka Patil

The following is an illustration of international experience on how water and water rights are transacted independent of land ownership.

Chile

In the water law regime preceding the 1981 Water Code, water rights in Chile were inseparable from the land and were subject to expropriation without payment of compensation. With the 1981 code being functional, the rights to advantageous use are legally separated from the land ownership and can be freely transferred. Further, the user of the rights may change the use without any prior sanction by the state or justify its need when applying for the same. Till an amendment in 2005, the user of water rights had no obligation to use them. This had created incentives for strategic action and speculation by power companies who hoarded water rights, thus creating price distortions in the market. The amendment meant that unless used within a specific period, water rights are automatically forfeited (Bauer 2004).

Water rights can be obtained by individuals by requesting the Director General of Water (DGA or DGW) for the same. The groundwater rights are granted after certain yield at certain depth is confirmed (Donoso 2003). Any party with legally entitled rights can oppose the grant of new groundwater use right, if he or she is adversely affected, by informing the regional DGA office.

Water rights do not attract any property tax. 'But land is taxed according to its productive value, which includes the value of irrigation water. There are seven different categories of land for tax purposes. These range from high quality irrigated central valley land to non-irrigated land' (Hearne 1998). Thus, the separation of land from water is not reflected in the tax code.

Use of market instruments has resulted in the transfer of water from low value uses to high value uses, as Hearne and Easter (1995) document, at least in places where canal infrastructure is flexible.

Western United States

The practice of trading water rights independent of land has existed in the western United States, which saw the development of the prior appropriation doctrine in the nineteenth century. The doctrine continues to apply in states such as Alaska, Arizona, and Colorado.

The key significance of the prior appropriation doctrine is that the first person to appropriate water in any given place and put it to beneficial use gets the senior right to use it. Thus, according to this doctrine, to exercise rights over groundwater, it is not necessary to own the land overlying it. An important point to note is that water rights continue as long as the beneficial use continues. Though this doctrine has been subjected to much criticism on the ground that prior appropriators, because of the

security of their water rights, have no incentive to save water, it is interesting to note that being divorced from land tenure, trade in water rights has long been the norm here.

Western Australia¹⁰

In Australia, water management has undergone a major transformation over the decades. In the first stage of the evolution, because of the transplantation of English notions of property, the owner of a piece of land came to have an absolute right to appropriate all the water that lay beneath the land. However, after about 1896, there began a move towards a more regulated and licensed regime. The right to water was vested in the Crown by statute. Water allocations were granted but were tied to land and could not be sold without it. It may be noted that even in this (intermediate) stage of the evolution, the nature of property was still real property since the allocations were tied to the land. The third and the final leg of the evolution of Australia's water regime involved a shift towards freeing water from overlying

land, which came around the 1980s when Victoria passed the legislation allowing formal trades in water rights. In 1995, the Council of Australian Governments (COAG) introduced its water reforms process whereby state governments undertook to introduce a system of water entitlements and allocations, backed by the separation of water property rights from the overlying land title (Productivity Commission 2003).

The freedom of underlying water from the bounds of overlying land title was thus achieved by a three-step process (McKay 2006):

- declare or assert all water resources in the territory to be the property of the State formally through the process of legislation;
- allocate water access licenses and water allocations to water users, conferring right of use over these *public* waters; and
- allow free transfer of these water access licenses and allocations between water users *inter se* to ensure water moves to its most valued uses.

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¹⁰ Hodgson (2006).

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Section II

LAND ACQUISITION Policy and Processes

5

Evolution of Political Economy of Land Acquisition

Sanjukta Ray and Shreemoyee Patra

Land Acquisition before Independence

The genesis of land acquisition in India lies in the Bengal Regulation Act (I) of 1824, enacted to promote British commercial interests in the country. This was replaced by Act (I) of 1850, by which the provision for land acquisition was extended to Calcutta town, the Indian British Capital, so that land needed for public works could be obtained without any legal problems. By 1857, various laws on the subject of land acquisition were consolidated as Act IV applicable to the whole of British India. Finally, the Land Acquisition Act of March 1894 replaced all previous laws relating to land acquisition.

The key concerns of the colonial legislators were quite evident. The state had to be enabled to acquire land swiftly while minimizing compensation payment, seen as a drain on the state exchequer. Further, there was a need for mobilizing larger amounts of land for expanding railways in the country. The imperial stance was evident in one simple fact: ‘public purpose’ was neither defined nor elaborated by the law; it was sufficient for the state to declare it to be so.

Intricate and elaborate rules were framed to keep compensation payments to a minimum. This Act made the collector’s award of compensation final unless alerted by a decree of the Civil Court in a regular suit and it helped speed up the process of determining compensation.¹

The end of colonial rule in 1947 and the Republican Constitution of 1950 did not bring about any significant change in the land acquisition law. The Constitution of India, by Article 372, allowed all colonial laws to remain in force unless they were explicitly repealed.

Reconstructing India—The Mahalanobis Way: 1950s–1980s

India in the 1950s was primarily an agricultural economy whose new political leadership was at the time, proactively (if not very effectively) grappling with the landlessness and acute poverty that marked its countryside. Abolition of the *Zamindari* System and the land reform measures that followed led to the redistribution of surplus land from the *zamindars* to the landless, in various degrees, at the behest of the respective state governments. In this socio-political milieu, it was not difficult for the Nehru government to get away with token compensation to a handful of rich zamindars for land acquired for development purposes.

This was, however, not easily done when land was sought from the small farmer. The national government had, at that time adopted a policy of heavy industrialization largely under the domain of the public sector, with private companies and multinationals functioning under strong governmental control through intimidating licensing systems. There was an enormous increase in infrastructure development and industrial activities by the state as compared to the colonial period. Numerous large dams, power plants, mines, and steel and heavy engineering plants came up on land acquired using the 1894 law, thus causing massive displacement of small farmers, agricultural labour, landless village workers, artisans, and forest dwellers. The issue became complicated when decisions had to be taken on paying the price for the land acquired. The question

¹ Kannan Kasturi (2007), ‘Land Acquisition from Colonial Times to the Present’, *Ghadar Jari Hai*, Vol. 2, No. 1 available at http://www.ghadar.in/Vol.2_Issue_1_PDF/v2_I1_Cover_Story.pdf

boiled down to: What would constitute 'fair compensation' to the landowner? At that time, the country was in financial penury, and had to begin large-scale industrialization. If the public sector industries did not buy land at cheap prices, they would not be financially viable. There was very little financial leeway for generous compensation. So, the Constituent Assembly broadly endorsed the Land Acquisition Act of 1894.

Public sector and government projects were not the only purposes for which land was forcibly acquired by the state. Rather, states acquired land for private companies too on the pretext of public purpose in the interest of states. Even in the Nehruvian period, land was being acquired for private industry by state governments. A landmark judgement (*R.L. Aurora vs State of UP*, 1962) of the Supreme Court held that the government could not justify acquiring land for a textile machinery manufacturer as a 'public purpose'. It further declared that, 'the Land Acquisition Act did not contemplate that the Government should be made a general agent for companies to acquire lands for them for their private profit'.²

That might have been an opportunity to revise the injustices of the Act, but the Nehru government chose to do the opposite. The immediate response of the government was to amend the law through the Land Acquisition (Amendment) Act, 1962, to allow land to be acquired for a company, which was engaged in or was taking steps for engaging in any industry or work for a public purpose. This was applied with retrospective effect and superseded the earlier Supreme Court judgement. Thus, the Nehruvian state succeeded in preserving its authority for acquiring land for private industry.

According to Palit and Bhattacharjee (2008),³ the government from the 1960s through to the 1980s played the role of a 'venture capitalist'. The fact of the matter was that, the government needed land and just took it, not only by virtue of the Land Acquisition Act, but also a host of other Acts and Laws, mainly governing petroleum, mines, forests, and wildlife. The tracts of land acquired were huge. It was not always for building industries such as the Durgapur Steel Plant, or for infrastructure projects, such as Damodar Valley Corporation. Often, it was for building townships such as Bhubaneswar, Durgapur,

Gandhinagar, and Chandigarh, all of which certainly entailed large-scale displacement. The very same states (West Bengal and Orissa), where the anti-SEZ protests have been massive, had ceded huge tracts of land to these townships. Even the largest SEZ (Special Economic Zone) required far less land than the smallest tract of land acquired by the government.⁴

Landowners who were compelled to part with their land in the interests of 'national reconstruction' did not always comply unresistingly. Protests were strong, particularly in situations where tribal or other indigenous populations were displaced or their livelihoods were threatened. The National Hydro-electric Power Corporation mooted a 700 MW project in Bihar (Koel Karo) in 1981. It was expected to submerge about 10,522 hectares (ha) of cultivable land, 5,666 ha of barren land, and 364 ha of government land. The dam would have displaced 3,282 families in 26 villages of Gumla district and 1,157 families in 16 villages in Ranchi district, of which, 90 per cent are indigenous people.⁵ In the face of intense opposition and prolonged struggle by project-affected-persons (PAPs), the project was finally shelved in 2007. Similarly, the Bharat Aluminium Company (BALCO) initiated their plans to tap huge bauxite reserves in Orissa, officially on 2 May 1983 that was scheduled to be completed by April 1985. The project came to a grinding halt due to mass-based agitations of the local people, mostly tribals despite the fact that the BALCO claimed to have invested Rs 30 crore on the project.⁶

These are only two examples among several instances of strife between the state and its project-affected citizens in the run up to the 1990s. Proponents of developmental activities for which land was sought to be acquired were seldom able to present convincing evidence that the displaced persons would gain substantially from the project. Sustainable employment opportunities were rarely offered to the unskilled and semi-skilled PAPs.

The Post-liberalization Era of the 1990s and Beyond

The policy climate of the Central Government went through a paradigm change in the early 1990s. Gradually, the political leadership loosened the controls of the licensing

² G.S. Kainth (2009), 'Special Economic Zones: A Grey Area of Land Acquisition', 11 January, available at <http://www.coolavenues.com/know/gm/gursharan-wconomic-1.php>

³ Amitendu Palit and Subhomoy Bhattacharjee (2008), 'The Political Yatra', *Special Economic Zones in India: Myths and Realities*, Anthem South Asian Studies, Anthem Press, Delhi.

⁴ Ibid. Ch. 6.

⁵ 'Koel Karo Firing', *Down to Earth*, Vol. 9, No. 20, 15 March 2001, available at <http://www.indiaenvironmentportal.org.in/code/36912>

⁶ See the report of a team of concerned scholars, 'Bharat Aluminium Company and Gandhamardan People's Struggle', presented at the seminar on 'Development and Displacement' at the Institute for Study of Society and Culture, Burla, 20–21 December 1987.

system in a bid to open up and extend encouragement to the private sector industry. Private investment was invited with open arms into a plethora of activities that were historically dominated by the public sector such as generation of power, laying of roads, building bridges and airports, and setting up of SEZs to boost forex earnings.

The government now started acquiring large tracts of land on behalf of private companies categorizing nearly every excuse for private activity as 'public purpose' in order to invoke the Land Acquisition Act of 1894. A public perception developed that the private corporate, unlike its public sector counterpart, was financially strong. Its initiatives were driven, not by the 'noble' cause of national development, but profit motive. It was both capable of as well as honour-bound to pay adequate and acceptable compensation. Public outcry erupted as the government used the Act to acquire land compulsorily against measly compensation to the landowners; and this land was then handed over to private companies. This phenomenon of 'acquiring land for a public purpose for use by a private industry' (operating with the sole motive of earning private profits), was not acceptable to the public, notwithstanding its legal sanctity.

Popular protests have, in the recent past, been frequently politicized by complex interplay of vested interests. The latest example of this can be seen in the series of events that ultimately led to the retreat of Tata Motors from Singur in West Bengal. Some years ago, Tatas also had to face flak in Orissa⁷ where again the government was acting on their behalf where land was acquired and those displaced were not rehabilitated, (or even adequately informed). Similarly, Salem withdrew from Nandigram and POSCO from Orissa. Being foreign companies, they had no choice but to let the government act as intermediaries, and as always, the Act was misused.

The PAPs have now awakened to their right to participate in the future stream of gains from the envisaged development, as a supplier of a prime factor of production, namely land. There are several instances where companies have displayed sensitivity to this sentiment while appreciating the business wisdom of approaching the landowners directly, instead of seeking shelter behind the Act. They have offered a fair price or an acceptable package to successfully conclude compensation negotiations and proceed with their projects, for example, the Raheja Group in Haryana,⁸ Reliance in Navi Mumbai,⁹ Maharashtra, and, on a smaller scale, JCT Steel (a Jindal Group venture) in Salboni, West Bengal.¹⁰

The spectacular failure of the democratically elected state to live up to the expectations of satisfactory governance of its citizens in the context of land acquisition prompted a fresh look at the legal framework of land acquisition, which is outdated and draconian, placing the landholder at a position of severe disadvantage. In June 2007, the Union Minister of State for Commerce, Jairam Ramesh announced at a press conference that the Centre would frame a new Land Acquisition Act to replace the Act of 1894.¹¹ The proposed Act was introduced in the Lok Sabha in December 2007 as the Land Acquisition (Amendment) Bill, 2007. The Bill redefines 'public purpose' as land acquired for strategic defence purposes, infrastructure, and contiguity purposes, or for any project useful to the general public where 70 per cent of the land has already been purchased. The Bill bars acquisition for companies except under the 70 per cent condition. It has defined 'person' to include any company, body or association of individuals, whether in corporate or not. But, the clause 'or for a company' has been omitted throughout the Principal Act.¹² In February 2009, the Government of India made an attempt to get the Bills passed in the Parliament, but failed.

⁷ 'Tribals Stage Protest against Tata Steel Project in Kalinga Nagar', *Orissa Current News*, 2 January 2009, Bhubaneswar, available at <http://www.orissadiary.com/Current News.asp?id=9855>

⁸ 'How to Have SEZs Without Protests', *Economic Times*, 4 September 2008, available at <http://www.economicstimes.indiatimes.com/articleshowarchive.cms?msid=3442455>

⁹ 'Mukesh Ambani, SEZ Offers Land or Money for Affected Persons', *Hindu Business Line*, 25 May 2008, Mumbai, available at <http://www.thehindubusinessline.com/2008/05/25/stories/200805250890100.htm>

¹⁰ 'Jindal Flaunts Salboni Land Model Success', *The Telegraph*, 27 August 2008, Kolkata, available at <http://www.telegraphindia.com/1080827/jsp/business/story9748722.jsp>

¹¹ Atiq Khan (2007), 'New Land Acquisition Act Soon, says Jairam Ramesh', *The Hindu*, 17 June, Lucknow, available at <http://www.hindu.com/2007/06/17/stories/2007061700921000.htm>

¹² <http://164.100.24.209/news/whatsnew/Landacqbill.pdf> (This is the web link to the text of the Land Acquisition Amendment Bill, which is Bill No. 97 of 2007).

6

Eminent Domain Powers Rationale, Abuse, and Way Forward

Nirmal Mohanty*

Context

Eminent domain is the inherent power of the state to seize a citizen's private property, with due monetary compensation. The monetary compensation is generally paid at prevalent market rates. Governments across the world, including in India, possess and exercise this power.¹

Industrial and infrastructure projects can acquire land either through the market route (that is, by negotiating with the land holders) or by the use of eminent domain powers of the government. In the market route, since the nature of transaction is voluntary, there is little or no social discontent, unlike in the case of eminent domain, where landowners have to part with their land for a government-determined compensation. The project proponents in India, however, are increasingly relying on the latter and states are cooperating, so much so that it has become the norm. This is not surprising given that state governments are competing with each other to attract industrial and infrastructure projects to their respective states.

A fall-out of this is the rise in controversies and violent protests by the project-affected people, underlining how sensitive the land acquisition issue is. It also points to an undercurrent of tension, which erupts when land is taken away from people without their consent. This

underlying tension is on account of the following three conflicts:

- Private Property Rights versus Needs of Development²

Economic development many times requires change in land use and consequent reallocation of land. Any such reallocation, when involuntary, undermines the rights of the owner of the property. If private property rights over land are undermined, the land-owners feel outraged; besides, the incentives to invest in properties including land get weakened.

- Land as a Private Good versus as an Anchor for Social Identity

Proponents of projects requiring land view land as a private good, which should be transacted like any other commodity in the market place. But several landowners in India, especially the poor, view land differently: for them, land is the primary asset, a source of livelihood for several generations, and a factor that determines their skills. Most significantly, land provides the context in which communities evolve their respective identity. It is through land that the social bonding develops, which provides

* The author is grateful to Ajay Pandey of IIM (Ahmedabad) for his useful comments.

¹ Land Acquisition Act, 1894 (LAA) is the principal legislation in India that gives the government eminent domain powers. There is a separate legislation for national highways; but it is broadly similar to the LAA. While LAA deals with compensation for land, the NRRP-2007 outlines the policies for the rehabilitation of people displaced by projects where land is acquired through the application of eminent domain. Two bills aimed at introducing reforms in this area—one seeking to amend the LAA and the other to provide statutory basis to R&R initiatives—are pending before the Parliament. Attempts by the Government to pass the bills in February 2009 failed.

² The 44th Constitutional Amendment of 1978 removed the right 'to acquire, hold, and dispose of property' from the Constitution as a fundamental right and retained it as only a legal right contained in Article 300A (that is, no person shall be deprived of his property save by authority of law).

meaning of life to a large number of people. Those who are bound to a community through land feel agitated when the ‘private good view’—that is, land can be freely transferable to alternative usage and owners—is imposed on them.

- Gainers versus Losers

Since government authorities control the use of any given piece of land, particularly its transition from agricultural use to other uses such as industry or infrastructure, which can tremendously increase land value and since under the framework for land acquisition by the government, compensation to the land holders is based on the current use, the farmers who lose land feel aggrieved about the low compensation they get. On the other hand, the land acquirers and those owning land in the surrounding area stand to gain—because the project itself adds value to the land where it is situated and its adjoining areas—and hence support the acquisition. Since the government is generally perceived to align itself with the interests of the land acquirers, the ire of the protestors is directed towards the government.

While these underlying causes have been there for a long time, the conflicts have escalated over the years due to the following reasons:

- Increasing Social and Political Empowerment

With the deepening of democratic institutions (including NGOs and civil society institutions), heightened fragmentation of polity (manifested in coalition governments) and pervasive reach of and competitive pressures within media, substantial social and political empowerment of the land holders has taken place in the last decade or so, and is reflected in greater mobilization of, and stronger protests by, the marginalized and weaker sections of the society (mostly land losers).

- Increase in Population Density

India’s population density has increased by over three times since 1951. With the rise in population density as well as in demand for new development projects to serve a larger population, land acquisition proposals have witnessed an increasingly wider resistance than before, because not only is more land being demanded, but also more people have to be displaced for the same size land. Another impact of the rising population is the increase in demand for land by the household sector, mainly for habitation. The incremental demand for land may be negligible in comparison to the total land mass of India, but the problem arises because the supply is not forthcoming in areas where land is in demand. (No one would set up

commercial infrastructure in deserts, for example, just because land is available there.)

- Private Sector Involvement in Development

The public perception on land acquisition is generally negative when land is acquired by the government on behalf of the private sector, whose sole objective is seen to be profit maximization. In contrast, people are more tolerant of acquisition by the government either for itself or its enterprises, as the projects promoted by the public sector are perceived to enhance the welfare of the society at large and not that of any private person or group. Traditionally, bulk of the land acquisition was by the government (defence, railways, etc.) or public sector undertakings. With liberalization, however, growth in infrastructure as well as industry has become increasingly private-led, resulting in higher private demand for land.

While these causes of growing conflict are difficult to resolve, it may be possible to reduce tension by addressing the policy and regulatory issues relating to eminent domain, which can be broadly classified into two categories: (a) issues related to purposes for which eminent domain can be used; and (b) compensation that needs to be given to those affected by this action. This chapter deals with the first set of issues.

Case for and Extent of Use of Eminent Domain

On the ground that the interest of the community is superior to the interest of an individual, it is only for projects that serve ‘public purpose’ that the use of eminent domain (equivalently the undermining of private property rights) can be justified. But even land for projects meant for ‘public purpose’ can and should be acquired by the market route, if it is possible, because voluntary transactions are socially more desirable than involuntary ones. Thus, there is a case for use of eminent domain only under the overarching framework of public purpose and only when the market fails (see Box 6.1 on case for eminent domain). Three situations can be thought of:

- Hold-out Problem

Hold-out problems arise when some people refuse to sell their land, without which a project cannot materialize. The chances of hold-outs are high when the area required is large and contiguous and holdings are small, as in the case of India. In such cases, market solutions are not possible and coercive powers of the government become necessary. If, however, a majority of land holders of an area sought to be purchased holds out, it may reflect unwillingness of

the buyer to offer a price high enough to induce voluntary sales rather than rent-seeking behaviour or emotional attachment to land on the part of land holders. Eminent domain is thus justified, if only a small fraction of land-owners hold out and their land constitutes a relatively small fraction of the total land.

- Non-substitutable Land for Public Purpose

The use of eminent domain for land acquisition is also justified when the public purpose in question can be served by only a specific piece of land, which has no substitute. Lands of this type are either location-specific or alignment-specific. For example, mineral extraction can take place only where minerals occur naturally. Similarly, land for strategic defence initiatives, ports, and widening of roads often cannot be substituted. In these cases, it may make sense to invoke eminent domain powers even when all the land holders involved refuse to sell their land.

- Outdated Records

While the above two cases constitute the rationale for eminent domain the world over, there is an additional attraction for use of eminent domain in India, which relates to land records. Since land records in India are generally inaccurate, there are widespread land-related disputes and litigation. Further, as the land holdings here are typically small, direct land acquisition (that is, market route) by projects generally requires each project promoter to deal with a large number of landowners, and therefore the litigation risk tends to be very high. This risk is eliminated in the case of the eminent domain route under which land vests completely free of all encumbrances in the government, which then transfers it to the projects. Similarly, it is easier to deal with squatters with the use of eminent domain than the usual legal recourse.

Issues Related to Public Purpose

DEFICIENCIES IN LEGAL DEFINITION

In India, the law requires that the eminent domain powers can be used only if the aim of the project is to serve a public purpose. The definition of ‘public purpose’ adopted in law is sometimes activity-specific (for example, provision of land for town or rural planning) and other times entity-specific (for example, provision of land for a corporation owned or controlled by the state). Entity-specific definitions can potentially create problems. For example,

including the ‘provision of land for a corporation owned or controlled by the state’ in the definition of ‘public purpose’ implies that all activities of a Public Sector Unit (PSU) serve ‘public purpose’. This may not always be true.

COURTS HAVE SUPPORTED WIDE INTERPRETATION OF PUBLIC PURPOSE

While the concept of ‘public purpose’ is contentious in legal and political discourses, there has to be some bound on what public purpose is. If something benefits all members of the public, it clearly serves the public purpose and if it excludes a vast majority, then it does not. Most of the projects, however, cannot be so clearly categorized. In such a situation, what position have the courts taken? Courts have taken a view that public purpose cannot and should not be defined and what constitutes public purpose has to be decided primarily by the state.³

The following extract of the Supreme Court judgement on *Daulat Singh Surana vs First Land Acquisition Officer* case is quite revealing of the Court’s position on the scope of eminent domain.

Ambiguity, indefiniteness, and vagueness of public purpose are usually the grounds on which notifications under Section 4(1) of the Land Acquisition Act are assailed. Public purpose cannot and should not be precisely defined and its scope and ambit be limited as far as acquisition of land for the public purpose is concerned. Public purpose is not static. It also changes with the passage of time, need, and requirements of the community. Broadly speaking, public purpose means the general interest of the community as opposed to the interest of an individual. The power of compulsory acquisition as described by the term ‘eminent domain’ can be exercised only in the interest and for the welfare of the people. The concept of public purpose should include matters such as safety, security, health, welfare, and prosperity of the community or public at large. The concept of ‘eminent domain’ is an essential attribute of every State. This concept is based on the fundamental principle that the interest and claim of the whole community is always superior to the interest of an individual.⁴

Two aspects of the Court’s views are clear:

- the concept of ‘public purpose’ cannot and should not be defined, as it changes with the passage of time, and
- the interest of the community is always superior to the interest of the individual.

³ *Daulat Singh Surana vs First Land Acquisition Officer*, AIR 2007 SC 471 (para 31, 32).

⁴ <http://www.judis.nic.in/supremecourt/chejudis.asp>

COURTS' SELF-IMPOSED RESTRAINTS ON REVIEW POWERS

Although the power to determine what constitutes 'public purpose' is primarily that of the government, the Courts have powers to review such decisions. In practice, however, the Courts have generally placed limitations on themselves (see Box 6.1).

CAN FOR-PROFIT COMPANIES SERVE PUBLIC PURPOSE?

Where profit is the motive, is public purpose still being served? Further, for-profit companies could engage in two broad categories of projects: infrastructure service projects and project for other private purposes (such as manufacturing cars). Should these two types of firms be treated at par or differently? To qualify for access to eminent domain, it is often enough for the company to engage in public purpose, even if the project in question may not be for a public purpose. What should be taken into account: the purpose of the project in question or the general mission of the requiring entity?

IMPLEMENTATION ISSUES

Several implementation issues can potentially emerge; for example:

- Should the claim of public purpose be contestable?
- Even if the land is required for public purpose, how does one ensure that the size of the land being acquired is optimal?
- Who monitors the actual use of land as opposed to the stated use?
- How and when does reversion take place if the land is no more required for public purpose?

The 'Kelo Case' in the United States

It has been seen in the earlier section that the legal view on 'public purpose' in India is quite liberal and the government enjoys enormous powers in determining what constitutes 'public purpose'. Since it is the basis for the use of eminent domain, the legal stance currently prevailing in India on public purpose has given rise to scope for abuse of eminent domain powers.

It is useful to note that this phenomenon is not confined to India alone and also that the eminent domain powers are abused not only to favour enterprises—public or private—but also to advance the objectives of the government, which may simply be interested in raising tax revenue (see Box 6.2 on the Kelo case); even in the United States, which champions the cause of private property rights, the abuse of eminent domain powers is not uncommon.

Box 6.1

Justiceability of Public Purpose and Grounds of Review

Mandar Kagade

The question whether a purported acquisition of land under the Land Acquisition Act, 1894 for public purpose by the executive arm of the State is genuinely for public purpose is justiciable. This is because the power of judicial review is a constituent power of the Courts and cannot be taken away by statute.

The Supreme Court in *Sooraram Reddy vs Collector, Ranga Reddy District* articulated the grounds of review as follows:

- mala fide exercise of power;
- a public purpose that is only apparently public purpose but is in reality private purpose or other collateral purpose;
- an acquisition without following the procedure established under the Act;
- when the acquisition is unreasonable or irrational; and
- when the acquisition is not a public purpose at all and the fraud on the statute is apparent.

It may be noticed that the grounds of review are carved out by the Supreme Court on fairly wide grounds including irrationality and unreasonableness: this implies that though the Supreme Court has found that the power to determine public purpose is *primarily* that of appropriate government, it retains the power to question that determination not merely for breach of procedural fairness but also on substantive grounds, at least in theory. In practice though, the Supreme Court has been remarkably consistent in upholding the primary determination of the appropriate government. Nonetheless, the door remains open for future litigants to invite the Court to review the acquisition on the aforementioned grounds.

Source: Minerva Mills Ltd vs Union of India AIR 1980 SC 1789 and *Sooraram Reddy vs Collector, Ranga Reddy District* (2008) 9 SCC 552.

Restrictions on Definition of Public Purpose

Subsequent to the Court decision on the Kelo case, there was widespread outrage across the USA and a multitude of states introduced laws restricting the use of eminent domain. Some examples are given below (http://en.wikipedia.org/wiki/Kelo_v._New_London).

MICHIGAN

Michigan passed a restriction on the use of eminent domain in November 2006. The amendment would:

- prohibit government from taking private property for transfer to another private individual or business for purposes of economic development or increasing tax revenue; and
- require government that takes a private property to demonstrate that the taking is for a public use; if taken to eliminate blight, require a higher standard of proof to demonstrate that the taking of that property is for a public use.

NEW HAMPSHIRE

The text of the amendment enacted in New Hampshire is as follows:

‘No part of a person’s property shall be taken by eminent domain and transferred, directly or indirectly, to another person if the taking is for the purpose of private development or other private use of the property’.

FLORIDA

Florida passed a 2006 ballot measure amending the Florida Constitution to restrict use of eminent domain. The Amendment says in part that private property taken by eminent domain may not be conveyed to a natural person or private entity except as provided by general law passed by a three-fifths vote of the membership of each house of the Legislature.

Way Forward

Given the complex nature of the problem, we obviously need some innovative solutions. One such solution is to adopt a separate legal framework, which would be applicable for large scale acquisition of land by a commercial entity; under this approach, the law would define the process of negotiations between the community of land holders on the one hand and the acquirer on the other (see Box 6.3).

Some innovative measures have been put forward by the government too. Recognizing that the legal definition of ‘public purpose’ has given rise to scope for abuse of eminent domain, the government has proposed to amend the Land Acquisition Act, 1894 through the Land Acquisition (Amendment) Bill, 2007 to provide for a stricter definition of ‘public purpose’.⁵

According to the Land Acquisition (Amendment) Bill, 2007, the scope of ‘public purpose’ has been restricted to provision of land for:

Box 6.2

Kelo vs City of New London Case

The Kelo vs City of New London case, argued and decided in 2005, constituted a milestone in eminent domain case heard in the United States. Since 1984, states and municipalities had extended their use of eminent domain frequently to include economic development purposes. In the Kelo case, which involved the acquisition of a private building, the owners sued the city, arguing that the city had misused its eminent domain power as economic development did not qualify as a public use. The additional twist in the Kelo case was that the development corporation was ostensibly a private entity; thus the plaintiffs argued that it was not constitutional for the government to take private property from one individual or corporation and give it to another. They also argued that the government was simply doing so because the repossession would put the property to a use that would generate higher tax revenue.

The Supreme Court of Connecticut found that the use of eminent domain for economic development did not violate the public use clauses of the state and federal constitutions. The Connecticut Court found that if an economic project creates new jobs, increases tax and other city revenues, and revitalizes a depressed (even if not blighted) urban area, it does qualify as a public use. The Court also found that government delegation of eminent domain power to a private entity was constitutional. Kelo became the focus of vigorous discussion and attracted numerous supporters on both sides. On 23 June 2005, the Supreme Court, in a 5–4 decision, ruled in favour of the City of New London, allowing the acquisition for the private entity. While the decision was controversial, it was not the first time ‘public use’ had been interpreted by the Supreme Court as ‘public purpose’. Dissenting people feared that after this ruling, acquisitions which take away resources from the poor and give it to the rich would become a norm rather than an exception.

Source: <http://caselaw.lp.findlaw.com/scripts/gatecase.pl?court=US&vol=000&invol=04-108>

⁵ According to the current law, the definition of ‘public purpose’ includes a very broad spectrum of activities including land required in pursuance of any scheme of the government, or for any corporation owned or controlled by the state. A private company can use eminent domain even for construction of some work which is ‘likely to prove useful to the public’.

Box 6.3
The Case for Negotiation with the Community
Nitin Desai

Large scale land acquisition, which affects a whole village or more, has to be treated as a transaction between the corporate or public buyer and the community and not just as a transaction with individual landowners.⁶ This allows us to take into account the interest of the landless and of common properties and common heritage such as sacred spots which would be lost in a set of individualized transactions.

One possibility, which I have advocated,⁷ on the analogy of the laws on collective bargaining, is a Land Purchase Act that would apply to any large scale purchase of land by a commercial entity. The Act must specify a process for negotiation between the buyer and the affected community because an agreement cannot be negotiated separately with each affected household.

The greatest difficulty will be to define who has the right of representation. Who speaks for the community? The local panchayats? Activist NGOs? This is not very different from the type of questions that have been raised and answered in the case of collective bargaining between trade unions and employers and the procedures set there for who can sit at the table in management–labour negotiations may provide a useful lead.

The law also has to take into account the ‘curmudgeon’ problem and specify the minimum proportion of rights holders who have to assent to the terms negotiated. Clearly if our main concern is that a few hold-outs should not prevent the bulk of the locals who want the redevelopment, the bar would have to be quite high, say at 75–80 per cent acceptance. But assent is not enough and the agreement must include an obligation to provide alternatives to those whose livelihoods are lost. The role of the government will be as a facilitator and, in the last resort as the protector of the more vulnerable group which is clearly the local landowners and not the large corporations who are the buyers.

The big issue in land acquisition is the huge increase in land values that will arise with redevelopment. Much of the tension arises from the feeling that those forced to sell land will not get a share of the increase in value. Hence, the most effective answer lies in moving beyond compensation to ensuring that the affected owners and the community are partners in the redevelopment. Make the community part of the solution and everything will fall in place.

Source: Author’s own.

- strategic purposes relating to naval, military, and air force works or any other work which is vital to the state;
- government’s own infrastructure projects which provide benefits to the general public; and
- acquisition of land for a ‘Person’ (which includes any company or association or body of individuals), if the person requires land for a purpose which is useful to the public and has already lawfully acquired up to a minimum of 70 per cent of the total land required for the project.

The Bill also defines ‘Infrastructure Projects’ as any projects relating to:

- generation, transmission or supply of electricity;
- construction of roads, highways, bridges, airports, ports, rail systems, or mining activities;
- water supply, irrigation, sanitation, and sewerage system; or
- any other public facility that may be notified by the Central Government in the Official Gazette.

An analysis of the proposed reforms relating to public purpose shows that in addition to restricting the

scope of public purpose, they clearly put a great deal of emphasis on infrastructure, which has been very clearly defined. Second, the strategic military purposes have been explicitly recognized. The most distinctive feature of the proposed amendment is that only after 70 per cent or more of the required land is acquired through market negotiation, can a company be eligible to access eminent domain. The point to note is that the proposed amendment requires that the market route is exhausted by companies in a legally prescribed way before eminent domain can be used. This is clearly a reflection of the new government thinking that market failure due to hold-outs should call for the use of eminent domain. Currently, in the absence of any such provision, many companies have been encouraged to use eminent domain even when the market can offer more efficient solutions, partly because ‘public purpose’ is loosely defined and the acquisition through the eminent domain route is less expensive. The compulsion for every company to acquire at least 70 per cent of the required land through the market route would create not only incentive for companies to reduce their demand for land, but also help in better discovery of market price of land.

⁶ Nitin Desai, ‘Land for Infrastructure’, *Business Standard*, 20 April 2006, New Delhi.

⁷ *Ibid.*, 18 January 2007, New Delhi.

The 70:30 rule is a significant improvement over the current system for the following reason. To be eligible to access eminent domain, a project must be for a purpose useful to the general public and must first acquire at least 70 per cent of the required land. So, even if there is an error in judgement on 'public use', which is likely even in the best of circumstances, the 70 per cent rule, which can be easily tested, can keep out several companies from abusing the system.

Although this proposed reform (70:30 rule) can potentially address the issue of abuse of eminent domain, a great deal would depend on how efficiently it can be implemented. The most significant implementation issue is that the criterion for determining the compensation for land acquired by the use of eminent domain, as defined in the Amendment Bill, is such that from a land holder's point of view, it makes more sense to get compensated than sell in the market.⁸ In such a situation, no company may be able to purchase 70 per cent of the required land through the market route and hence, no project would materialize. There are other problems with the 70:30 rule too. For example, it is possible that a vast majority of the affected people possess only a small fraction of the land. So the 70:30 rule can potentially ignore the majority view. It would, therefore, be useful to explore if the rule can be defined in terms of a fraction of both land and affected people. Further, in case the land required by a company is non-substitutable, should the 70:30 rule still apply?

Finally, the proposed amendments do not require the government, for its infrastructure projects, to first try and acquire land using the market negotiation route, before invoking the Land Acquisition Act, 1894. This may not be justifiable when the project in question is in competition with private projects (such as in the case of electricity generation).

Conclusion

Since voluntary land transactions (market mechanism), by definition, do not cause any anguish on anybody's part, they should be preferred over eminent domain. In India, eminent domain powers have, however, been used even in situations where the transactions could have been voluntary, partly because they entail less costs and hassles and partly because public purpose can be invoked rather easily, leaving little incentive for the use of land markets. As a result, instead of becoming an exception, they have almost become the norm, leading to widespread discontent. So, the aim of public policy should be to minimize the scope of eminent domain and make it less attractive vis-à-vis market transactions. The proposed changes to 'public purpose' in the Land Acquisition Amendment Bill, 2007 are a step in the right direction, although some more thinking is necessary to make the proposed reforms easier to implement.

⁸ According to the proposed reforms, compensation to be determined by the Collector would be the highest of three valuations, one of which is 'the average of the sale price, ascertained from the prices paid or agreed to be paid for not less than fifty percent of the land already purchased in the project...' (Land Acquisition Amendment Bill, 2007).

7

Regulatory and Policy Regime of Land Acquisition A State-level Perspective

Videh Upadhyay and Chandrima Sinha*

Introduction

Under the Constitution of India, states have the legislative competence to enact laws relating to land. Facilitating land acquisition¹ is one of the three main aims of state-level land legislations in India, the other two being regulating administration and development and introducing land reforms.² In addition, states have a significant role to play in the rehabilitation and resettlement (R&R) of those involuntarily displaced by land acquisition.

This chapter seeks to examine the policy and regulatory framework governing land acquisition and the related issue of R&R at the state level, including some of the recent initiatives taken by the states in this context. We begin below by analysing how states have responded to the basic land acquisition framework provided by the Land Acquisition Act (LAA), 1894. In the subsequent section, the focus is on the implications of various R&R policies and laws on the land acquisition process. This is followed by discussions on land acquisition under special state laws, and on provisions for acquisition of land in tribal areas.

State-level Amendments to the LAA, 1894

While the LAA, 1894 provides the principal framework for land acquisition in the country, the states have adopted it for application within their respective jurisdiction with amendments that they deem necessary. In this section, we examine the nature of amendments that states have made to the LAA.

A review of the amendments at the state level reveals that the states have adopted the LAA, 1894 with essentially procedural changes. The substantive part of their respective enactments is more or less the same as in the Central Act. Some procedural amendments, however, have significant implications on the process to be followed under the LAA. Some examples of the state amendments are given below:

- *Preliminary notification:* The LAA specifies that the preliminary notification needs to appear in the affected locality with no mandate of a time frame. However, Andhra Pradesh provides that public notice of the notification to acquire land must appear in the affected

* This paper was written when the second author was with the National Institute of Public Finance and Policy (NIPFP).

¹ While land is a state subject under the Constitution of India, acquisition and requisitioning of property is treated as a concurrent subject under the constitution.

² The land laws at the state level could be broadly classified as:

- *Land Administration and Development Laws* including State Land Revenue Act and Codes, Land Preservation and Development Laws, Consolidation of Holding Acts, amongst others.
- *Laws relating to Land Reforms* including State Land Reform Acts, Zamindari Abolition and Tenancy Acts, Cultivation Tenants Protection Act and Bhoodan Yagna Acts.
- *Land Acquisition Laws* including the state-level amendments to the Land Acquisition Act, 1894 and all other allied acquisition Acts which have provisions of land acquisition in them to cater to the main objective of the special Act.

locality within forty days of publication in the Official Gazette, making the process time-bound. Similarly, whereas the LAA provides for a period of thirty days for hearing objections to the preliminary notification, this is reduced to twenty-one days by an Amendment in Uttar Pradesh.

- *Survey before initial notification:* Amendments brought in by the states of Maharashtra, Gujarat, and Andhra Pradesh provide for a preliminary survey of the land—to undertake an assessment of the land for its feasibility for acquisition—even before the notification of intent under Sec. 4 of LLA is issued. This can be seen as an improvement over the land acquisition process as it facilitates better decision-making for acquisition of land.
- *Public purpose:* While most states have adopted the definition of public purpose as under the LAA, which specifically ‘does not include the acquisition of land for companies’, some state amendments have made additions to the definition. The Karnataka Amendment adds that public purpose includes ‘provision of land for a company for construction of such work that is likely to prove substantially useful to the public’ while Madhya Pradesh has taken a more liberal approach and includes provision of land for agriculture, for residential, business or industrial purposes. Uttar Pradesh specifies that public purpose includes acquisition for settlement of land for agriculture with the weaker sections.
- *Criteria for determining market value:* The relevant criteria (such as reference date and land usage) for determining the market value of the land for the purpose of compensation under Sec. 23 differs across states. For example, in West Bengal, the market value is calculated with reference to the date of taking possession of the land, while in most cases it is calculated with reference to the much earlier date of publication of Sec. 4(1) notification, in line with the LAA. The amendments for Manipur, Maharashtra (Nagpur City), and Maharashtra (Highways) take into account the date of publication of the declaration of acquisition of land under Sec. 6. While the LAA does not specify the land use criteria, most states have added amendments specifying that the market value will be based on the land use as on the date on which market value is to be calculated. However, Bihar (Patna City) Amendments specify that market value will be according to the use to which the land was put in the preceding five years.
- *Compensation rights for cultivators:* Unlike the Central Act which focuses on the rights of landowners, the West Bengal Amendment specifically recognizes the

right to compensation of the *bargardar*, that is, one who cultivates the land of another on condition of delivering a share of the produce.

- *Reference to court:* Under the LAA, any person disputing the award may refer to the Court their objection within six weeks of the award if present or represented before the Collector at the time when the award was made; or else within six weeks of receiving the Collector’s notice or six months from the award. In Bihar, this does not apply to areas declared as slums. Himachal Pradesh, Punjab, Haryana, Chandigarh (a Union Territory), and Uttar Pradesh allow the acquiring company to appeal against excessive compensation.
- *Compensation in case of dispute:* In case of a dispute, the LAA specifies that the amount of compensation awarded by the Court must not be lower than the amount awarded by the Collector. In Himachal Pradesh, Punjab, Haryana, Chandigarh, and UP, a lower compensation may be awarded by the Court if the state government via the Collector has made a reference to the Court and the Court opinion is that the compensation is excessive and should be reduced.
- *Inaction:* The LAA does not specify the basis on which the conclusion to acquire a particular land or approvals for schemes is arrived at. None of the states have also specified any guidelines.

Thus, it can be seen that the changes made by the states relate mainly to the procedural aspects of the land acquisition process. In some cases, these procedural changes empower the people affected by the land acquisition, while in other cases they are conducive to speeding up the land acquisition process and thus may be more useful for the project proponents.

Rehabilitation and Resettlement (R&R) at the State Level

LAND ACQUISITION AND R&R— UNDERSTANDING THE LINKAGE

The LAA, 1894 (including state amendments) discussed above empowers the government to acquire any land for a public purpose and pay cash as compensation. The objective of the legal framework is to compensate persons for having compulsorily acquired their private property, and not to provide a complete R&R package, so as to enable the displaced people to resettle again in their lives. Besides, the LAA does not envisage compensating people who do not have any legal title or legal right in the acquired lands. This leaves a number of people such as landless agricultural workers, non-agricultural labourers,

forest dwellers, tenants, and artisans—outside the purview of the compensatory benefits provided under the LAA, even though they may be the worst affected.

NATIONAL MANDATE FOR STATES TO OPERATIONALIZE THE R&R MECHANISM

The National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007) seeks to provide a complete R&R package—beyond the compensatory benefits provided under the LAA—so as to enable the displaced people to resettle elsewhere. While the National Policy lays down the objective and the nature of R&R benefits to be made available to the ‘Project-Affected People’, it is the state governments that are required to operationalize the provisions of the policy.

While the preamble of NRRP-2007 states that: ‘*A national policy must apply to all projects where involuntary displacement takes place,*’ state governments are required to declare an area as an *affected area* only if there is likely to be ‘*involuntary displacement of four hundred or more families en masse in plain areas, or two hundred or more families en masse in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution due to acquisition of land for any project or due to any other reason*’.³

The 2007 Policy provides that the appropriate state government may appoint an Administrator for Rehabilitation and Resettlement, who is an officer not below the rank of District Collector, to oversee the R&R plan. But the Administrator can delegate his/her powers and duties to any officer not below the rank of a *Tehsildar* or equivalent. After the declaration of an area as *affected area*, the Administrator undertakes a baseline survey and census for identification of the persons and families likely to be affected by the proposed project. The Administrator is vested with the power of ‘*overall control and superintendence of the formulation, execution, and monitoring of the rehabilitation and resettlement plan.*’ However, the Administrator can only exercise his powers and functions ‘*subject to the superintendence, directions and control of the appropriate (State) Government and Commissioner for Rehabilitation and Resettlement*’ and ‘*subject to any general or special order of the appropriate (State) Government.*’ Clearly, the entire R&R mechanism is subject to the discretion of the appropriate state government.

STATES TO ENSURE SOCIAL IMPACT ASSESSMENT OF INFRASTRUCTURE PROJECTS

One of the most important features of the NRRP-2007 is that it has introduced the concept of Social Impact Assessment (SIA) of projects. The Policy states whenever an area is declared as an *affected area*, using the criterion stated above, ‘*the appropriate government shall ensure that a Social Impact Assessment (SIA) study is carried out in the affected areas in such manner as may be prescribed*’.⁴ The appropriate government here refers to the state government in whose jurisdiction the concerned project or expansion of an existing project is located.

According to the 2007 Policy, the SIA to be carried out by the state government must take into consideration the impact of the project on: (i) public and community properties, assets, and infrastructure; particularly roads, public transport, drainage, sanitation, sources of safe drinking water, sources of drinking water for cattle, community ponds, grazing land, and plantations; (ii) public utilities such as post offices, electricity supply, health care facilities, (iii) public institutions such as schools and training facilities, places of worship, land for traditional tribal institutions, burial and cremation grounds, etc.⁵

Even though SIA has been introduced in the policy discourse in India through the NRRP-2007 as a tool for managing the social consequences of development, the Policy does not give adequate details on the concept, methodology, and the steps for carrying out an effective and credible SIA. In other words, there are flaws in the SIA as envisaged in NRRP-2007, which would inhibit it from attaining its objectives (see Box 7.1). It is important to understand SIA more than ever before in India as it is now a part of a national policy under the NRRP-2007, and would thus need to be carried out in all projects that fall under the purview of the Policy.

MAKING R&R AN INTEGRAL PART OF A BINDING REGULATORY REGIME

If the difference between policy provisions and binding/enforceable legal provisions is appreciated, it should be clear that adherence to R&R policy is not a legal requirement in the case of all projects. Except for a few states which have specific R&R laws, mandatory compliance with R&R as an integral part of a binding legal and regulatory process today exists only under the Environment

³ DDP refers to Desert Development Programme whereas Schedules V and VI in the Constitution cover tribal areas.

⁴ Clause 4.1 of NRRP-2007.

⁵ Clause 4.2.2 of NRRP-2007.

Box 7.1
Need for A Better Understanding of SIA

Social Impact Assessment (SIA) can be defined as the process of assessing or estimating, in advance, the social consequences that are likely to follow from specific policy actions or project development.⁶ It is meant to analyse, monitor, and manage the social consequences of development. It ought to take a proactive stance to development, aim at better development outcomes, and not limit itself to the objective of identification or amelioration of negative or unintended outcomes. Assisting communities and other stakeholders to identify development goals, and ensuring that positive outcomes are maximized, are as important as minimizing negative consequences.⁷

Some notable principles specific to good SIA practice include:

- It should be an integral part of the development process, involved in all stages from inception to follow-up audit;
- There should be a focus on socially sustainable development: SIA and EIA have more to offer than just being an arbiter between economic benefit and social cost;
- The SIA must give due consideration to the alternatives of any planned intervention, but especially in cases when there are likely to be unavoidable impacts;
- Full consideration should be given to the potential mitigation measures of social and environmental impacts, even where impacted communities may approve the planned intervention and where they may be regarded as beneficiaries; and
- The approach must acknowledge different cultural values in different regions and take advantage of local knowledge and experience.

Sources: Burdge and Vanclay (1995) and Vanclay (2003).

Clearance Process laid out under the Environment Impact Assessment Notification, 2006 under the Environment Protection Act, 1986. Under this process, state infrastructure projects are required to submit R&R package to the Centre.

The R&R package for the Project-Affected Families (PAFs)—together with Environment Impact Assessment (EIA) and Environment Management Programme (EMP) reports—is assessed and approved by the Expert Appraisal Committee (EAC) of the Ministry of Environment and Forests (MoEF). The clearance of a project following an EIA is also linked with the R&R of the project. This link is provided by the fact that typically the mandatory conditions appended with the EIA clearance of any project accorded by MoEF lay down that:

- (a) R&R in sufficient detail shall be finalized before the award of the project and a copy of the detailed R&R shall be submitted by the Project Proponent to the MoEF within three months or before the award of the project;
- (b) Project-Affected Persons (PAPs) losing their homesteads or a major portion of the land shall not be ousted from the land till they are settled in the alternate sites;

- (c) A committee under the auspices of the District Administration with representatives of the PAPs, Local *Panchayats* (elected rural local bodies) and representatives of NGOs and project proponents shall be constituted to monitor the implementation of the R&R Plan.

Under condition (c) above, the MoEF requires that a committee under the auspices of the District Administration be constituted to monitor the implementation of the R&R Plan. Under the existing policy regime, the State government is expected to prescribe the composition, powers, functions and other matters related to the Rehabilitation and Resettlement Committee at the district level, which is headed by the District Collector/Deputy Commissioner of the district.⁸ For effective enforcement, this committee should be linked with the committee mechanism provided in the NRRP-2007, under which a Resettlement and Rehabilitation Committee at the *project level* monitors and reviews the progress of R&R schemes.

A report submitted to the Planning Commission noted that while the Government of India has established a fairly strong mechanism for environmental clearance, a parallel process for ‘rehabilitation clearance’ of large projects remains overdue. The report felt that this would ensure

⁶ Burdge and Vanclay (1995).

⁷ Vanclay (2003).

⁸ Clause 8.2.1 of the NRRP-2007.

that the detailed rehabilitation planning is integrated into the overall planning of the project, and that affected populations are extensively informed and consulted.⁹

R&R POLICIES BY THE STATE GOVERNMENT

While acknowledging that many state governments, public sector undertakings or agencies, and other land requiring bodies either have their own R&R policies or are in the process of formulating them, the NRRP-2007 makes it clear that its provisions ‘provide for the basic minimum requirements, and all projects leading to involuntary displacement of people must address the rehabilitation and resettlement issues comprehensively. The State Governments, Public Sector Undertakings or agencies, and other requiring bodies shall be at liberty to put in place greater benefit levels than those prescribed in the NRRP-2007’.¹⁰

In addition to project-specific R&R policies, many state governments have also formulated state-wide R&R policies, or Model R&R policies that apply to all infrastructure projects coming up in these states. Some recent examples include the Model Rehabilitation and Resettlement Policy of the Government of Madhya Pradesh, 2002; State Resettlement and Rehabilitation Policy for Andhra Pradesh, 2005; Orissa Rehabilitation and Resettlement Policy 2006; and *Jharkhand Punarnirman and Visthapan Niti* (Jharkhand Rehabilitation and Resettlement Policy), 2008.

The R&R policies of states vary from the NRRP-2007 in different ways. While it is beyond the scope of this chapter to discuss all cases, the Jharkhand R&R Policy (2008) can be used as an illustrative example of the nature of departure of state policies from NRRP-2007. In particular, the Jharkhand R&R Policy:

- applies when one hundred or more families *en masse* are involuntarily displaced;¹¹
- requires that to qualify as labourer in a particular area, one must be a resident in the area for not less than fifteen years for Non-Scheduled Areas, and thirty years for Scheduled Areas. In contrast, NRRP-2007 states the time period to be less than three years for those in the affected area (note here that to the extent the state policy provisions are less beneficial to the PAPs compared to NRRP-2007, the provisions of the latter should be given effect to by the state government);

- exempts land acquisition for Industrial Area Development Authorities/Industrial Estates from R&R obligations;
- sets specific time periods and deadlines for the completion of various stages of activities such as completion of the baseline survey and census of affected families, obtaining the SIA clearance, completion of the SIA hearing, and declaration of the settlement area;
- requires the R&R Plan to note the educational qualifications of those displaced, and the available job opportunities in the project and their eligibility criteria. This is not required in the NRRP;
- bars the acquiring body (for a project) from selling the land after acquisition;
- entitles affected families to one per cent of the annual net profit in monetary terms, when the land requiring agency is a commercial project other than a public sector entity under the State or Central Government. The sum is to be paid within three months of declaration of annual financial results; and
- makes the provision of basic amenities (such as drinking water, electricity, access, schools, dispensaries, etc.) mandatory in the resettlement site.

States, in certain instances, have not only incorporated progressive provisions in their R&R policy that go above and beyond the minimum requirements benchmarked by the NRRP-2007, but have also made pioneering efforts in the area of R&R. For example, the Orissa Rehabilitation and Resettlement Policy, 2006, which was notified a year earlier than NRRP-2007, contains provisions for compensation under various types of development projects and recognizes, among other things, the benefits to landless/homestead-less encroacher and also allows for compensation in convertible preference shares in the project company.

State policies have not always entailed R&R obligations for all cases of land acquisition. Some state governments have enacted legislations to set up specific agencies for acquiring land for SEZs,¹² and for other purposes, which do not always fall under the purview of the State R&R policy. For example, as stated earlier, Jharkhand exempts land acquisition by Industrial Area Development Authorities and Industrial Estates from its R&R policy requirements. State Industrial and SEZ Authorities, thus, could acquire

⁹ Hemadri, Mander, and Nagraj (2000).

¹⁰ Clause 1.7 of the Policy.

¹¹ NRRP-2007 applies to four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI of the Constitution.

¹² For example, the Uttar Pradesh Special Economic Zone Development Authority Act, 2002.

land and sell the same to private parties without any burden of meeting R&R requirements. This can be viewed as a lacuna in the existing R&R framework.

R&R LAWS BY STATE GOVERNMENTS

In addition to the state policies as stated above, there have been legislations in the states of Maharashtra, Madhya Pradesh, and Karnataka, namely, the Maharashtra Rehabilitation Act, 1989, *Madhya Pradesh Pariyojna ke Karan Visthapit Vyakti (Punsttapan) Adhinyam* (Madhya Pradesh Resettlement Act), 1985 and the Karnataka Resettlement of Project-Displaced Persons Act, 1987, which were envisioned as progressive legislations legally mandating resettlement and rehabilitation of the PAPs at the state level.

There were, however, major lacunae which limited the effect of these legislations. All the state enactments were

either project-specific or their applicability was dependent on the discretion of the government. The Madhya Pradesh Act, for example, basically revolves around persons affected on account of irrigation projects and hence has a limited focus. Further, the package of rehabilitation in most of these Acts is in line with the compensation as provided under LAA, 1894 which means that the compensation is basically in monetary terms. The question as to whether the compensation principle of 'land for land' should be effected as a premise for rehabilitation has not been answered by all the existing laws. The Karnataka Resettlement of Project-Displaced Persons Act, 1987 was repealed in 2002 and the Maharashtra Rehabilitation Act, 1989 was repealed and replaced by a new legislation in 1999, namely the Maharashtra Project Affected Persons Rehabilitation Act, 1999, (see Box 7.2).

Box 7.2

Maharashtra Project Affected Persons Rehabilitation Act, 1999 An Overview of Provisions

In Maharashtra, there have been enactments from time to time in the area of resettlement of PAPs. The Maharashtra Resettlement of Project Displaced Persons Act in 1976 was the first one. This Act, however, was repealed in 1989 and gave way to the Maharashtra Project Affected Persons Rehabilitation Act, which in turn was repealed a decade later and replaced by the Maharashtra Project Affected Persons Rehabilitation Act, 1999, which continues to be in force in the state.

The 1989 Act aims at rehabilitation of persons affected by projects in certain sectors such as irrigation, power, and roads. The Act further defines the persons who can claim benefits under the Act as affected persons. These include occupants whose land has been acquired for the project in the area constituted as *affected zone*, tenants in actual possession of land under the relevant tenancy law, and occupants whose land has been acquired for construction, extension, improvement or development of canals for a project in the area constituted as *benefited zone*.¹³ The affected persons, once identified, are rehabilitated by the state government in accordance to the provisions under this Act.

The Act states that the State Government shall, subject to the availability of sufficient land for the purpose, *rehabilitate affected persons from the affected zone under an irrigation project, on land in the villages or areas receiving benefit of irrigation from such project.*

As regards land acquisition, the Act provides that the commissioner or the collector as authorized by him has the power to purchase or exchange any land required for carrying out rehabilitation works. However, the amount paid for such purchase of land shall be approximately equal to the amount of compensation payable for the land that is compulsorily acquired by the commissioner under the LAA, 1894.¹⁴ The state government has the power to grant developed land to the project-affected persons on payment of certain amount as prescribed by the government.

Source: Authors' own

Land Acquisition Under Special Laws: An Overview

In addition to the LAA, 1894, there are separate laws in states under which land is acquired for various purposes such as housing, town planning, construction of highways,

etc. Proceedings from a 2006 World Bank Workshop provide a useful snapshot:¹⁵

In view of the problems associated with the LA Act, some states including Maharashtra, Tamil Nadu, and Andhra Pradesh have tried to simplify the procedure as part of Rules under the LA

¹³ Under Sec. 13(3) of the Act, the commissioner shall declare the extent of the area to be constituted as *affected zone* under the project. He shall also declare the extent of the area of the *benefited zone*, if the project is an irrigation project.

¹⁴ An eligible affected person, who desires to get land or plot in the affected and benefited areas, may make an application to the Collector in a prescribed manner as stated under the Act.

¹⁵ See Proceedings from the Workshop on Land Acquisition, Resettlement and Rehabilitation in Urban Development and Redevelopment, 2006, p. 23.

Act.¹⁶ Land acquisition has been mandated by several other national legislations.¹⁷ Similarly, certain states have passed separate and special legislations for acquiring land in order to avoid lengthy procedures under the LA Act. For example, legislations such as Maharashtra Regional and Town Planning Act (1966), Housing Area Development, Industrial Development, City Improvement and the Bombay Municipal Corporation Act, (1888) broadly provide for less cumbersome procedures involving acquisition through notification and payment of compensation based on agreement/negotiation. In Tamil Nadu also, several legislations provide for acquisition through notice and compensation through agreement.¹⁸ The use of specific acquisition legislations is noticeable in Andhra Pradesh,¹⁹ where a different method of land valuation is adopted to minimize speculation.

SPECIAL ENACTMENTS FOR ACQUISITION OF URBAN LAND: THE CASE OF MAHARASHTRA

Within a state, there are special legislations for designated regions or urban areas separately empowering the relevant authorities to acquire land for various purposes, illustrations of which are given below for the state of Maharashtra.

Land Acquisition for Regional Plans and Town Planning

The Maharashtra Regional and Town Planning Act, 1966 provides 'for planning the development and use of land in regions established for that purpose and to make better provisions for the preparation of Development plans'. This is done 'with a view to ensuring that town planning schemes are made in a proper manner and their execution

is made effective'.²⁰ On the question of land acquisition, the Act clarifies that 'any land required, reserved or designated in a Regional Plan, Development Plan or Town Planning Scheme for a public purpose or purposes including plans for any area of comprehensive development or for any new town shall be deemed to be land needed for a public purpose within the meaning of the Land Acquisition Act, 1894'.²¹ Under the Act, after the publication of a draft Regional Plan, a development or any other plan or town planning scheme, acquisition of land can proceed under the provisions of the LAA, 1894. On receipt of application from the appropriate planning authority, the state government has to make a declaration in the Official Gazette, in the manner provided under Sec. 6 of the LAA, 1894.²²

Land Acquisition for Industrial Development

The Maharashtra Industrial Development Act, 1961 provides for making special provisions for securing the orderly establishments in industrial areas and industrial estates in the state, and for this purpose establishes the Maharashtra Industrial Development Corporation (MIDC). The Act provides for acquisition of land for various purposes of the Corporation or for other purposes in furtherance of the objects of the Act. The state government is empowered to acquire land for the purposes of this Act, following the procedure under the LAA, 1894.

Land Acquisition for Metropolitan Region Development

The Mumbai Metropolitan Region Development Authority Act, 1974, established the Mumbai Metropolitan Region

¹⁶ Maharashtra has included provision for preliminary survey, and made the decision of the concerned officer (the collector) accountable. Tamil Nadu has increased scope for urgent acquisition, brought in procedural clarity, and set a time limit of two years for award. Andhra Pradesh has defined urgent public purposes, and has made the acquisition notice period more pragmatic.

¹⁷ National Highways Act, 1956; National Highways Authority Act, 1988; Coal Bearing Areas (Acquisition and Development) Act, 1957; Cantonment Act, 1924; Electricity Act, 1910; Indian Forest Act, 1927; Petroleum and Minerals, Pipelines (Acquisition of Right of User in Land Act); Indian Telegraph Act, 1885; and Indian Railways Act, 1890, 1989.

¹⁸ Acquisition of Land for *Harijan* (Scheduled castes) Welfare Schemes provides for land acquisition through notice; and compensation through enquiry and market value; the Madras State Housing Board Act provides for land acquisition through agreement by purchase, lease or exchange of land; the Highways Act provides for acquisition through notice, compensation by agreement or through the collector and re-vesting or unused acquired land with the original owner with interest; the Acquisition of Land for Industrial Purposes Act provides for acquisition through notice and compensation through agreement; Madras City Municipal Corporation Act, 1919 and Tamil Nadu Town and Country Planning Act provide for land acquisition through agreement.

¹⁹ The Nagarjunasagar Project (Acquisition of Land) Act, 1956; Visakhapatnam Steel Project (Acquisition of Lands) Act, 1972.

²⁰ The Act also provides for the creation of new towns by means of development authorities and to make provisions for the compulsory acquisition of land required for public purposes in respect of the plans. See the Preamble to the Maharashtra Regional and Town Planning Act, 1966.

²¹ Sec. 25 of the Maharashtra Regional and Town Planning Act, 1966. Under Sec. 128, lands can be acquired for purpose other than the one for which it is designated in any plan under the provisions of the LA Act 1894 under certain conditions.

²² The declaration so published is deemed to be a declaration under Sec. 6 of the LAA, 1894. However, such declaration should not be made after the expiry of three years from the date of publication of the draft plan.

Development Authority (MMRDA) for the purpose of planning, coordinating, and supervising the development of the Mumbai Metropolitan Region. The Act contains important provisions for land acquisition by MMRDA for the purposes of the Act including slum upgradation, urban infrastructure, and R&R of the households affected by the projects falling under the purview of the Act. For the purpose of acquiring land, the MMRDA is required to make a representation to the state government, which if satisfied with the need for acquisition, may acquire the land by publishing in the Official Gazette, a notification specifying that the state has decided to acquire the land under the Act.²³

The above set of laws (at the state level) are laws specially enacted for land acquisition for specific purposes, some of which are applicable in specific regions (such as urban areas), laying down procedures beyond the LAA, 1894. The state of implementation of these laws is outside the scope of the present chapter. However, there can be gaps between the intention of the laws and their effect on the ground (see Box 7.3).

Land Acquisition in State Tribal Lands

Acquisition of the tribal lands in the states is regulated by special legal regimes that: (a) seek to give the tribals powers relating to land acquisition and (b) provide for special mechanisms for preventing the alienation of the tribals' land. Some important legal provisions applicable in tribal lands on both these aspects are discussed below.

THE POSITION UNDER PESA

The 73rd Amendment to the Constitution relating to Panchayats and the subsequent enactment of provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA) have attempted a genuine transfer of power making the *Gram Sabha*, the cornerstone of the process of democratic decentralization in the tribal areas of the country. PESA extends to all the states having Schedule V Areas (as defined and categorized under the Constitution of India; refers to the predominantly tribal areas in the states). These states are: Andhra Pradesh, Bihar, Chhatisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Orissa, and Rajasthan.

PESA aims at ensuring that the 'gram sabha or panchayat at appropriate level' are endowed specifically with powers for management of land resources, amongst other things. A significant aspect of this power is that these bodies need to be *consulted* before (i) acquisition of land for development projects and (ii) R&R of persons affected by such projects in Scheduled areas.²⁴

There are, however, ambiguities in the manner in which states have adopted this provision under PESA. In Madhya Pradesh, for example, it is provided that the Gram Sabha shall have 'the power to manage natural resources including land in Schedule Areas'.²⁵ On the other hand, the adoption of PESA by Andhra Pradesh provides that the Gram Panchayat or the Gram Sabha shall exercise the function of preventing alienation of land in Scheduled areas and restoring any unlawfully alienated

Box 7.3

Results of Land Acquisition may be Contrary to Expectations: The Case of DDA in Delhi

While special legal regimes have been created in states for the acquisition of land by state-appointed authorities, even if the land acquisition is executed as per the due process, it may still not culminate in desirable results. One well-known case in point pertains to the Delhi Development Authority (DDA), which is responsible for large-scale public acquisition of land for urban development. On evaluation of DDA's acquisition process, the Planning Commission has observed that:

- it has not been possible for DDA to provide land at affordable prices to low income beneficiaries, resulting in large-scale *jhuggi jhopadi* colonies;
- in the absence of appropriate price signals, land has been sub-optimally used, resulting in over-provision to powerful groups; and
- DDA's policy to auction very few plots at a time and treating the maximum price quoted in such bidding as the real market price has in fact meant artificially increasing the land price.

Source: Planning Commission Study on DDA experience as quoted in the Regional Plan document of the MMRDA, p. 216, Sec. 9.24, available at <http://www.regionalplan-mmrd.org/IN-9.pdf>

²³ See Sec. 32 of the Mumbai Metropolitan Region Development Authority Act, 1974.

²⁴ The Bhuria Committee Report—on whose recommendations the Central Law on PESA came into being—had recommended that prior consent of the Gram Sabha/local village community be taken before acquisition of land in Scheduled Areas. The provision of 'consultation' under PESA, instead of 'consent', significantly waters down the power vested with the Gram Sabha or Panchayat.

²⁵ *Madhya Pradesh Panchayati Raj Avam Gram Swaraj Adhiniyam*, 2001.

land of scheduled tribes.²⁶ However, with respect to land acquisition, it has been provided that the *Mandal Parishad*, at a higher tier than the Gram Sabha, should be consulted before making any acquisition of land in the Scheduled areas for developmental projects and before resettling or rehabilitating persons evicted by such projects, while the planning and implementation of such projects shall be coordinated at the state level. Thus, with regard to land acquisition, the role of the Gram Sabha is significantly curtailed in Andhra Pradesh. In Gujarat, the case was made before the High Court that the Gram

Sabha needs to be consulted before land acquisition is undertaken. The High Court held that in the context of the Amendment to PESA, as adopted by Gujarat under the Gujarat Panchayat Act, prior consultation with *Taluka Panchayat* alone is adequate, and consultation with Gram Sabha is not necessary.²⁷ An alternate view on the scope of PESA is presented in Box 7.4.

In addition to the difficulties in *formulation* of the provisions relating to land acquisition in state laws under PESA which have been pointed out above, the level of *implementation* of these provisions is worth examining

Box 7.4

Development in Tribal Areas and PESA

*K. Balagopal**

Rights of Scheduled Tribes in the Scheduled areas have become hostage to the exigencies of development in India's quest for two-digit growth rate. Rapid growth requires substantial utilization of minerals which are to a major extent located under the soil in the Scheduled areas, and their extraction brooks no delay. Coal, which is the raw material for thermal power, is the worst offender because rapid increase of power generation is deemed to be an unavoidable concomitant of growth.

The Scheduled area of Khammam district of Andhra Pradesh is an area where there are sizeable deposits of coal, till recently mined by labour-intensive underground mining, which did affect the livelihood rights of the tribal people of the area to a limited extent. But, with open-cast mining being resorted to in the interests of greater productivity and cost-efficiency, the effect is taking devastating proportions. Whole hamlets and their fields are proposed to be cleared by force to hand over the land for mining of coal, dumping the top soil ('over-burden' is the technical name), and building the rooms/buildings of the establishment. It is being done by the Singareni Collieries Company, a public sector concern owned jointly by the State and Central Governments. The land is being cleared as if it is not governed by any special law or laws but only the ordinary legislation such as the LAA and Revenue rules and regulations. The take-over of the hamlet of Daratogu and parts of neighbouring hamlets—Kothagudem, Kothuru, Kishtaram, Lacchagudem, and Dubbatogu Gumpu—for clearing the lands for Koyagudem Open Cast Project-II in Tekulapalli Revenue Mandal is imminent. So is the take-over of Punukudu Chelka and the neighbouring Mailaram in the Kothagudem Revenue Mandal.

The Panchayats (Extension to Scheduled Areas) Act, 1996 (Act 40 of 1996), briefly known as PESA, prohibits any such unilateral acquisition. It is a constitutional mandate since, by virtue of Art. 243 M(4) of the Constitution, PESA is not just an Act of Parliament, but Part IX of the Constitution as applicable to the Scheduled areas. Sec. 4(d) of PESA gives the tribal gram sabha the right to safeguard and preserve, inter alia, the community resources, which includes the land, the soil, minerals, etc. This right precludes taking over of tribal villages and lands in the scheduled area without intimation and consultation with the gram sabha and arguably, without its consent too. Sec. 4(i) of PESA mandates consultation with the panchayat at the appropriate level before land acquisition or rehabilitation is undertaken in the Scheduled areas. Also, Sec. 242-F of the AP Panchayat Raj Act has prescribed the appropriate level as the middle tier that is the Mandal Parishad. Such consultation has to be effective, in the terms set out by the Supreme Court in relation to the expression 'consultation' used by the Constitution, in the context of appointment of judges. No such consultation has taken place nor is it contemplated in the above instance of land acquisition for open-cast coal mines.

But PESA is not the only special law being violated in the interests of the exigencies of rapid development. The Schedule Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights), 2006 (Act II of 2007) recognizes rights in reserve forest land enjoyed prior to 13 December 2005. But a lot of such land is being simply taken over for the coal mines, claiming that the tribals are in illegal occupation and have no right to it.

Communist politics in its various shades is very much present in the district. But the communist parties are not being able to organize themselves fast enough to match the speed of the government's acquisition, so as to update the people's knowledge of (i) their rights and (ii) the ways of violation devised by the government. They are also unable to discover ways of overcoming the pessimism resulting from the adamant attitude of the government in the past.

* The author is associated with the Human Rights Forum, Andhra Pradesh.

Note: Views expressed here are of the author.

²⁶ AP Panchayat Raj (Amendment) Act, 1998 (AP-PESA).

²⁷ See *M.N. Vasava vs State of Gujarat*, 2003 AIHC 3830 (DB).

closely. Since PESA came into being, there has been growing criticism from the civil society, pointing out that in most cases even the minimal mandate of ‘*consultation before acquisition*’ is not honoured by the project proponents, and that this aspect has been taken lightly by the state governments.²⁸

REGULATION OF TRANSFER OF TRIBAL LAND TO ‘NON-TRIBAL’: A STATE PERSPECTIVE

While depriving the tribal person of his land for an industrial or infrastructure project may be justifiable under the *due process of law* in some cases, in other cases this may not be so. All such cases are part of the phenomenon of ‘tribal land alienation’ in the country. Acquisition and alienation of land in many cases can be seen as the two sides of the same coin and, therefore, special legal provisions seeking to prevent tribal land alienation also deserve a closer look.

A number of state laws (such as Land Revenue Codes) have been passed from time to time in independent India with the objective of protecting the interest of tribals in their lands, particularly by regulating the transfer of land from tribals to ‘non-tribals,’ which include government and corporate bodies (see Box 7.5).

There are similar provisions in other states as well. In 2003, the Orissa Government amended relevant rules to make the law more stringent in protecting the lands of tribals and ensuring that these could not be transferred to non-tribals in the Scheduled areas of the state. Under the new rules, no tribal person can transfer his land to a non-tribal or even to another tribal if he possesses less than two acres of irrigated land or less than five acres of

unirrigated land. Violations of the rules entail severe penal consequences including extended jail terms.

Despite the categorical legal imperative, however, land alienation of the tribals persists, and in large areas of the country it is also endemic. In four districts in Orissa—Dhenkanal, Ganjam, Koraput, and Phulbani—about 56 per cent of the total tribal land was lost to non-tribals over a 25–30 year period (Mearns and Sinha 1998, p. 54).

With the mandate of finding a lasting solution to the vexed problem of tribal land alienation and consequent indebtedness, various commissions and committees were appointed in the past. Some of the legislative and judicial measures suggested by these committees were radical and potentially far-reaching. These include, among others: ousting the jurisdiction of civil courts in cases of eviction of Scheduled Tribes, suspending the operation of the Limitation Act in cases of dispute relating to the tribal land, separate legislation for the conferment of the ownership rights, provisions in all civil suits involving tribal land for making the government a party and empowering it to give and rebut evidence, banning transfers of tribal land to non-tribals in all states and union territories, amending the law of evidence to place oral evidence on a higher pedestal, and establishing special courts for prompt disposal of land alienation cases.

Conclusion

The LAA, 1894 provides the foundation to the land acquisition regime at the state level. The changes made by the states while adopting the law are largely procedural, with little or no substantive changes made. While the substantive rights of those affected by the land acquisition

Box 7.5

Regulation of Transfer of Tribal Land to Non-Tribals in States Provisions of Madhya Pradesh Land Revenue Code

- The Code regulates the transfer of a land parcel held by a member of aboriginal tribe by way of sale or otherwise to a person not belonging to such a tribe, if the land falls in the Schedule V areas, so declared by the state government;
- Transfer of agricultural land from a tribal to a non-tribal is prohibited in Schedule V areas. For transfer of non-agricultural land of a tribal falling in the schedule V areas to a non-tribal, the Code provides that prior permission has to be sought by the Collector and the Collector, while permitting such transfer, has to record reasons for it. The Collector, before granting such permission, must also ascertain that the person acquiring the land has been a resident of the area and proves adequacy of the consideration and such other matter as may be prescribed;
- If the State Development Officer (SDO) on an inquiry and after giving reasonable opportunity of hearing to all the parties is satisfied that the transfer of the land belonging to a tribal falling in Schedule V area is not bonafide, then the SDO can set aside such a transfer and restore the land to the transferor by putting him in possession of the land forthwith; and
- The Collector has the powers to initiate *suo moto* inquiry within five years of the transfer,

Source: Madhya Pradesh Land Revenue Code, 1959.

²⁸ It may be a worthwhile exercise to carry out a careful state-wise assessment of the nature and level of implementation of the provisions under PESA, with a view to take corrective actions before it is too late.

remain more or less the same, on the whole the procedural changes enacted by various states to the land acquisition process have been across the spectrum. Some procedural changes require more rigorous standards to be observed during the acquisition process (for example, during serving of notification), while other procedural changes facilitate speedier completion of the land acquisition process. No state has ventured to accord greater rights than those provided under LAA, 1894 to individuals whose land is to be compulsorily acquired for public purpose.

In addition to the basic land acquisition law, special enactments related to land acquisition exist in many states, which separately empower the relevant authorities to acquire land for designated purposes such as town planning, improvement and development of slum areas, etc. An examination of the implications of these legislations

indicates a possible scope for rationalization of the multiple legislations.

The R&R framework at the state level is still primarily a policy framework, with only a few states having adopted legally enforceable R&R laws. Even within the R&R policy framework, state-wide policies are few, with most policies being project-specific. A cursory review of the state-level R&R frameworks reveals that the existing national level R&R policy framework allows for ambiguities in interpretation and, thus, in adoption of these policies at the state level. The need to strengthen the mechanism of R&R requirements under the project clearance process is clearly indicated. As regards rights of tribals, states have put in place regulations to restrict alienation of land through distress sales; however, increasing rates of tribal landlessness suggest that these regulations are often not effective.

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8

Land Acquisition Process for National Highways Issues and Recommendations

V.K. Sharma and Tarun Choudhary

Roads and highways are linear projects that involve widening of existing roads and opening of new roads for by-passes, and have a long and narrow corridor of impact. The National Highway Act (NHA), 1956 provides for acquisition of land for national highways. In this chapter, we contrast the provisions of the NHA with that of Land Acquisition Act (LAA), 1894. Later, we discuss the practical difficulties encountered in acquiring land for national highways and the ways in which some of these difficulties can be mitigated.

Land Acquisition Act, 1894 versus National Highway Act

Land is acquired by the government under various statutes. The most important and general law for land acquisition for public purposes and a company is the LAA. It establishes the principle of eminent domain by which the state can compulsorily acquire private lands. The LAA covers land acquisition for every kind of public purpose—dams, industry, hospitals, educational institutions, housing, official and commercial buildings, airports or railways.

At the same time, there are other laws for compulsory land acquisition for specific purposes. These include, for example, the Coal-Bearing Areas Act, the Wildlife Protection Act, and the Forest Act. Until 1956, land for all highways was also acquired under the LAA. But since the enactment of the NHA, 1956, land acquisition for national highways is carried out only under this Act.

The NHA applies only to the national highways, which are under the jurisdiction of the Central Government and

not to state highways, where land must be acquired under the LAA. How do the two Acts differ? There are important differences.

Execution

Under the LAA, land acquisition has to be handled by the revenue department, which means the District Collector and his staff of land record keepers and surveyors. The NHA, on the other hand, appoints a competent authority for this purpose, which can be constituted from within the National Highways Authority of India (NHAI) or appointed at the district level, generally the revenue department.

Time Limit

Under the LAA, the Collector is required to make an award within a period of two years from the date of publication of the declaration and if no award is made during that period, the entire proceeding of the acquisition of land shall lapse. The Collector, after making an award, can take possession of the land. Under the NHA, there is no such time limit defined and possession can be taken any time after the declaration is made by giving a notice of 60 days to the landowner.

Urgency Clause

The LAA has an Urgency Clause, according to which the government can take possession of the land within 15 days of publishing the preliminary notification without even making the award. There is no such clause in the NHA.

Compensation

The LAA provides for *solatium* amount (30 per cent of the market value of land) to those whose land is acquired in consideration for the compulsory nature of acquisition. Besides, landowners receive a payment of an interest (12 per cent per annum on the market value of land) for the period commencing from the date of publication of notification till the award of the collector or the date of taking possession, whichever is earlier. However, no such provision exists in the NHA.

Resettlement & Rehabilitation (R&R) Benefits

Unlike the LAA, acquisitions under the NHA are necessarily linear in nature. The National R&R Policy provides that for such acquisitions, in addition to the compensation payable under the policy, the concerned authority should also pay an *ex-gratia* grant of a minimum of Rs 20,000 per affected person.

Issues in Land Acquisition

Delay in acquisition of land has been one of the major problems in the execution of road and highway projects. In some cases, land acquisition starts only after the appointed day; that is, the day on which the concession agreement is signed between the NHAI and the contractor, although in a majority of cases, land acquisition begins prior to the appointed day. In all cases, however, land acquisition is completed several months after the appointed day. This often puts the concessionaire in a difficult situation, since he has to complete the project within a defined time period or face penalty. The challenge then is to complete land acquisition and provide encumbrance-free stretches to the contractors on time. The main reasons for delay in the acquisition of land are given below:

- (i) *Administration*: When the land is acquired under the National Highways Act, 1956, the NHAI requests the district administration to nominate a revenue officer to be appointed as the competent authority under the Act. Under the Act, the NHAI has the option of appointing its own manager as a competent authority, but invariably relies on district administration for the purpose, because the revenue department has access to land records. The District Administration appoints an Additional District Magistrate or Sub-Divisional Magistrate as the competent authority. There is generally delay in the appointment of a competent authority by the state government. Delay in nomination of the competent authority by the state governments invariably leads to delay in the land acquisition process;
- (ii) *Institutional Capacity*: Existing capacity, awareness, and knowledge levels amongst the planners and implementing partners are considerably weak. The implementing agency is dependent on the district administration to acquire land, an external agency over which they have no control. The district administration has other pressing duties and is often unable to implement the issue of land acquisition as a priority for the project, which affects the capacity of the implementing agency to deliver results on time and efficiently;
- (iii) *Frequent Transfer*: The competent authority is often transferred frequently;
- (iv) *Valuation*: Valuation of the structures and other assets such as trees on land requires coordination with other departments and this process takes time;
- (v) *Land Administration and Records*: Outdated and inaccessible revenue records and unclear titles of the land being acquired results in preparation of poor land acquisition plans; this also excludes at times the legitimate rights of the affected persons for compensation and increases litigation. The settlement of claims during land acquisition and duplication of procedures and processes to acquire land under the revised land acquisition plans delays the process. The revenue records are not updated, and in some cases, joint verification is not done in time, which causes delay in the process of acquisition.

SUGGESTIONS FOR LAND ACQUISITION PROCESS FOR TIMELY LAND ACQUISITION

In view of the practical difficulties listed above, the following measures by agencies involved in the project may help in reducing delays on account of land acquisition for road and highway projects:

- updating land records through settlement of claims of ownership should be one of the pre-project activities,
- competent authority should mobilize and update records in villages coming under the project, as soon as they are identified. This should be done prior to the initiation of land acquisition process or at the project formulation stage;
- computerized records of rights should be in the public domain;
- sensitization of public and revenue officers is required including that of lower staff, on their role and responsibilities: why and when land is required, to update records, the sense of urgency and the need to avoid delay. Intensive training programmes with exposure visits at the inception stage of the project and

follow-up training at regular intervals may be helpful in the process of sensitization;

- enhanced land acquisition and resettlement institutional capacity is needed at the design stage—well before the start of civil works. The capacity of revenue offices needs to be assessed and, where considerable increased volume of work is expected, commensurate staff and budget resources need to be assigned. Nodal officers are needed to coordinate tasks among agencies, with decentralized decision making to speed up work progress;
- creating effective systems for better delivery results such as marking corridor of impact, centre line, and right of way should be completed by design consultants before detailed designs. This will allow land acquisition to commence within the project preparation stage; and
- surveys of assets proposed to be acquired need to be done before Land Acquisition schedules are prepared and included in the Detailed Project Reports (DPR). Increased outsourcing of survey work and valuation of assets and buildings is required; of course, statutory functions must remain with the government. There is a need to build the credibility and capacity of private sector in this respect.

Forest and Environmental Clearances

In addition to the difficulties arising out of institutions and processes related to land administration system during land acquisition, the highway projects also face difficulties due to processes associated with obtaining forest, environment, and wildlife clearances, wherever required. Environmental clearance—needed only in specific cases (mentioned below)—is required for the entire stretch of the project, whereas forest clearance is required only for that stretch of national highways passing through forest land. Further, wild life clearance is required not for the entire stretch of highway passing through forest land, but only that stretch that disrupts wildlife (such as notified in wildlife sanctuary or national parks). Further, environmental clearance has to precede forest and wildlife clearance; the latter two can, however, be pursued concurrently. These clearances are discussed below.

ISSUES RELATED TO FOREST CLEARANCE:

EXPERIENCE AND SUGGESTIONS

One of the problems encountered in the execution of highway projects is on account of the time taken in obtaining the forest clearance. Forest clearance is granted in two stages. The first stage clearance is only an ‘in-principle’ approval, stipulating certain conditions. Final clearance is issued after fulfillment of all the conditions. Ground level activity for implementation of the project cannot be started until final clearance is issued. Besides, the conditions stipulated by the Ministry of Environment and Forests (MoEF) under the Central Government in the first stage clearance, and the state forest departments impose additional conditions. At times, the additional conditions imposed by the states appear unreasonable and are difficult to meet. Demands have been made for staff quarters, wireless systems, vehicles etc. without apparent justification.¹ The extent of compensatory afforestation to be taken up as one of the conditions also varies greatly from state to state.

To prevent situations where difficult-to-implement conditions are imposed by the state governments, the MoEF should consider the issue of uniform policy guidelines on the nature of additional conditions that may be prescribed by the state governments.

ISSUES RELATED TO ENVIRONMENTAL CLEARANCE:

EXPERIENCE AND SUGGESTIONS

The MoEF is now adopting the procedures notified under the new Environment Impact Assessment (EIA) Notification, 2006 under which environment clearance is required in case of the following road projects:

- new national highway more than 30 km; and
- national highway more than 30 km and widening of more than 20 m.

Provisions in the new notification have implications on the timely environmental clearance of the projects. The notification has laid down elaborate procedures for granting the environment clearance. All the proposals will now have to be submitted right at the feasibility stage. For each project, MoEF will draft a separate Terms of Reference (TOR). Based on the TOR, the proponent authorities

¹ The state governments are authorized to impose conditions, being the owner of the land, before the grant of approval under the Forest (Conservation) Act, 1980. These conditions are taken into consideration while examining the proposal by the Forest Advisory Committee. However, no conditions are imposed after the approval accorded by the Central Government.

have to prepare the complete EIA. The projects are then examined by the Expert Committee either at the Central level or at the state level, depending upon the category in which it falls. The experience suggests that the entire process of clearance takes not less than 9 to 12 months. This can become one of the major reasons for delays in the national highway projects.

In the interest of timely completion of highway projects, it might be better if the procedure for obtaining clearance for such projects is simplified and standardized to facilitate reduction in time in obtaining clearance for the project. As per the existing regulations, the land acquisition for projects of more than 30 km length and involving more than 20 m of widening requires environmental clearance. Instead, it may be desirable to exempt those projects from getting environmental clearance where construction activities are confined to a total 'Right of Way' (RoW) of 60 m, which is the standard norm for the national highways as stipulated by the Ministry.

ISSUES RELATED TO WILDLIFE CLEARANCE: EXPERIENCE AND SUGGESTIONS

In practice, it is extremely difficult to obtain Wildlife clearance in time. It takes almost 2 to 3 years in getting the final approval from the Forest Department. The whole process involves various stages, which are as follows:

- (i) Submission of application to the Wildlife Warden of the district;
- (ii) Independent examination of the proposal by Chief Wildlife Warden of the state;
- (iii) Scrutiny and examination by the State level Wildlife Advisory Body;

- (iv) After recommendation by the State Wildlife Advisory Body, the case is forwarded to National Board of Wildlife (NBW);
- (v) Consideration of the proposal by NBW;
- (vi) After recommendation by the NBW, the proposal is forwarded to the Supreme Court of India, which refers it to the Central Empowered Committee (CEC) constituted by the Supreme Court to advise in the matter of environment, forest, and wildlife;
- (vii) After receipt of approval from the Apex Court, the proposal is processed by the state government if no forest land is involved for issue of the government order; and
- (viii) The proposal is thereafter submitted to the Central Government, if forest land is involved for consideration under the Forest (Conservation) Act, 1980 and to grant Stage I approval.

The proponent authorities are required to seek clearance at two stages—which can be quite tedious and time-consuming—first at the time of surveying the area and thereafter for obtaining the final clearance. There always remains an uncertainty with regard to whether the projects on such alignments would receive final approval.

In order to streamline the process, it would be better if the environmental concerns are taken into consideration at the time of preparation of the DPR and all the three clearances, which are statutorily required, and are processed simultaneously under the relevant Acts/Notifications. Once the approval is granted for a specific alignment for doing surveys, taking into account the above environmental concerns including forests and wildlife, then the proposal stands very high chances of approval.

9

Obtaining Forest Clearances under the Forest (Conservation) Act, 1980

C.D. Singh

Introduction

With a view to regulate the unabated diversion of forest land to non-forestry purposes, the Government of India enacted a legislation, the Forest (Conservation) Act with effect from 25 October 1980, which provides a regulatory mechanism for unavoidable use of forest land for various developmental purposes. Under Sec. 2 of the Act, every State/union territory (UT) Government, before permitting investigation/survey/prospecting in forest land and diverting/de-reserving forest land for non-forest purposes, requires prior approval of the Central Government. Also, the Centre has, from time to time, framed guidelines and rules under the Forest (Conservation) Act, 1980. The Forest (Conservation) Rules, 2003 are currently in force, which prescribe detailed procedures for obtaining forest clearances for projects involving diversion of forest land.¹ This chapter provides the salient features of such procedures.

Forest Conservation Rules, 2003

A TWO-STAGE PROCESS

The statute for forest diversion requires the diversion to be done in two stages. At Stage-I (that is, the 'in-principle

approval' stage), the proposal is either agreed to or rejected after being thoroughly examined by the regional offices (up to 5 ha), State Advisory Group (SAG) (5 to 40 ha), and Forest Advisory Committee (more than 40 ha). If agreed to, certain conditions, largely relating to payment of appropriate opportunity costs and expenses towards mitigating the environmental damages of diversion of forest land are stipulated, which are required to be fulfilled by the project authorities. Prominent conditions among these include:

- Net Present Value (NPV) or the quantification of the environmental services provided for the forest area diverted to non-forestry uses as determined by the Central Government from time to time by appointing an expert committee;
- Identification of non-forest land for Compensatory Afforestation (CA) and payment of cost towards CA, or afforestation done in lieu of the diversion of forest land for non-forestry use under the Forest (Conservation) Act, 1980;
- Cost of Penal Compensatory Afforestation or afforestation work to be undertaken over and above the

¹ Prospecting of any mineral, done under prospecting licence granted under Mines and Minerals (Development and Regulation) Act, 1957, which requires collection/removal of samples from the forest land would be a stage between survey and investigation and grant of mining lease, and as such permission under Forest (Conservation) Act, 1980 would be required. However, in case of metallic ores—test drilling up to 20–25 boreholes of maximum 4" dia per 10 sq. km and in case of coal and lignite (non-metallic ores)—(a) test drilling up to 15 boreholes of maximum 4" dia per 10 sq. km for open cast mining; and (b) test drilling up to 20 boreholes of maximum 4" dia per 10 sq. km for underground mining for prospecting exploration or reconnaissance operations, without felling of trees, shall not attract the provisions of the Act. In all other cases, prior permission of the Central Government is required.

prescribed compensatory afforestation under the Forest (Conservation) Act, 1980 in lieu of the extent of area over which non-forestry activities have been carried out without obtaining prior approval of the competent authority under the Forest (Conservation) Act, 1980; and

- Other expenses towards mitigating the environmental damages including catchment area treatment, wildlife preservation, biodiversity conservation, and rehabilitation of displaced persons, if any.

After the receipt of the Compliance Report, fulfilling the conditions stipulated in Stage-I (in-principle approval) from the user agencies through the respective State/UT Governments, Stage-II clearance is accorded by the Government of India. Following this, the project authorities are handed over the forest land for non-forestry use, provided they also have other requisite clearances.

DECISION-MAKING UNDER DIFFERENT JURISDICTIONS

The proposals seeking forest clearance are dealt with by different decision-making bodies, as summarized below:

1. The proposal is submitted by the concerned State/UT Government seeking prior approval of the Central Government (Ministry of Environment and Forests or the MoEF);
2. Proposals involving more than 40 ha of forest land are sent to the MoEF, New Delhi;
3. Proposals involving forest land up to 40 ha are sent to the concerned regional offices of the MoEF. These offices are situated at Shillong, Lucknow, Chandigarh, Bhopal, Bhubaneswar, and Bengaluru;
4. In the MoEF at New Delhi, the proposal is examined by the FAC constituted under Sec. 3 of the Forest (Conservation) Act, 1980. The decision is then taken by the Competent Authority on the basis of the recommendations of the FAC;
5. In the regional offices of the Ministry, proposals are examined by the SAG pertaining to the concerned State/UT. The decision is then taken by the Competent Authority in the MoEF, New Delhi on the basis of the recommendations of the SAG;
6. The Regional Chief Conservator of Forests, who heads the Regional Office, has been empowered to take decisions on proposals involving forest land up to 5 ha except the proposals related to mining and regularization of encroachment; and
7. All proposals for regularization of encroachment are dealt with by the MoEF, New Delhi irrespective of the area involved.

SEEKING FOREST CLEARANCE UNDER THE FOREST (CONSERVATION) RULES, 2003

Every user agency, that wants to use any forest land for non-forest purposes, is required to make its proposal in the appropriate form, that is, Form 'A' (see Box 9.1) to the concerned Nodal Officer² along with requisite information and documents, complete in all respects, well in advance of taking up any non-forest activity on the forest land.

SIMPLIFIED PROCEDURE FOR CERTAIN CATEGORIES OF PROPOSALS

1. In respect of proposals for laying transmission lines, pipelines for drinking water supply, laying telephone/optical fibre lines, and exploratory drilling for prospecting of oil, which do not involve felling or cutting of trees, only the following particulars may be furnished in the prescribed form:
 - (a) Map of the area along with geographical location of the project;
 - (b) Purpose for which forest land is required to be used;
 - (c) Extent of forest area to be diverted;
 - (d) Legal status of forest land;
 - (e) Whether forest land forms part of national park, wildlife sanctuary, biosphere reserve or forms part of the habitat of any endangered or threatened species of flora and fauna;
 - (f) Whether no alternative alignment is possible to avoid or minimize use of forest land and, whether, the required forest area is the minimum needed for the purpose. A certificate in this regard is to be furnished by the concerned Divisional Forest Officer after personal inspection of the spot;
 - (g) Compensatory afforestation scheme; and
 - (h) A certificate stating specifically that no cutting or felling of trees is involved.
2. Other cases involving forest area up to 2 ha, which are devoid of tree cover, may also be dealt with as per the above simplified procedure, except for proposals for mining and regularization of encroachments;

² Every State Government has appointed a Nodal Officer in the State Forest Department to look after the Forest (Conservation) Act, 1980 in the State.

Box 9.1

Form 'A' for seeking prior approval under Section 2 of the proposals by the State Governments and other authorities

PART-I

(to be filled up by user agency)

1. Project details:
 - (i) Short narrative of the proposal and project/scheme for which the forest land is required;
 - (ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale toposheet of the Survey of India;
 - (iii) Cost of the project;
 - (iv) Justification for locating the project in the forest area;
 - (v) Cost–benefit analysis (to be enclosed); and
 - (vi) Employment likely to be generated.
2. Purpose-wise break-up of the total land required (forest and non-forest both).
3. Details of displacement of people due to the project, if any:
 - (i) Number of families;
 - (ii) Number of Scheduled Castes/Scheduled Tribe families;
 - (iii) Rehabilitation plan as per State Government's R&R Policy (to be enclosed).
4. Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No).
5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation as well as cost for protection, and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (undertaking to be enclosed).
6. Details of Certificates/documents enclosed as required under the instructions.

Signature
(Name in Block letters)

Date:

Designation

Place:

Address (of User Agency)

PART-II

(to be filled up by concerned Divisional Forests Officer (DFO))

PART-III

(inspection report of the concerned Conservator of Forests)

PART-IV

(countersignature of the Principal Chief Conservator of Forests)

PART-V

(countersignature of the concerned Secretary of the State Government)

Source: Forest Conservation Rules, 2003.

3. Diversion of Forest Land for widening or expansion or realignment of Road/Rail/Canal: The proposal in the prescribed format should pass through the State Forest Department to the concerned Regional Office of the Ministry. The regional offices shall be competent to finally dispose off all such proposals having an area up to 40 ha, preferably within 30 days from

the date of receipt of the proposal. While issuing the approval, in place of normal provision for compensatory afforestation, the regional offices will stipulate a condition that for every tree cut, at least two trees should be planted. (This is applicable to only such projects where plantations have been raised on the lands and subsequently notified as 'Protected Forest')

and will not be applicable if the forest land involved is reserved/protected forests belonging to the Forest Department.)

TIME-LINES

According to the Forest (Conservation) Rules, 2003, currently in force, the time-limits prescribed at different levels are as follows:

1. After receipt of renewal proposals, in the prescribed format and complete in all respects from the user agency: 60 days for State/UT Government;
2. After receipt of fresh proposals in the prescribed format and complete in all respects from the user agency: 90 days for State/UT Government; and
3. After receipt of the proposals recommended for approval from the State/UT Government: 60 days for the Central Government to take a decision.

OTHER PROVISIONS

The Supreme Court of India, vide its various orders as given below directed the Central Government to follow certain procedures for according forest clearance:

1. Vide its order dated 13 November 2000 in WP (Civil) No. 337 of 1995, the Supreme Court of India *banned de-reservation of forests/sanctuaries/national Parks* except with the approval of the Supreme Court.
2. The MoEF moved the Supreme Court of India for deletion of the word 'forests' from the above order, dated 13 November 2000 in WP (Civil) No. 337 of 1995 through an Interlocutory Application (IA) no. 16. However, the Supreme Court of India on 9 February 2004 disallowed the request of the Ministry stating that 'We see no ground to allow the application and delete the word "forests" from the order dated 13 November 2000. The application is accordingly dismissed'.³
3. The Supreme Court of India vide its order dated 23 November 2001 in IA. No. 703 in WP (Civil) No. 202 of 1995, *restrained the Union of India from permitting regularization of any encroachments whatsoever* without their approval.
 - (a) In addition to the above, a general approval has been given to the State Governments for according approval up to 1.00 ha of forest land for non-

forest purposes for social sector developmental projects executed by Government agencies. These are also covered under the Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006;

- (b) There is also a general approval given to the State Governments for according approval under Sec. 2 of the Forest (Conservation) Act, 1980 for diversion of forest land for underground laying of optical fibre cables, telephone lines and drinking water supply pipelines which involve no tree felling, if:
 - (i) these are outside national parks or wildlife sanctuaries;
 - (ii) these are laid along the roads and within the existing right of way; and
 - (iii) the maximum size of the trench is 2.00 metre depth and 1.00 metre width.
 - (iv) Any deviation from the above category/conditions will require separate submission of proposal/permission under Forest (Conservation) Act, 1980.

DIVERSION FOR NON-SITE SPECIFIC PROJECTS

Normally, there should not be any justification for locating non-site specific projects on forest land such as industries, residential colonies, institutes, disposal of fly ash, rehabilitation of displaced persons, etc. Accordingly, State Governments are required to scrutinize the alternatives in more detail, providing complete justification for locating the project in the forest area, thus establishing its inescapability and inevitability in a convincing way.

The Central Government normally does not entertain any proposal for diversion of forest land for construction of residential or dwelling houses. The late Prime Minister Indira Gandhi had observed, 'Destruction of our forest has already caused great damage to our environment. Therefore, I am not at all in favour of use of forest land for construction of houses. ... The State Government should find other land for such purposes'.⁴

Diversion of forest land for construction of other buildings, such as schools, hospitals/dispensaries, community halls, cooperatives, panchayats, tiny rural industrial sheds of the Government, etc., which are to be put up for the benefit of the people of that area and which do not exceed 1 ha in each case, is sometimes allowed.

³ Supreme Court order dated 9 February 2004 in IA. No. 16 in Writ Petition (Civil) No. 337 of 1995.

⁴ Handbook of Forest (Conservation) Act 1980; Forest (Conservation) Rules 2003—Guidelines and Clarifications.

Measures to Reduce the Adverse Impact of the Loss of Forest Land

Compensatory Afforestation (CA) is one of the most important conditions stipulated by the Central Government while approving proposals for de-reservation or diversion of forest land for non-forest uses to mitigate the adverse impact of the loss of forest land:

1. The CA shall be done over an equivalent area of non-forest land, identified contiguous to or in the proximity of the Reserved Forest or Protected Forest to enable the Forest Department to effectively manage the newly planted area.⁵
2. In respect of certain types of proposals—extraction of minor minerals from the river beds; construction of link roads; small waterworks, minor irrigation works, school building, dispensaries, hospital, tiny rural industrial sheds of the Government or any other similar work; laying of transmission lines up to 220 KV, laying of telephone/optical fibre lines; mulberry plantation undertaken for silk-worm rearing without any felling of existing trees; (excluding mining and encroachment cases)—which directly benefit the people, provided the diversion of forest area does not exceed 20 ha, CA may be raised over degraded forest land spread over twice the forest area being diverted/de-reserved.
3. No CA shall be insisted upon for clearing of naturally grown trees in forest land for reforestation and for proposals involving forest land diversion up to one ha. (However, in such cases, ten trees will have to be planted for each tree likely to be felled.)
4. As a special provision for Central Government/Central Government undertaking projects, CA may be raised on degraded forest land spread over twice the forest area being diverted.⁶
5. Equivalent non-forest land identified for the purpose for CA are to be transferred to the ownership of the State Forest Department and declared as protected forests.
6. CA should be an additional plantation activity and not a diversion of part of the annual plantation programme.

⁵ In the event that non-forest land for CA is not available in the same district, it may be identified anywhere else in the State/UT as near as possible to the site of diversion, so as to minimize adverse impact on the micro-ecology of the area. The non-availability of suitable non-forest land for CA in the entire State/UT would be accepted by the Central Government only on the Certificate from the Chief Secretary to the State/UT Government to that effect.

⁶ This provision would be applicable to only Central sector projects and not to State sector projects being undertaken by Central PSUs on turnkey basis. In such cases, CA on equivalent non-forest land or a certificate of Chief Secretary regarding non-availability of equivalent non-forest land anywhere in the State shall be insisted upon.

In spite of the above stipulations for reducing the adverse impact of the diversion of forest land for non-forestry purposes, commensurate non-forest land is not being made available for taking up CA. Countrywide, only about 47 per cent of the area diverted is brought back into the fold of forests. This shortfall in the CA is the primary cause of increasing resistance from the NGOs, environmentalists, and wildlife experts (see Annexure 1).

Concessions

As mentioned earlier, NPV represents the quantification of value of the environmental services provided for the forest area diverted to non-forestry uses as determined by the Central Government from time to time by appointing an expert committee. Project authorities requiring diversion of forest land for other uses have to pay appropriate opportunity costs such as costs of CA, NPV of the land being diverted, and expenses towards mitigating the environmental damages including catchment area treatment, wildlife preservation, biodiversity conservation, and rehabilitation of displaced persons, if any. The Hon'ble Supreme Court of India, vide its order dated 24 April 2008 and 9 May 2008 in 202 of 1995 in T.N. Godavarman Thirumulpad vs GoI and others, has exempted certain categories of projects from payment of NPV as shown in Table 9.1.

The Apex Court has further directed that the use of forest land falling in national parks/wildlife sanctuaries will be permissible only in totally unavoidable circumstances for public interest projects and after obtaining permission from the Hon'ble Court. Such permissions may be considered on payment of an amount equal to ten times in the case of national parks and five times in the case of sanctuaries respectively of the NPV payable for such areas. The use of non-forest land falling within the national parks and wildlife sanctuaries may be permitted on payment of an amount equal to the NPV payable for the adjoining forest area. In respect of non-forest land falling within marine national parks/wildlife sanctuaries, the amount may be fixed at five times the NPV payable for the adjoining forest area.

It has also been highlighted by the Apex Court that in case of any other category seeking exemption from

TABLE 9.1
Projects Exempt from Payment of NPV as per Supreme Court of India

Sl no.	List of Activities/Projects	Exemption Levels for NPV (as percentage of full chargeable NPV)	Remarks
1.	(i) Schools (ii) Hospitals (iii) Children's playground of non-commercial nature (iv) Community centres in rural areas (v) Overhead tanks (vi) Village tanks (vii) Laying of underground drinking water pipeline up to 4" diameter and (viii) Electricity distribution line up to 22 KV in rural areas.	Full exemption up to 1.00 ha of forest land provided: (a) no felling of trees is involved; (b) alternate forest land is not available; (c) the project is of non-commercial nature and is part of the Plan/Non-Plan Scheme of Government; and (d) the area is outside National Park/Sanctuary.	As per Hon'ble Supreme Court Order dated 9.5.2008 regarding correction of the judgment dated 28.3.2008
2.	Relocation of villages from the national parks/sanctuaries to alternate forest land	Full exemption	-do-
3.	Collection of boulders/silts from the river belts in the forest area	Full exemption provided: (a) area is outside National Park/Sanctuary; (b) no mining lease is approved/signed in respect of this area; (c) the works including the sale of boulders/silt are carried out departmentally or through Government undertaking or through the Economic Development Committee or joint Forest Management Committee; (d) the activity is necessary for conservation and protection of forests; and (e) the sale proceeds are used for protection/conservation of forests	-do-
4.	Laying of underground optical fibre cable	Full exemption provided: (a) no felling of trees is involved; and (b) area falls outside National Park/Sanctuary	-do-
5.	Pre-1980 regularization of encroachments and conversion of forest villages into revenue villages	Full exemption provided these are strictly in accordance with MOEF's guidelines dated 18.09.1990.	-do-
6.	Underground mining	Payment of 50% of the NPV of the entire area.	-do-
7.	Field Firing Range	Full exemption provided: (a) no felling of trees is involved; and (b) there is no likelihood of destruction of forest.	As per Hon'ble Supreme Court Order dated 24.4.2008
8.	Wind Energy Projects	Payment of 50% of the minimum rate of the NPV irrespective of the eco-class in which the project lies provided minimum tree felling is involved.	-do- and CEC clarification dated 22.12.2008

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

payment of NPV, the State Government/user agency may approach Hon'ble Supreme Court of India as per its orders, dated 24 April 2008 and 9 May 2008, respectively.

Summary and Conclusion

It is evident that there are fairly clear and transparent procedures for obtaining permission and approvals to

use forest land for non-forestry purposes, as long as the need is site-specific and the requested amount of forest land is absolutely essential to the development project. Project authorities requiring diversion of forest land for other uses have to pay appropriate opportunity costs such as costs of CA, NPV of the land being diverted, and expenses towards mitigating the environmental damages

including catchment area treatment, wildlife preservation, biodiversity conservation, and rehabilitation of displaced persons, if any. A matter of great concern, however, is the large gap between the CA stipulated and CA achieved, which has led to increased resistance to diversion of forest

land from the NGOs and environmental and wildlife experts, and could lead to litigation as well, resulting in delays and cost overruns in projects involving acquisition of forest land.

Annexure

TABLE A9.1
Progress in CA against Use of Forest Land for Non-forestry Purposes under
Forest (Conservation) Act, 1980 during 25.10.1980 and 30.9.2008

As on 1.10.2008

Sl No.	State/UT	No. of Cases Approved	Area Diverted (in ha)	CA stipulated (in ha)			CA achieved (in ha)		
				Forest land	Non-forest land	Total	Forest land	Non-forest land	Total
1.	A & N Island	83	2,766	628	2,035	2,663	226	1,701	1,927
2.	Andhra Pradesh	525	44,947	6,555	25,493	32,048	4,588	15,806	20,394
3.	Arunachal Pradesh	131	44,191	9,998	4,544	14,542	6,162	86	6,248
4.	Assam	240	7,571	7,859	1,565	9,424	1,163	537	1,700
5.	Bihar	86	2,558	1,624	563	2,187	847	0	847
6.	Chandigarh	22	49	10	20	30	0	0	0
7.	Chhattisgarh	416	89,683	35,501	58,674	94,175	27,284	3,331	30,615
8.	Dadar & Nagar Haveli	197	287	359	279	638	269	210	479
9.	Daman & Diu	1	4	8	0	8	0	0	0
10.	Delhi	8	20	28	6	34	0	0	0
11.	Goa	91	1,727	928	463	1,391	1,131	18	1,149
12.	Gujarat	1,222	66,503	7,478	51,558	59,036	17,233	27,141	44,374
13.	Haryana	1,430	8,706	2,914	1,538	4,452	2,252	1,092	3,344
14.	Himachal Pradesh	1,240	11,131	18,157	523	18,680	5,770	137	5,907
15.	Jammu & Kashmir	8	1,500	1,125	0	1,125	288	0	288
16.	Jharkhand	234	14,956	12,232	4,880	17,112	36	0	36
17.	Karnataka	710	43,081	6,927	30,212	37,139	9,213	28,841	38,054
18.	Kerala	220	40,987	43,151	15,223	58,374	49,449	776	50,225
19.	Madhya Pradesh	897	391,083	121,159	214,816	335,975	129,560	38,134	167,694
20.	Maharashtra	1,490	91,134	28,909	34,402	63,311	44,189	27,723	71,912
21.	Manipur	23	1162	465	741	1,206	181	0	181
22.	Meghalaya	91	398	112	347	459	258	5	263
23.	Mizoram	28	25,485	19,558	10,553	30,111	38	5,521	5,559
24.	Orissa	446	44,092	9,036	39,475	48,511	11,076	22,396	33,472
25.	Pondicherry	1	1	0	0	0	0	0	0
26.	Punjab	2,499	77,009	7,994	1,819	9,813	3,919	929	4,848
27.	Rajasthan	631	25,077	6,255	15,314	21,569	3,066	7,267	10,333
28.	Sikkim	281	2,232	2,853	152	3,005	2,013	18	2,031
29.	Tamil Nadu	410	4,879	649	1,687	2,336	1,253	1,009	2,262
30.	Tripura	247	7,870	3,669	742	4,411	2,877	78	2,955
31.	Uttar Pradesh	596	41,770	57,194	6,569	63,763	2,530	4,689	7,219
32.	Uttaranchal	3,493	62,627	66,457	14,468	80,925	8,334	6,558	14,892
33.	West Bengal	83	4,162	1,924	4,035	5,959	1,237	2,664	3,901
	Total	18,080	1,159,648	481,716	542,696	1,024,412	336,442	196,667	533,109

Source: All the figures and records mentioned in this chapter have been sourced from the records available in the MoEF, Government of India, New Delhi.

Note: The area figures as indicated in the tables have been rounded off to the nearest digit for uniformity.

10 Use of Eminent Domain Process and Its Critique

Tarun Choudhary

Introduction

In India, eminent domain powers are exercised by the state mainly through the Land Acquisition Act, 1894. The Act, inter alia, describes the processes that have to be used by the state to acquire land for either itself or for a company. Although the Central Government broadly determines the contents of the law, there can be regional variations in procedural matters.¹ This chapter aims to: (i) outline the steps involved in the acquisition process laid out in the Land Acquisition Act, 1894, (ii) critically examine the processes, and (iii) assess the proposed reforms as contained in the Land Acquisition (Amendment) Bill, 2007 in the light of the deficiencies of the existing processes.

Land Acquisition Processes²

As per the 1894 Act, land can be acquired under either Part II or Part VII of the Act—procedures laid out under these two parts are somewhat different as shown by the following discussion. While the former is used when the acquiring body is the Central or state government or companies that are either owned, partly owned or controlled by the State, the latter is used in case of non-government companies. It may also be noted that while land acquisition under Part II is entirely for ‘public purpose’, acquisition under Part VII can be for both ‘public purpose’ and ‘non-public purpose’, although the scope for ‘non-public purpose’ is very limited (see below).

The details of processes under these two routes are given below:

LAND ACQUISITION UNDER PART II

In this regard the process of acquisition involves the following sequential steps.

Step 1: Notification

The process for land acquisition begins with the issuance of a preliminary notification u/s 4(1) of the Act. The notification must be published in the Official Gazette and two daily local newspapers. There must also be a public notice of the substance of the notification at convenient places in the locality. The notification says that ‘land in one or more village(s) is (or may be) needed in the foreseeable future for a public purpose (or for a company)’. This notice:

- makes it lawful for an authorized officer to enter and survey the land specified in the notice without the owner’s permission;
- alerts the landowner that he should not invest any money or labour on any improvements to his land without the collector’s consent; and
- informs the public not to acquire any interest in such land.

Typically, the landowner continues to hold the land for a long time beyond this notification, but this notice prevents him from making full use of his land and getting an appropriate return.

¹ For detail, Please see ‘Regulatory and Policy Regime of Land Acquisition: A State-level Perspective’ by Videh Upadhyay and Chandrima Sinha in this report.

² This section draws on Vaswani, Dhagamwar, and Thukral (eds) (1997).

Step 2: Filing of Objections

Owners and other people who have certain interests in the land are then required to file their objections, if any, against this notice within 30 days. These objections have to be submitted to the collector and every 'objector' gets an opportunity of being heard by the Collector. Objections are typically made on the following grounds:

- the purpose for which land is sought to be acquired is not a public purpose;
- the land in question is not suitable for the stated purpose;
- more land is being acquired than what is necessary for the proposed project;
- an alternative piece of land could be acquired which would cause less (or no) inconvenience to people; and
- the land contains historic monuments, places of public interest, religious buildings, tombs, graveyards, etc. and hence it should not be acquired.

After hearing all objections, the Collector submits a report to the appropriate government in respect of the notified land containing his recommendations on the objections and the records of the proceedings held by him. The government then takes a decision regarding the proposed acquisition based on the report submitted by the Collector.

Step 3: Declaration

Based on the decision of the government, a declaration is issued u/s 6(1), which becomes conclusive evidence that land is needed for public purpose (or for a company) and that the government can go ahead with the acquisition process. The declaration must be given the same publicity as the preliminary notification. The Act requires that such declaration should be issued within a period of one year from the date of issuance of preliminary notification.³

Step 4: Notice to Interested Parties

After the declaration, the notified land is marked out, measured, and planned as per Sec. 7 and 8 of the Act. The Collector informs the landowners about the government's intention to take possession of their land and invites claims from all interested parties to compensation by sending them a notice u/s 9(1). Interested parties can submit their objections regarding measurements and value of land to the Collector.

Step 5: Enquiry and Award

Under Sec. 11, an enquiry is conducted by the Collector regarding the objections submitted by the interested parties as per Step 4 above. On completion of this enquiry, an award is made, stating (i) area of the land, (ii) compensation payable, and (iii) its apportionment among all the interested persons. No award can be made by the Collector without prior approval by the appropriate government. The award should be made *within two years*⁴ from the date of publication of the declaration (under Sec. 6), else the acquisition proceedings lapse.

A landowner can object to the award regarding the measurement of land, amount of compensation, the persons to whom it is payable, and its apportionment by filing a written application to the Collector, who shall refer the matter to the court. The landowner cannot file a suit in the ordinary civil courts to establish his claim. The only course of option available to him is to seek a reference to the District Court from the Collector. To retain their rights to challenge the quantum of compensation in court, the landowners must receive the compensation money 'under protest'.

Step 6: Possession

After passing the award, the competent authority may take possession of the land immediately upon paying or offering to pay the compensation. The land then vests absolutely with the government, free from all encumbrances, whatsoever. The transfer of title is delayed till possession is taken by the government.

Step 7: Compensation

The Act provides that the compensation should be based on the market value of land on the date of the preliminary notification. The payment of compensation can be delayed beyond the date on which possession of land is taken. As a protection against delay in compensation, an interest of 12 per cent per annum is also given. Additionally, in view of the compulsory nature of the acquisition, a *solatium* equivalent to 30 per cent of the market value is also provided for.

ACQUISITION IN EMERGENCY

Sec. 17 of the Act confers special powers to the acquiring authority when land has to be acquired in cases of urgency, by virtue of which the Collector can take possession of the

³ The Amendment to the Act in 1984 reduced the time limit from three years to one year.

⁴ The 1984 Amendment to the Act introduced a time limit of two years; there was no such time limit earlier.

land without even giving away the award. The government has complete authority to define a situation as 'urgent' and invoke the urgency clause to acquire land. The process for such a scenario is same as the process described above, with the following exceptions:

- the government can dispense with Sec. 5(A) which requires the Collector to hear objections of landowners against the notification published u/s 4(1). In other words, the declaration u/s 6(1) can technically be passed immediately after the preliminary notification u/s 4(1);
- upon expiry of 15 days from the notice u/s 9(1), the Collector can take possession of the land. It may be noted that the Collector can take possession of land even before giving away the award; and
- before taking possession of land, the collector has to pay 80 per cent of the compensation for the land as estimated by him.⁵

LAND ACQUISITION UNDER PART VII

As stated earlier, under Part VII, land can be acquired for non-government companies. To access this route, a company has to pay the entire amount of compensation for the land it seeks to acquire.⁶ In contrast, Part II of the Act can be invoked if the compensation is funded wholly or partly from public revenues or some fund controlled or managed by a local authority.

For Part VII purposes, the term 'Company' includes companies (as defined by the Companies Act, 1956), societies (registered under the Societies Registration Act, 1860), cooperative societies and industrial concerns owned individually or as a partnership.

Acquisition under Part VII can be for the following purposes:

- for erecting dwelling houses for workmen or for providing amenities connected with such dwelling houses;⁷ and
- construction of some building or work for a company, which is engaged or is taking steps for engaging itself in any industry or work, which is for a public purpose or is likely to prove useful to the public.

Although the steps involved in acquisition of land under Part VII are similar to those in Part II, there are two major exceptions which make the former part significantly more

cumbersome than the latter. These exceptions relate to the company (i) getting appropriate government's consent and (ii) entering into an agreement with the same government before issuing the declaration u/s 6(1). To give its consent, the government must be satisfied on a number of counts, including that:⁸

- the company has made reasonable efforts to buy land through negotiations with the owners offering to pay a reasonable price and that such efforts have failed;
- the land in question is suitable for the purpose for which it is sought and the area to be acquired is not excessive; and
- the company is in a position to utilize the land speedily and efficiently.

The agreement between a company and the government must include:

- terms regarding the payment of the cost of the acquisition of land to the appropriate government;
- terms regarding transfer of land to the company on such payment; and
- terms on which the land shall be held by the company.

It may be noted that private sector companies can also acquire land under the urgency provision. Of course, such acquisitions can only be made for a 'Public Purpose.'

Critique of The Processes

There are a number of deficiencies in the processes, which are discussed below.

EXCESSIVE/DISCRETIONARY POWERS OF THE COLLECTOR/GOVERNMENT

- The Collector has wide discretion in matters regarding assessment of compensation, since the Act does not provide any guidelines for assessing compensation.
- As stated earlier, after hearing objections from the interested parties following preliminary notification, the Collector makes a report to the government, which contains his recommendations on the objections. The decision of the appropriate government on the objection is based entirely on this report and this decision is final.
- For acquisition under the company's route, the Collector submits a report to the government stating whether

⁵ This provision was added when the Act was amended in 1984.

⁶ The Supreme Court judgement in the Devinder Singh vs State of Punjab case, dated 12 October 2007 in C.A No. 4843 and 4844 of 2007.

⁷ This is the only 'non-public' purpose for which land can be acquired in the entire Act.

⁸ See Vaswani et al. (1997), p. 87.

the purpose for land acquisition by the company is permissible under the Act. This gives a lot of powers to the Collector.

- The Act does not provide the definition of ‘Public Purpose’ and ‘Urgency’ which is entirely a matter for the government to decide.
- A landowner cannot approach the court directly to object against the award (that is, on matters related to the measurement of his land or the amount of compensation); he has to seek a reference from the Collector to do so.

DELAYS

- The maximum time period allowed between the Notification u/s 4(1) and the declaration u/s 6(1) is one year. But, often the landowners object to the acquisition proceedings in court and that takes up a lot of time. Such time is excluded while calculating the prescribed one year limit. Hence, in practice, the time lapse between the Notification and Declaration can be significantly more than one year. The delay hurts both the acquirers and the landowners; the acquirers, because it can jeopardize the viability of the project and landowners, because they have little incentive to invest on the land during the acquisition process;
- The Act does not give any time limit for issuing a fresh declaration, if court proceedings quash a previous declaration. The preliminary notifications in such cases still hold. This leads to uncertainty regarding the time frame within which the acquisition process must be completed;
- Subsequent to the award by the Collector, there is no stipulated time period in the Act within which the government must take possession of the land. Nor is there a time limit for compensation to be paid after possession of land has been taken;
- If a preliminary notification lapses because no declaration could be made within one year, there is uncertainty about future preliminary notification for the same land.
- In the absence of dedicated courts to address grievances related to land acquisition, the court proceedings tend to be unduly protracted.

ABSENCE OF A LEVEL PLAYING FIELD

As stated earlier, the procedures under Chapter II (which covers all government companies) are far less cumbersome than Chapter VII (which covers private companies). Thus, a public sector power utility would have less problems acquiring land than a private sector one, even though both compete to get a larger share of the same output market

(power). At a time when the government is encouraging private participation in the infrastructure sector, this provision clearly vitiates the level-playing field.

LACK OF INFORMATION

- The provision of the notification u/s 4(1) fails to achieve its purpose in tribal areas (which are generally the most suitable sites for many projects) where literacy is typically low. Further, many of these areas are remote and difficult to reach, which creates constraints for adequate publicity (Vaswani et al. 1997);
- The right of the land holders to make objections under Sec. 5(A) is a laudable provision of the Act. However, problems arise in the exercise of this right because there is no legal provision for the government to give detailed information about the proposed project, which could potentially form the basis for objections. Further, the time limit of only 30 days to exercise this right seems to be inappropriate. ‘Keeping in mind the lack of necessary details such as the description of the land by its survey numbers, its boundaries and its approximate area, the sketchy description of the public purpose for which the land is needed that characterize most notifications, 30 days or more would be required merely to try and elicit this information from the Government’.
- Although Resettlement and Rehabilitation (R&R) benefits are an integral part of the land acquisition process, transparency regarding their administration is terribly lacking because of the absence of a legal mandate for the project proponents either to provide R&R benefits or make public the information relating to benefit administration.

Assessment of Proposed Reforms

The Land Acquisition (Amendment) Bill, 2007 contains some reform proposals, which seek to address the deficiencies in the process of acquisition. These proposals are given below.

ADDRESSING DISCRETIONARY POWERS

- The Bill provides a clearer definition of the term ‘Public Purpose’, which would effectively reduce the Government’s discretionary powers. For example, ‘infrastructure projects’ have been clearly defined.
- The proposed amendments provide a definite procedure for the Collector to assess the market value of land for the purpose of providing compensation. This is a major departure from the current Act, which does not specify how the market value of the land is to be determined.

ADDRESSING DELAYS

- The Bill says that if the preliminary notification lapses because no declaration u/s 6 (1) is issued within one year, then no fresh notification can be issued for a period of one year in respect to the same land. In case the preliminary notification lapses for a second time, then no proceeding can be initiated in the next five years;
- The Bill proposes that the period within which the award should be made after the date of publication of the declaration u/s 6(1) should be reduced from two years to one year;
- According to the proposed amendment, possession of land should be taken within 60 days of the award. Currently there is no such time limit. Further, compensation must be paid before the possession is taken.
- For timely disposal of compensation disputes, the Bill proposes to bar the jurisdiction of the civil courts on matters related to land acquisition, and proposes to set up dedicated Disputes Settlement Authorities in each state and at the Central level.

ADDRESSING LEVEL-PLAYING FIELD ISSUES

The proposed reforms seek to do away with Chapter VII, which would do away with the dichotomy between government and non-government companies.

ADDRESSING LACK OF INFORMATION

The Bill proposes that the Collector should make a summary of the acquisition process containing the amount of compensation awarded and details of land acquired from each individual, open to public access.

In addition to what has been proposed in the Land Acquisition (Amendment) Bill, 2007, the use of electronic tools can address some of the shortcomings of the acquisition process, especially in the area of transparency (see Box 10.1).

Conclusion

The Land Acquisition Act, 1894 continues to have a number of deficiencies in the processes, despite some amendments in the past. This chapter details the various

Box 10.1

An e-Monitoring System for Land Acquisition and R&R in Irrigation Projects in Andhra Pradesh

Ramakrishna Nallathiga

An e-monitoring system can go a long way in bringing the much desired transparency and efficiency into the Land Acquisition and R&R activities. To this effect, the Government of Andhra Pradesh has got developed an online monitoring system which has been deployed by its irrigation department for some irrigation projects. An online monitoring system can potentially cover all processes from requisition to acquisition of land and as regards R&R, from declaration of the affected zone to the establishment of rehabilitation villages. It is a superior information dissemination tool as the notifications, declarations, and all other notices can be put online for easier access. The online system also allows standardization, automation, and simplification of processes. The benefits and compensation amounts are generated by the system and the affected people need not approach the officials for processing their claim. This eliminates subjectivity and human bias in the compensation assessment process. Ideally, such a system should:

- provide a platform for the affected persons to know their available benefits/ compensation online without much hassle;
- implement certain statutory processes which are missing in manual procedures due to lack of awareness among the implementing authorities;
- streamline the system by bringing in uniformity in the processes and also mitigating grievances of the affected people; and
- allow the monitoring authorities to review the progress of implementation more easily.

Shown below (see Table 10.1) is a snapshot of the benefit/compensation report of an irrigation project from such an Online Monitoring System, which captures the R&R benefits/entitlements of Project-Affected Families (PAFs)/Project-Displaced Families (PDFs), based on the inputs of a socio-economic survey. It has the following details provided for in the database:

- a Family Identification Number—a unique number for each family;
- ex-gratia payments (if any);
- grants for land development, cattle shed, crops currently cultivated on the land, etc;
- wages and subsistence fees payable to the families;
- extra grant if the resettlement is carried outside the Scheduled Area; and
- grand total of the compensation payable to the family.

Source: Centre for Good Governance, Hyderabad.

TABLE 10.1
Veligallu Project

Family ID	Grants									
	Ex-gratia ex-gratia payable to house site holder, exceeds 5 Cents	Extent	Amount of land development Rs 10,000 per ha	Crop Rs 5,000 per ha	Cattle shed Rs 3000	Transport Rs 5000	House site 5 Cents	House Construc- tion Scheme Rs 40,000	Income Generation Scheme Rs 25,000	
111525001201131005		1.1	0	5500.0	0	5000		40,000	0	
111525001201131006		2.5	0	12500.0	0	5000		40,000	0	
111525001201131009		2.1	21000.0	10500.0	0	5000		40,000	25000	
111525001201131009		2.1	21000.0	10500.0	0	5000		40,000	25000	
111525001201131010		1.3	0	6500.0	0	5000		40,000	25000	
111525001201131011		2.4	0	12000.0	0	0		40,000	0	
111525001201131012		0	0	0.0	0	0		40,000	0	
111525001201131013		0	0	0.0	0	0		40,000	0	

(Contd.)

Family ID	Wages									
	LL/MF/SF Amount	LL/MF/SF Amount	Labour 625 days	Subsistence (PAF/PDF) 240 days	ST (CR & MFP) 600 days	Outside Scheduled Area Resettlement Grant 20%	Proceedings No.	Date DD/MM/YYYY	Grand Total	
111525001201131005	0	0	69375.0	0	55500.0	0			175375.0	
111525001201131006	0	0	0	26640.0	55500.0	14375.0			209015.0	
111525001201131009	0	0	0	26640.0	55500.0	0			253015.0	
111525001201131009	0	0	0	26640.0	55500.0	0			253015.0	
111525001201131010	SF	83250.0	0	26640.0	55500.0	24375.0			249015.0	
111525001201131011	SF	83250.0	0	26640.0	55500.0	0			224515.0	
111525001201131012	SF	83250.0	0	26640.0	55500.0	0			212515.0	
111525001201131013	0	0	69375.0	26640.0	55500.0	15250.0			212515.0	

Source: Centre for Good Governance, Hyderabad.

acquisition processes as per the current Act and tries to highlight some of the deficiencies. Although the Land Acquisition (Amendment) Bill, 2007, which attempts

to address some of these issues, is a step in the right direction, it does not address all the process-related issues stated here.

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Section III

COMPENSATION AND R&R

11 Compensation and R&R

Current Issues and Proposed Reforms

Tarun Choudhary

Introduction

Land is a critical resource—physical, commercial, and financial—in any country’s industrial and infrastructure development. It is also a major social and economic asset for any individual, especially in a country like India where a large part of the population depends on it as their primary source of livelihood. As the Indian economy makes rapid strides on the global canvas, the need for infrastructure to sustain the momentum of growth and development stares straight in the face. Needless to say, this would require acquisition of large areas of land and would result in involuntary displacement of people, thereby uprooting them from their socio-cultural environment and depriving them of their land, livelihood, and shelter. These make it imperative to not only provide appropriate monetary compensation for the acquired land, but extend additional benefits to the displaced to protect their livelihood and mitigate their socio-cultural trauma. In this milieu, the policy makers are thus faced with the challenge of providing a comprehensive legal and policy framework for land acquisition and the Rehabilitation and Resettlement (R&R) of the displaced people.

This chapter focuses on issues in the prevailing legal and policy framework addressing compensation for land and R&R of the affected people, and reforms so far. Monetary compensation in lieu for land is provided as per the Land Acquisition Act, (LAA) 1894 the principal act that governs involuntary land acquisition in India. Since the LAA does not mandate any R&R for the displaced people, the Government of India (GoI) in 2003

announced the National Policy on Resettlement and Rehabilitation for Project-Affected Families (NPRR),¹ which came into force with effect from February 2004. However, implementation of this policy indicated a number of limitations in the incumbent provisions, which needed to be reviewed. Subsequently, a revised National Rehabilitation and Resettlement Policy (NRRP-2007) was announced by the GoI on October 2007. With the intent of overcoming the limitations in the prevailing legislations and policies, and making the LAA, 1894 consistent with the NRRP, the twin bills, Land Acquisition (Amendment) Bill, 2007 and the Rehabilitation and Resettlement Bill, 2007, were introduced in the Parliament. Finally, this chapter discusses some of the pending issues and inconsistencies related to compensation and R&R observed in the twin bills.

Limitations and Proposed Amendments in the LAA, 1894 on Compensation and R&R

COMPENSATION FOR LAND

The LAA, 1894 provides that the compensation for land is to be based on its market value. However, the Act does not specify any guidelines for the assessing officer (viz. the Collector) to assess this market value. It is often alleged that the assessing officer undervalues the land and the poor landowner ends up subsidizing the acquirer.

In this regard, the Amendment Bill proposes more clarity on how the Collector should determine and assess

¹ The NPRR 2007 was finalized after discussions for nearly two decades over various draft policies.

the market value of land for providing compensation. The Bill provides that the highest of the following three values should be used by the Collector:

- the minimum land value specified in the Indian Stamp Act, 1899 for the registration of sale transactions in the area where the land is situated;
- the average sale price for similar land in the vicinity, calculated using at least 50 per cent of the transactions registered during the last three years where higher prices were paid; or
- the average sale price as calculated from the prices paid for at least 50 per cent of the land already purchased for a project, where higher prices were paid by the acquiring company.

The Bill also provides for the State Government to specify a floor price based on at least 50 per cent of the land sale transactions in the last three years in the vicinity where higher prices were paid. Further, the Bill specifies that before calculating the market value, the Collector should also take into consideration the intended use category of land and the value of such category of land in the vicinity. He is also required to consult specialists and experienced persons in various fields such as agriculture, forestry, horticulture, architecture, etc. to determine the market value of various assets on the land.

INCOME ON TRANSFER OF ACQUIRED LAND

With the intent that the original landowner should be able to capture the increase in the value of his land following subsequent acquisition, the Bill provides that the land acquirer has to share his unearned income with the original landowner if he sells the land which was acquired for a public purpose. It specifies that 80 per cent of such net unearned income has to be shared with the original landowner.

PART PAYMENT OF COMPENSATION BY SHARES AND DEBENTURES

Taking a progressive step in the direction of involving affected families in the project development, the Bill allows the landowner to receive a part of his compensation in the form of debentures and shares of the acquiring company, if it is eligible to issue such instruments. A minimum of 20 per cent of compensation has to be paid via this route, subject to a maximum of 50 per cent, although the land owner can reject this offer and claim whole compensation in cash. There are no such provisions in the current act.

COMPENSATION BEFORE POSSESSION

The Act in its current form allows the collector to take possession of land even without compensating the landowner. To overcome this limitation, the Amendment Bill specifies that compensation has to be paid to the landowner before possession can be taken.

SOLATIUM

The Bill proposes that the *solatium* amount should be increased from 30 per cent of the market value of land to 60 per cent (75 per cent for acquisition in cases of urgency).

REHABILITATION AND RESETTLEMENT

The LAA, 1894 does not mandate any R&R for the people displaced, but the Amendment Bill provides for mandatory R&R for every involuntary displacement caused by the acquisition of land.

Shortcomings and Reforms in the R&R Policy

There were several deficiencies in the NPRR-2003 which prompted the government to introduce a new policy framework in 2007 for providing R&R benefits to people affected by involuntary land acquisition. Some of these deficiencies were:

- the applicability of the policy was very limited as it set out a high threshold of 500 families or more *en masse* in plain areas and 250 families *en masse* in hilly areas, Desert Development Programme (DDP) blocks, and areas mentioned in Schedule V and Schedule VI of the Constitution of India;
- the policy failed to emphasize a non-displacing or a least-displacing option for project execution;
- it did not allow for prior consent of the affected people before involuntary displacement arising from land acquisition;
- there was no provision for assessing the social, economic, cultural or demographic impacts of projects that involved involuntary land acquisition;
- provisions ensuring livelihood security for the affected families were very limited and the process itself was not transparent and participative at all stages;
- the policy did not emphasize bettering the standard of living for the affected families upon resettlement;
- the scope of the policy was limited to land acquisition cases and there was a felt need to cover cases of involuntary displacement of a permanent nature arising out of other legitimate causes;

- it did not provide for appraisal of the desirability and justifiability of projects and assessment of optimal area of land to be acquired;
- it did not prescribe any time limits for completion of R&R activities, utilization of acquired lands, and disposal of excess land acquired;
- there were no specific provisions addressing the concerns of the vulnerable sections of society such as the Scheduled Castes (SCs), Scheduled Tribes (STs), women, destitute, etc.; and
- there were no effective mechanisms for speedy redressal of grievances.

NATIONAL REHABILITATION AND RESETTLEMENT POLICY (NRRP), 2007

The NRRP-2007 was notified by the GoI with the aim of overcoming the deficiencies in the NPRR-2003 and providing for a more comprehensive and inclusive R&R Policy applicable to all projects that lead to involuntary displacement of people. The salient features of the new policy are as follows:

Expanded Objectives

- NRRP-2007 has substantially expanded the objectives of the old policy. These amendments promote non-displacing or least-displacing alternatives and aim to ensure expeditious implementation of an adequate rehabilitation package while taking special care for protecting the rights of weaker sections of the society. There are also provisions for providing a better standard of living after resettlement by integrating the rehabilitation concerns into the development planning and implementation process.

Redefined Scope

- The principles of the Policy also apply to R&R of persons involuntarily displaced permanently due to any reason. Further, to make the policy more inclusive, the term 'Project' has been defined as 'any project involving involuntary displacement of people, irrespective of the number of persons affected'. However, certain provisions of the policy, such as the Social Impact Assessment (SIA) and the Tribal Development Plan (TDP) are mandatory for only those projects that cause displacement beyond pre-defined thresholds.

Concern for the Vulnerable

- In comparison to the old policy, NRRP-2007 aims at providing better R&R benefits. It lays special emphasis on the vulnerable sections of the society such as the old,

disabled, orphans, women, tribals, etc. These provisions include annuity policies that pay a pension for life, resettlement in a compact block (as far as possible), and financial assistance for loss of usage of forest produce for tribals, continuation of the reservation benefits at resettlement sites for SCs and STs, etc.

Social Impact Assessment

- Social Impact Assessment (SIA) provides a robust and consultative mechanism to assess options in terms of location, size and/or technology, minimizing displacement and mitigating the adverse social, economic, demographic, and cultural effects on the affected population. Such an exercise was not provided in the NPRR-2003. Correcting this deficiency, the NRRP-2007 introduced a new chapter on SIA for projects involving physical displacement of 400 or more families *en masse* in plain areas, or 200 or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in Schedule V or Schedule VI to the Constitution.

Transparency and Participation

- The new policy has a lot of scope for extensive public participation at all stages of the R&R process, which makes the whole process more transparent. The mechanisms for ensuring people's participation include mandatory public hearings at the SIA stage, wide publicity for the survey results and R&R plan, consultations with Gram Sabhas, representation of the affected persons on the R&R Committees, and accessibility for all to the grievance redressal mechanisms.

Grievance Redressal and Monitoring

- NRRP-2007 provides a robust mechanism for time-bound disposal of grievances and new provisions for monitoring the R&R schemes at the national level. The grievance redressal mechanism includes R&R committees at the project level and standing R&R committees at the district level. A National Monitoring Committee will monitor the implementation of the R&R process and would be serviced by a National Monitoring Cell.

The benefits to the displaced and their criteria for eligibility provided in the NRRP-2007 are tabulated below (see Table 11.1)

The NRRP-2007, however, provides for only basic minimum requirements, and allows State Governments, Public Sector Undertakings (PSUs) or agencies, and other requiring bodies to put in place greater benefit levels

TABLE 11.1
Rehabilitation Benefits for Affected Families

Criteria for Eligibility of Benefits	Benefits
Any affected family whose house has been acquired or lost	Land for a house (without payment) of up to 250 square metres of land in rural areas or up to 150 square metres of land or a house of up to 100 metres carpeted area in urban areas
Affected family owning agricultural land whose land has been acquired or lost or has been reduced to marginal farmer	If available in the resettlement area, agricultural land or cultivable wasteland equivalent to the land lost up to one hectare of irrigated land or two hectares of un-irrigated or cultivable wasteland; shall be in the name of each person included on the record of rights
Below Poverty Line (BPL)-affected family without land and has continuously lived in an area for 5 years before declaration	A house with at least 50 square metre carpet area in rural areas or 25 square metre in urban areas; or the family can opt for a one-time financial assistance for house construction
Family with land lost for an irrigation or hydel project	Preference for land-for-land in the command area of the project; if land is not available or family opts not to take the land, they shall receive monetary compensation; fishing rights in the reservoirs
Allotment of agricultural land instead of acquired land	One-time compensation of at least Rs 10,000 to each person on the records of rights
Allotment of wasteland instead of acquired land	One-time compensation of at least Rs 15,000 per hectare to each person on the records of rights
Displaced affected family with a cattle shed	Minimum of Rs 15,000 for construction of a cattle shed
Affected artisan, small trader, or self-employed person	Minimum of Rs 25,000 for construction of a shop or shed
All affected families	One-time compensation for moving and transportation costs of at least Rs 10,000
All vulnerable affected persons	Minimum of Rs 500 per month for lifetime pension
For land development project instead of land-for-land or employment	Developed land or build-up space within the development project in proportion to the land acquired, subject to some limits
Linear Acquisitions for railway lines, highways, transmission lines, laying of pipelines, and other projects requiring a narrow parcel of land	Minimum of Rs 20,000 in addition to other benefits under the scheme through which land is acquired to each person on the records of rights. Benefits listed in this Bill shall also be given if the person becomes landless or is reduced to a small or marginal farmer
Family affected by land acquisition on behalf of a requiring body	Monthly subsistence allowance of 25 days minimum agricultural wages* per month for one year; allotted houses or land shall be free of encumbrances and may be in joint names of wife and husband
Land acquisition on behalf of a requiring body: affected family not provided agricultural land or employment	Rehabilitation grant of 750 days minimum agricultural wages; If requiring body is a company, it is required to give the option of taking 20–50% of this rehabilitation grant as shares or debentures

Source: 'Legislative Brief on The Rehabilitation and Resettlement Bill, 2007', *PRS Legislative Research*, 10 March 2008, New Delhi.

Note: * The monetary value may vary from state to state as each state sets its own minimum agricultural wage.

than those prescribed in the NPRR-2003. Several state governments, PSUs and agencies (refer Box 11.1), and some requiring bodies already have in place their own policies. These policies have evolved over time and include some of the provisions of NRRP-2007.

Select Outstanding Issues in Compensation and R&R

Notwithstanding the initiatives taken so far in addressing compensation and R&R issues, through a comprehensive National R&R Policy and the progress made with the

twin Land Acquisition Act (Amendment) Bill, 2007 and R&R Bill, 2007, there are several outstanding issues and apparent inconsistencies in the provisions of the Bills. These outstanding issues, unless appropriately addressed, might defeat the purpose that the legislative and executive actions set out to achieve. Some key outstanding issues are as follows:

Applicability Provision

- The affected families eligible for R&R benefits are identified as on the date of declaration of the affected

Box 11.1
R&R Policies of Select Public Sector Organizations in India

Coal India Limited

The R&R Policy of Coal India Limited (CIL) of May 2008 attempts to streamline the different R&R practices followed by its subsidiaries in a way that allows subsidiaries to deal more effectively with the issue of R&R. The Policy provides for two types of benefits to project-affected persons (PAPs) viz. economic rehabilitation and resettlement. The former accrues to persons from whom land is acquired, persons whose homestead is acquired, tribals dependent on forest produce and sharecroppers, land lessees, tenants, and day labourers. The resettlement benefit is provided to the displaced families who are defined as those who are permanent residents and have been living in the project area on the date of publication of the notification of land acquisition. The compensation provided under the Policy includes monetary compensation for land at a value determined on the basis of prevailing legal norms and one employment for every two acres of land for persons whose land is acquired, site of 100 sq. metre per family or one time lumpsum payment for persons whose homestead is acquired, and non-farm self-employment through the provision of petty contracts or jobs with contractors of CIL for sharecroppers, day labourers, and landless tribals. The Policy also provides for a budgetary provision of 1 to 2.5 per cent of retained earnings in CIL's subsidiaries for Corporate Social Responsibility (CSR) activities in creating social assets, developing infrastructure, and creating institutions to impart vocational training.

National Hydel Power Corporation (NHPC) Limited

NHPC's R&R Policy—2007 came into effect in February 2008. It categorizes PAPs into titleholders and non-titleholders. Houseless PAPs are those who own a house in the project area and whose house or entire homestead is acquired while landless PAPs are those whose entire agricultural land is acquired or those who are left with less than 0.2 hectare unirrigated land or 0.1 hectare irrigated land. Amongst the titleholders, the Policy also covers people whose property is not acquired but has become inaccessible because the land in its immediate vicinity has been acquired and people losing common property resources such as ponds, grazing land, and community land. Besides compensation in the form of land, the Policy provides for other forms of compensation such as subsidy for seeds, pesticides, and fertilizers for those who have been allotted agricultural land, option of taking up to 20 per cent of their rehabilitation grant amount in the form of shares and debentures of NHPC, marriage grant of Rs 10,000 to Projected-Affected Families (PAFs) belonging to BPL category at the time of marriage of their dependent daughter or sister, scholarships for children of PAPs, and free OPD medical facility during the construction phase of the project.

National Thermal Power Corporation (NTPC) Limited

NTPC's Policy of June 2005 puts the cut-off date for R&R package at three years of residence in the acquired area. Eligible PAPs include agricultural as well as non-agricultural labourers, squatters and encroachers. In terms of compensation, the policy lays down the option of land for land and a one-time rehabilitation grant for those whose land is acquired, subject to the ceiling of maximum of 1 ha of irrigated land or 2 ha of unirrigated/cultivable wasteland subject to availability of government land in the districts. If Government land is not available, PAPs will be assisted in purchasing land on a 'willing buyer-willing seller' basis. The policy further allows each PAP a monthly subsistence allowance equivalent to 20 days of Minimum Agricultural Wages (MAW) per month for a period of one year up to 250 days of MAW. Other compensation provided under this policy include compensation on a project specific basis for loss of common property resources like grazing lands, cremation grounds, religious, skill upgradation of PAPs through various training schemes and training institutes of NTPC/state government in order to make them self-reliant and 80% subsidized treatment in all facilities like outdoor and indoor treatments in project hospitals.

Source: Author's own

area. This declaration is made only when 400 or more families are affected *en masse* in plains or 200 or more families are affected in tribal or hilly areas. It is not clear whether the benefits listed in Table 11.1 above apply in cases where fewer families are displaced. The Bill also differentiates between the process for large-scale displacement and when fewer families are displaced. It provides comprehensive infrastructure facilities at the resettlement areas for large scale displacement and basic infrastructure facilities in other cases. There is a scope for misuse of the applicability threshold especially in linear projects (such as highways) where the project proponent can divide the project into multiple parts so

that he does not have to provide comprehensive R&R benefits to the displaced.

Disconnect between Objectives and Provisions of Bill

- While the Statement of Objects and Reasons mentions minimizing displacement, protecting livelihoods, and improving living standards, the language in the Bill does not make these clauses mandatory. For example, the only mandatory benefit for rural artisans, small traders, and self-employed persons is a one-time financial assistance of a minimum of Rs 25,000 for construction of a working shed or shop. While the

government *may* identify specific areas for resettling displaced persons, the Bill does not make this provision mandatory.

Jurisdiction

- The Bill mandates the appropriate government to appoint an ombudsman to address any rehabilitation grievances and the civil courts are barred from having jurisdiction on any matter. He is empowered to dispose of any petitions related to R&R. The Bill does not even specify any criteria for the appointment of an ombudsman, and whether he is required to possess judicial qualifications or experience. This provision was inserted to fast-track the grievance redressal process, but providing special courts set up by the State Governments could have been considered (drawing parallels with the provision in the Electricity Act, 2003).

Income on Transfer of Acquired Land

- Although the Land Acquisition Act (Amendment) Bill provides that the land acquirer has to share 80 per cent of his unearned income with the original landowner if he sells the land which was acquired for a public purpose, there could be three distinct issues while implementing this clause. First, since the Bill does not specify a time limit for the application of this clause after the original acquisition, the onus is on the acquirer to keep track of the original owners and their heirs, in perpetuity, so that they could be paid in case of a future sale. Second, the new sale price of the land may be difficult to calculate if it is part of a larger deal. Third, in cases where the company has invested in developing the land, it is not clear whether the original acquisition price could be adjusted upwards for the cost of development.

Irrational Land-for-Land Policy

- The land-for-land provision in the Bill is lopsided. Regardless of the amount of land acquired, an individual whose land has been acquired, lost, or reduced, is entitled to receive a maximum of one hectare of irrigated land or two hectares of un-irrigated land.

Functions of the Administrator

- The Administrator for R&R is responsible for formulating, executing, and monitoring the R&R plan, and his functions include minimizing displacement of persons and identifying non-displacing or least displacing alternatives in discussion with the requiring body. This is practically not possible as the requiring body prepares the project, the Collector

notifies the intention to acquire land under Sec. 4 of the LAA, 1894 SIA is done and clearance of the Expert Group is received before the Administrator is appointed. At that juncture, the Administrator is bound by constraints determining the solution and it is not possible to minimize displacement or identify non-displacing or least displacing alternatives.

Employment

- The R&R Bill mandates that preference should be given to at least one person from a displaced family for providing employment, conditional on availability and suitability of the affected person, only if land is acquired for a private corporate. This implies that if land is acquired for the government then the displaced don't even get any employment.

Cash for Benefits

- The R&R Bill provides an option for the displaced to accept cash in lieu of the R&R benefits. The amount however is decided by the appropriate government in consultation with the requiring body. Ideally, there should be a representative of the displaced in the consultation process. Given the level of illiteracy and ignorance in our country, this provision leaves scope for a corporate to under-pay and stay away from providing any R&R benefits.

Broadbased SIA Provision

- The SIA applicability provisions are very broad-based with thresholds that may not be achievable in sparsely populated areas, especially areas inhabited by tribals. There should be supporting provisions which can mandate an SIA study for such special cases, if desired.

Urban Displacement

- This Bill appears to be written primarily for displacement from rural areas. In case of loss of land or house, the Bill requires compensation as agricultural land or house (which may be in rural or urban areas). The Bill does not require the replacement of an urban house with another urban house/plot.

Residency Requirements

- Landless individuals are eligible for compensation provided that they have lived in a place for at least 5 years. The NRRP-2007 sets the time limit at 3 years. There is also no clear policy for double displacement if the acquired land is resettlement area and people have been there for less than five years as a result of displacement.

Number of Committees

- The Bills propose to set up a large number of committees to build a robust grievance redressal mechanism, but

there appears certain overlap between the functions of the entities which could cause confusion.

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12 Framework for Evaluation of Land Acquisitions in India Sustainable Development Perspective

T.L. Raghu Ram and Ram Kumar Kakani

Introduction

Land acquisitions, whether for state-sponsored development or for private business projects, have always faced opposition. The reasons for opposition have become more broad-based over the years. Our analysis of land acquisitions in the last four and a half decades (1970 onwards) has identified three distinct reasons for opposition, namely, environmental concerns, social well-being concerns, and benefit sharing concerns.

The United Nations Conference on the Human Environment (also known as the Stockholm Conference) held in 1972, marked a turning point in the creation of international awareness on environmental issues. Following the Conference, environmental concerns and associated opposition to land acquisition were reckoned as a major project risk. The Silent Valley Hydroelectric Dam Project in Kerala, for example, was opposed as it threatened the biodiversity-rich rain forests in the region, which eventually led to the abandonment of the project.

With increasing understanding and appreciation of the interlinkages between the environment and human well-being, social concerns and associated conflicts started constituting a prominent aspect of business risk in the 1990s. Opposition to the Narmada Valley dam, for example, was primarily based on the perceived negative social impacts along with strong underpinnings of environmental concerns. The social uprising against the Sardar Sarovar Dam Project in the Narmada Valley forced its funding agency, the World Bank, to issue stringent benchmarks for social compliance by the project proponents (Government of India and the key riparian states of

Madhya Pradesh, Gujarat, and Maharashtra). Unable to meet the set benchmarks, project proponents requested for termination of World Bank support. Although the project was later completed by the project proponents, social concerns have proved to be a significant factor in terms of influencing institutional support to development projects.

With liberalization and globalization, new growth opportunities have emerged in the Indian economy. This has increased the demand for land that often entails the conversion of forest and agricultural areas for mining, industrial, infrastructure, and urbanization projects. Land use changes that make these projects possible often result in a highly skewed benefit accrual bias towards a small number of people at the cost of wider sections of the society, especially those who are forced to give up their lands and along with it their livelihoods, and witness a worsening of living standards.

Learning from experiences, communities have started demanding more equitable benefit sharing opportunities. The much contested question of equitable benefit sharing between project proponents and local communities has emerged as the third important source of project risk.

Land: A Finite and Scarce Resource

India's geographical area is about 329 million hectares with an average population density of 325 persons per square kilometre (Census 2001). However, with population growth, per capita land availability declined from 0.89 ha in 1951 to 0.3 ha by 2001, and per capita agriculture land

declined from 0.48 ha in 1951 to 0.14 ha by 2001. With a projected population of 1581 million by 2050 (Visaria and Visaria 1996), the per capita land availability will go down further to 0.2 ha. With rise in population density and demand for new development projects, land acquisition proposals for private or public use are likely to witness an increasingly stronger and wider resistance than before, because not only more land is being demanded, but also more people have to be displaced for the same-sized land. Resistance arises because land is not only an empowering tool for its owners, but also an asset that has the ability to provide sustainable livelihood support to millions of rural people. Developers have to acknowledge that land is no longer a freely or easily available resource.

DICHOTOMY OF VIEWS ON LAND

Different stakeholders view land differently. For example, depending on land use category, lands under forests, sacred groves, agriculture, wetlands, village commons or industry have different utility and perceived values to different stakeholders. When a unit of land is contested by two stakeholders with widely different perceptions and utility value, conflicts arise. The dichotomy in perception, namely, businesses perceiving land as a commodity to build private wealth and communities viewing it as an asset that empowers and sustains livelihoods, is at the heart of opposition to land acquisition attempts by private businesses (Figure 12.1).

ISSUE OF INCREASING RESISTANCE TO LAND ACQUISITIONS

As environmental, social, and benefit sharing concerns together with land scarcity exerted pressure on land acquisition proposals of development and infrastructure projects, both state and Central governments initiated various regulatory and policy interventions to address these concerns. However, when comprehensive regulations such as the Forest (Conservation) Act, 1980; Environmental Protection Act, 1986, and Environmental Impact Assessment (EIA) Notification, 1994, etc. for the management of social and environmental impacts of projects and resettlement and rehabilitation (R&R) policies were put in place, opposition to land acquisition proposals intensified further. Social and environmental scientists attribute this to the progressive dilution of regulatory provisions such as amendments to EIA notification (see below), to facilitate faster clearances for industrialization and infrastructure without due regard for socio-environmental impacts.

In the period 1986–2006, 4016 projects were granted environmental clearance under EIA by the Ministry of Environment and Forests (MoEF). A much larger number, however, operated without the clearance (Wani and Kothari 2008). Noting this, in March 2005, the Supreme Court ordered the closure of all such illegally running business units. Soon after, in July 2005, the MoEF set

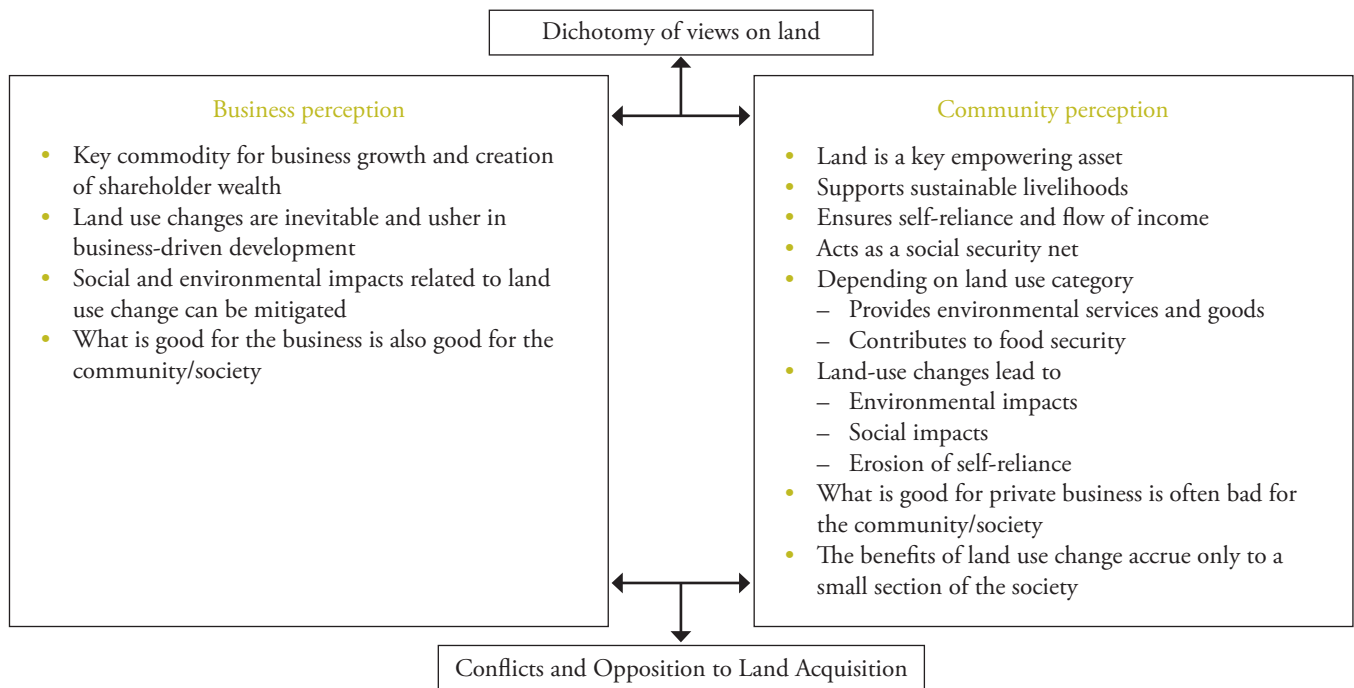


FIGURE 12.1 Dichotomy of Views on Land

into motion a process of seeking temporary working permits and *post facto* clearances through an amendment to the EIA notification. Subsequently, the EIA procedures were overhauled in 2006. The reforms focused on speedy clearances. Public hearing, a crucial step in the EIA process to mainstream stakeholder's views into decision making, is now limited only to those with a 'direct stake' in the project. In any case, even overwhelming public opinion against a proposed project in a public hearing can be disregarded as there is no binding necessity to take this into account in the final decision.

Further, since there is ambiguity in definition of 'public purpose', governments often used Land Acquisition Act (LAA), 1894, to acquire land for private business projects. Indiscriminate use of LAA, 1894 by governments to facilitate private business projects in the guise of serving 'public purpose' has been severely contested by the communities.

The communities perceive such dilution of legal provisions, more liberal legal clearances, and indiscriminate use of LAA as a reflection of the government aligning itself with private business without due regard for negative socio-economic and environmental impacts on the communities. The direct fall-out of such a perception is the increasing public resistance to land acquisition for private industrial projects (Box 12.1).

Land Acquisition and Sustainable Development

As the examples in Box 12.1 highlight, the three pillars of sustainable development namely, environmental concerns, social concerns, and equitable distribution of benefits, individually or in combination, have the potential to unite communities to oppose land acquisition.

It is widely observed that the communities today are more frequently standing up and taking exception to the presence of promoters, or the ways in which the promoters are conducting themselves than before. These challenges are less about opposing project activities *per se* than many would think. Rather, the opposition to land acquisition and projects is a manifestation of an increasing desire on the part of the local population to have some measure of control over their own future, and to participate in the development process from the earliest stages (Joyce 2000).

LESSONS FOR PROJECT PROMOTERS

With communities finding the capacity and the will to oppose land acquisitions or disrupt operations, development projects have either been delayed or abandoned. As a consequence, companies have suffered on account of not only huge financial losses but also tarnished reputation. To secure access to land and other natural resources and

Box 12.1

Examples of Private Business Projects facing Opposition to Land Acquisition Plans

POSCO in Orissa

The Rs 51,000 crore investments proposed by Korean multinational Pohang Steel Company (POSCO) includes a mine at Khandadhar, a steel plant at Jagatsinghpur, and a captive port at Paradeep. The area is characterized by dense forests, waterfalls, an elephant corridor (connecting Saranda in Jharkhand to Bhamaragarh in Chhattisgarh), the rare limbless lizard *Sepsophis* (recently discovered), and is the origin of eight major perennial streams. 66 per cent of the population belongs to scheduled tribes. Together, according to local activists, these activities could threaten 10,000 hectares of forest land, and the mining alone could displace about 30,000 people (Wani and Kothari 2008). It comes as no surprise that all the three components of the POSCO Project are being vehemently opposed by the local communities.

Vedanta/Sterlite Project in Orissa

This project is controversial for wanting to mine in a sacred landscape of some of India's most vulnerable tribal groups and also for starting operations without necessary legal permissions (Wani and Kothari 2008). The local tribal communities are opposing the project.

Tata Nano Singur Project

This high profile, so called people's car project, attracted unprecedented publicity ever since the idea was mooted and the prototype displayed. However, the project hit rough weather, as a section of the community in Singur, West Bengal, vehemently opposed their multi-crop agricultural land's acquisition through LAA 1894, and the inadequate compensation offered by the state government (Mohanty 2007). Unable to mend bridges with the local communities and not willing to bear further cost overruns on account of time-lags, the project was ultimately relocated to a new site in Gujarat. However, the company had to underwrite a huge opportunity in terms of cost of time lost and sunk costs of project site development, which were estimated to run into a few hundred crore rupees.

ensure that invested assets eventually see a return, it is becoming inevitable for companies to internalize the sustainable development paradigm, in its broadest sense, into their businesses. In the area of land acquisition, this would mean recognizing the need for community consultation and delivery of tangible benefits to impacted communities. Free, prior, and informed consent (FPIC) of affected communities need to be secured. Needless to say, FPIC can only be gained if all the three facets of sustainable development, namely, environmental sustainability, social well-being, and equitable benefit sharing are ingrained into the land acquisition models which ultimately determine the economic viability and long-term sustainability of the projects. On the other hand, not adopting a sustainable development path has been found to affect many projects, both in public and private sectors. When natural resources are unsustainably used or projects do not contribute to the socio-economic well-being of local communities, local people have demonstrated their ability to impact business operations leading to plummeted profits and eroded brand value (Box 12.2).

The Path Ahead: An Integrative Framework for Evaluation of Land Acquisitions

Much has been written on the legal, normative, and sustainable development arguments for ensuring that host

communities have the opportunity to provide their FPIC to give land to a project. Integration of sustainable development concerns into land acquisition proposals may be difficult but not impossible. While existing frameworks, as specified by regulations, give the companies legal permits to operate, the promoters may not gain the much needed social licence to start new projects. For this to happen, the first and foremost prerequisite is the willingness of promoters to go beyond the current legal and regulatory frameworks that control land acquisition. Companies have to look at new frameworks that expand the scope of existing environmental and social impact assessment (SIA) frameworks and R&R guidelines. We present below an integrative framework that internalizes environmental, social, and equitable benefit sharing into land acquisition proposals.

INTERNALIZING ENVIRONMENTAL CONCERNS INTO LAND ACQUISITIONS

The existing EIA framework looks at project-specific impacts separately on air environment, water environment, land environment, biodiversity, etc. However, the highly integrative and interactive nature of these sub-systems as part of a composite ecological system and the flow of benefits it provides for human and business well-being have now received global recognition (Millennium Ecosystem

Box 12.2

Impact of Unsustainable Business Practices

Coal India Limited (CIL)

CIL was formed in 1975 after the nationalization of coal mines in 1972–3. Three of its subsidiaries, Central Coalfields Limited, Bharat Coking Coal Limited, and Eastern Coalfields Limited operate in about 3292 sq. km area in the coal-bearing tracts of Jharkhand state. It has been alleged that this land was mostly acquired after uprooting thousands of tribals from their homes by paying inadequate compensation. Resettlement and Rehabilitation (R&R) of affected communities was also a neglected parameter. Thermal power, steel, and other consuming industries thrived on the coal extracted by CIL. However, the living standards of the native, disadvantaged communities reportedly worsened (<http://www.runningoutoftime.co.in/poleco.htm>). Driven by poverty, lack of education, and alternative employment opportunities, thousands of original inhabitants now indulge in illegal coal mining, coal pilferage, etc. The financial loss to CIL on account of the small scale artisanal mining (coal extracted by using primitive instruments such as sickle, spade, etc.) and illegal coal supply chain is conservatively estimated to be over Rs 100 crore per year. The state of Jharkhand loses at least Rs 34 crore in coal royalty, as the illegal artisanal coal supply chain is not reflected in the accounts of coal companies (Raghu Ram 2008). This demonstrates that poor R&R, not paying adequate compensation for land acquired, and not contributing for social well-being of the affected communities can come back to haunt the business prospects in the long run.

Coca Cola

One of the bottling plants of Coca Cola India Limited was located in Plachimada village in Palakkad district of Kerala. Initially, the local community welcomed the plant as it created about 350 jobs. Being a water-intensive unit, the bottling plant started extracting huge quantities of groundwater through deep bore wells. Soon after, the groundwater table in the surrounding regions dropped sharply. The local community associated the drop in groundwater levels to the bottling plant operations and started agitations. As an outfall, the local village *panchayat* withdrew licence to operate to the bottling plant. The plant remained closed for over three years (TERI 2006). This example demonstrates that even if one aspect of sustainable development (benefit sharing or creation) is achieved, violating another pillar of sustainability (environment) can antagonize the community.

Assessment 2005). For example, forests supply timber and wood fibre, regulate climate by absorbing carbon dioxide, and yield genetic resources for medicines. Known as ‘ecosystem services’ (Box 12.3), these services are important for business as well as for people and community well-being.

In our integrative framework we suggest that instead of EIA, project promoters should look at impacts of land acquisition proposals on the flow of ecosystem services. By adopting a ‘no net loss’ of ecosystem service flows as a principle, promoters can simultaneously internalize both social well-being and business well-being concerns into their land acquisition proposals. This implies that businesses will minimize loss of ecosystem service flows

and also make good any loss through compensatory interventions. For example, if agricultural land is diverted for an infrastructure project leading to loss of agricultural productivity, the project proponent should ensure that the loss is compensated through crop-yield improvement interventions in the nearby areas. Similarly, any loss in flows of fresh water, carbon sequestration, protection from natural hazards, etc. will have to be accounted for and ‘no net loss’ ensured through appropriate interventions. Initially, this may sound like a tall order for the promoters, but in view of the current understanding on the subject, it also makes sound business sense (WRI 2008). The extended integrative framework is presented in Figure 12.2.

Box 12.3
Ecosystem Services

Ecosystem services—sometimes called ‘environmental services’ or ‘ecological services’—are the benefits that people obtain from the ecosystem. Examples include fresh water, timber, climate regulation, and protection from natural hazards, erosion control, and recreation.

Ecosystem services are broadly categorized into four types:

Provision Services

They include goods or products obtained from ecosystems such as food, fresh water, timber, and fibre.

Regulating Services

The benefits obtained from an ecosystem’s control of natural processes such as climate, disease, erosion, water flows, and pollination, as well as protection from natural hazards. ‘Regulating’ in this context is a natural phenomenon and is not to be confused with government policies or regulations.

Cultural Services

The non-material benefits obtained from ecosystems such as recreation, spiritual values, and aesthetic enjoyment.

Supporting Services

The natural processes such as nutrient cycling and primary production that maintain the other services.

Beneficiaries of these services can be at the local, regional, and/or global scale and may include future generations.

Source: The World Resources Institute (WRI 2008).

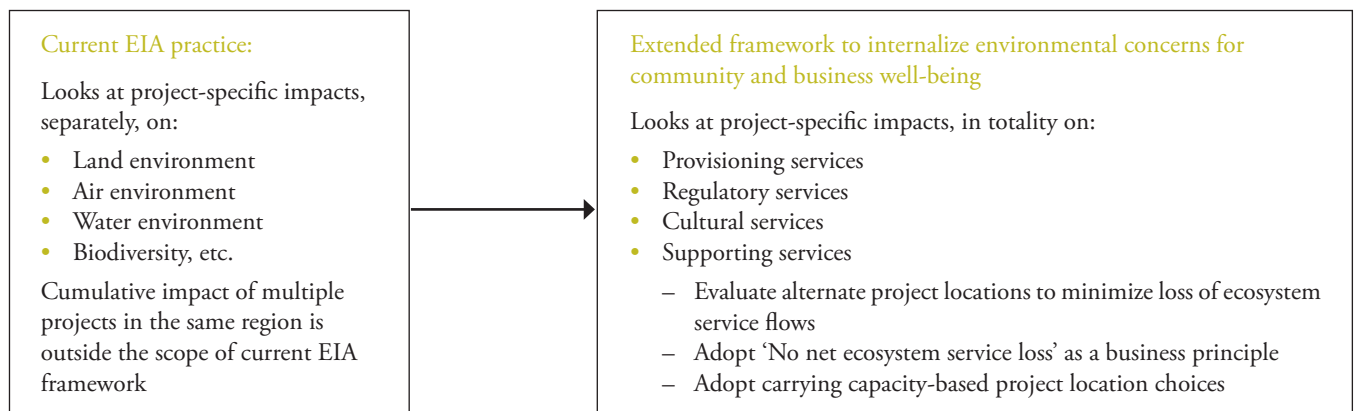


FIGURE 12.2 Environmental Sustainability Framework

INTERNALIZING SOCIAL WELL-BEING CONCERNS INTO LAND ACQUISITIONS

The scope of SIA in India is typically limited to minimizing the impacts on livelihoods. This chapter proposes a broader framework that aims at maximizing social well-being of affected communities (Figure 12.3). It is proposed that social well-being concerns in land acquisition proposals are extended to provide sustainable livelihood options and comprehensively cover all affected stakeholders namely landless, jobless, homeless, elderly, and the destitute. The contribution of each infrastructure project to the social well-being of the local communities should be monitored and evaluated by taking Millennium Development Goals (MDGs) as benchmarks. It is envisaged that the new framework, when aligned with project proposals in the true spirit, will reduce conflicts between the project promoters and communities.

INTERNALIZING EQUITABLE BENEFIT SHARING CONCERNS INTO LAND ACQUISITIONS

The existing compensation and R&R packages are reported as being fraught with ambiguity. In the absence of clearly defined rights of the project-affected population, the communities are often short-changed by the project proponents. We propose the adoption of the following model by infrastructure projects to gain social consent for land acquisitions and project viability (Figure 12.4).

Conclusion

It has been observed that sustainable development concerns are the basic premise on which the local communities oppose land acquisitions for infrastructure projects. This chapter proposes that by internalizing environmental, social, and equitable benefit sharing concerns into

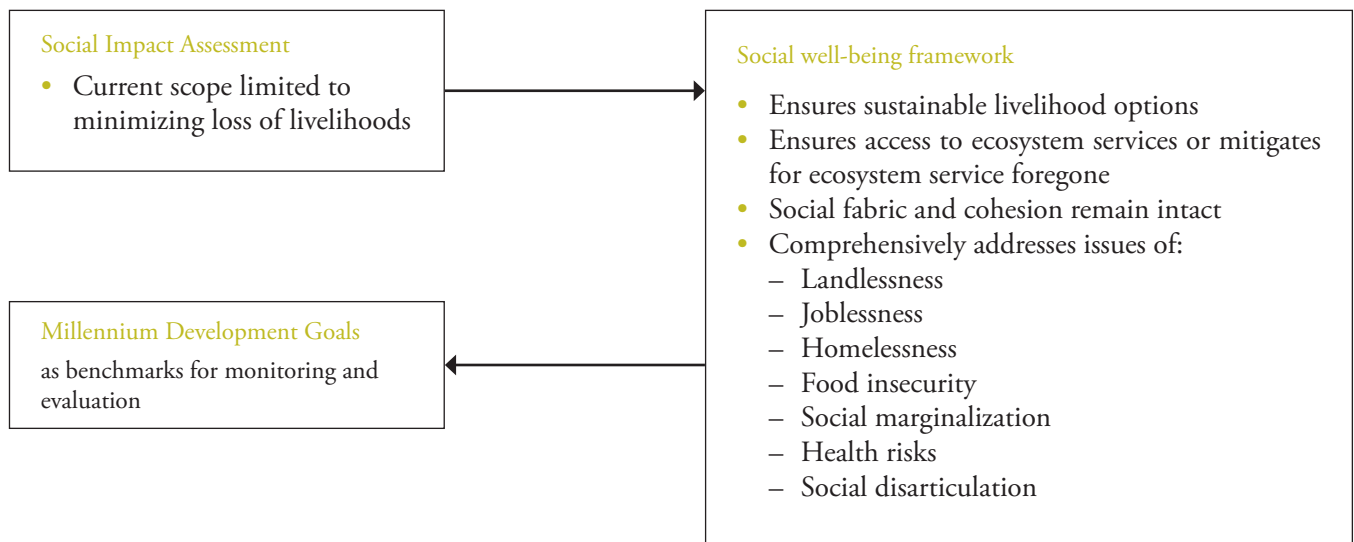


FIGURE 12.3 Social Well-being Framework

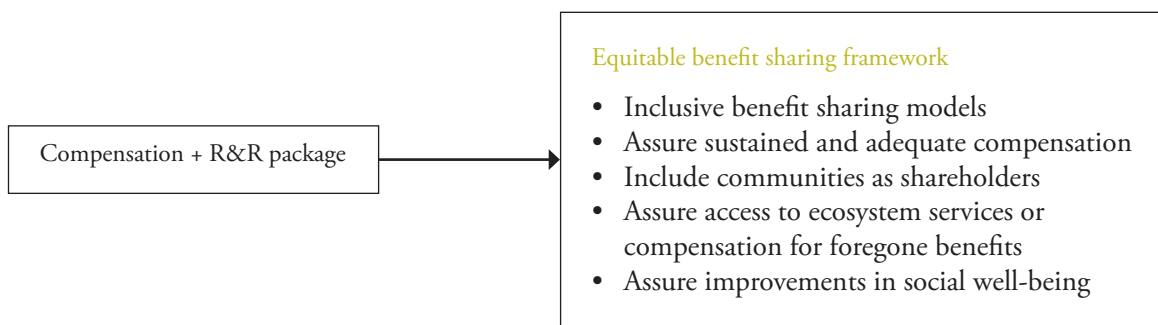


FIGURE 12.4 Maximizing Benefits to Communities

infrastructure project proposals, promoters can not only gain community cooperation but also consent for land acquisitions and operations (Figure 12.5)

As gaining community consent also paves the path for smooth implementation of projects and eventually to their

sustainability and commercial viability, it is in the interest of the infrastructure projects to adopt the sustainable development framework that is suggested here, which would lead to a 'win-win situation' for both infrastructure project proponents and local communities.

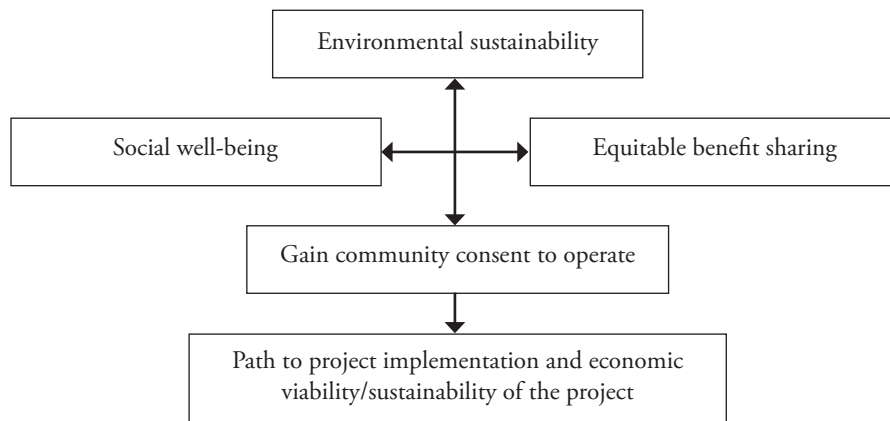


FIGURE 12.5 Gaining Community Consent for Land Acquisitions for Infrastructure Projects

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13 Resettlement Entitlements

Moral Economy of Land Rights and Beyond

Jyotsna Bapat

Introduction

Experience of land acquisition and resettlement of Project-Affected Persons (PAPs) in all types of infrastructure development projects such as dams, multi-purpose projects, highways, natural resource management or urban areas, is generally associated with feelings of bitterness and of being short-changed. The ‘talking claims’ made by PAPs, who lived in the area before the project started, usually express dissatisfaction with project benefits and compensations. On the other hand, when an economic and instrumentally rational process of cost–benefit analysis is carried out, there is no proof of rigour to support these claims.

If the results of cost–benefit analyses are to be believed, then it is difficult to explain the general discontent and one asks the question: Why are stories of being cheated, compromised, and shortchanged by the project authorities rampant among the PAPs when a development project is implemented? One view is that ‘land’ as a concept is understood differently by different social actors involved in a project. State and project promoters and implementers of infrastructure projects look at land as an ‘economic resource’ needed for the development of the project. Hence, they associate an economic value with it and regard it as a commodity that can be bought and sold for a price. As against this, the people and communities who have lived on this land see it as an ‘invaluable good’ or ‘priceless’—something you cannot put a value on. What then is the solution? This chapter relies on the moral economy argument as the basis for state action and explores options for a lasting solution.

Moral Economy Argument

Land provides the context within which different ecological niches are exploited by different communities, be it animal or human. Therefore, land ownership is not as much of an issue as access to land is. On a piece of land, when a new regime takes control, there is a tendency on the part of the new regime to deny all other claimants any access to that piece of land, which becomes a source of conflict. Hence, maintaining social stability by offering security from starvation and ensuring subsistence of PAPs becomes the principal concern of the state in any regime change (that is, in control over land). The state has a moral obligation rooted in the notion of political justice towards the survival of all its citizens.

The two separate worlds of societies and economies have different agendas. The economic world promotes economic activities that are committed to ensuring a return on investment by way of profits to the investors. The social world of people, on the other hand, promotes activities that support individuals, communities, and societies to survive and thrive, by way of oneness and empathy, thus ensuring social security. When these two worlds are balanced, there is stability and harmony among people living in it. When the economic world dominates the social world, it threatens the survival of vulnerable individuals. Then the political or politico-religious order steps in and dictates actions. These interventions, dictated by moral obligations of the state or society through customs and social pressures, coerce economic actors in a society

to conform to traditional norms, even at the expense of profit. It also ensures the survival of vulnerable individuals and thereby restores harmony and stability. These actions are grounded in subsistence ethics—a commitment to ensure survival of the most vulnerable in any society.

All societies are governed by subsistence ethics. In the seventeenth century, economies in Europe and North American colonies were governed by a variety of (formal and informal) regulations designed to prevent greed from overcoming morality. This resulted in the regulation of free markets by religious leaders in different contexts. For example, the clergymen in North American colonies regulated certain practices deemed to be uncharitable, such as hoarding, which may not be ‘wrong’ and therefore not punishable by law. Moral economy is a term used to describe this behaviour (Barton 2008).

The term ‘moral economy’ is also used by Scott (1976) in the context of peasants’ behaviour in agrarian economies in South Asia. He places the critical problem of the peasant-household subsistence at the centre in interpreting peasant behaviour. The fear of food shortages, according to him, explains many otherwise puzzling technical, social, and moral arrangements in peasant society, such as resistance to innovation, the desire to own land however small, even at some cost in terms of income, relationships with other people, and relationships with institutions including the state.

To maintain the social fabric and ensure stability for any political regime, it is imperative to ensure subsistence of affected people. Scott (1990), while describing the ‘weapons of the weak’ states that peasant revolts are not very common in the face of domination by elites in agrarian regimes. Instead, the peasants use ‘every day forms of resistance,’ such as communication and language to protest against domination. These ‘talking claims’ made by vulnerable individuals are clues pointing to the perceived threat to their survival. These talking claims are legitimate, though these may not be validated using rational economic logic of cost–benefit analysis. They provide clues to the state about rising local discontent, and if needed, call upon the state to intervene through actions to restore harmony and integrity. These actions dictated by the political order are referred to as ‘moral economy’. They ensure, at the very least, survival and restoration of livelihood of the most vulnerable individuals after the land on which they lived is transformed into a new productive resource.

Land relations to the majority of people living in rural India represent more than just economic relations. They

determine technical, social (relations with other people and institutions including state), and moral arrangements in rural agrarian society. When the land use pattern is transformed due to industry or infrastructure needs, these technical, social, and moral arrangements get displaced, thus affecting the communities associated with the land and making them vulnerable. To resettle and rehabilitate the affected communities by providing alternate arrangements that are equally effective to ensure economic and social security, becomes the moral obligation of the state, which then holds the new owners of the land responsible for it through policies and legal instruments such as Resettlement and Rehabilitation (R&R) Acts.

The instruments mentioned above define the minimum R&R packages that include infrastructure restoration, individual land compensations, and restoration of livelihood. Resettlement and Rehabilitation (R&R) Acts also specify the process to be followed, procedures to be adopted, and the actions to be taken to restore the livelihood of PAPs.¹ In India, draft R&R legislation is ready at the central government level, which aims at defining more clearly the R&R obligations of the project promoters and providing a stronger basis for their enforcement.² Some states have already passed R&R Acts. In addition, there are R&R policies framed by both the Central Government and some states, which have over the years, tended to address the concerns of PAPs more comprehensively, with special focus on the socially disadvantaged groups.

Learnings from the Past

In the seventeenth century, there was a practice among landlords in Europe to claim non-farm lands as personal property by fencing it. The practice and its resistance by peasants is well documented (Powelson 2000). With this practice, other changes that followed included changes in gathering, production, transport, and transformation of resources for use as marketable commodities. Dependence on subsistence gathering as a means of livelihood declined with a corresponding increase in the number of persons engaged in manufacturing, transport, service, and resource use for commodities. Cooperation between neighbours of long standing became less important (Riggs 2006). Patterns and associations of wealth and poverty since then became more diffused and diverse as non-farming opportunities expanded and heightened the level of mobility, leading to the delocalization of livelihoods. This had ramifications for the countryside that got progressively delinked from agricultural resources.

¹ Carnea (1995 and 2006).

² ‘The National Rehabilitation and Resettlement Policy 2007, *The Times of India*, Mumbai, 2008.

Historically what happened in Europe is now becoming a global trend and India is no exception. Several studies have documented evidences of peasant revolts against various regimes whenever their survival was threatened by new regimes. Tribal revolt (Guha 1974) against indigo dye plantation replacing subsistence agriculture is well documented. Protest against forest contractors exploiting forests for timber has often led to protest among tribal communities, as described by Hardiman (1987), in *The Coming of the Devi...* Guha (1989) has reported that persistence of over a century of protest and alienation by the local communities in the Gharwal Himalayas in the face of commercial forestry can be explained by the community taking recourse to their reservoir of traditional ecological knowledge saved through folklore and every day practices of resource exploitation. In the context of ecological studies, the impact of regime change leading to conflict in communal and caste harmony is documented by Gadgil and Malhotra (1983).

History thus provides several instances of the elite usurping the right over lands and putting them to other uses, supported by an ideology that land is an economic good, the access to and ownership of which can be changed like any other economic good. Equally important the available evidence in several cases of regime change in control over land, and of resistance from those whose survival has been threatened by such regime changes.

Mistrust Growing with Economy

In the post-independence period, India has always maintained a commitment to the modern paradigm of higher industrial growth and accelerated infrastructure development; but these commitments have become stronger in recent years. States are competing with each other to attract industries and infrastructure developers by providing incentives. Project promoters have been responding positively to these incentives by setting up projects, which entail acquisition of land, often with the assistance of the state. This has meant that an increasing number of people are getting involuntarily displaced. In pursuance of the moral economy argument, the state, through R&R legislation and policies at its disposal, is attempting to ensure that land use changes for development projects do not reduce the welfare of the PAPs.

But have these attempts been successful? The answer is broadly negative, partly because of some inherent weaknesses in the instruments used by the state to reflect the moral economy argument, such as inadequate legal backing for compliance with R&R obligations, but mainly due to the mistrust, which is growing as attempts for land

acquisition gain pace. Given that the project promoters typically borrow from the market to fund their projects, there is always a pressure on them from their lenders to reduce the non-capital expenditure to the minimum. Even in the absence of such pressures, they see minimizing R&R expenditure as a way of pursuing self-interest. There is also a certain amount of fear and mistrust in the minds of the project promoters about the PAPs, who they believe, generally try to seek advantage during negotiations from the involvement of political parties and other vested interests that support them in determining the R&R packages. Open negotiations with affected communities can be protracted, causing delays, adding to the project costs, and in turn, making the project less profitable and in extreme cases unviable. Promoters also believe that state governments, given their development commitment, would back the project promoters as long as due procedures are followed.

Not surprisingly, a view that project promoters follow the mandate in 'letter' rather than in 'spirit' has gained ground. The affected communities often feel that despite the policies and acts aimed at protecting their interests, they are the biggest losers among all the stakeholders. After the project becomes operational, very often livelihoods are not restored as promised. On the one hand, their old ways of surviving and earning a living are no longer valid in the changed regime and on the other hand, they do not have the skills or resources to take advantage of the opportunities resulting from the project. Hence, their worst fear of being left out on the margins to starve and die is reinforced. This leads them to uphold the 'moral economy' argument and make 'talking claims' that they are cheated, since they were promised something and given something else (Bapat 2006). These claims usually appear after the construction phase of the project and continue even after the project is commissioned, with their grievances broadly falling into three categories: loss of incomes including economic exploitation, erosion of the socio-cultural fabric, and environmental degradation.

What lies underneath such claims is a concern that something they value is about to be transformed beyond recognition and they would have no control over the transformation. They would be bypassed in important decisions regarding the transformation of their land, despite generations of PAPs having spent time and effort in nurturing and taking care of that land. Without attempting to judge the appropriateness of these claims, what is needed is empathy with the PAPs and an understanding of what that land means to the people and communities associated with it.

Protests from PAPs: The Current Scenario

The trend of resistance by the affected communities continues and has become more intense and widespread in recent years. The other change clearly perceptible is that state governments, keen on more rapid industrialization of their respective states, have become more sensitive to this issue. Thus, while the PAPs are organizing themselves to protest, thereby threatening projects with delays and disruptions, state governments are attempting to minimize such resistance, as the following newspaper reports indicate.

In the Sripada Sagar Project (Andhra Pradesh), a Rs 900-crore irrigation project on the Godavari at Yellampalli village, the Irrigation Department had to hold a four hour-long meeting to review complaints from the PAPs over the promises made to those who had lost their lands (*The Times of India*, 4 October 2008, 'Govt. girdles upon Yellampalli').

In the Rs 8000 crore multi-purpose Polavaram project in the Godavari Khammam district, as many as 205 villages and 62,700 acres of arable land would be submerged and over 25,000 families affected in the district (Reddy 2008). As part of the R&R package, the state government has to provide alternate land to the displaced persons in lieu of the land being acquired, construct houses for them, and also pay monetary compensation. In fact, for those ousted in Polavaram district, the state government has come out with a special package for their rehabilitation, which includes provision of 32,000 acres for SCs and STs.

In Jharkhand, the state government and companies have been trying to acquire land but have faced protests from farmers, who have been supported by political parties and non-governmental organizations (NGOs). Recently three land surveyors of a private steel and power company were roughed up by farmers at Potka block of East Singhbhum district in the state (*Sindh Today*, 17 September 2008). To facilitate land acquisition, Jharkhand formulated an R&R policy in September 2008 and decided to create greater awareness of its new policy among the land losers.

The resistance to land acquisition by a car manufacturing company (Tatas) in Singur (West Bengal) led the company to relocate its car production unit to another state in spite of the West Bengal Chief Minister's best efforts to break barriers to settle the Singur issue, once and for all (*Economic Times*, 11 September 2008, 'CM ropes in Gautam Deb').

A Search for Lasting Solutions

Reviewing the history of peasant revolts/struggles or other

forms of resistance against regime change in control over land, one observes that a major contributing factor has been the absence of space for communication between the impacted communities and the project implementers that was safe, neutral, and fair, where transparent negotiations can take place. This missing link in the relationship between the PAPs and project promoters continues till date, as reflected in the press reports noted above, which explains why despite the policies and legislations relating to R&R becoming increasingly sympathetic to the cause of the involuntarily displaced, the PAPs continue to feel insecure and resentful.³ Another factor causing resentment is the absence of a choice in moving into a transformed common future associated with the process leading to their displacement. Filling these two gaps would reduce 'talking claims' substantially.

The trust of the community needs to be gained by the implementing authority right from the inception of the project. It is useful to put in place an organizational structure with defined functions that is sensitive to the plight of the PAPs. Communication channels need to be nurtured between the community and the project promoters right from the development planning stage. It would then be possible to hand hold the PAPs throughout the life cycle of the project, listening to both their concerns and claims to the lands that are being transformed, all the time exploring the possibility of a new and exciting future that has growth and prosperity, alive and real for every one. At the same time, the project promoters must guarantee at least subsistence on a continuous basis, keeping track of each and every livelihood that gets impacted, as the land transforms and provide alternative livelihood options through training, capacity building, microfinance, etc.

The second component of the strategy is commitment to a common future that can be created with integrity. Credibility of this commitment is critical for building faith and trust. What this means is that if circumstances demand a change in plan, the same is honestly and truthfully communicated to the PAPs and the new plan is implemented after taking into consideration the views of the PAPs. No village community is so weak relative to a project, however strong, to be completely eliminated by the project. So, co-existence is inevitable when lands are acquired from a community. The enlightened self-interest of the project promoters lies in accepting the community as equal partners through a long-term strategic alliance in a manner that assures the community that they are not short-changed.

One way to do this is to use the tool of Corporate Social Responsibility (CSR) creatively. After all, the community has human capital that can be useful for future growth in

the surrounding areas as well as cater to the future needs of the project itself. For example, major private funded engineering, medical, and management institutions are seen functioning along highways, catering to higher technical and professional needs of the catchment areas. There can be arrangements to support fellowships for people whose lands were taken, if the student qualifies. Another example of a strategic relationship between project promoters and local communities from whom land is acquired is a proposal by a petroleum company to support its dealers in setting up petrol pumps in peri-urban areas and one-stop shops (akin to a mini supermarket) which would cater to the needs of the local community and also serve as a market for their produce. To resolve the concerns of the locals in the Singur (small car manufacturing) project, Prem Shankar Jha had suggested that just 0.25 per cent of the annual sales revenue be set aside for distribution as an annual royalty to the owners and sharecroppers for the use of their land. With an annual turnover of Rs 5,000 crore (assuming annual sale of 5 lakh cars a year), the royalty would have amounted to Rs 1.25 lakh per acre per year to be split among landowners and sharecroppers. To recover this added outlay, the company would have had to increase the price of their car by only Rs 250 (*Hindustan Times*, 5 October 2008).

Conclusion

The chapter observes that while the moral economy argument—which makes it a moral obligation of the state to protect the interest of the involuntarily displaced—is

getting reflected in the policies and legislations in India, such state actions have not been able to reduce tension between PAPs and project promoters partly because of their inherent weaknesses, but mainly because of mutual mistrust which is rooted in differing perceptions of land between these two groups. There has been no convergence of these perceptions because of the absence of (i) effective communication and (ii) a vision for a common future. The chapter, therefore, argues that while there is a case for strengthening the policies and legislations to better reflect the moral economy argument, there is a need to go beyond it to establish mutual trust. The initiative has to be taken by the project promoters by setting up effective channels of communication and exploring a new way of acquisition of land and transformation of its use, which is seen by the PAPs as an opportunity for creating a future that excites them and that they support wholeheartedly. It is possible to learn lessons from the CSR initiatives of the corporates in this regard. A strategic partnership between the PAPs and the project promoters not only has the potential to reduce significantly or eliminate ‘talking claims’, but also constitutes an investment in the affected persons as a future resource. The ‘human capital’ created over one generation after duly anticipating the kind of skills and capacities that may be in demand could result in a ‘win-win’ proposition for the PAPs as well as the project promoters. Building on the strengths of these communities and creating a strategic partnership for a common future that inspires both the promoters and PAPs could transform the land acquisition paradigm.

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14 Rehabilitation and Resettlement Policies

A Comparison of National and Multilateral Agency Policies and Issues in Implementation

Ashok Emani

Introduction

Over the years, the Rehabilitation and Resettlement (R&R) policies, both at the national and international level, have become more sensitive to the needs of the displaced. As detailed elsewhere in this report, the Central Government has notified the National Rehabilitation and Resettlement Policy in 2007 (NRRP-2007), which has addressed many of the deficiencies of the earlier R&R policies of 2003, and clearly represents a significant milestone in the Indian R&R landscape.

Multilateral Agencies (MLAs) have also strengthened their safeguard policies over the years. Asian Development Bank's (ADB) Policy on Involuntary Resettlement (IR), initially adopted in 1995, has been subsequently revised in 2003 and 2006. The World Bank's (WB) Operational Directive (OD) 4.30 (on Involuntary Resettlement) and OD 4.20 (on Indigenous People) have been replaced by Operational Policy (OP) 4.12 and Bank Procedure (BP) 4.10 respectively, which apply to all projects entailing resettlement. International Finance Corporation (IFC), in 2006, formulated their standards known as Performance Standards on Social and Environmental Sustainability with Performance Standard 5 exclusively addressing land acquisition and involuntary resettlement.

This chapter details the policies of WB and ADB on R&R and compares them with NRRP. Further, the

chapter critiques NRRP-2007 from the point of view of its practicality and implementability.

World Bank and ADB—R&R Policies

WORLD BANK R&R POLICIES: OBJECTIVES AND IMPLEMENTATION GUIDELINES

The World Bank Policy on Involuntary Resettlement OP 4.12 (September 2001) has the following objectives:

- involuntary resettlement should be avoided where feasible or minimized,
- where it is not feasible to avoid resettlement, activities related to resettlement should be conceived and executed as sustainable development programmes, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programmes, and
- displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

The Policy covers the direct economic and social impacts that result from funded projects, and are caused by either involuntary deprivation of land resulting in relocation or loss of shelter, loss of assets or access to assets, loss of income sources or sources of livelihood or because of involuntary restriction of access to legally designated parks and protected areas, resulting in adverse impacts on the livelihoods of the displaced persons.

As per the objectives of the Policy, the borrower is responsible for preparing, implementing, and monitoring a resettlement plan. The Plan should present a strategy for achieving these objectives and cover all aspects of the proposed resettlement. The borrower's commitment to, and the capacity for, undertaking successful resettlement is a key determinant of bank involvement in a project. The scope and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. For preparing the plan, the borrower draws on appropriate social, technical, and legal expertise and on relevant community-based organizations and non-governmental organizations (NGOs).

A resettlement plan is drawn up to address the impacts on the displaced persons, to ensure that they are informed about their options and rights pertaining to resettlement, are consulted on, offered choices, provided with technically and economically feasible resettlement alternatives; and are provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.

The borrower carries out a census to identify the project-affected persons to determine who will be eligible for assistance, and to discourage inflow of people ineligible for assistance into the affected area. Displaced persons may be classified in one of the following three groups:

- those who have formal legal rights to land;
- those who do not have formal legal rights to land at the time the Census begins but have a claim to such land or assets—provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan; and
- those who have no recognizable legal right or claim to the land they are occupying.

If the impacts include physical relocation, the resettlement plan includes measures to ensure that the displaced persons are provided assistance during relocation such as residential housing, housing sites, or as required, agricultural sites. Measures have to be taken to ensure that the displaced persons are offered support after displacement for a transition period based on a reasonable estimate of the time likely to be needed to restore their livelihood and

standards of living; and provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities. Particular attention needs to be paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women and children, indigenous people, and ethnic minorities. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.

The implementation of resettlement activities is linked to implementation of the investment component of the project to ensure that displacement does not occur before necessary measures for resettlement are in place. The Bank Policy also requires that the displaced persons should be provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms should be established for these groups. In new resettlement sites or host communities, infrastructure and public services are provided as necessary to improve, restore, or maintain accessibility and levels of service for the displaced persons and host communities. To the extent possible, the existing social and cultural institutions of resettlers and host communities are preserved and resettlers' preferences with respect to relocating in pre-existing communities and groups are honoured.

The full costs of resettlement activities necessary to achieve the objectives of the project are included in the total costs of the project. The costs of resettlement, such as the costs of other project activities, are treated as a charge against the economic benefits of the project. The borrower is responsible for adequate monitoring and evaluation of the activities set forth in the resettlement plan. The Bank regularly supervises resettlement implementation to determine compliance with the resettlement plan. Upon completion of the project, the borrower undertakes an assessment to determine whether the objectives of the resettlement plan have been achieved.

ADB'S R&R POLICIES: OBJECTIVES AND IMPLEMENTATION GUIDELINES

The ADB Policy on Involuntary Resettlement (September 2006) has the following objectives

- avoid involuntary resettlement where feasible; and minimize resettlement where population displacement is unavoidable;
- the Policy aims to provide compensation for lost assets and loss of livelihood and income, assistance for relocation including provision of relocation sites with

appropriate facilities and services, and assistance for rehabilitation to achieve at least the same level of well-being with the project as without it;

- any involuntary resettlement should, as far as possible, be conceived and executed as a part of a development project and resettlement plans should be prepared with appropriate time-bound actions and budgets;
- appropriate patterns of social organization should be promoted, and existing social and cultural institutions of resettlers and their hosts should be supported and used to the greatest extent possible; and
- resettlers should be integrated economically and socially into host communities so that adverse impacts on host communities are minimized.

The ADB requires that an Initial Social Assessment (ISA) be carried out for every development project in order to identify the people who may be beneficially and adversely affected by the project. It should assess the stage of development of various sub-groups, their needs, demands, and absorptive capacity. The ISA should also identify the key social dimensions related to involuntary resettlement (such as indigenous groups, poverty reduction, and status of women) that need to be addressed under the project.

Where population displacement is unavoidable, a detailed resettlement plan with time-bound actions and a budget is required. Resettlement plans should be built around a development strategy; and compensation, resettlement, and rehabilitation packages should be designed to generally improve or at least restore the social and economic base of those to be relocated. The contents and level of detail of resettlement plans (which will vary with circumstances) should normally include:

- organizational responsibilities, community participation, and integration with host populations;
- socio-economic survey and a legal framework including mechanisms for resolution of conflicts and appeals procedures;
- identification of alternate sites and selection along with valuation of and compensation for lost assets;
- access to training, employment, credit, shelter, infrastructure, and social services; and
- implementation schedule along with a monitoring and evaluation process.

According to the Policy, budgeted cost estimates are required to be prepared and implementation of the activities be scheduled with time-bound actions in coordination with the civil works for the main investment project. The responsibility for planning and implementing resettlement rests with the government and other project sponsors. The ADB supports the efforts of the

government and other project sponsors, as required, through: (i) assistance in formulating and implementing resettlement policies, strategies, laws, regulations, and specific plans; (ii) providing technical assistance to strengthen the capacity of agencies responsible for resettlement; and (iii) financing eligible costs of resettlement, if requested.

According to the Policy, resettlement components are required to be thoroughly reviewed throughout project implementation. Asian Development Bank (ADB) review missions should include, as far as possible, persons with expertise in resettlement, sociology, or social anthropology.

Semi-annual reviews of large-scale resettlement operations are recommended, and in-depth reviews of mid-term progress are critical. The reviews should be planned from the outset to allow the government, project sponsors, and ADB to make necessary adjustments in project implementation. Complete recovery from resettlement can be protracted and may require monitoring well after affected persons are relocated, sometimes even after project facilities are commissioned, and ADB financing is completed. Staff of the Project Departments should regularly monitor the involuntary resettlement aspects of ongoing ADB-financed projects, and the progress should be reported in the Project Administration Committee notes. Annual reports on involuntary resettlement aspects of ongoing projects should be prepared by the Office of Environment and Social Development (OESD) in consultation with Operational Departments. These reports should be circulated to the Board of Directors for information along with the corresponding semi-annual reports on Project Administration.

SOME DIFFERENCES BETWEEN WORLD BANK AND ADB POLICIES ON R&R

As is evident from the description above, the commonalities in objectives as well as implementation approach in the policies of the World Bank and the ADB are significant. Yet, there are some important differences as well, which need to be highlighted. Generally, the World Bank Policy is more favourable to PAPs than ADB as can be seen from the differences in their respective approach:

- the ADB Policy lacks strong statements on creating genuine opportunities for affected people to participate in and shape project design and other upstream processes, whereas the World Bank emphasizes, in much stronger terms, the need for such participation;
- the Policy does not adequately specify the methodologies by which baseline data should be gathered as compared to the World Bank, which requires that, 'in

preparing the resettlement component, the borrower draws on appropriate social, technical, and legal expertise and on relevant community-based organizations and NGOs’;

- the Policy has insufficient specifications as to how long supervision must continue. The World Bank clearly states that a project is not considered complete—and Bank supervision continues—until the resettlement measures set out in the relevant resettlement instrument have been implemented; and
- the Policy does encourage monitoring by an external evaluation agency, but in general relies heavily on client-generated information through submission of reports. The World Bank, on the other hand, specifically encourages such external evaluation.

MLAs and National R&R Policies: A Quick Comparison

The core objective of all R&R policies is to avoid involuntary resettlement as far as possible, and minimize resettlement by exploring all viable alternate project sites and designs. Where resettlement is unavoidable, resettlement activities need to be visualized and executed as sustainable development programmes through prior informed consultations with the displaced persons, thereby allowing them to participate in the planning and implementation of the resettlement programmes.

A comparison of the available resettlement and rehabilitation policies of MLAs¹ and the NRRP-2007 is given below across three major elements: applicability, operational procedures, and entitlement/benefits.

Borrower or the client in case of MLAs and a government-nominated officer in case of NRRP-2007 is responsible for implementation of policy requirements.

APPLICABILITY

While the R&R policy of MLAs aims at addressing involuntary resettlement caused by project-related land acquisition, NRRP-2007 is applicable to involuntary displacement resulting not only from project-related land acquisition but also due to any other reason. Further, the MLA policies attribute no less importance to economic displacement than they do to physical displacement, as the former may result in long-term hardship and impoverishment of the affected persons and communities. NRRP-2007, as compared to the policy it replaced, does talk about the economic displacement (livelihood issues), but the progressive provisions of the Policy are yet to be

internalized at project level. The emphasis in NRRP-2007 is on mitigation of suffering due to physical displacement rather than economic displacement. Indeed, in the case of NRRP, R&R benefits trigger only if there are 400 families in plains and 200 families in hills. However, there is no minimum threshold prescribed by MLAs to trigger the applicability of their involuntary resettlement policies.

OPERATIONAL PROCEDURES

Assessment of Affected Persons

MLA R&R Policy envisages socio-economic studies to be prepared by borrowers/clients and carried out in the early stages of the project with involvement of potentially displaced persons whereas in the case of NRRP, the social impact assessment (SIA) studies are to be carried out by the accredited agencies in such a proforma as the government may prescribe and the timing is left to the discretion of the appropriate government. Further, NRRP defines a timeline of 165 days for completion of the entire socio-economic documentation, although there is no defined timeline for implementation of the resettlement plan either in the NRRP or in the SIA study to be prepared under its mandate. In contrast, the MLA Policy does not provide any timeline for the preparation of the SIA (except that it should be completed in the initial period of the project). There is, however, a requirement that the resettlement plan specify justifiable timelines for implementation of activities identified.

Public Consultation

The MLA Policy emphasizes: (i) the disclosure of relevant information to the affected persons and (ii) close consultations with the affected persons in drafting the resettlement action plan. The borrower is expected to facilitate informed participation of affected persons and communities, including host communities in decision making processes related to resettlement and should continue to do so during implementation, monitoring, and evaluation of compensation payment. Though NRRP requires wide dissemination of the Resettlement Plan, the plan need not be prepared in consultation with the affected persons.

SIA Clearance

NRRP envisages mandatory clearance of the SIA study from an independent and multi-disciplinary expert group including non-official social scientists and rehabilitation experts to be nominated by the government. On the other hand, no such committee is required to be set up under the MLA Policy where the decision is mutually

¹ Includes the World Bank, ADB, and IFC.

consented between the requiring body and MLA. MLAs typically have in-house expertise and capacity to review the plans.

ENTITLEMENTS/BENEFITS

In cases of projects funded with financial assistance from MLAs, the MLAs insist that PAPs get the best of both policies (MLAs and NRRP):

The Nature and Eligibility of Entitlements/Benefits

NRRP covers only land acquired through the application of an eminent domain and does not apply to cases of negotiated settlement, while MLA policies cover both.² Further, under NRRP, the government determines the benefits, subject to a set of minimum prescribed standards.³ In case of MLA policies, it is possible for project proponents to arrive at acceptable compensation (replacement costs) through negotiations with affected persons under the supervision of the respective MLA. On determining the eligibility of the affected persons, both NRRP and MLA policies use formal legal rights to land.

Benefits

The MLA Policy envisages all losses to be mitigated at replacement cost, which is the amount sufficient to replace lost assets and cover transaction costs. NRRP, on the other hand, advocates benefits to be calculated on the basis of valuation of lost assets at the market value except in the case of hydel projects where replacement cost is envisaged.

The National R&R Policy of 2007: Gaps and Implementation Issues

NRRP-2007 constitutes a significant improvement over the R&R policies introduced by the government earlier. The current policy extensively covers the R&R issues arising out of involuntary displacement and defines an administrative framework to be applied for projects taking place anywhere in the country. However, there are gaps and issues with respect to practicality and implementability of the R&R Policy. These are elaborated in the following sub-sections.

GAPS

Threshold for Triggering SIA

Unless a project involves displacement of four hundred or more families *en masse* in plains or two hundred or

more families *en masse* in tribal or hilly areas, an SIA study including a baseline survey is not required to be carried out. If the project involves displacement of fewer families than the defined threshold, the displaced persons will not be entitled to any R&R benefits. Until Sec. 6 notification under Land Acquisition Act happens, which provides information on the affected persons, there is no way to know the number of persons that are going to be affected.

Cut-off Date for Entitlements

Application of a cut-off date to determine the eligibility of R&R benefits would exclude the poorest and most vulnerable from these benefits, since such groups would not have any documentary evidence to prove their actual stay in the previous three years.

Benefit Sharing

The Policy envisages long-term benefit sharing with the affected people from the project profits. However, the scope is restricted to titleholders only. In this scenario, non-title holders are left out and excluded from receiving long-term benefits from the revenue generated by the project. This could lead to a conflict situation within the community, entailing delays or even risks, leading to situations wherein the project may not materialize

Prescriptive Nature

NRRP-2007 is more emphatic on defining the minimum standards and benefits rather than providing broad guidelines and principles for project promoters to decide on entitlements.

IMPLEMENTATION ISSUES IN R&R

Despite its robustness, there are concerns associated with the implementation on the ground. The problems encountered during implementation of the R&R Policy are detailed below.

Adoption of NRRP-2007

Though the NRRP-2007 was approved by the Central Government in October 2007; states have not yet adopted the same. Even though in some of the states (such as Chhatisgarh and Maharashtra), R&R benefits and entitlements fall short of what is prescribed under NRRP. It is clearly seen that efforts are not made by the respective departments of those states to bridge the gap.

² IFC Performance Standard 5, for example, clearly identifies negotiated settlement involving involuntary displacement.

³ 'In case of allotment of wasteland or degraded land in lieu of the acquired land, each *khatedar* in the affected family shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees per hectare for land development' (NRRP-2007).

Social Impact Assessment

Social Impact Assessment (SIA) and the related documentation is a crucial feature of any involuntary displacement. A dedicated section on SIA has been introduced in the NRRP-2007, highlighting a clear-cut process and set of procedures to be followed. Based on these socio-economic studies, estimates of physical and economic displacement are arrived at, and consequent entitlement packages determined.

Though the objectives and methodology of undertaking the socio-economic survey are correctly set out, in practice, the primary information is lost somewhere in the process of reporting and does not get registered. The SIA is considered to be an exercise to complete the process requirements and fill the gap. It has become more of a formality than an exercise aimed at finding and presenting the true impact of any proposed project on displacement.

Further, it is observed that SIA reports provide macro-level information of the project area rather than providing a micro-level picture which is more pertinent from the point of view of R&R.

RESETTLEMENT & REHABILITATION ACTION SCHEME/PLAN (RAP)

When it comes to preparing and presenting a RAP as envisaged in the policy, it has been seen that neither the project developers nor the government officials at the local level are conversant with what is involved and often lack the adequate capacity needed to accomplish the task. The ignorance in some places is so much that in one of the power projects in Orissa, the project proponent adopted the policy as RAP and submitted it to the government department. Typically, no compensation framework matrix is drawn. To many developers, compensation means only the price to be paid for land. Though the Policy has provisions for accounting for various economic losses such as agricultural production loss, assets lost, livelihood loss, loss of access to common resource property, and so on, these are rarely considered while working out the compensation.

PUBLIC CONSULTATIONS

Public hearing, which is mandatory for getting clearance for certain projects, is often construed as public consultation by the project proponents as well as the authorities responsible for overseeing R&R. Public consultations are conspicuously absent at the local level, except in very rare cases. Though NRRP-2007 envisages that the Resettlement and Rehabilitation Action Plan (RRAP) be

prepared in consultation with the communities, project information is tightly held between the requiring body and appropriate government. In the absence of project information availability, anxiety amongst the affected persons builds up, leading to unrest and agitation.

VALUATION OF LOST ASSETS

The R&R losses are evaluated at market value, taking into consideration the depreciation of structures and assets. Often, this value is less than the replacement value of the asset and the affected person/household is unable to replace the asset with the given compensation. As a result, in practice, restoration of the economic well-being of the affected people to the pre-project conditions is not even attempted.

ALIENATION OF COMMON PROPERTY RESOURCES

Loss of common property resources (CPRs) affects the people living in the plains and hilly areas alike. Though provision for creating access to CPRs in hilly areas is envisaged in the NRRP, there is no such provision for those living in the plains. In practice, tribal as well as hilly areas are neglected with little concern shown towards CPR alienation.

GRIEVANCE REDRESS MECHANISM

Under the NRRP, there are R&R committees (under the Chairmanship of the Administrator of that project), which monitor and review the progress of R&R scheme/plan implementation. It is the administrator who carries out the directions issued by the Grievance Redress Cell, which has the powers to consider and dispose of all complaints relating to R&R. Although NRRP provides a robust redressal mechanism, there is no way of addressing grievances of persons who may actually get affected, but did not get an opportunity to represent themselves in the plan/scheme that was drawn. These committees get to know the shortcomings of RAP only at the time of social audits which is too late a stage to address the issues of affected persons.

ADDRESSING IMPLEMENTATION

ISSUES AT THE PROJECT LEVEL

At the project level, the implementation issues as discussed above are being addressed by adopting MLA R&R policy requirements. A case in point is the Mumbai Urban Transport Project, whose R&R package and implementation are planned on the lines of the World Bank Policy (see Box 14.1).

Box 14.1

Guidance Note on Urban Resettlement for the MUTP

The World Bank-financed Mumbai Urban Transport Project (MUTP) affects a total of about 20,000 Project-Affected Households (PAHs) through its three main components—the Santa Cruz–Chembur Link Road (SCLR), the Jogeshvari–Vikhroli Link Road (JVLRL), and upgradation of the rail transport system. The cost of R&R in this project is estimated at about US\$ 97 million, that is about 15 per cent of the total infrastructure cost.

The Guidance Note observes that a perception has developed in the public that compliance with World Bank resettlement policies is the main cause of delays in R&R implementation, and hence in the construction of the MUTP infrastructure. It argues, though, that the main cause of delays is poor planning of R&R components, bureaucratic hurdles, and inadequate resources.

The Guidance Note was, therefore, prepared with the objective of assisting the Government of Maharashtra (GoM) and the World Bank in assessing and evaluating resettlement issues related to the project, developing appropriate packages for resettlement, and establishing an efficient implementation mechanism. The key features of R&R suggested in the Guidance Note are: (i) special attention to the issue of livelihood restoration as well as the longer term issue of the sustainability of new communities of resettled people; (ii) the development of a resettlement-oriented data management system involving issuance of identity cards to heads of affected households; preparation of lists of PAHs sorted by criteria such as location, value of assets, and compensation preferences, and baseline socio-economic information; (iii) grievance management system involving registration, tracking, and redressal of grievances within one month; and (iv) monitoring and evaluation of the resettlement process on the basis of a pre-identified set of indicators.

The MUTP R&R policy envisions two main resettlement options for slum dwellers, viz. (i) the Township/Sites and Services option wherein the PAH is entitled to a fully developed plot of 25 square metres on a green-field site as well as monetary compensation to rebuild a new structure on this plot and (ii) the more common ‘Resettlement Colony’ option or ‘Slum Redevelopment Scheme’ wherein slum dwellers receive a tenement of 225 square feet in a multi-storeyed building within a resettlement colony.

The Policy provides for additional compensation for the permanent loss of employment and increase in travel distance to original place of work. It also talks of a special package for the vulnerable PAHs such as households below the poverty line, the women headed households, the handicapped, and the aged. This would include a ration shop under the Public Distribution System (PDS), ground floor accommodation for the handicapped and the aged, and support through the community-operated fund for income generating activities.

The Guidance Note suggests alternatives and improvements to the compensation to be provided to PAHs. These include a voucher system which could be used as a down payment by the voucher holder to secure a loan with a financial institution, collective relocation solutions under which businesses grouped by professions are relocated together in specific trading centres in the resettlement sites or elsewhere, and dedicating the ground floor of resettlement developments to resettled shops.

One of the important issues highlighted in the Note is that of the eligibility criteria and categorization of eligible PAPs. While the policies of the GoM provide for R&R of only those informal slum dwellers who are registered in the electoral rolls as of 1 January 1995, the World Bank Policy provides for R&R of all persons occupying the project footprint at the time of the project-specific Census. The Note, therefore, suggests the following solutions:

- residents able to demonstrate that they were residing in the slum prior to the 1 January 1995 cut-off would be eligible to a full R&R package;
- residents having settled after 1995 and before the project census would be eligible to a reduced package; and
- residents occupying the footprint after the census would not be eligible to anything.

Source: Frédéric Giovannetti (2009), ‘Guidance Note on Urban Resettlement’, prepared for The World Bank and the Government of Maharashtra, for MUTP, January.

Conclusion

Although the NRRP-2007 is a far superior policy as compared to the earlier R&R policies of the government and is more in line with international best practices from the point of view of the project-affected people, the Policy still falls short of the policies and practices advocated by the MLAs, particularly with respect to the threshold level for applicability of R&R benefits and emphasis on timeline

for implementation of R&R. Besides these deficiencies at the policy level, there are some implementation issues as well. Some of them may be teething problems; but with the passage of the R&R Bill, which is pending in the Parliament, and over time as the administrative apparatus gears up and capacity improves at the government and project proponent level, the implementation is likely to improve.

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15 Land for Infrastructure Development

Livelihoods and Fair Compensation

Sankar Datta, Vijay Mahajan, and Ashok Kumar Singha

Introduction

It is widely believed that the growth momentum of the Indian economy in recent years cannot be sustained unless the infrastructure bottlenecks are swiftly and adequately removed. Further, a view is gaining ground that deficiencies in infrastructure are impacting the poor the most. Infrastructure development not only creates a large number of jobs for the poor in terms of ensuring their economic security, but also contributes to other indicators of human development such as health and education. In appreciation of the significance of infrastructure in ensuring the penetration and sustainability of the gains from development, the government has been showing increasing commitment to the facilitation of higher investment in infrastructure, which would ensure sustainable delivery of infrastructure services at low prices. Historically, the public sector has been the dominant provider of infrastructure services; but in recent years focus has been shifting to private provisioning and the government has been progressively taking the role of a facilitator. Indeed, getting private capital into infrastructure services has become the cornerstone of the infrastructure development strategy.

With rising investments, infrastructure is emerging as a dominant source of demand for land, which often entails compulsory land acquisition by the government for projects promoted either by state agencies or private conglomerates. As the scale of such acquisition rises, it intensifies two issues: discontent among the landholders

regarding the compensation they receive and concern about the loss of traditional livelihood activities. Thus, while at a nationwide level, infrastructure development is mitigating poverty by reducing unemployment and improving health and education standards, it is also causing impoverishment of the people displaced by the projects, and is thus proving to be a setback to the anti-poverty programmes. This is happening because of deficiencies in the Rehabilitation and Resettlement (R&R) policies and their implementation. The aim of this chapter is to create a deeper understanding of the livelihood and compensation issues and the impediments to their mitigation through the current legal and policy instruments. Some initiatives to overcome these barriers are mentioned below.

Consequences of Infrastructure Development

In this section we will focus on the consequences of infrastructure development at the local level, broadly from three perspectives: change in traditional livelihoods, emergence of new livelihood opportunities, and unprecedented changes in land prices and later of other items.

TRADITIONAL LIVELIHOODS GET AFFECTED

Poor people are usually engaged in more than one activity to sustain themselves. These form their 'diversified

¹ S. Datta, V. Mahajan, and G. Thakur (2003), 'A Resource Book for Livelihood Promotion' Discussion in Module 1, p. 25.

portfolio of subsistence activities' (DPSA).¹ A large majority depends on land-related activities such as forest product collection, agriculture, and animal husbandry. The impact of land acquisition on their sources of livelihood is profound and well recognized. But there are also people engaged in related activities, for example, small enterprises which supply tools and inputs to support agriculture and other village-level activities such as trading in agricultural produce, loading–unloading–transportation, and storage, who also get impacted. Furthermore, with loss of land, some may lose their livelihood from the entire DPSA and others may lose only a part of it.

Another category of people that gets adversely affected is the one dependent on common property resources (CPRs). A study (Singha et al. 2006) in the non-forested areas of Keonjhar, Jagatsinghpur, and Bolangir districts of Orissa in 2007 shows that about 25.7 per cent of the income of the poorest households came directly from the CPRs, such as vegetation in the embankment, village forest, and upland orchards. As the policy of land acquisition in many states aims at minimizing displacement, they first target CPR lands because from the prevailing viewpoint of the government, only acquisition of land belonging to households is considered alienation. This is because the Land Acquisition Act (LAA), 1894 recognizes only ownership rights and not usage rights such as grazing, gathering grass and branches of shrubs, collecting silt and sand, or merely squatting. Interestingly, the Indian Forest Act, 1860, recognized customary usage rights or '*nistar*' rights and permitted their continuation when a forest area was 'reserved'. But there was no such recognition of usage rights in the LAA, 1894, enacted 34 years later. This has serious adverse outcomes for those who are dependent on CPRs for sustenance.

The nature of impact is often complex and it is difficult to gauge the net impact on a community. A study by Sills et al. (2006) is probably the first systematic analysis of local environmental and social impacts of mines in India and reveals some interesting insights. The analysis combines information from household and community surveys, spatial data on land cover, location of mines and villages, and Census data to examine the impact of iron ore mines on the forest resources and local livelihoods in Keonjhar district of Orissa. The study suggests that mine location is negatively correlated with forest benefits (such as major non-timber forest produce sold and forest products in diet) and various other measures of household welfare (such as health, education, cash income, and production assets), but may create local factory and industry jobs (see section 14.2) and proximity to infrastructure (that is, bus-stops and all-weather roads).

NEW LIVELIHOOD OPPORTUNITIES EMERGE

Due to infrastructure development, several new livelihood opportunities emerge both within the project as well as the surrounding areas during and after the infrastructure development phase. In the development stage, requirements are mainly in construction. Many livelihood-related activities that emerge are: construction labour, masonry, carpentry, electrical and plumbing work, enterprises supplying inputs for construction work, transportation, garages for maintenance of vehicles and construction equipments, and land brokers, etc.

After the development of the infrastructure, many new livelihood opportunities emerge in the area. Some of them are created by the infrastructure itself. Irrigation infrastructure, for example, leads to improved agricultural production in the area, while road infrastructure supports transport and trade. Additionally, many support enterprises open up new livelihood opportunities. For instance, seeds, fertilizers, and other input supply in an area with modernizing agriculture, or automobile repair shops and eateries in areas with new road infrastructure uncover new livelihood opportunities. This also leads to immigration, triggering demand for more new jobs in repair and maintenance, transportation, retail, trade, hotels and dhabas, and business services such as telephone booths.

These new opportunities are mostly in service industry and small enterprises and are less dependent on natural resources. Some shifts may occur within the agricultural hinterland of the project—for example, cash crops such as floriculture and vegetables become possible, as demand rises and market channels get strengthened due to infrastructure development. This has also been illustrated in the case of land acquisition for the Rajiv Gandhi International Airport in Samshabad, discussed later in this chapter.

Nowhere is the debate about the loss of traditional livelihoods versus the gain of new livelihoods more strident than in the case of Special Economic Zones (SEZs), which experts believe would lead to about 100 million workers moving out from agriculture into industry and services (Sharma & Goswami 2006). The SEZ Policy of the Government of India was announced in April 2000 with a view to attracting larger foreign investments into India by overcoming the bottlenecks created by the multiplicity of controls and clearances and the absence of world-class infrastructure. The SEZ Act, 2005, supported by SEZ Rules, came into effect on 10 February 2006, providing for simplification of procedures and for single window clearance on matters relating to central as well as state governments.

The land required for all the planned SEZs, however, constitutes a miniscule part of India's total arable land.² Without entering into the debate of whether SEZs yield net benefits, we observe that one positive anticipated consequence of development of SEZs is rapid urbanization of the area and shift of livelihoods from agriculture and allied activities to the industry and service sector. However, this desirable inter-sectoral shift is accompanied by the obvious fall-out that those who lose their traditional livelihoods rarely get jobs in the new enterprises that come up in the SEZ, or even in the related and supporting services. When they do, the jobs are typically low paying ones, such as security guards, domestic help, and drivers.

UNPRECEDENTED RISE IN LAND PRICES

Demand for land goes up as soon as a site for infrastructure development is identified. While the actual land requirement for the project may not always be significant, demand for land goes up sharply because of purchases by land speculators in the areas surrounding the project much before the actual commissioning, which often lead to rise in land prices. Speculation is motivated by the (appropriate) expectation that after infrastructure development, land prices would be much higher than at the time of acquisition.

In Singur, West Bengal, the location from where the Tatas shifted the Nano car factory, farmers were paid Rs 8.5 lakh per acre for single-crop land and Rs 12 lakh per acre for double-crop land during 2005–06 (see West Bengal Industries Development Corporation website www.wbidc.com). But by the beginning of 2008, the authors found that industrial plots in Singur were quoted for as high as Rs 40 lakh per acre. This differential was one of the main causes for the resistance.

Similarly, the Government of Andhra Pradesh had acquired about 100 acres of land from small and marginal Dalit farmers in Medak district (about 40 km from Hyderabad) during April 2006 with a promise to set up a beverage factory. Landowners were paid Rs 1 lakh per acre and promised a job in the factory. While the offer was attractive at that time, the market value of the same land rose to Rs 20 lakh per acre in six months, even though

the promised factory was not in sight (*The Hindu*, 25 November 2006).

Speculators are not always private sector players; even the State Industrial Development Corporations (SIDCs) sometimes engage in speculation. The case of Kalinga Nagar illustrates the point (see Box 15.1).

Compensation and Livelihood Agenda under Different Regimes

To understand how the livelihood agenda is currently being addressed, it would be useful to gain a historical perspective. The strategies to gain this historical perspective are mentioned below.

EVOLUTION OF THE LEGAL AND POLICY REGIME

Following is a brief description of how the regime for land acquisition and the policy regime that aimed at mitigating its consequences evolved over time.

ORISSA R&R POLICY, 2006

Following several deliberations on the policies and best practices of other states, a group of ministers of the Government of Orissa recommended a balanced policy for R&R, which is a significant improvement over other policies of similar nature. The policy and institutional arrangement was finalized by the Orissa State Cabinet on 14 May 2006. The key features of the policy are as follows.

Prior to Land Acquisition

- The Policy requires that a socio-economic survey (consisting of socio-cultural, resource mapping, and infrastructural sub-surveys) should be undertaken for the identification of displaced families and for recording their socio-economic status.
- A comprehensive communication plan for awareness creation should be formulated and executed in the affected area.
- *Gram Sabha* or *Panchayats* at the appropriate level shall be consulted in Scheduled areas before initiating the land acquisitions proposal.

² Land Allocation for SEZs

Parameters	Area in sq. km	% to total land mass
A Total landmass in India	29,73,190	
B Arable agriculture land	16,20,388	54.5
C Land in possession of the 260 SEZs notified	299	0.01
D SEZs in pipeline for which approvals have been granted	677	0.02
Total approved and possessed land under SEZs (C+D)	976	0.03

Source: Ministry of Commerce, SEZ section, Government of India, 2008.

Box 15.1
The Kalinga Nagar Case

Gifted with abundant natural resources, such as forests and minerals (coal, iron ore, manganese ore, bauxite, nickel, cobalt, and chromite), Orissa has become the hotspot for steel and alumina producing companies worldwide. The growing demand for steel in the international market has resulted in steel manufacturing giants the world over eyeing Orissa for their industries. The Government of Orissa, in a bid to capitalize on the growing international interest in the state, launched a systematic effort to bring investment into the state through the nodal agency for investment promotion, Industrial Promotion Investment Corporation Limited, Orissa (IPICOL). Significant effort went into capacity building within IPICOL, which now boasts of some of the state's best officers on its rolls. Following this, at least 45 MOUs were signed with the steel sector. Of these, 13 major steel plants are coming up at Kalinga Nagar, where more than 100 chrome washing plants are already in operation.

The disconnect between the investment promotion agenda of the state and local issues of the people were starkly exposed after the police fired at a rally of *Munda* tribals of the area, resulting in the death of more than 10 tribals and injuries to more than 30. The *adivasis* at Kalinga Nagar alleged that Industrial Development Corporation Limited (IDCO) had been acquiring their lands either by force or at low prices and selling the same land to various companies at higher prices. They also alleged that they were not consulted or provided with access to information, and were excluded from the decision-making processes that affected their livelihood.

The firing incident led to national and international outrage and prompted the government to go for wider consultation and to engage experts to design a new R&R policy to address all the contested issues. The Policy restored confidence and several of the investors have commissioned their projects in the state including Kalinga Nagar.

Source: Ashok Singha's field visit, media, and taskforce reports.

TABLE 15.1
Acquisition and Compensation Policies—1894 to 2008

Milestones	Mode of acquisition	Compensation and livelihood Agenda
LAA, 1894	Drawing strength from an English law; the concept is known as the <i>Law of Compulsory Purchase</i> . It yields extraordinary power to the state to acquire land with mere notification.	The LAA, 1894 is a highly efficient instrument in the hands of a state, designed to facilitate acquisition of land for public purpose. This law empowers the state, (as an exception to the general rule) to compel the owner of a property to submit it to the state, any agency or entity authorized by the state on the grounds that the property is required for the use of the state (for an inadequately defined 'public purpose'). In effect, the state can appropriate private property rights for public purpose—which has a wide and generous definition. The pretext of 'public purpose' is often accused of harbouring private interests. LAA, 1894 does propose compensation for the loss of asset ownership but there is no clear emphasis on livelihood.
LAA, 1894 (as amended in 1984)	Acquisition process as above	The Amendment in 1984 enabled greater private sector participation but the state's role was still pre-eminent. There was still no emphasis on livelihood security.
National Policy on Rehabilitation and Resettlement (NPRR), 1998 (Hanumantha Rao Committee)	Acquisition under LAA, 1894	The NPRR-1998 recognizes the rights of tenants and agricultural-labour and is broad-based to address the livelihood issues to include both the displaced and affected.
World Commission on Dams, 2000	Acquisitions for dams and irrigation projects financed by multilateral aid/loan	The World Commission on Dams recognizes 'good practices' and advises greater focus on means of livelihood and their protection rather than only assets. It recommends baseline surveys and assessments to arrive at a 'just compensation' for livelihood lost. These recommendations were not made mandatory. The implementation history of these recommendations is poor.

Table 15.1 (Contd.)

Milestones	Mode of acquisition	Compensation and livelihood Agenda
Andhra Policy, 2005	Acquisition for Irrigation Project under LAA, 1894	The definition of agriculture was broadened to include all allied activities and artisans.
SEZ Act, 2005	Acquisition for SEZ	The focus of this Act was primarily on the creation of new jobs at the cost of traditional/existing livelihoods. The transition is particularly difficult for project-affected persons (PAPs).
Orissa R&R Policy, 2006	Acquisition for all kinds of projects under LAA, 1894	This R&R policy has broadened the definition of a family with a major focus on livelihood analysis and planning, perspective infrastructure planning in the resettlement areas, socio-cultural and socio-economic survey to give recognition to wide-ranging livelihood options in the affected areas. This is the first attempt at benefits sharing with the offer of preference shares.
National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007) and Land Acquisition (Amendment) Bill, 2007	Acquisition through a narrowed-down version of 'public purpose'	NRRP-2007 recognizes traumatic, psychological, and socio-cultural consequences on the displaced populations, which calls for affirmative state action for protecting their rights. It talks about the concept of indexed benefit and direct negotiations similar to the Orissa Policy mentioned above. LA (Amendment) Bill lays down that companies, in order to qualify for state intervention in land acquisition, must raise at least 70 per cent of the land required through market mechanisms. They can seek state support in only acquiring the pending 30 per cent. This is a major paradigm change which recognizes livelihood threats and takes a candid look at the employability possibilities of PAPs in the new project.
Multilateral-financed projects in 2008	Acquisition under LAA, 1894	The Asian Development Bank in Uttaranchal (Road Investment Programme, 2000), and the World Bank in Orissa (Community Tank Management Programme 2008) ³ developed an Entitlement Matrix recognizing the rights of the affected persons and provided separate compensation for asset acquisition, livelihood assistance, and rehabilitation assistance.
Private sector industrial projects, 2008	Mostly complying with the Act and state policies or project-specific packages	Pohang Steel Company Ltd (POSCO) Project in Orissa offers additional compensation for traditional livelihoods and shops for trading as well as skill building opportunities. Videocon Project promises profit sharing by offering shares in West Bengal and Maharashtra (2008).

Benefits as per the R&R Package

- The Policy expands the definition of 'family' to include vulnerable individuals, the physically and mentally challenged, widows, etc.;
- The Policy requires the project proponent to give preference to one nominated member of each affected eligible family for the purpose of employment;
- The project proponent also has to provide training for self-employment, provide homestead land, and assistance for self-relocation, and offer an option for the displaced family to subscribe to convertible preference shares;
- There are special provisions for the indigenous and primitive tribal groups. As far as practicable, indigenous communities should be resettled in a compact area close to their habitat;
- The rehabilitation grant is indexed to the Wholesale Price Index (WPI) and is revised by the government once in every two years thereafter;
- The project proponent may opt for direct purchase of land on the basis of negotiated price after issue of notification requiring acquisition of land under relevant Act(s). If acquisition of land through direct purchase fails, other provisions of the relevant Act may

³ Ashok Singha, along with colleagues Satya Mohanty and Saroj Nayak were involved in developing the integrated safeguard analysis and design of the Orissa Community Tank Management Project for the World Bank.

be invoked. This would ensure that displaced people get the maximum value of their land.

Monitoring the R&R Process

- A Rehabilitation and Periphery Development Advisory Committee (RPDAC) is formed to encourage participation of displaced people in implementation and monitoring of the R&R package, to oversee, and to monitor periphery development;
- A State-Level Council on Resettlement and Rehabilitation (SLCRR) is formed to advise, review and monitor the implementation of R&R Policy. The SLCRR is headed by the state's chief minister;
- A directorate of R&R is constituted at the state level to discharge and oversee the implementation of the R&R Policy.

While the policy has several positive features such as provision of a survey to identify the displaced families and benchmark their socio-economic status, consultation with the Gram Sabha, a more inclusive approach to identification of beneficiaries, well-defined benefit package, and a strong monitoring mechanism, it has been criticized on the following grounds:

- The policy fails to ensure employment guarantee to the displaced; it carries just a stipulation that the industries give job 'preference' to at least one nominated member of each affected family;
- The policy is non-committal on ensuring land for land rehabilitation for the displaced families; and
- The policy remains silent on the government's role in cases where people don't want to be displaced by projects.

NATIONAL POLICY ON R&R

In October 2007, the Government of India (GoI) notified the NRRP-2007 formulated by the Ministry of Rural Development (MoRD), to replace the earlier National Policy for Rehabilitation and Resettlement, 2003. A review of the Policy shows that there has been a renewed emphasis on inclusiveness and greater sensitivity to social impact of the project. The new Policy and the associated (proposed) legislative measures aim at striking a balance between the need for land for developmental activities and the need to protect the interests of the landowners, and others such as the tenants, landless, the agricultural and non-agricultural labourers, artisans, etc. whose livelihood depends on the land involved. The benefits under the new Policy shall be available to all affected persons and families

whose land, property or livelihood are adversely affected by land acquisition or by involuntary displacement of a permanent nature due to any other reason such as natural calamities, etc.⁴

HOW SUCCESSFUL HAVE THE R&R POLICIES BEEN?

In the area of livelihood, R&R policies typically aim at protecting and sustaining the income and wealth of the PAPs and hence, the degree of its success must be assessed in terms of its ability to advance this objective. Though over the years, the R&R Policy has tended to be not only more comprehensive, providing for both social (including health, education, and other facilities) and economic (including alternate sites for taking up activities, necessary infrastructure, market, and credit support) rehabilitation, but also more sensitive to gender issues and the interests of the vulnerable communities, it often leads to non-feasible solutions for the project authorities. Though the Policy very clearly states that only cash compensation is not adequate for R&R, in the absence of any other viable alternative, the provisions are often converted into their cash equivalent.

To assess the success of R&R implementation, the question to examine then becomes whether the sum received as compensation by the seller of land is invested in a manner that would assure income flows that are not less than his/her previous income. What happens in practice? Anecdotal evidence from Rajiv Gandhi International Airport at Shamsabad shows that the experience is not encouraging (see Box 15.2)

KEY IMPLEMENTATION CHALLENGES

Clearly it is not enough to put in place policies that are more sensitive to the livelihood issues of the PAPs. These policies can deliver only if the implementation challenges are adequately addressed. There are two broad categories of implementation challenges: valuation problem and benefit sharing problem.

Valuation Problem

Complexity of the valuation of a land acquired for infrastructure arises from three sources. The first relates to the treatment of user ship rights. Though a land parcel is owned by one person, there are many others who derive utility from the land by its usage. For example, when the land is acquired, not only is the livelihood of the farmer who owned (and tilled) the land in jeopardy but also the agricultural labourers who worked for him.

⁴ Please see 'Eminent Domain Powers: Rationale, Abuse, and Way Forward' by Nirmal Mohanty in this report.

Box 15.2

Land Acquisition and its Aftermath: Rajiv Gandhi International Airport at Shamshabad

The Rajiv Gandhi International Airport at Shamshabad is about 40 km away from Hyderabad city and involves an investment of Rs 2,478 crore. The project is spread over 5,265 acres of land which was acquired in different phases by the government. The construction work started in 2001 and the airport began operations in 2008. This project impacted the local communities in many ways, entirely displacing five villages with more than 1,500 families and taking agricultural land of another 500 families of the surrounding villages. At a later stage, some real estate players started buying private land from the surrounding villages to construct residential apartments as also techno parks.⁵

With the construction of the road connecting the airport to the city and increasing traffic, the area has undergone a major transformation from its rural setting. Several autorickshaws and taxis now connect the local bus stand and the railway station to the airport. With them have emerged several auto repair workshops. A large number of restaurants of different standards have also cropped up in the area. Several residential apartments have started coming up in the area because of availability of relatively open spaces and improved accessibility. This has also attracted several hardware shops and offices of several construction companies in the area.

In the whole process, the slew of new economic activities in the area has transformed the lives and livelihoods of the local people. Those who lost their entire agricultural land to the acquisition got severely affected because of challenges and uncertainties in the new set of livelihood activities, though they got financial compensation and 250 sq yards of land at an alternate location for house construction. For example, Anand and his family lost all their entire holding of 5 acres as well as their house to this project. The family invested the whole compensation amount in a *pakka* house, a grocery shop, and a Qualis car with partial support from the bank. Meanwhile, Anand got a job at the Airport as a driver. He had to then sell the Qualis to repay the bank loan while he could not retain his job for more than six months, as he did not match the expectations of the employer. The sale in the grocery shop run by his elder brother, also diminished substantially, as many similar shops mushroomed in the same area. All these pushed the family into a financial crisis.

In some cases, in absence of *pattas* (land title documents), some people did not get proper compensation and also became victims of corruption as in the case of Sandhi Sattaih from village Manidipally who got compensation for only 2 acres although he had 12 acres of land.

Job assurance for each family who got displaced in the airport project was met with little commitment from the authority. According to Narsimha, one of the villagers interviewed by us, 'We lost our lands eight years back and now they (authority) are telling us that our capabilities do not match with the required job profiles'.

In many a case, people from the villages surrounding the project started selling their land to builders and others to take advantage of the sudden increase in price. But this sudden inflow of money encouraged many families to indulge in indiscrete spending on luxurious assets, but focusing little to ensure future income flows. Sattish, a farmer from Tukuguda village sold 5 acres of his holding of 10 acres at Rs 20 lakh. He spent the whole amount in constructing a house, purchasing a Scorpio with a bank loan including purchasing some land 50 km away from his village (too far to be put to cultivation). He did not invest the money in any income generating activity. Meanwhile, the financier confiscated his car as he could not pay his installments. Now Sattish has again started farming to maintain his family with only half his plot at his disposal.

There were some positive results too. Children from many families started going to school. Anjamma, a small landless shopkeeper in front of the school in Nagaram village explains, 'I was an agricultural labourer before but started this shop two years back with the money I got as compensation and the support from the *Sarpanch*. The shop is successful as many children have started coming to school. I don't want to go under the sun anymore to work hard to earn my bread'.

Source: Based on personal interviews with several farmers from Nagaram, Maheshwaram, Tukuguda, Mamidipally, and Gollagudem villages around Shamshabad International Airport.

Though the R&R policies have tried to compensate for the ownership value of the land, its user ship value has not been adequately compensated. In India, while ownership rights are established with some difficulties which arise due to poor maintenance of records and unclear titling; establishing user ship rights is even more complicated and hence is often not even attempted. Many times lands used for infrastructure development projects are CPRs and

most of the dependants on such land do not have a title deed to establish their ownership over the land and its use that they are deprived of.

The second difficulty arises in measuring the 'location value' of land, which is distinct from its 'productive value'. For example, the location value of a hamlet just next to a forest, grazing land or the village pond is far higher than a homestead on barren land. Though the R&R policies

⁵ Source information from *Frontline* (2008), Vol. 25, No. 6 pp. 15–28).

have compensated for the productive value of the land, it has often failed to compensate for the location value, which also seriously affects the livelihoods of the Project-Affected Persons (PAPs).

The third problem is the unpredictable nature of the change in land value following development of infrastructure. It is well known that land value in the vicinity of a project changes because of the project's externalities. So, even if compensation were to be forward looking, at the time of determining compensation it would be difficult to gauge with any reasonable degree of accuracy as to what the future value of the land in the vicinity would be.

Benefit Administration Problem

The second area of implementation challenges arises from the benefit administration of monetized and non-monetized compensation components. Often the agencies engaged in infrastructure development do not have the necessary competencies for making interventions in the area of livelihood, which are complex in nature. For example, the R&R Policy of Orissa asks the requiring body to map the potential livelihoods of the PAPs, about which the requiring body often has no clue. Therefore, no action is taken in this direction.

Usually the compensation is disbursed as a lump sum amount in a single or a few instalments. This often leads to expenditure patterns by PAPs that do not cater to their long-term livelihoods needs. This can be seen in many areas, such as Gurgaon, where significant compensation was given to land-owners. But most of them utilized the capital funds received in various forms of conspicuous consumption expenditure as reflected in a higher standard of living, but without attention to creating future income streams that can support such lifestyles. This has also been illustrated in the case of land acquisition for the Rajiv Gandhi International Airport in Samshabad.

Way Forward

Infrastructure development is inevitable not only for the growth of economy but also to make economic growth more inclusive and to that extent, land use will have to change with changing needs of the time. The fact that all the proposed SEZs together account for less than 0.06 per cent of the total land mass of the country, shows that the problem is not on account of the number of acres to be acquired, but the process followed in the course of this

acquisition. We argue in this section that there are several possible steps needed to protect the livelihood options for the PAPs in an infrastructure development project. These include:

1. Establishing a relationship based on trustworthy communication between the requiring body and the likely PAPs;
2. Fine-tuning the benefit administration process to ensure that the benefits accrue to the PAPs over a fairly long period of time;
3. Requiring body to make balanced investments in natural, physical, human, social and institutional capital, in addition to making just financial compensation; and in this context collaborative arrangement with other institutions may be necessary; and
4. Extending technical assistance and support services for the emerging livelihood opportunities after doing a Livelihood Opportunity Analysis as is currently being done in Orissa.

The message from troubled projects of Singur, Nandigram, and POSCO is that no matter how generous the compensation, unless the R&R Policy is comprehensively communicated and credibility of its implementation firmly established, farmers will always be reluctant to part with their land. We can also learn from the success of a dozen other projects where land has been acquired and communities have moved to alternate locations and livelihoods, without any bitterness in its wake. For example, even as Singur was simmering, the Jindal Steel Works (JSW) site in Salboni, Midnapore district witnessed acquisition of 4,860 acres, or over four times as much land as Singur, without any significant protests. Interestingly, of this, 560 acres was acquired through direct purchase by JSW, for which they paid Rs 6 lakh per acre. This was divided into three parts—Rs 1.5 lakh in cash right away, another Rs 1.5 lakh in long-term fixed deposits, and Rs 3 lakh in equity of JSW, making the PAPs long-term shareholder beneficiaries of the project.⁶ In an SEZ near Pune (Maharashtra), a year long effort was made in establishing rapport, developing a better understanding of the compensation package, carrying out education in financial management, and continuing dialogue with the PAP community's representatives. This led to a smooth process of land acquisition when it eventually happened.⁷

Under the LAA, 1894, land is made available to project promoters necessarily through change in ownership. This

⁶ Ram Kumar Kakani, Tata L. Raghu Ram, and Nutan Shashi Tigga, 'Insights into Land Acquisition Experiences of Private Businesses in India', in this report.

⁷ Rumjhum Chatterjee, 'Sustainable Rehabilitation Interventions through Community Engagement', in this report.

does not have to be the case. Land may be compulsorily requisitioned for a long term—say 10 year lease. The landowner, who would retain the title to the land, may be paid a lease rent, which may be revised annually by a land regulator. After the stipulated period is over, the ownership may also be transferred to the requiring body and due compensation—based on say 75 per cent of the then prevailing market price as may have emerged after development of the infrastructure—may be paid. The remaining 25 per cent would be saved for investments in collective goods, as described below.

This kind of design would not only help the displaced landowners who would receive a regular lease rent instead

of a lump-sum price, but would also minimize speculation, as significant part of the enhanced price would flow to them in terms of higher lease rent over 10 years. In spirit, this provision is similar to the provision for payment of unearned increase to the original owners, in the National Rehabilitation and Resettlement Policy, 2007.⁸ Box 15.3 represents a successful case of project development where change in land use did not entail change in ownership.

Howsoever liberal the financial compensation is and whatever methods used to smooth the payment over a long period of time, we maintain that unless balanced investments are made in other types of capital, it would

Box 15.3

Magarpatta Township: Delivering Development from the Grassroots

Shreemoyee Patra

The Magars, tracing their lineage back to the Marathas, had farmed their lands for three centuries on the fringes of Pune and formed a rural settlement called Magarpatta. As their ancestral home and hearth, Magarpatta had been categorized as an agricultural zone within the jurisdiction of the Pune Municipal Corporation (PMC) since the 1960s. In the decades that followed, the PMC was compelled to explore all possible options of creating urban space for a rapidly expanding Pune and in 1982, the PMC identified Magarpatta as a ‘future urbanizable zone’ in its draft development plan. This meant that the government could acquire the ancestral Magar lands any time under the Urban Land Ceiling Act.

While the Magars had bitterly resisted attempts to acquire their ancestral lands in the 1960s and 1970s, by the 1980s they came to recognize the inevitability of the slow march of development that already threatened to explode out of Pune city and consume their lands. With this realization also came the awareness that if the process was allowed to take its usual course, the farmers would lose their lands to middlemen or ‘landsharks’ who would then resell the same acres at huge premiums, effectively cutting the original landowner off from the growth engine spurring development in the region.

Led by Satish Magar,⁹ the community devised an ingenious plan which could eliminate ubiquitous intermediaries while yielding rich benefits for the landowners, transforming their lives forever. Under his visionary leadership, the 123 families of the Magar clan pooled in 400 acres of their lands in order to develop Magarpatta City—visualized as an innovative mixed use township complete with an IT park, 10 towers offering 40 lakh sq. feet of office space, 12,500 residential units, along with schools, hospitals, playgrounds, food courts, and shopping plazas. The idea conceived of in 1993 fructified in 2000 when all the relevant clearances and formalities were completed and the construction began.

Today, the Magarpatta Township Development and Construction Company Limited with ISO 9001:2000 certification, is a prominent case study for any discussion on equitable land acquisition for development projects. It is marked by several features which set it apart:¹⁰

- The company aimed at bypassing all intermediaries and transforming landowners into entrepreneurs who would develop their lands themselves and capture the benefits of this development comprehensively.
- The most important feature of the model is that the land *pattas* (7/12 registrations) remain in the name of these families, safeguarding their ownership over the land. Till the land was developed, the farmers were free to continue farming for a livelihood.
- Every family was an equity shareholder of the company, proportionate to the size of the original landholding.
- The company was run by the Managing Director and Technical Director in consultation with eight Board Members drawn from the shareholding families.
- Each share was equivalent to 1 sq. metre of land and cost Rs 100, in 1998. The current price per share is approximately Rs 1,000 (April 2008). Shares could be sold only to member families.

Box 15.3 (Contd.)

⁸ The NRRP-2007 provides that if the land acquired for a public purpose is transferred for a consideration, 80 per cent of the net unearned income so accruing to the transferor shall be shared amongst the persons from whom the land was acquired or their heir, in proportion to the value of land acquired.

⁹ Satish Magar, an educated and qualified professional is also a prominent and politically influential landowner whose family owned 40 per cent of the Magarpatta lands.

¹⁰ Rakesh Ganguli (2008), ‘The Magarpatta Model of Land Acquisition’, *Infochange News and Views*.

Box 15.3 (Contd.)

- The approximate price of an acre of land that was Rs 1.20 crore in 2000 rose to Rs 1.50 crore in 2007.
- Thirty per cent of the total cost of each construction was earmarked as cost of land at the current price and paid to the shareholders. The family has the option of reinvesting the amount in the company, in the form of a term deposit at an appropriate rate of interest (12.5 per cent for three years, 11.5 per cent for one year, and 10.5 per cent for three months).
- There were two kinds of shares initially—a preferential share and an equity share. The preferential share was short-term, where the rights of shareholders in the company and over their lands were redeemed at the end of the term. The equity share, on the other hand, endowed shareholders with permanent rights in the company and over their lands. Later, preferential shares were abolished and only equity shares that offer lifelong security to the families were retained.
- The by-laws of the company ensure preference to family members of shareholders in employment generated by the company. Shareholders may also invest in the construction of commercial spaces that are rented out to companies.
- Shareholding families also bid for contracts for services such as construction, maintenance, transport, and material supplies. Farming families became excavation contractors, concrete-block makers, restaurateurs, taxi and truck operators, and grill and cabinet makers. Many became civil contractors too, taking on pockets of *in-situ* development.

So, Magarpatta was special for several reasons:

- There was no adversarial relationship between the landowner and the project proponent, eliminating scope for corruption, exploitation, as well as agitation and disruption.
- While the project promoters may have been farmers, the actual management of the project was handled by qualified professionals such as financial, marketing, customer care, supply chain management professionals as also architects and engineers.
- As residential, commercial and office units were built and rented out, the original landowners were able to augment their incomes from returns on capital investments and revenues from service providing endeavours with rents from tenants. Hence, benefits that flowed from the development of the properties were fully leveraged by the original landowners precluding any possibility of discontent and conflict.
- Magarpatta was conceived of and executed at a time when the IT-BPO boom had hit Pune so there was ready demand for the real estate being developed.
- Satish Magar as a charismatic and influential person in the area was able to get his proposition endorsed and supported by political and bureaucratic heavy weights.

The next township is being planned in Nanded village on the outskirts of Pune. Meanwhile, several farmer associations have approached the company, with proposals to catalyse similar change for their lands as well. The Government of India has granted approval to Magarpatta City for development, operation and maintenance of an SEZ for electronic hardware and software, including information technology-enabled services.¹¹

The model lends veracity to the fact that it is the prerogative of the original landowner to have a say in the course of events that transform his life and that of his family. He plays a prominent part in the development process and accrues the benefits thereof. If infrastructural development on a piece of land is incentive-driven for the tillers from whom this land is to be acquired, land acquisition will cease to be coercive, creating an equitable and inclusive system that is both practical and sustainable.

It must be acknowledged, however, that Magarpatta owed its success in part to a happy confluence of circumstances, which makes replication of the model a bit of a challenge. In cases where the land is too finely fragmented or the project proposed heavily politicized, creating a Magarpatta may be impossible.

lead to distorted development. It has been argued by Chambers and Conway (1991) that there are five types of assets or capital:

- Natural capital such as land, water, forests, livestock, and mineral wealth,
- Physical capital such as canals, market yards, warehouses, electricity, roads, railway,
- Human capital including labour, skills, knowledge base, entrepreneurial ability, education, and health profile of the population;

- Social capital such as relationships of trust and reciprocity within and between communities, including local traditional institutions as well as the legal and policy framework governing the livelihoods of the people in the area; and
- Financial capital—formal and informal credit; savings mechanisms, and other financial services available.

Two common characteristics of capital other than financial capital need to be noted: (i) they require investment much larger than a single household can afford and

¹¹ Approval was received in August 2006, while the notification is dated 21 July 2007. The area covered under the SEZ is 11.98 hectares.

(ii) they are typically collective goods rather than private goods.

For protecting the livelihoods of the PAPs, a balanced investment in all the five types of capital would be necessary and not only in financial capital. The funding for this investment in collective goods could come from the 25 per cent component (of the market value of the land, which is withheld at the time of transfer of ownership at the end of a 10-year lease period). The project implementation agencies would have to consider replacement of some of the natural capital, which could include afforestation, rehabilitation of traditional water bodies, and regeneration of grazing areas in rural areas and establishment of parks in urban areas. In physical capital, facilities such as a market yard and connecting roads may have to be considered as a part of the R&R plan. In human capital, appropriate arrangements for upgrading the skills of youth on a potential scale, who drop out of school would be a necessary step, after due analysis of livelihood opportunities. In social capital, establishment of self-help groups and producer groups such as dairy societies and strengthening of local *panchayats* and cooperatives would be a useful step.

For facilitating the emergence of livelihood opportunities in the area for the displaced communities, the project implementation agencies may have to take some proactive steps, particularly since people in the area may not have the competencies for taking up the new livelihood opportunities. Even if they have the skills, appropriate inputs may not be accessible for them. As these services require different sets of competencies, it may not be feasible for the project implementation agencies to build all of them. Therefore, it may be a sensible option for the promoters to have collaborative arrangements with different agencies, which would bring in complementary abilities. This may be carried out in cooperation with institutions specializing in R&R work. Several NGOs and micro-finance

institutions specialize in this kind of work. For example, PRADAN helped rehabilitate persons affected by the ordnance proof range in Kesla block of Hoshangabad district by promoting livelihoods such as household broiler poultry rearing and mushroom cultivation. BASIX has been working with *Korku* tribals displaced from the core zone of the Melghat Wildlife Sanctuary in Akola district of Maharashtra. These NGOs have helped in establishing self-help groups for savings and water users' groups for sharing water from newly dug wells for agriculture. They have also extended micro-credit for crop cultivation and handicraft activities in addition to providing micro-insurance for life, health, and livestock.

Conclusion

It appears that land acquisition has been sensationalized more than it has been studied. To address the shortcomings in this regard, it is necessary to learn lessons from both successes as well as mistakes made in the land acquisition process. Livelihood issues need to be addressed with a long-term perspective. Several solutions are available which are fair to the PAPs and yet enable infrastructure and industrial projects to be commercially viable. The shift from non-participatory to a community-based approach as well as the recognition of user ship rights of the landless and location value of land (in addition to productive value) for determining compensation level is essential. Benefits need to be disbursed in a manner which ensures long-term income rather than a one-time windfall, and this should be combined with education on how to handle finances. Part of the windfall gains should be mopped up for investment in natural capital (such as afforestation), physical capital (schools and roads), human capital (vocational skills) and social capital (self-help groups). Project-Affected Persons (PAPs) should be given assistance by specialized R&R agencies in all these processes.

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16 Sustainable Rehabilitation Interventions through Community Engagement

Rumjhum Chatterjee

The Backdrop

In India's recent history of infrastructure growth, there are many instances in which projects have faced delays and interruptions owing to disputes over land acquisition. Examples of Nandigram and Singur in West Bengal, the Reliance Special Economic Zone (SEZ) in Raigad, Maharashtra, and the Bhushan Steel Project in Jharkhand are recent examples in this regard. One key factor that contributes to these problems is the absence of effective communication between promoters and affected communities, resulting from little or no community involvement in the acquisition process. Very often, promoters provide only lip service to community involvement by holding a few inconsequential community consultations—just to prove that the community of project-affected persons (PAPs) has been taken on-board. This leads to mistrust among PAPs, which is reinforced when the promoters fail to honour their commitments relating to rehabilitation and resettlement (R&R).

While project promoters often display immense reluctance in dealing with the PAPs directly at the grassroots level, several projects in rural sectors have successfully demonstrated the power of community engagement in pushing great ideas through. The Swajal Project in Uttarakhand and Uttar Pradesh; the Kerala Rural Water Supply and Sanitation Agency (KRWSA); the Joint Forestry Management Project in Uttarakhand and Himachal Pradesh; the Participatory Irrigation Management Project in Himachal Pradesh and more

recently the Community-led Total Sanitation (CLTS) Project initiated in Bangladesh and now replicated in Haryana, Madhya Pradesh, Himachal Pradesh and Sikkim are all good examples.

All these examples demonstrate that if community engagement is taken seriously, it can lead to fundamental behavioural change that is conducive to collective resolution and commitment. The beneficial dimension points to the fact that the change is brought about not by coercive action but by 'peer pressure' to get involved and rally around the issue in point. Over a long-time horizon, it can ensure 'multiplier benefits' for all stakeholders. The chances of success significantly improve when the process is inclusive; that is, when the benefits of R&R in a project reach all sections of the impacted society (the young, old, men, women, youth, children, the rich, the poor, and the vulnerable).

COMMUNITY-LED SUSTAINABLE REHABILITATION INTERVENTIONS

Taking the thought forward, the Community-led Sustainable Rehabilitation Interventions (CLSRI)¹ has been developed as an approach to the design and implementation of the R&R component, which manages to retain the essential elements of community 'voice' and 'choice' in the package, while ensuring that the land acquisition process is as smooth, timely, fair, and equitable as possible for all stakeholders concerned (see Figure 16.1).

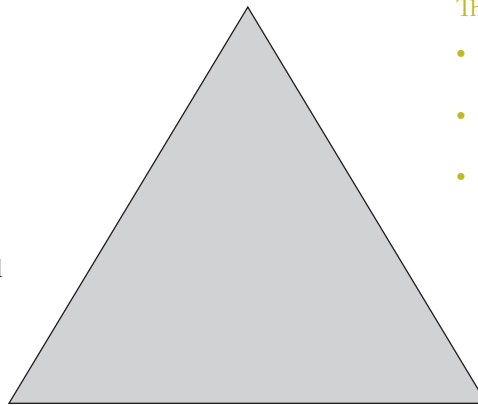
¹ The CLSRI approach has been developed by Feedback Ventures (Private) Ltd (FVL), New Delhi.

The Corporate

- Conducive environment for project implementation;
- Long range manpower planning through skill bank potential;
- Tailor made R&R plans;
- Meaningful CSR through Community Engagement Activities;
- Status of Responsible Employer and Enhancement of Brand Equity

The Government

- Realization of economic/social agenda;
- Enhancement of development indicators;
- Credibility with all stakeholders



The Community

- Community-led engagement;
- Opportunity for capacity building;
- Tailor made R&R plans;
- Expert guidance and facilitation

FIGURE 16.1 The CLSRI Approach

The CLSRI approach is based on the following principles.

(i) Community-led

where entry, engagement, and the development initiatives are driven by the community,

(ii) Demand-driven

where all the components of the engagement programme are based on a detailed needs assessment made at the community level and in all the areas affected by the project,

(iii) Inclusive

of all sections of the society where the development process is undertaken, particularly the segments of the community that are directly or indirectly affected by the land acquisition, and

(iv) Consistent communication

among all stakeholders for continuous feedback and ‘perception management’, thus, ensuring focus on a truly participative approach for all stakeholders.

The CLSRI approach marks a clear shift in the way R&R has been dealt with in the past. The underlying philosophy of CSLRI is to enhance the quality of life of the affected communities. Towards this end, all the stakeholder groups—the affected communities, the R&R designers, facilitators, implementers, and concerned public authorities come together synergistically. The process is carried out in four phases:

Phase I—Pre-entry Phase,
Phase II—Entry and Engagement Phase,
Phase III—Survey and Design Phase, and
Phase IV—Implementation Phase.

The objectives and processes involved at each stage are given below.

Pre-entry Phase

Prior to undertaking any project which involves issues as sensitive as displacement and threat to livelihood, it is vital to gain the trust and confidence of the affected communities. This is a delicate and painstaking process which requires careful planning and an approach of partnership and collaboration. Towards this end, the facilitators together with the PAPs and other stakeholders have to build a grand vision of a more empowered community that ensures for itself a better quality of life, and to look for ways to bring that vision to fruition.

The strategies and interventions that may be employed by the project functionaries at this pre-entry stage include:

KICK OFF PHASE

These meetings are held in each project-affected village for project proponents to converge with the key decision makers of that village namely, the Sarpanch and other members of the Gram Panchayat, some respected elderly members of the community and some influential young people of the village. The objectives are:

- to get to know the key community members and

- elicit relevant information about the village that can help to formulate the engagement strategy and provide data to draw up the initial village profile.

CLUSTER LEVEL MEETINGS

In case of villages that are geographically large, it is useful to have cluster level meetings prior to the Village Level Meeting. These meetings:

- ensure that the developmental issues concerning all pockets of the village are heard and taken to the *gram sabha*;
- seek a 'buy in' from all clusters and therefore ensures representation at the *gram sabha*; and
- allow the facilitators to identify 'natural leaders' from the community, who can in future be entrusted with additional responsibilities to oversee R&R activities.

VILLAGE LEVEL MEETINGS

The first Gram Sabha or village level meeting is crucial for many reasons.

- usually developmental issues dominate the agenda. Since representatives from almost all the households are present, the most relevant and pressing village development issues are raised and discussed. Through consensus, a prioritization of issues is attempted, which forms the bedrock for the 'engagement strategy' that would work for the community.
- this is a forum that utilizes a government–community interface to transparently and openly discuss issues regarding the upcoming project and clarifies any misconceptions and appreciates the inputs.
- the first signs of dissent regarding the project and any kind of aggression or 'posturing' by some groups are usually visible in such a meeting. This meeting provides an opportunity to identify the 'dissenters' and work with them separately.

'SHADOW VILLAGE' CONCEPT

When local community members are overly sensitive about the land acquisition process due to their apprehension about the project being established in their village, it has been found beneficial to initially select a village in the vicinity of the affected village for entry level community engagement and developmental activities. This is the concept of adopting a 'shadow village', which is usually in close proximity to the affected village in the sense that the inhabitants use the same infrastructural facilities such as schools, markets, link roads, and health facilities, thus giving them an occasion to interact with each other. A positive triggering undertaken in the shadow village soon

spreads to the affected village and interest is aroused among the community of the affected village. The message of a potential enhancement of quality of life leads to the creation of demand of such interventions from the affected village, which till some time ago was not in favour of any developmental activity.

Entry and Engagement Phase

The initial pre-entry activities set the stage for the next round of community engagement in the project-affected villages. This phase is characterized by a deepening of relationships between stakeholders, clarity about the institutional, social, and economic status of the village, and the synergistic dynamics between these variables. It is a time of introspection, planning, and decision-making for the stakeholders. The facilitating team gets organized and deployed while field reconnaissance visits intensify.

The team of community workers now moves either into the village or a nearby village and becomes a part of the community. They merge themselves within the community and become 'one among them'. The community members bond with them very well and soon the community workers are called on to participate in social functions and also to play the role of a mediator in resolving domestic or neighbourly issues. In short, rapport with the community is so well established that the team of community workers can now go about 'mobilizing' the community members for specific issues concerning the project.

An important task at this phase is the identification of the 'hooks' for engagement and the 'trigger tools' with which to mobilize the community. The 'hooks' vary from community to community and ideally should be the subject most needed in that community such as water, health, education, etc. Within the hooks, the 'trigger tools' act as catalysts that galvanize the community into thinking, analysing, and coming together over a common issue. This forms part of the 'mobilization strategy' and the cluster level meetings (discussed earlier) provide important inputs into deciding which trigger tools will work for the community.

The triggering process also has some other important benefits:

- triggering leads to specific behavioural change. The challenge thereafter is to sustain the same;
- charismatic natural leaders who are effective in mobilizing and motivating households, emerge from within the community through the process of triggering;
- it also provides useful insights into the social fabric of the community and clearly maps the power equations within the society including the differential access of

Box 16.1
Community Mobilization and Triggering through a Sanitation Intervention

Many times rural communities are mobilized using the CLTS approach wherein the whole community is triggered and empowered to take collective need-based decisions.

An approach like CLTS has proved to be one of the best entry tools towards holistic livelihood interventions. Sanitation is the only developmental issue which directly involves all the members of the community and remains an issue of concern for every single individual. Discussing sanitation, especially defecation issues, is embarrassing and hence it is mostly avoided. But once addressed, it helps shed all barriers and makes it easier for other topics to be discussed. Triggering activities bring the community to a state of ‘ignition’ where they become motivated and eager to take collective decisions and make choices for the improvement in their own sanitation status. Sanitation is a subject which cuts across all social strata and requires the collaboration of all, both poor and rich, young and old, and women and men to achieve a successful outcome.

Accomplishing a community-wide goal (such as making their village/community open-defecation free) within a given time period, instills great pride and enhances self-esteem, which itself is a form of social capital. Community solidarity is established and it serves as the gateway to further development initiatives. The facilitator then has to leverage this social capital to channelize it towards collective decision-making in other areas.

Source: Author’s own.

various groups to infrastructure, landholding, and the ownership pattern of available resources in the community. All this is achieved without the community realizing it and becoming conscious.

One size, however, does not fit all. While some communities benefit from the sanitation hook as a trigger,

some other communities have successfully used a livelihood intervention. In two specific villages in a project in Maharashtra, the villagers are working towards bringing piped water into their homes, a need that governments had been promising to fulfill for over 20 years, thus showcasing how communities work together after being triggered for action.

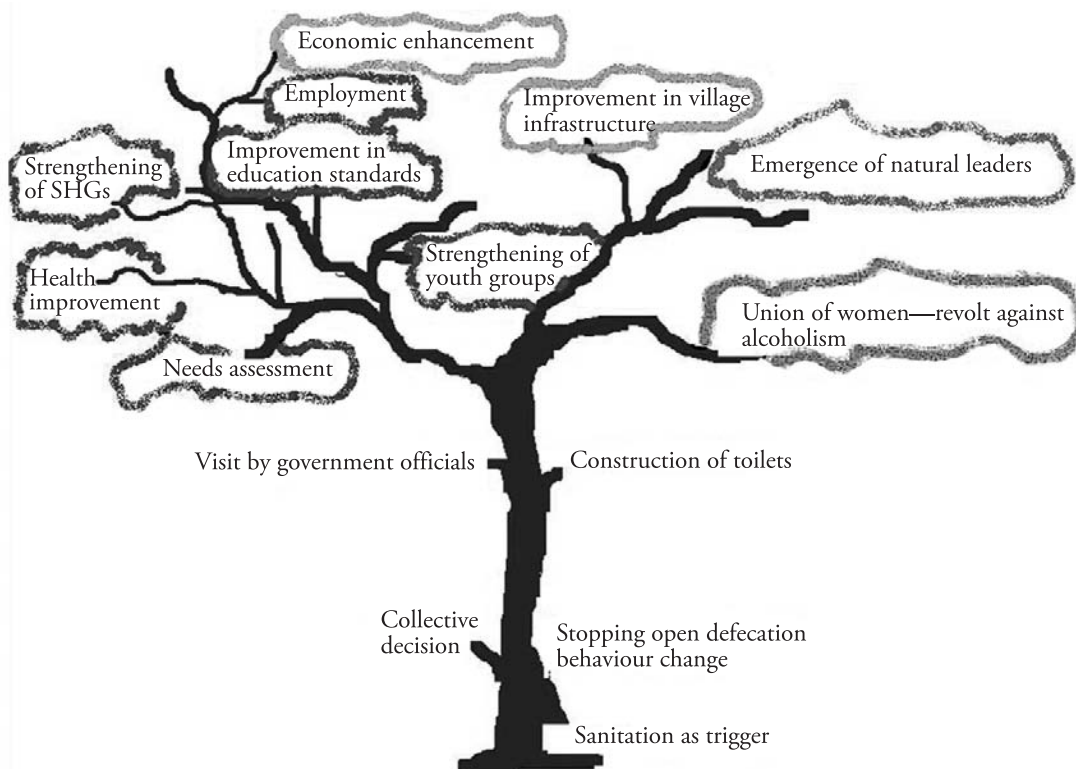


FIGURE 16.2 Trigger Tree

When the community has moved into a collective decision-making mode, they have been ‘mobilized’ and soon thereafter the community workers can begin to talk directly about the proposed ‘project’ and how it will impact their lives. This is the crucial part of the engagement process and must be handled with great sensitivity.

This is also the stage where the voice of dissent is first recognized. So long as the engagement is continued along a developmental issue, no one really objects. But as soon as the project and the related land acquisition issue is brought to the centre stage, several opponents come to the fore. This needs firm yet careful handling. There is need for communication that is persuasive, consistent, neutral, and transparent and at the same time sensitive, gentle, and fair. The power of a community-led approach is that the collective body usually reigns over the agitators and persuades them to use head over heart or choose to be alienated. The dream of a better quality of life is put to the test and must be reiterated through targeted communication: one-on-one, one to many, and many to many.

With the collective decision to move ahead with the project (and therefore to consider giving up the land), the next step of the engagement process, that is, to proceed with the socio-economic survey, can be taken.

Survey and Design Phase

The previous phase has prepared the community to engage in thinking and planning for their future against the backdrop of the project to be established in their area.

This phase involves the community in the assessment of the impact that the project will have on their lives. It is also a critical stage for the developer of the project as this will, apart from creating an understanding in general of the social impact, provide vital details of the impact that the project will have on each of the households in the project villages. The data so generated will help to design customized R&R interventions for the affected community. The government also benefits from this exercise. The database developed from the survey lays the foundation for updating the demographic and socio-economic information as well as a rigorous validation of land records.

Since the community’s development is at the centre of this exercise, it is prudent to involve them at all stages of the survey—planning, data gathering as well as data validation. Members of the community are co-opted to help with the data gathering and can efficiently navigate the enumerators to ensure that no household in the village is left out of the process. Villagers are also less inhibited in sharing information since they understand that this is ultimately going to benefit them. Their participation can also be positively influenced when they see a member of their community working along with the data gatherers.

FORMATION OF R&R COMMITTEE

The most important part of the survey exercise is data validation and for this a committee is created with members from among the PAPs who are chosen as overseers. This committee is called the R&R Committee, entrusted with

Box 16.2

Respecting the Voice of the Community

A corporate based in Maharashtra was preparing to purchase land for an SEZ project. Some of the land identified was agricultural land but most of it was wasteland. Part of the land parcel was skirting the Mumbai–Pune highway and was proving to be difficult to acquire. The landowners of the fertile stretches were not comfortable about selling as agriculture was their main livelihood and they were getting a satisfactory yield from their crops. Additionally, the highway facing land was largely being ‘retained’ to be sold to real estate developers at exorbitant rates.

After significant engagement with the communities, the project promoters realized that:

- (i) it would be difficult to purchase stretches of land at reasonable rates. The project viability was under question if the land was to be paid for at rates being demanded.
- (ii) the contiguity of the land parcel would be lost if the few villages on the highway were not aggregated as part of the project.
- (iii) the landowners of the fertile land were getting a good yield from their fields and it did not warrant an upheaval in their lives. In any case, fertile land should not be used for project development unless it is absolutely necessary, as in the case of mining projects etc.

The client respected the ‘voice’ of the communities and decided to look afresh at wasteland available for development of the project. The communities were conveyed that the project was not being considered at that site. Some villagers were however sad and felt that they had lost an opportunity to realize their dreams of a better tomorrow. They blamed the villagers who refused to give their land for the project.

Source: Author’s own.

the task of facilitating the survey, validating the data, and vetting the plans that emerge from the analysis of the data. This way, affected communities derive a sense of ownership over the course of their own development, based on the data that emerge from the survey.

The R&R Committee has the following features:

- representation from all clusters;
- 30 per cent women;
- 20 per cent SC–ST; and
- 80 per cent from directly affected PAPs and 20 per cent from indirectly affected PAPs;
- equal representation of land and house-affected PAPs;

The R&R Committees are given a day-long training on their roles and responsibilities before they assume their duties. They:

- validate the list of project-affected families and remove duplications if any;
- concur and validate the entitlements of different groups and prioritize them under the most appropriate head;
- approve and oversee distribution of identity cards to entitled units; and
- oversee disbursement of compensation amounts as per entitlements ensuring that the process is transparent.

When the R&R package is ready to be implemented, this committee plays an important role in monitoring the progress of each of the elements and resolving issues, grievances, etc.

IDENTIFICATION OF CONFIDENCE BUILDING MEASURES (CBMs)

The fears and apprehensions of a community are considerable when they are faced with displacement. It is, therefore, necessary to boost their confidence levels and foster trust among them. A CBM is defined as an activity or a group of activities undertaken to build confidence and trust among the people directly or indirectly affected by land acquisition/any developmental activity in the region. These CBM initiatives exemplify sincerity of purpose on the part of the project developers and are an excellent method to bring the communities together. They help in developing consensus on important issues vital for the community and empower them to take collective decisions. Capacity at the community-level for planning, implementation, operation, maintenance, and monitoring is built by these interventions. A sense of ownership over community facilities is promoted and a durable and sustainable community asset which adds to the quality of their lives is established in their settlement. The identifica-

tion of CBMs is usually undertaken in the Survey and Design Phase.

Besides building the community's confidence in the R&R package, these CBMs also help improve both the physical and social infrastructure of the village which is in keeping with the National Rehabilitation and Resettlement Policy (NRRP)-2007. It is important that these CBMs complement the other components of the proposed R&R package and that they also leverage the maximum use of other public-funded developmental schemes and programmes prevalent in the area.

Box 16.3

Confidence Building Measures Identified in R&R Projects Facilitated by FVL

- Provision of drinking water;
- SHG training for income generating activities;
- Promotion of the education of tribal girls;
- Information and Communication Technology initiatives and kiosk management training for youths in association with a local NGO;
- Rooftop rainwater harvesting structures for Zila Parishad schools;
- Construction of a village connecting road;
- Construction of a community hall.

Source: Author's own.

SOCIO-ECONOMIC SURVEY AND SOCIAL IMPACT ASSESSMENT (SIA) STUDY

The SIA study, which is now mandatory for all R&R projects, has been re-designed with a significantly more participatory and inclusive approach. The process relies on quantitative data gathering as well as a participatory qualitative tool. The methodology used for the SIA is depicted clearly in the process flow chart below (see Figure 16.3).

The SIA is designed to also carry out a skill mapping exercise so that the R&R package so developed can address some of the new livelihood options and plan for any capacity-building interventions as may be required. Mapping of the existing skills of the PAPs, their needs, aspirations, vulnerability levels, and willingness to learn is done in a comprehensive manner and is documented in the SIA report. In a separate exercise, self-help groups (SHGs) are assessed on various parameters to evaluate their effective functioning, strength of purpose, and long-term sustainability.

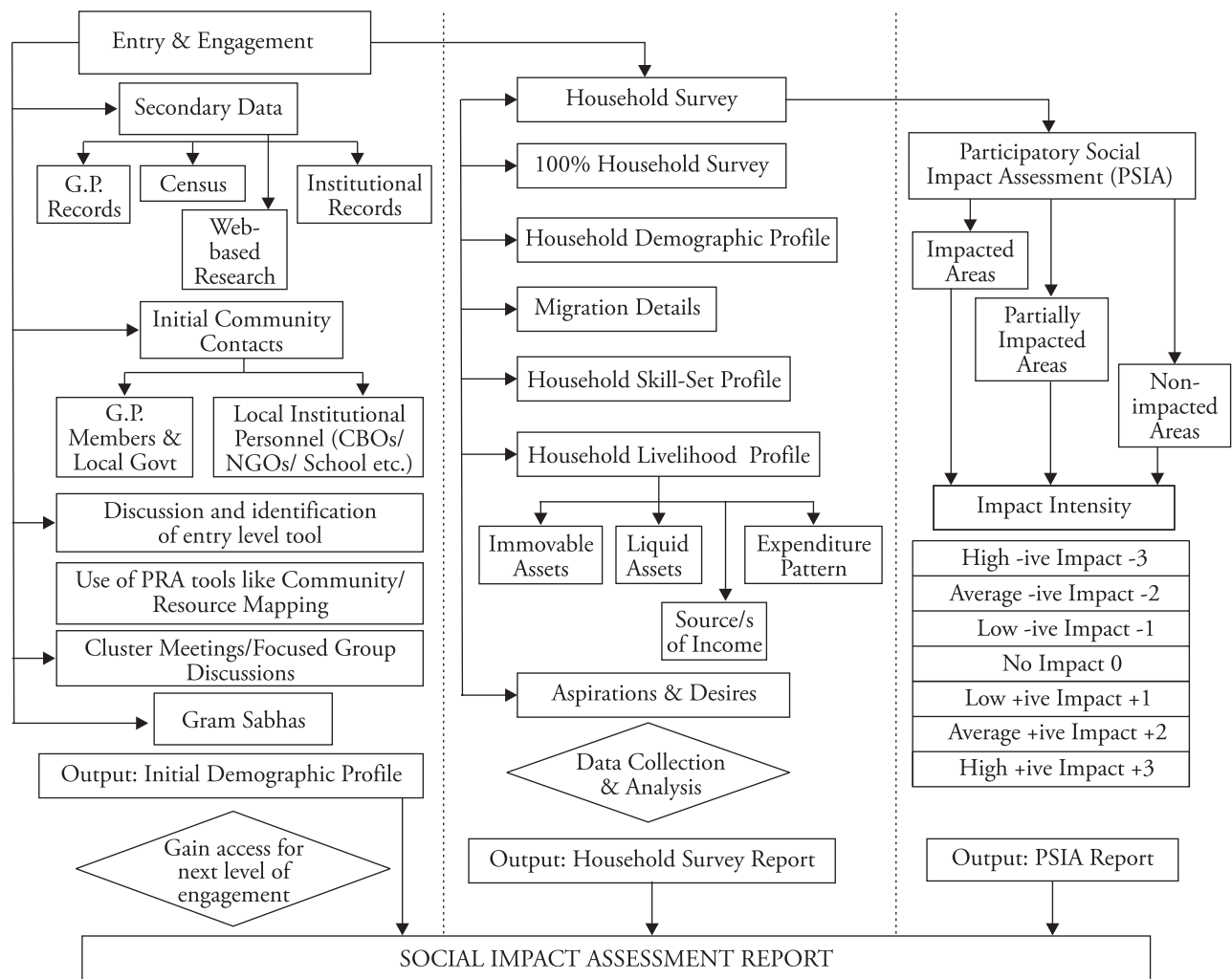


FIGURE 16.3: SIA Process Flowchart

PREPARATION/FORMULATION OF RRR PLAN

An RRR plan is usually built around three Rs as shown in Figure 16.4. The addition of a third R, that is, ‘Reconstruction’ is included to convey a ‘new vision’ of an improved quality of life with the reconstruction of infrastructural facilities as part of the developmental part of the R&R plan.

The RRR plan is presented to the R&R committee of each village and the members of the committee, along with facilitators, district authorities and the project developer endorse the plan in a community-wide meeting in which it is mandatory for at least one member from each household in the village to attend.

Implementation Phase

This phase is not only the most challenging but also the longest phase of the community engagement process. This phase can stretch from the end of the planning stage

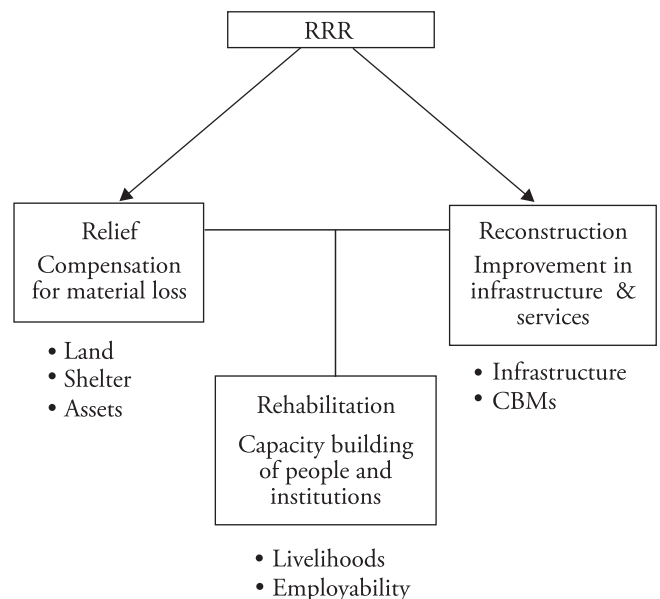


Figure 16.4 The RRR Concept

(when agreement has been reached over different elements of the R&R Plan) through the construction phase of the project, and sometimes well into the stage of commencement of commercial operations of the project. Particularly with respect to economic rehabilitation of the PAPs, the opportunities for skilled job creation arise only once the project is completed. The phase continues till all aspects and dimensions of the different elements of the R&R plan are rolled out.

For many projects however, this is a 'make or break' stage as it tests the project developer's intent to live up to its promises. This, therefore, requires extremely sensitive handling.

For the developer too, this stage is fraught with many challenges—taking possession of land, getting the necessary clearances, dealing with government, putting project plans in place, arranging funds, looking into regulatory matters, managing business collaborations, etc. In the midst of all this, to keep the project-affected communities at the centre stage (as they were some time ago) is a huge task. Yet the communities expect all the attention they were being given before they conceded to the project and any change in that equation sends them messages that were perhaps not intended.

A fine balance has to be struck and the entire implementation phase executed in a systematic and professional manner.

PREPARATORY STAGE OF IMPLEMENTATION

To begin with, the different elements of the R&R plan have to be communicated to the PAPs and the communities have to take ownership of it. The next step would be to prepare a detailed micro-plan for each component, discuss these micro-plans at the appropriate levels, and gain acceptance from the community. Each micro-plan would entail listing of specific tasks, identification of implementation partners, resource planning, target beneficiary details, R&R costing, budget estimation, and preparation of an implementation schedule in a time-bound manner. Besides the R&R committee, leaders/spokespersons from all representative community sections are identified for the supervision of activities during the implementation phase. The detailed roll-out plans are then endorsed in a Gram Sabha in which they are formally signed off by the R&R Committee.

One of the major tasks for the R&R committee at this stage is to validate the beneficiary list for each of the components of the R&R package. Data from the revenue department (post-land measurement and notification issued) have to be reconciled with the data from the

socio-economic survey and validated against the eligibility criteria mentioned in the R&R package.

Communication with the affected communities at this stage becomes even more critical. A communication dossier prepared in the local language and distributed to the communities is useful. It is also useful to provide a similar dossier containing frequently asked questions (FAQs) on each component of the R&R package, its implications, eligibilities, roll-out schedule, etc. to all functionaries as well as members of the facilitation team so that there is uniformity of communication.

ROLL-OUT OF THE R&R PACKAGE

The micro-plans of each component which have been shared with the community and endorsed by them in the Gram Sabha are rolled out in a systematic manner. Some of the challenges faced during this phase of implementation and some innovative ways to handle them are briefly listed below.

- In the absence of updated land records, project-affected families who have effected changes in land ownership within the family but not registered the change, are encouraged to give a legal undertaking in the form of an affidavit to the Sub-Divisional Office and accept monetary compensation for land after the same has been verified and accepted by all. This ensures that the compensation disbursement is not unduly held up;
- The monetary compensation given to each family for land can often be quite substantial—running to the tune of several million rupees per family. Often when the project-affected families suddenly get large sums of money, they are not sure how to deal with their funds and are tempted to squander them in unproductive ways. To counter this possibility, in advance of the disbursement, a wealth management event is planned and conducted, the purpose of which is to inform the landowners about the various instruments wherein they can invest their newly acquired wealth. This event is held in each village and all the families are invited to learn about investment opportunities from financial institutions such as national and local banks, insurance companies, and the post office (savings division);
- A benefit-sharing scheme (to compensate for any negative impacts of the project that will be borne when the project comes up in the vicinity) is designed to provide a sustainable income stream to the project-affected families, over and above the monetary compensation for land and other benefits in the R&R package.

- Provision of a job or suitable business opportunity for one member of the family is usually one of the components of the R&R package. The skills mapping exercise as part of the socio-economic survey also makes it possible to map the existing skills of the nominated persons. Accordingly, a job fair is announced wherein institutions and organizations participate to recruit from among the nominated PAPs, based on their existing skills. Some organizations are known to train the new recruits post-selection;
- The facilitation, formation, and registration of PAP cooperatives is encouraged. These cooperatives are provided initial handholding support and trained to take up contracts/works that will be required for the main, ancillary or incidental industries/works in the project area to be established;
- Training institutes are engaged to build the capacity of those PAPs who possess low skill levels to take up jobs at this present moment. A Capacity Building Plan, based on the kind of skills required in the area and the jobs available, is formulated, along with a time-bound calendar and schedule of programmes. The re-skilling activities are undertaken as per the plans;
- Strengthening of SHGs and establishing market linkages for them are also built into the overall Capacity Building Plan. These usually take little time and effort and provide opportunities for demonstrating successful economic rehabilitation measures;
- R&R projects are known to invariably lead to grievances among the affected communities about issues ranging from rates of compensation and eligibility criteria to the location of resettlement sites and the quality of services at those sites. Timely redress of such grievances is vital to the satisfactory implementation of resettlement and to completion of the project on schedule. In order to address this requirement in the R&R projects being facilitated by FVL, a 'Help Desk' is set up in a centrally located town which serves as the block headquarters of most of the project-affected villages. This facility is manned by representatives of the facilitator, the public administration, and the project developer. It houses a database of all the land acquisition details, the R&R package provisions and village-wise micro-plans of each component, and details of the affected and non-affected population. It also serves as a complaint/grievance/information and data centre or repository and can service any query from any of the stakeholders; and
- Systems for community monitoring of the implementation of some components of the R&R package are put in place as part of the monitoring and evaluation system of the project.

Conclusion

It may be concluded that dealing with the affected communities in a sensitive, fair, and transparent manner can

Box 16.4

Broad Details of the Buy-Back Scheme Proposed as Part of the R&R Package for an SEZ Project in Maharashtra

The total land pool to be available under this scheme will comprise 75 per cent land from the PAPs and 25 per cent from the developer as follows:

- 15 per cent of the land under this scheme as per the option exercised by every project-affected family from whom land is being acquired;
- an additional piece of land amounting 25 per cent of the total land pool will be contributed by the SEZ developer;
- this entire land pool should be made available in one or more than one block or land parcels as appropriate in the upcoming SEZ as per availability of size, infrastructure and area once it is developed (as per the Project's Master Plan);
- the ownership of this land pool will be vested in a vehicle which has been set up as a Company; and
- PAPs contributing to this land pool will become shareholders in this Company. The SEZ developer will hold 25 per cent of the shareholding.

The Company will be managed by a Board of Directors, headed by the Chairman, comprising representatives of PAPs, Independents, Government, and the Developer.

A business plan will be prepared for the utilization of the land parcel and the revenue streams that can be expected; the expenses envisaged to manage the land so as to have it earn the revenues projected, and the profits that will therefore be available.

The PAPs will be locked in for a period of seven years. Even after that, PAPs can only sell their respective shares to the Company if they want to exit. PAPs receive part of the revenue every month. They are also entitled to dividends.

Source: Author's own.

lead to several benefits not just for the community but for the developer and the government. Inclusive growth is possible if done strategically. Community-led Sustainable Rehabilitation Intervention (CLSRI) is an attempt in this direction. With more widespread use of this methodology, there would be greater opportunities to make it more robust.

Further, there emerges a clear need for professional developmental agencies who can credibly take on the critical task of bringing all stakeholders of a project, that is, the government, the private developer, and the community on the same platform and ensuring that this engagement is fair and equitable.

Section IV

LAND ACQUISITION EXPERIENCES

17 Insights into Land Acquisition Experiences of Private Businesses in India

Ram Kumar Kakani, Tata L. Raghuram, and Nutan Shashi Tigga

Introduction

Socio-political uprising against land acquisition for industrial projects has emerged as a major constraining factor leading to time-lags, cost overruns, business uncertainties, and even shelving of projects. This, however, is not the case with all private projects. It is becoming evident that the distinguishing factor for success is ‘social consent to operate’ and therefore, the degree of success in acquisition by private businesses is profoundly influenced by the above mentioned strategy adopted to build the ‘social consent to operate’.

For the purpose of this chapter ‘social consent to operate’ means securing the free, prior, and informed consent of affected communities to part with or share their resources and also the consent to do business in their community. Thus, consent must be freely given and not coerced, and it must be obtained prior to taking significant project decisions. Communities must be fully informed with access to accurate and comprehensive project-related economic, social, and environmental information. Companies must also provide communities with time and access to the technical expertise necessary to acquire a complete understanding of project-related impacts and benefits. They also must acknowledge that communities have the right to withhold their consent.

While each strategy is unique to the specific situation that a private enterprise finds itself in, some inferences can be made on what strategies work and what do not.

In our study, we evaluated the land acquisition attempts of over 20 large projects by private businesses spanning

a time period of over a decade (1994–2008) (see Table 17.1). Our purpose was to identify commonalities in strategies adopted by: (i) projects that succeeded in land acquisition and (ii) projects that failed.

Patterns of Success and Failure

We observed that there were multiple examples of private businesses which have failed in land acquisition for their Greenfield projects while there were also a few success stories to learn from. By and large, we see distinct patterns emerging both in the acquisitions process as well as the project characteristics for these two broad categories.

A SUCCESSFUL LAND ACQUISITIONS MODEL

Figure 17.1 shows the process pattern of a successful strategy. In the first stage, following a few rounds of discussion on the proposal, the private business enters into a formal memorandum of agreement (MoA) with the appropriate state government. In the second stage, the business directly initiates a dialogue with key local stakeholders, especially the landowners. The state government plays a facilitator’s role, only to the extent needed. The bipartite discussions result in the private business appreciating the local issues and concerns and also signal the beginning of a long-term relationship between the community and private business. The involvement of middlemen and other parties (including non-governmental organizations or NGOs) is kept to the essential minimum. Care is also

TABLE 17.1
List of Industrial Projects of Private Business Studied along with the Status of the Project

Project brief	Sponsor name	Place	Status (2008)
Alumina Refinery	Vedanta (Sterlite)	Lanjigarh (Orissa)	Tending towards Failure
Aluminium Smelter	Vedanta (Sterlite)	Jharsuguda (Orissa)	Tending towards Failure
Car Plant	Tata Motors	Singur (West Bengal)	Abandoned
Car Plant	Hyundai Motors	Irungattukottai (Tamil Nadu)	Successful
Port and Special Economic Zone	Adani Group	Mundra (Gujarat)	Successful
Power Plant	Navin Jindal Group	Raigarh (Chhattisgarh)	Successful
Power Plant	Sajjan Jindal Group	Barmer (Rajasthan)	Tending towards Success
Power Plant	Moser Baer	Chandil (Jharkhand)	Tending towards Success
Power Plant, Fertilizer, and Steel	Tata Group	Barapukuria (Bangladesh)	Abandoned
Special Economic Zone	Mahindra Group	Bagru (Rajasthan)	Successful
Special Economic Zone	Mahindra Group	Maraimalainagar (Tamil Nadu)	Successful
Steel Plant	Bhusan Steel	Potka (Jharkhand)	Tending towards Failure
Steel Plant	Tata Steel	Bastar (Chhattisgarh)	Tending towards Failure
Steel Plant	Tata Steel	Gopalpur (Orissa)	Abandoned
Steel Plant	Essar Group	Paradip (Orissa)	Tending towards Failure
Steel Plant	POSCO, Korea	Paradip (Orissa)	Tending towards Failure
Steel Plant	L.N. Mittal Group	Torpa (Jharkhand)	Tending towards Failure
Steel Plant	L.N. Mittal Group	Kasaphal (Orissa)	Tending towards Failure
Steel Plant	Tata Steel	Saraikela (Jharkhand)	Temporarily Stalled
Steel Plant	Sajjan Jindal Group	Salboni (West Bengal)	Tending towards Success
Steel Plant	Tata Steel	Kalinganagar (Orissa)	Tending towards Failure
Titanium Dioxide	Tata Steel	Tuticorin (Tamil Nadu)	Abandoned

Source: Authors' collation.

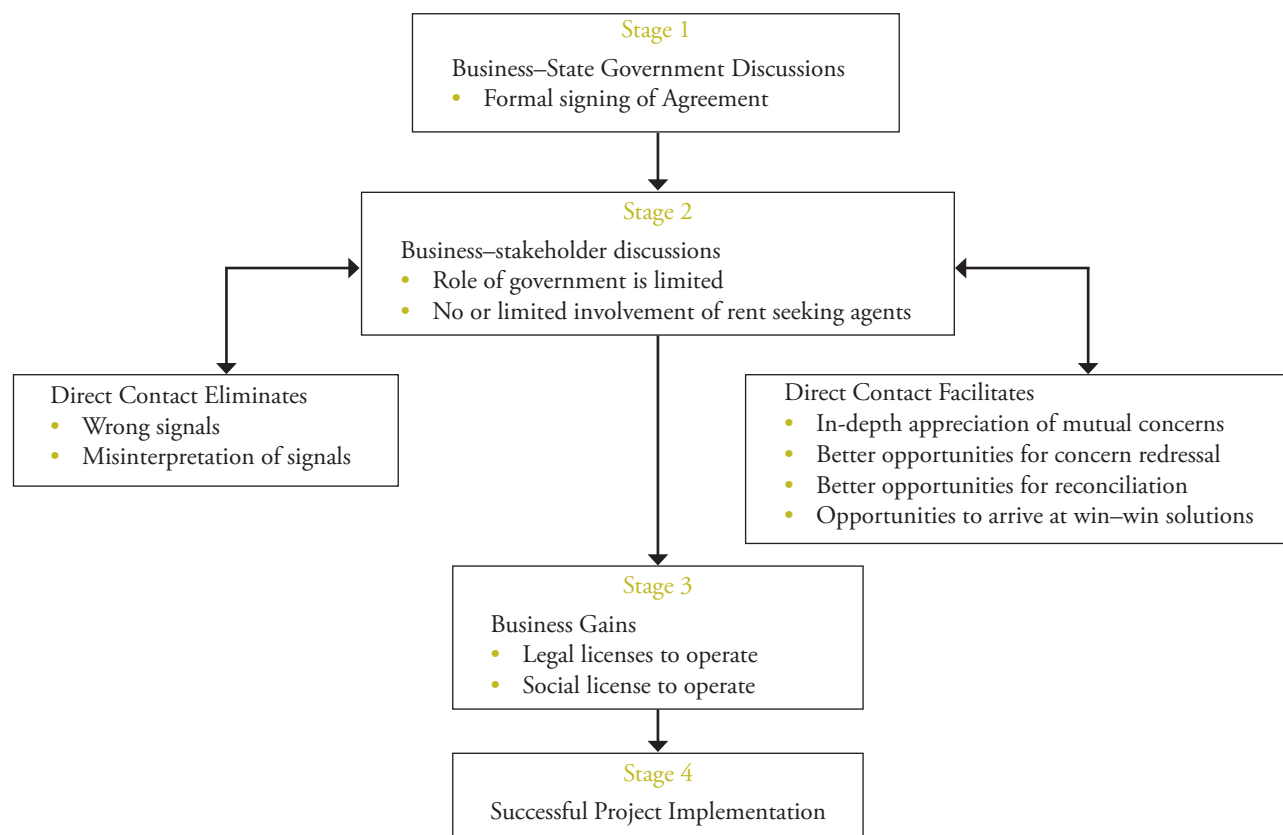


FIGURE 17.1 Successful Land Acquisition Pattern

taken not to communicate any false signals or threatening gestures through the media or other sources to the locals. A few concessions and a conciliatory stance from both the parties result in the project going to stage three wherein all the paperwork and clearances are obtained. This lays the foundation for stage four, where successful project implementation is achieved. Box 17.1 gives an example of a successful land acquisition model adopted by the O.P. Jindal group.

AN UNSUCCESSFUL LAND ACQUISITIONS MODEL

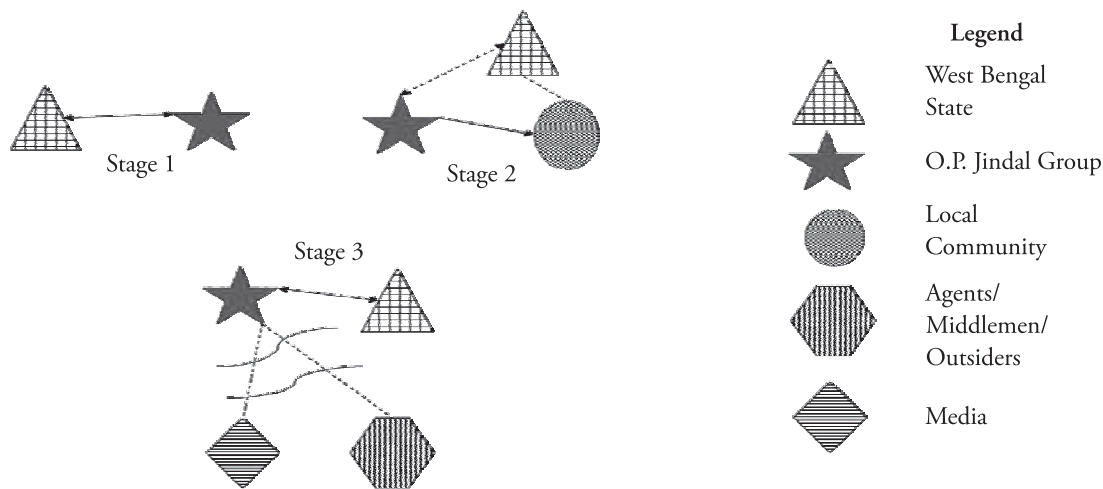
In the case of unsuccessful land acquisition, as shown in Figure 17.2, the first stage remains similar to the case of successful land acquisition, that is, the private business formally signs an agreement with the state government. But the crucial second stage usually has a large set of disjoint networks working simultaneously. Due to the involvement of multiple players, this also becomes a starting point for complications and subsequent trouble, which starts with the private business exerting pressure on the state to acquire land quickly. As the discussions get protracted, private rent-seeking agents and middlemen

(including some political outfits) get involved in the process. Meanwhile, the locals also organize themselves, or are induced to align either with local political outfits or non-governmental organizations (NGOs). Often private business and the State complicate the situation further by giving wrong and confusing signals through the media to other stakeholders. With time, the communication gap and distance between the positions held by both sides increase. As the situation becomes difficult, the blame game starts (stage 3). Private business and its supporters (usually other well-known industrialists) start putting the blame on locals, political outfits, and the state government for failure, state governments blame private parties, and so on. This leads to time-lags, huge opportunity costs for the business, and most often to a failed land acquisition. Box 17.2 gives an example of an unsuccessful land acquisition model.

Ingredients of Success and Failure

Utilizing publicly available information on 22 large industrial projects with different rates of success in land acquisitions, focus group discussions were conducted.

Box 17.1
JSW Bengal Steel Project: A Successful Land Acquisition Model



- In stage one, the O.P. Jindal Group signed an MoA with the West Bengal Government to set up a 10-million tonne steel plant at Salboni with a total estimated cost of Rs 35,000 crore and a requirement of 4,860 acres of land (*The Hindu*, 12 January 2007). In Stage two, about 4,300 acres of fallow land was directly acquired from the government. The Group still needed to buy about 560 acres from the villagers (*The Financial Express*, 29 May 2007). After direct negotiations, JSW Bengal Steel (JBS) successfully negotiated a partnership with 700 marginal farmers. JBS offered one job per family and an attractive compensation package for the land acquired, combining a cash- and equity-component approximately equal to Rs 6 lakh per acre (*Outlook Business*, 5 July 2007). Meanwhile, the company went about completing other formalities required to start construction of the plant. In Stage three, the West Bengal government granted SEZ status to the company (*Economic Times*, 28 August 2008). News reports and discussions do not reveal any role of middlemen and other rent-seeking agents. The company announced laying of the foundation stone on 2 November 2008 (*The Hindu*, 21 October 2008).

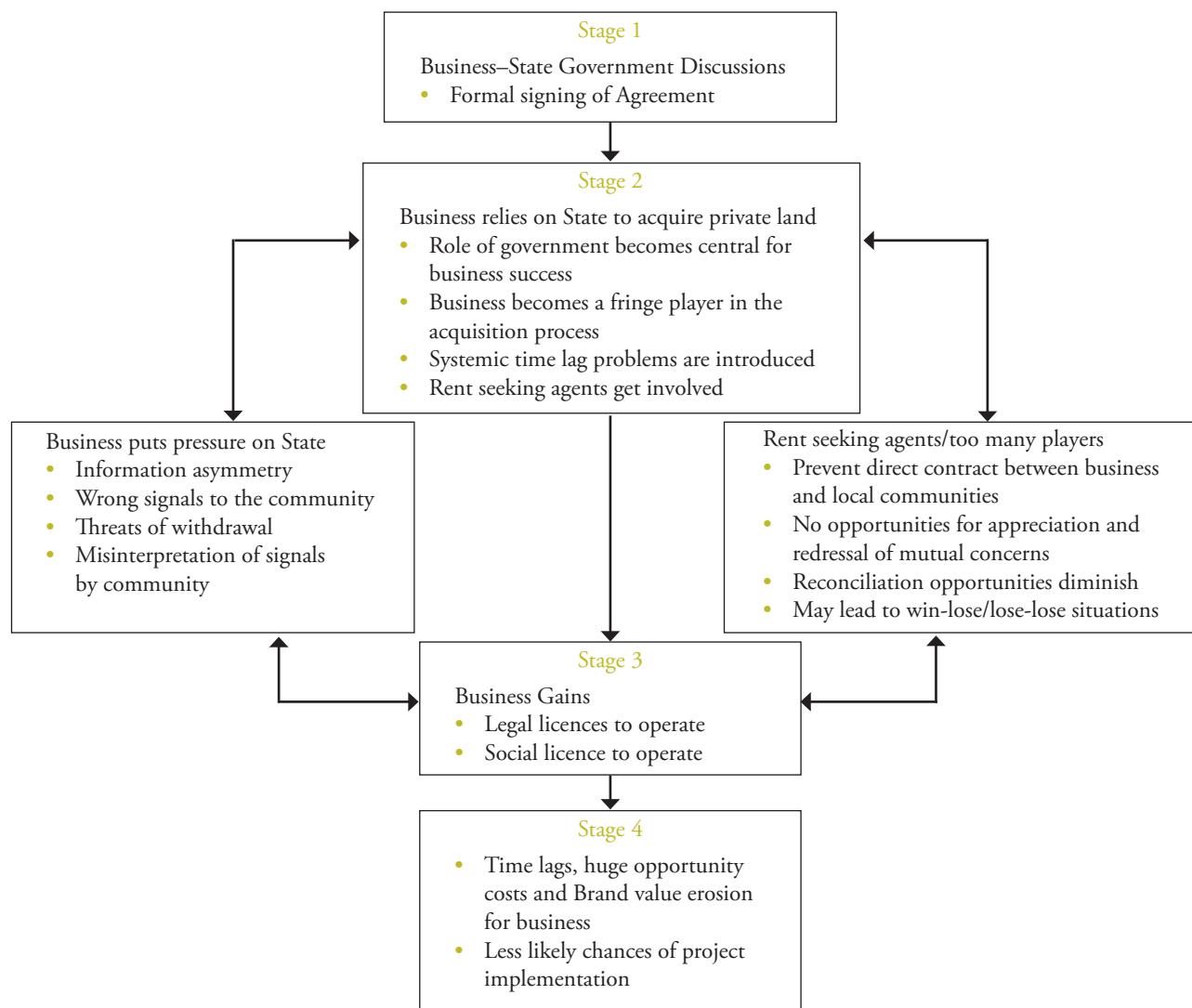


FIGURE 17.2 Unsuccessful Land Acquisition Pattern

Our findings indicate key characteristics of successful and failed attempts at land acquisition.

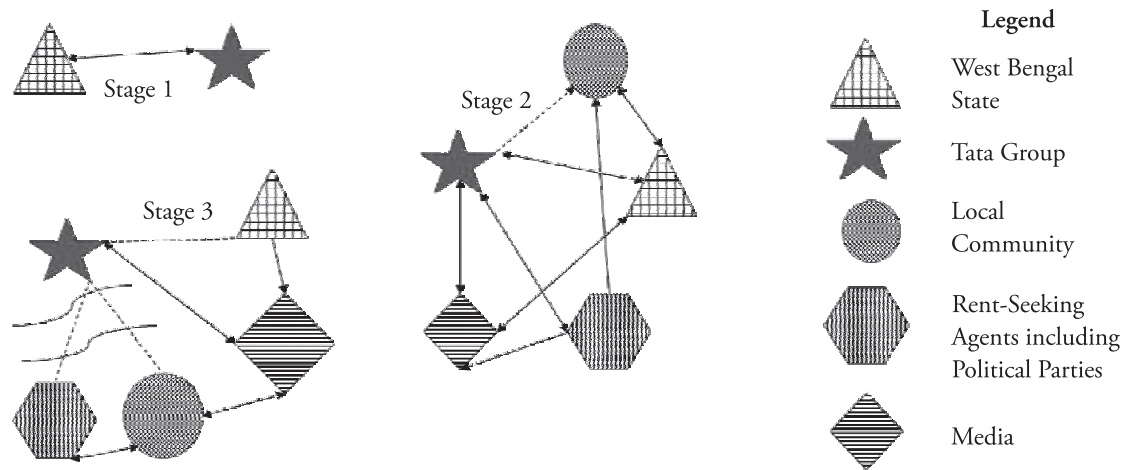
KEY CHARACTERISTICS OF SUCCESSFUL LAND ACQUISITIONS

- **Avoid productive lands:** Gaining social consent becomes much easier if all or large part of the selected land is waste/fallow land. This becomes the case because locals expect limited benefits for themselves from the project *vis-à-vis* the fertile land. The Mundra Port and Special Economic Zone had a smooth ride through its land acquisition process as the land they identified in the Kutch region of Gujarat was arid and unoccupied (*The Hindu, Business Line*, 4 November 2007). JSW Steel, part of the O.P. Jindal Group, also made a smart decision of setting up its steel plant in the Salboni area

of West Bengal on large portions of fallow land. Out of 4,860 acres of land needed, the company acquired 4,300 acres of fallow land directly from the government (*The Economic Times*, 29 May 2007).

- **Open direct communication channels with locals:** One way of building trust and transparency is by establishing *direct* communication with the local stakeholders (that is, Gram Sarpanch, Mukhia, landholders, etc). It also minimizes information asymmetry and private rent-seeking opportunities available to the outsiders and middlemen. The recent experience of the Jindal group to acquire more than 24,700 acres of land for its Bhadres Lignite Power Plant, located in the Barmer district of Rajasthan, is a good example. Initially, a large number of farmers refused to give up the identified land to the Rajasthan Government. A direct discussion

Box 17.2
Tata Motors Small Car Project: Unsuccessful Land Acquisition Model



In Stage one, the Tata Group formally evinced interest in setting up their small car project in West Bengal and visited several locations to identify a site (*The Hindu, Business Line*, 13 May 2006). The Group signed an Memorandum of Understanding (MoU) with the West Bengal Government for setting up a plant at Singur, requiring 1,000 acres of land and an estimated investment of Rs 1,000 crore (*The Hindu*, 19 May 2006). In stage two, the State went about offering just Rs 1 Lakh per acre of fertile land. The state's minister even visited the site to talk to farmers and faced opposition by locals (*The Telegraph*, 31 May 2006). The project entered a controversy, as over 5,000 locals opposed the land acquisition under the local MLA (and part of opposition party), under the banner of *Krishi Jomi Bachao (Save Farmland) Committee* (*The Telegraph*, 19 June 2006). The State Industries Minister assured that the government would avoid acquiring multi-crop land (*The Telegraph*, 29 June 2006).

The West Bengal Government announced that the land acquisition for the proposed small car unit would be complete by October 2006 (*The Hindu, Business Line*, 9 August 2006). Protests by locals became more vociferous with rising support from the media, political parties, and the intelligentsia against the project (*The Financial Express*, 26 September 2006). Tata Motors Managing Director expressed unhappiness over the State Government's progress in land acquisition and gave threatening signals that the company would look at other locations if the State was unable to provide land by the end of the year (*The Telegraph*, 28 September 2006). Farmers were made to forcibly sell their land (*The Hindu*, 9 October 2006). Keeping in mind the end-of-the-year deadline given by the Tatas, the Land Revenue Minister told newsmen at the State Secretariat that land acquisition at Singur was complete and distribution of the compensation cheques was in the final stage (*The Hindu*, 21 October 2006). Under heavy police presence, Tata Motors made a notional beginning of construction at the plant site (*Business Line*, 22 January 2007). The terms of the deal between private business and the State, meanwhile were revealed, indicating large freebies and subsidies by the latter. (*The Telegraph*, 11 March, 2007). A farmer whose land was acquired for the Singur project by the Tatas, and whose family refused to collect compensation saying the acquisition was against their wishes, committed suicide (*The Indian Express*, 26 May 2007). Tata Motors announced large-scale export plans of the small car with a launch date of early 2008 (*Business Standard*, 19 June 2007).

As the project moved towards Stage three, the State Opposition political party chief agreed to hold talks with the Tata officials to resolve the impasse (*The Telegraph*, 8 August 2008). The Tata Group CEO addressed a press meet stating that the company would not hesitate to pull out from Singur if violence and disturbance continued (*Hindu Business Line*, 23 August 2008). The farmers in Singur reacted on the Tatas' decision to pull out the proposed plant from Singur (*The Telegraph*, 27 August 2008). The State Chief Minister, Buddhadeb Bhattacharjee, trying to keep things under control stated that he would be meeting the Tata Group Chairman Ratan Tata to resolve the 'Singur deadlock', however criticizing the opposition for the continued stand-off there (*Financial Express*, 28 September 2008). Tata Motors finally announced its decision to pull out from Singur (*The Times of India*, 3 October 2008).

between the locals (*Kisan Bhoomi Awapti Sangharsh Samiti*) and Jindal Group CEO Sajjan Jindal led to an in-principle agreement between both the parties (*The Telegraph*, 29 September 2008). Another example is

that of Mahindra World City, India's first operational Special Economic Zone (SEZ), 50 km from Chennai (Maraimalainagar), where this approach was adopted from the beginning. The company negotiated with

landowners on its own. Their experience suggests that this way private acquisition of land faces a lower risk of litigation and is faster and cheaper (*Outlook Business*, 1 December 2007).

- **Equitable benefit sharing:** There is a need for an appropriate compensation package to the locals, preferably a package that includes a share of future profits of the industrial project. Two examples mentioned above, both from the O.P. Jindal group, stand out in this regard. JSW Bengal Steel in Salboni area chalked out a workable partnership with 700 marginal farmers owning 450 acres of land. As part of the package, JSW Bengal Steel offered one job per family and compensation for land acquired (approximately Rs 3 lakh per acre), 50 per cent of which was deposited as an annuity policy, payable on a monthly basis. In addition, shares of the company, equivalent to the value of the land, were offered free of charge (*Outlook Business*, 5 July 2007). To acquire land for its Barmer-based Bhadres Power Plant, the Jindal Group agreed to a proposal wherein farmers would be allowed to rent out the land for mining so that they do not forego their ownership rights. After mining, the land would be levelled and given back to the farmers. Hence, they would have access to future potential gains in case the land prices appreciate (*NDTV.com*, 27 August 2008).
- **No political alignment:** Usually private business works out the details of its industrial project including land issues in discussion with the ruling party leaders. Opposition political parties often take this as an opportunity to bring the locals over to their side. In a democratic country, political fortunes of parties often change and such changes can create difficulties for the project. Jindal Steel and Power Limited avoided taking political sides even though there were protests against its project in Raigarh district of Chhattisgarh (*infochangeindia.com*, 1 October 2005). We have also not come across even one news article which demonstrated that Mahindra World City and its officials were flexing any political muscle during their land acquisition process in Tamil Nadu.
- **Coordinated corporate communications:** Communication gaps, deliberate or otherwise, and wrong signals can adversely affect a land acquisition process. This aspect assumes importance given that the literacy levels in local communities are typically low. Even a single careless statement or rumour can create problems especially when the land acquisition process is at its initial stage. Hyundai Motors' second car manufacturing plant is a case in point. From its first announcement in

February 2005 to inauguration of the plant three years later in February 2008, the company had made only 13 news releases. Of these, only one was a threatening signal of relocating the company's second plant outside Tamil Nadu and demanding better incentives for the company (*The Financial Express*, 11 May 2006).

KEY CHARACTERISTICS OF FAILED LAND ACQUISITIONS

- **High profile promoters:** Walking in with a big reputation tends to raise the expectations from the locals and middlemen about compensation packages, with the result that the compensation package on offer falls short of expectations. This leads to difficulties in land acquisition, especially if the land quantity required is large and contiguous. The L.N. Mittal Group, one of the richest in the world and also the biggest steel producer, faced this problem in their land acquisition of 8,000 acres in Keonjhar district of Orissa (*moneycontrol.com*, 27 May 2008). Tata Steel's titanium dioxide project requiring 10,000 acres of land in the Tuticorin district of Tamil Nadu also faced similar challenges. After discussions with the state government, the company reportedly fixed a price in the range of Rs 40,000 to Rs 50,000 per acre (*Business Standard*, 26 August 2007). But the process of land acquisition had to be stalled due to arbitrary hike in land prices by middlemen (*The Hindu, Business Line*, 20 April 2008). To tackle this problem, one private business has recently acquired land in Jharkhand in a different name from the locals. We also observe savvy players such as the Mahindra Group, which keeps a low profile through the project cycle. For example, Mahindra Group for its Maraimalainagar SEZ project in Tamil Nadu, had a total of only three news appearances in national dailies during its sixty months of project time (*Industrial Economist*, 29 October 2002; *Business Standard*, 8 September 2004; and *The Hindu*, 10 September 2004).
- **Slow acquisition process:** A slow pace of land acquisition usually increases the chances of locals to be influenced by rent-seeking agents. It also gives an opportunity to outsiders and media to meddle into the affairs of the acquisition process, leading to complications and information asymmetry issues. Tata Steel signed an MoU for the Gopalpur steel plant in August 1995. The formal rehabilitation package of the company and Orissa State Government for the project was announced after a time gap of only ten months,

in June 1996 (*The Financial Express*, 21 June 1996). It has taken more than two years for Vedanta Aluminium Refinery, part of the Vedanta (Sterlite) Group to obtain social consent from the locals to operate at Jharsuguda, Orissa. In fact, recent news reports show that social consent is yet to be obtained (*The Financial Express*, 5 May 2008). A fast acquisition process helps avoid the attention of unnecessary rent-seeking elements and problems of information asymmetry with the locals.

- **Unacceptable rehabilitation package:** Often we observe industrial projects not taking off because the rehabilitation and resettlement (R&R) package is vague, lacks innovation, and does not convey the proper and sincere involvement of the private business in creating a package that ascribes appropriate value to the true loss of the locals. For instance, Vedanta Aluminium Refinery mentioned above, was not allowed to commission its open-cast mine project in the sacred Niyamgiri hills in Orissa as its rehabilitation package was not detailed. The package hardly mentioned the loss of sacred hills for the Dongria Kondh tribe, damage to environment, and the loss to forest-dependent livelihoods (*domain-b.com*, 26 July 2008). Similarly, Mittal Steel India, for its proposed Orissa project, stated that the company was taking the Orissa government's R&R policy as a guideline for its compensation package (*Business Standard*, 17 May 2007). The problem was that the R&R policy of the Orissa government was already marred with failure to ensure employment guarantees for the displaced. The policy was also silent about the state's role in cases where people do not want to be displaced by the industrial projects. As a result, the locals resisted the project (*indiatgether.com*, 8 August 2007).
- **Aligning with political parties:** During the land acquisition process of Tata Motors at Singur in West Bengal, it was often seen that senior members of Tata Motors were praising the initiatives of the political party in power and making sarcastic comments to the media on the political party opposing the project (*The Financial Express*, 10 January 2008). Such acts in public may have only increased the opposition to the project instead of helping in winning the 'social consent to operate'.
- **Wrong or confusing communication signals:** In the modern day, private businesses often use their corporate communication channels to convey information

and signals to their investors and competitors. But, these signals are often picked up by other stakeholders, say locals affected by the Greenfield projects, and lead to increased misunderstandings between them. Press releases may also be used by corporates to show urgency, demand incentives, and other favours from the state government. Tata Steel often issued statements in its Gopalpur steel plant project in Orissa probably to convey a message to its investors. Since they avoided direct talks with the locals, these statements only increased the gap of mistrust and expectations between them (*Business Standard*, 26 March, 1996; *Business Standard*, 4 April, 1996). Arcelor-Mittal announced setting up two steel plants, one in Jharkhand and another in Orissa. They often used press releases to initiate competition between the two states. *The Times of India* reported that Arcelor-Mittal's progress in Orissa was being viewed with high interest as it was pointing towards an eventual walk-out from Jharkhand (*The Times of India*, 29 March 2007). In June 2007, *The Telegraph* reported that the Mittal Group is back in Jharkhand after a brief rendezvous with Orissa (*The Telegraph India*, 8 June 2007). The aim of the above moves in all probability was to extract few concessions from the state government without considering its implications on gaining social consent from the locals for these projects (*Economic Times*, 29 March 2007 and *The Telegraph*, 8 June 2007).

Conclusion

Gaining prior, free, and informed consent from local communities is a key determinant of success or failure of land acquisition for businesses. But how does one build such consent? Although it is always risky to jump to conclusions from anecdotes, an analysis of our observations on a fairly large set of companies engaged in land acquisition indicates emerging patterns of processes and characteristics of successful projects as opposed to failed projects. The chances of success in gaining social consent appear to increase when project proponents demand less fertile land, opt for more equitable benefit sharing, directly negotiate with stakeholders, avoid alignments with political forces and rent-seeking agents, and finally maintain smooth, easy to decipher communication channels. Given the high pervasiveness of evidence on these patterns, it would be safe to learn lessons from them.

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18 Land Acquisition for Railway Projects—Two Case Studies

Sanjiv Garg

Brief Overview of Railway Land

Railway land has been defined under the Railways (Amendment) Act, 2005, as ‘any land in which a Government Railway has any right, title or interest’ and includes all lands within the fences or other boundary marks indicating the limits of the land appurtenant to a railway.¹ Over the years, Indian Railways (IR) has been acquiring land for its operation of trains. According to the latest available information, IR had 4.3 lakh hectares of land as on 1 April 2006. Some of this land has been provided by the state governments free of cost or on nominal charges and the rest acquired in exchange for market-determined compensation.

Legal Provisions for Land Acquisition By IR

For land acquisition, IR follows the procedures laid down in the legal provisions of the Land Acquisition Act (LAA) 1894. Actions such as publication of Preliminary Notice under Sec. 4(1) of the LAA, 1894, declaration under Sec. 6 (1), award enquiry, passing of final award, disbursement of payment, etc. are done by the competent authority of the state government. The assessed approximate land acquisition cost including *solatium* and interest, etc. as per statutory provisions is deposited in advance with the State Government by IR. Although IR has generally used LAA, 1894 for acquisition, it is possible for IR to directly negotiate with the landowners.

Sec. 11 of the Railways Act, 1989 has significant implications for the institutional structures under which

the private sector can invest in a railway project, which *inter alia* involves acquisition of land. This section and its implications need to be understood before we outline the case studies.

Sec. 11 states that,

...Notwithstanding anything contained in any other law for the time being in force, but subject to the provisions of this Act and the provisions of any law for the acquisition of land for a public purpose or for companies, and subject also, in the case of a non-government railway, to the provisions of any contract between the non-government railway and the Central Government, a railway administration may, for the purposes of constructing or maintaining a railway—

(a) make or construct in upon, across, under or over any land, or any street, hills, valleys, roads, railway, tramways, or any rivers, canals, brooks, streams or other waters, or any drains, water-pipes, gas-pipes, oil-pipes, sewers, electric supply lines, or telegraph lines, such temporary or permanent inclined-planes, bridges, tunnels, culverts, embankments, aqua ducts, roads, lines of railways, passages, conduits, drains, piers, cuttings and fences, in take wells, tube wells, dams, river training, and protection works as it thinks proper;

(b) do all other acts necessary for making, maintaining, altering or repairing and using the railway.

Thus, Sec. 11 of the Railways Act, 1989 provides the authority to IR to execute works for provision of railway lines and related installations. The importance of Sec. 11 is in enabling better access to right of way and land and enables faster and more assured implementation of

¹ ‘Government Railway’ is defined to mean a railway owned by the Central Government. ‘Non-Government Railways’ is defined to mean a railway other than a government railway. ‘Railway’ is defined to mean a railway, or any portion of a railway, for the public carriage of passengers or goods (*Source*: The Railways Act, 1989).

projects. It overrides all other laws including environment laws, local state laws, and municipal laws and thereby reduces the clearances required. Without access to such a provision, a railway project may not be viable.

However, the authority provided under Sec. 11 is available with greater certainty to Government Railways. Since 'railway' is defined to mean a railway or any portion of a railway, for the public carriage of passengers or goods, a railway that is not to be used for public carriage of goods or passengers will not fall within the above mentioned definition under the Railways Act. Thus, it would not be eligible for the benefit of Sec. 11, which acts as a major disincentive for completely captive non-government railways.

A non-government railway can have access to Sec. 11, but subject to the provisions of a contract with the Central Government. Since there is no framework governing contracts between the Government of India and non-government railway, the latter would be completely exposed to executive discretion.² There is, therefore, an underlying practical encouragement to government railways within the legal framework.

As per the present provisions of the Railways Act, 1989, the most suitable railway projects (albeit in a limited manner) for private investment will be government railway projects (that is, projects in which Government of India owns part of the project). Hence, most rail-port connectivity projects involving private investment are being executed through the special purpose vehicle (SPV) route (where the Central Government is a partner) as it then enables the private partner to use the provisions of Sec. 11 of the Railways Act, 1989.³

Case Study 1: Haridaspur–Paradip New Line Project

The Haridaspur–Paradip New Line Project is an 82 km long port connectivity project under the National Rail Vikas Yojana (NRVY). It is meant to provide railway connectivity to the iron-ore mines in Banspani area of Orissa to Paradip port, to enable export of iron-ore from India. The project is being implemented by Rail Vikas Nigam Ltd (RVNL) through a project-specific SPV called Haridaspur–Paradip

Railway Company Limited (HPRCL).⁴ The landed cost of the project is approximately Rs 1,000 crore and it is targeted to be completed by March 2010. For this project, land is being acquired by East Coast Railway (a Zonal Railway and part of the IR) on behalf of HPRCL, but the cost of land acquisition is being entirely borne by the SPV. As per the Concession Agreement signed between Ministry of Railways and HPRCL, all the new land acquired by East Coast Railway on behalf of HPRCL will be given to the SPV at a total licence fee of Re 1 per annum for the period of the concession. The title of the land will, however, remain in the name of East Coast Railway and the SPV will hand back the possession of the land when the concession period ends or is terminated. Such an arrangement has been devised to utilize the provisions of the Railways Act, 1989 for acquisition of land for the project. As already mentioned above, it is much easier to acquire land for a government railway than for a non-government railway. Under this arrangement, land is being acquired for East Coast Railway and not for the SPV, which therefore, makes the acquisition of land a simpler process.

RVNL had been awarded the contract for the construction of this line for the entire project in May 2007. Due to the problems mentioned below, the work has not progressed much. If the state government and IR are unable to make the site available for construction, the contractor may not continue the work on the project and this will be a serious setback in terms of project cost and time overrun.

PROBLEMS IN LAND ACQUISITION FOR THE PROJECT

The project involves acquisition of 270 acres of government land and 1440 acres of private land. Acquisition of private land is being done under LAA, 1894 while government land is being alienated under the Orissa Government Settlement Rules. East Coast Railway has acquired land in a 70 km stretch out of 82 km in Kendrapada, Jajpur, and Jagatsinhpur districts. An amount of Rs 46 crore has been paid to the state government, which is much higher than the initial estimate of the cost of land. The balance land to be acquired is spread over the alignment at different

² For example, a non-government railway has no assurance in relation to tariff.

³ There are currently only two port connectivity projects which have been implemented as private railways—Mundra Port and Dhamra Port. In the case of Mundra Port the Adanis were themselves able to buy all the land (around year 2000) for the 60 km long railway line. Indian Railways was, at that point, not particularly enthusiastic to set up an SPV for implementing this project. Today, IR has gained more experience in the area as several SPVs have become operational and hence it is more positively inclined towards the SPV route. In the case of Dhamra Port, the project was not found bankable by Rail Vikas Nigam Ltd (RVNL) and hence, IR did not sanction the project. Therefore, Dhamra Port decided to implement this project as a private railway line.

⁴ The equity partners of HPRCL include RVNL, IDCO, POSCO, Essel Mining & Industries Limited, Paradip Port Trust, Sail, JSPL, and MSPL.

locations. The progress has since been slowed down on account of the following problems, which have cropped up in the land acquisition process.

- **Executive Decisions are Inconsistent with Government Rules⁵**

The villagers are not permitting the construction contractor appointed by RVNL to undertake the activity of earthwork and bridge construction on the land already acquired, both private and government. The reason for agitation by villagers is that in some of the villages, the rates paid for state government land are 10 to 20 times higher than that for private land. For a comparative statement of price (village-wise) of the *Rayati* land and government land is enclosed (see Annexure Table A18.1). Such a wide variation in the pricing of land has resulted in resentment among the private landowners. The villagers are demanding the same rate for compensation as is being given for government land. The District Collector, as per the Orissa Government Settlement Rules, should have determined the price of the government land on the basis of transactions made for the private land in the vicinity. Instead, the Collector charged Railways on the basis of prices for homestead land or urban land instead of agricultural land. The decision of the Collector is not in consonance with the government rules.

- **Unfair Demand for Compensation**

In some areas, even the government land is in possession of farmers who are raising crop on this land without payment of any taxes or levies. They are now demanding compensation at the same levels as those given to other title holders of private land. Since they do not have title to the land, it is obviously not possible to grant them compensation. Similarly, the forest department had permitted project-related construction on some forest land, which lacked tree cover. However, it is found that this land is also being cultivated by non-title holders and they are not permitting the construction without compensation. Furthermore, the custodians of the temples located on the alignment are demanding that compensation be paid to them, although as per law, the compensation is to be paid to the endowment commission. To bypass this issue, the RVNL decided to change the alignment of the railway line so as to avoid passing through the temple land.

⁵ Source: RVNL records.

⁶ Since average cost of government land being charged is already substantially higher than private land and this being an infrastructure project in which the Government of Orissa is also a participant, RVNL has requested the state government that such a cess may not be levied.

- **A Case of a Single Hold-out**

A building in village Nanpur, namely *Pollishree Sikshya and Sanskrutik Vidyalaya* near Birupa river is yet to be taken over for possession by the railway. The owner is refusing to accept the compensation and threatening to file a false criminal case.

- **Poor Law and Order Situation**

There are many instances where the contractor's men are being threatened and beaten up by the locals. Several FIRs have been lodged with the police. The areas severely affected are in Kendrapara district and Jajpur district. To sort out this issue, Principal Secretary, the Commerce & Transport had convened a meeting in April 2008, which was attended by collector and superintendent of police of these districts and officers from the Railways. Unfortunately, the results have not been very encouraging.

- **Cess Charges for Government Land**

Tehsildars have levied cess for government land being acquired at the rate of 75 per cent of the capitalized value, which works out to Rs 10 lakhs per acre.⁶

As a result of the above difficulties in acquiring land for the project, the work progress has been slow and the revised cost of acquiring the land is now estimated at Rs 54.5 crore, which is way above the original estimated cost (as in April 2005) of Rs 23.7 crore. This has had an adverse impact on the project financials. The main lesson from this case is that in the absence of full cooperation of the state government and its functionaries, railway projects can be unduly delayed and viability affected.

Case Study 2: Surat–Hazira New Rail Line Project

The Surat–Hazira new rail line project is a 26 km long new rail line, providing connection to Hazira Port from Surat through which the main line passes. The new Dedicated Freight Corridor (from Dadri near Delhi to Jawaharlal Nehru Port near Mumbai) will also be passing via Surat with connectivity to this new line. Hazira Port is being developed as a private port under a concession by Gujarat Maritime Board to Hazira Port Private Limited (HPPL) owned by a consortium of Royal Dutch Shell Plc and Total Gaz Electricité Holdings, France. The proposed line would also provide rail connectivity to other industries in this

area such as Essar Steel Limited (ESL), which is planning a massive expansion programme from its existing capacity of 4.6 mtpa to 10.0 mtpa. Hitherto, ESL has been moving iron ore from Vishakapatnam in barges via the coastal shipping route to Hazira. Rail Vikas Nigam Ltd (RVNL) commenced the project development activity for Surat–Hazira new line project in September 2003. In the last four years, RVNL has undertaken alignment surveys for this railway line repeatedly, as the surveys are being discarded for one reason or the other. One alignment selected jointly by RVNL, Gujarat Infrastructure Development Board (on behalf of the Government of Gujarat), and representatives of ESL was discarded in 2007 by the Gujarat government as the land through which it passed had been allotted to the Essar SEZ being located in this area. Therefore, RVNL was asked to re-survey the alignment along the road corridor which passes through the Coastal Regulation Zone (CRZ) area. As RVNL finished the work, representatives of Essar Steel informed the survey team that the alignment is not feasible as it will not get environmental clearance. Then, RVNL was asked to shift 200 m away from the zero line of CRZ, since it is possible to have condonation if the corridor falls between 200 m and 500 m lines of CRZ.⁷

At this stage, discussions were held in a meeting headed by the Principal Secretary, Industry in April 2008 at Gandhinagar. Essar Steel objected to the new alignment on the plea that the proposed alignment passed through their land, where they have other plans for development and the land could not be spared for the railway line. Clearly, Essar owned SEZ land in the CRZ area that required condonation. It is a matter of concern that planning for that area does not provide a corridor for either a road or railway line.

However, very recently, in November 2008, the Government of Gujarat has finally been able to identify land

for a rail corridor which lies between 200 m and 500 m lines of the CRZ (although condonation of CRZ regulations would still have to be obtained), so as not to minimize disturbance to the Essar SEZ along this corridor. It is now hoped that the railway line will come up on this new alignment. It may be noted that the alignment has no alternative but to pass through Essar land as the entire land stretching from Tapi river on one side and the sea on the other side has been allotted to Essar Steel by the Government of Gujarat.⁸

Meanwhile, the cost of the project, which was Rs 100 crore (landed cost: Rs 120 crore) as per the alignment No. 2 (surveyed in 2005) shot up to Rs 195 crore in the last surveyed alignment (with the landed cost being about Rs 245 crore). In 2005, the project required viability gap funding of Rs 24 crore from the Ministry of Finance and a grant of Rs 7 crore from the Gujarat Government. Currently, to maintain the bankability of the project, a total grant component of about Rs 120 crore is required. Frequent shifts in alignment of this line have not only resulted in inordinate delays in the implementation of the project but also in the doubling of its landed cost. The length of the project line has also been increasing as the line is being pushed out towards the sea so as to avoid the Essar Steel and SEZ areas. The delay in freezing the alignment at the initial stages has been primarily responsible for this cost and time escalation of the project, even as one of the biggest thriving industrial estates of the country remains deprived of environment friendly rail connectivity. The delay occurred despite the fact that the state government was supporting the project. The problem could have been avoided if the planning at the state government level for the Hazira area had provided for a rail/road corridor.

⁷ In general cases, regulations require that up to 500 metres from the zero line, there can be no development activity.

⁸ The Gujarat Infrastructure Development Board has proposed for a joint meeting with stakeholders under the Chairmanship of the Chief Secretary, Government of Gujarat, to firm up the proposed alignment.

Annexure

Table A18.1
Comparison Statement of *Rayati* Land Acquired/Government Land Alienated for HPRCL

Sl No.	Village	<i>Kissam</i> of highest value	Year of Approval	Rate in Rs/Ac Rayati land/ Private land	Rate in Rs/Ac Govt land
1	K Deradihi	<i>Chakka Land</i>	2007	380,000	
2	K Balabhadarpur	<i>Sarad Jala do fasali II</i>	2007	250,000	
3	K Nuahat	<i>Sarad do fasali II</i>	2007	270,000	150,000
4	K Laxminarayanpur	<i>Sarad Jala do fasali II</i>	2007	210,000	150,000
5	K Belarpur	<i>Sarad Jala do fasali II</i>	2007	200,000	200,000
6	K Fakirabad	<i>Sarad Jala do fasali II</i>	2007	200,000	250,000
7	K Mantripara	<i>Sarad Jala do fasali II</i>	2007	200,000	
8	K Nuagan	<i>Sarad I</i>	1999	52,000	
9	K Bajipara	<i>Sarad do fasali II</i>	1999	32,000	
10	K Haladia	<i>Sarad Jala do fasali II</i>	2002	45,000	
11	K Gualsingh	<i>Sarad Jala do fasali II</i>	2003	282,000	
12	K Mararapur	<i>Sarad Jala do fasali II</i>	2000	55,000	
13	K Kajala	<i>Sarad do fasali II</i>	2000	50,000	
14	K Samsundarpur	<i>Sarad do fasali II</i>	2000	60,000	
15	K Oriso	<i>Sarad Jala II</i>	2002	70,000	15,00,000
16	K Gaugop	<i>Sarad do fasali II</i>	2000	32,000	16,25,000
17	K Meghabarara	<i>Sarad do fasali II</i>	2000	45,000	500,000
18	K Gop	<i>Sarad Jala do fasali II</i>	2002	75,000	
19	K Chakara	<i>Sarad Jala do fasali I</i>	2001	73,000	15,60,000
20	K Samagudia	<i>Sarad II</i>	2001	200,000	16,00,000
21	M Angali	<i>Sarad I</i>	2002	120,000	
22	M Hatia	<i>Sarad Jala do fasali I</i>	2003	130,000	625,000
23	M Manikunda	<i>Sarad do fasali I</i>	2003	110,000	901,900
24	M Darbhanga	<i>Sarad do fasali I</i>	2002	70,000	935,000
25	M Kurutung	<i>Bagayat II</i>	2002	50,000	
26	M Silipur	<i>Sarad Jala do fasali I</i>	2002	150,000	22,04,545
27	M Dumuka	<i>Sarad Jala do fasali I</i>	2002	64,000	
28	M Kusunpur	<i>Sarad I</i>	2002	90,000	500,000
29	M Tulasipur	<i>Bioli do fasali</i>	2002	105,000	
30	M Badapal	<i>Sarad II</i>	2003	85,000	680,000
31	M Athabatia	<i>Sarad Jala do fasali II</i>	2004	200,000	554,500
32	M Baragaon	<i>Sarad do fasali II</i>	2003	100,000	470,000
33	M Jayachandrapur	<i>Sarad II</i>	2003	70,000	628,000
34	M Kalagharh	<i>Sarad do fasali II</i>	2003	52,000	14,50,000
35	M Sannagan	<i>Sarad I</i>	2006	250,000	250,000
36	M Ostara	<i>Sarad II</i>	2002	215,000	350,000
37	M Jadupur	<i>Sarad II</i>	2002	500,000	800,000
38	M Masakani	<i>Sarad II</i>	2005	126,000	310,000
39	M Nuagaon M	<i>Sarad II</i>	2003	65,000	910,000
40	M Naladia Sasan	<i>Sarad II</i>	2002	30,000	
41	M Narayanpur	<i>Sarad I</i>	2002	41,000	
42	M Tikarpanga	<i>Sarad II</i>	2002	36,000	450,000
43	M Taradeipur	<i>Sarad II</i>	2002	85,000	370,600
44	M Anantapur	<i>Sarad II</i>	2006	60,000	61,000
45	M Ranmachandrapur	<i>Sarad do fasali II</i>	2006	120,000	
46	M Paunsiapal	<i>Bioli</i>	2006	40,000	
47	M Chhanda	<i>Sarad do fasali II</i>	2007	400,000	

Source: RVNL records.

19 Forest Land Diversion

Balancing Development and Conservation through Forest (Conservation) Act, 1980[†]

C.D. Singh

Introduction

Diversion of forest land for non-forestry purposes including infrastructure development has been a matter of grave concern for policy makers. A major policy response to this concern has been the enactment of the Forest (Conservation) Act in 1980, which aims at balancing the development needs with the urgent need to preserve forests and biodiversity. In this chapter, we look at the experiences in diversion of forest land for non-forestry purposes since Independence with a focus on infrastructure and also outline two brief cases describing how the Forest (Conservation) Act, 1980 has regulated and optimized land use without hindering economic development.

LAND DIVERSION PRIOR TO THE FOREST (CONSERVATION) ACT, 1980

While submitting a proposal for consideration to the Government on the need for legislation for protection of forests and trees, the Ministry of Agriculture, Department of Agriculture and Cooperation (as Environment and Forests were then part of Ministry of Agriculture) highlighted that:

The National Forest Policy of 1952 laid down that 60 per cent of land in the mountainous region and 20 per cent in the plains should be dedicated to forestry to attain an average of one-third of the country's geographical land area under forests. Even though the country's total recorded forest area is much below this national average and covers hardly 22 per cent, there has been a continuous diversion of forest land for non-forestry

purposes. Since 1951–2 to 1975–6, the country has lost about 4.13 million ha of forests of which more than half of the diversion is for agricultural purposes.

Table A19.1 (see Annexure) highlights the State-wise and category-wise diversion of forest land for non-forestry purposes during 1951–80 (All India data provided in Table 19.1 below). On an aggregate basis, it is seen that during 1951–2 to 1980, the average annual diversion of forestry land for non-forestry purpose was as high as 1.43 lakh ha and that agriculture accounted for over 60 per cent of the total diversion of forest land. It may be noted that while data are available for river valley projects, construction of roads, and establishment of industries, diversion of land for other infrastructure purposes such as thermal plants, railways, schools, hospitals, etc. may have been included in miscellaneous categories and are not separately available. Hence, it is difficult to assess land diversion to infrastructure in the pre-1980 period. Diversion was geographically highly skewed with Madhya Pradesh accounting for about 43 per cent of total diversion that took place before the promulgation of Forest (Conservation) Act, 1980.

The Forest (Conservation) Act, 1980 and Its Impact on Forest Land Diversion

With a view to regulate unabated diversion of forest land for non-forestry purposes by various State/UT Governments, the Government of India took a proactive role and forests were brought under the Concurrent List by the

[†] All the figures and records mentioned in this chapter have been sourced from the records available in the Ministry of Environment and Forests, Government of India, New Delhi.

TABLE 19.1
Diversion of Forest Land for Non-forestry Purposes before the Promulgation of Forest (Conservation) Act, 1980

Area	River Valley projects	Construction of roads	Establishment of industries	Agricultural purposes	Miscellaneous purposes	(Figures in thousand hectares)	
						Total	
All India	479.1	57.1	127.2	2506.9	985.4	4135	

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

42nd Constitutional Amendment in 1976. The Government later enacted the Forest (Conservation) Act, 1980 with effect from 25 October 1980, which was recognized as a unique piece of legislation not only in the country but also internationally. This Act not only reflects the collective will of the nation to protect its rich biodiversity and natural heritage but also provides a regulatory mechanism for unavoidable use of forest land for various developmental purposes. In a way, the Act embodies the firm commitment of the Government to balance the conservation of forests with economic development, thus leading to better environment and stronger economy. The remarkable feature of this Act is that it is regulatory in nature rather than being prohibitory. This, however, does not mean that all kinds of proposals for forest land diversion are welcomed. As a matter of fact, it has been recognized that use of forest land should be the last resort and that too for site-specific activities.

Another noteworthy feature the Rules made under this Act is that it delegates powers to the regional offices and State Advisory Groups (SAGs) for taking decisions relating to forest with land use (up to 40 ha.), with decisions on smaller land diversions (less than 5 ha) being taken at the regional level.¹ This decentralization has made the Act more efficient as well as effective and reduced time-lags for project approvals. The usefulness of this provision is higher than what appears at first sight from Table 19.2,² which shows that 98.8 per cent of land diverted was in the category of

more than 5 ha, which accounted for 25 per cent of approvals, whereas less than 5 ha accounted for a large number of approvals (over 75 per cent) that were cleared at the regional level, thus reducing load on SAG and FAC and accelerating the pace of centralized decision making.

Over the years since 1980, rules and guidelines have been framed for diversion of forest land for non-forestry purposes. Under Sec. 2 of this Act, every State Government-UT Administration, before permitting investigation/survey/prospecting in forest land and diverting/de-reserving forest land for non-forest purposes, is required to seek prior approval of the Central Government. Since its inception, the Act has effectively regulated developmental activities such as initiation of power projects, irrigation projects, roads, railways, schools, hospitals, rural electrification, telecommunication, drinking water facilities, mining, etc. in the country by allowing these activities on forest lands, while checking indiscriminate diversion of pristine forest areas.

Tables A19.3 and A19.4, respectively showing category-wise and State-wise proposals received and approved with forest area diverted during the period 25 October 1980 to 30 September 2008 under the 1980 Act, reveal the regulatory nature of this Act. From Table A19.3 it is evident that approval to divert forest land for infrastructure development was granted in around 66 per cent of cases as compared to only 34 per cent for other purposes. During the period 1980–2008, the fraction of forest land

TABLE 19.2
Statement showing Area-wise Diversion of Forest Land for Non-forestry Purposes under Forest (Conservation) Act, 1980 during 25.10.1980 and 30.9.2008

Area	No. of cases approved	Area diverted (in ha.)	(As on 1 October 2008)									
			Proposals for 0 to 5 ha		Proposals for 5 to 10 ha		Proposals for 10 to 20 ha		Proposals for 20 to 40 ha		Proposals for more than 40 ha	
			No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted
All India	18,080	11,59,648	13,670	14,352	1,064	7,842	992	14,527	789	22,919	1,565	11,00,008

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

¹ The Regional Chief Conservator of Forests, who heads the Regional Office, has been empowered to take decision for the proposals involving forest land up to 5 ha. except for proposals related to mining and regularization of encroachment.

² All India level data are summarized in Table 19.2; Table A19.2 presents data at the State level.

diverted for infrastructure was around 26 per cent (Table A19.4). Out of the land diverted for infrastructure during this period, hydroelectric power and irrigation projects account for almost 37 per cent of forest land diversion each, followed by 9.7 per cent and 9.4 per cent of diversion for roads and transmission lines and electrification of villages, respectively. It may be noted here that land diversion on account of encroachment was 23 per cent higher than that for infrastructure. The least amount of forest land (only 107 ha. health centres) has been diverted for health care as hospitals, health centres etc. have less land requirements and are not as site-specific. There was no diversion of forest land for agriculture *per se*, although part of encroachment regularization and forest village conversion may be under agriculture. This is a far cry from the position prior to 1980.

Madhya Pradesh, Chhattisgarh, Punjab, Gujarat, and Maharashtra were on the top of the list of states where forest land has been diverted for infrastructure (Table A19.4). An analysis of the size distribution of forest land (see Table A19.2) shows that an overwhelmingly large part of the diversion was in terms of large parcels (40 ha or more).

Following are two illustrations of the processes followed under the Act that lead to optimal use of forest land.

Legislative Changes in The Forest (Conservation) Act, 1980 and their Impact

Two significant developments in the Forest (Conservation) Act, 1980, which brought in some change in the use of forest land for non-forestry purposes, took place after 1980. They are listed below:

Box 19.1

Proposal for Diversion of 928 ha of Forest Land for Construction of Greenfield Airport at Itanagar, Arunachal Pradesh

A Green field airport at Itanagar was proposed in two phases by the Government of Arunachal Pradesh on 5 May 2008 with the following land requirements:

- Phase I: Construction of the runway with all accessories for 50-seater ATR standard aircrafts requiring 110 ha forest area and
- Phase II: The extension of runway requiring another 818 ha forest area.

The Forest Advisory Committee (FAC) insisted on a presentation of the detailed project report during its meeting held on 13 August 2008. It questioned the requirement of 818 ha forest land for Phase II. Requirement of forest area was then reduced to 250 ha including expansion of the runway and the proposal was recommended for approval on 5 September 2008 by the FAC. The approval for the airport was granted on 3 October 2008 with the diversion of 250 ha of forest land (as opposed to 928 ha).

With proactive initiatives of the project proponents as well as the support of the State Government, the approval was granted within five months of the presentation of the proposal while 678 ha of forests were saved from destruction.

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

- enlargement of the scope of the word 'forest' by the Hon'ble Supreme Court of India vide its order dated 12 December 1996 brought all recorded forest areas of the country under the ambit of this Act along with areas that looked like forests, adopting the dictionary meaning of the word 'forest'.³

Box 19.2

Proposal for Diversion of 883 ha (originally proposed 2410 ha) of Forest Land for Rowghat Iron Ore Mining project of Bhilai Steel Plant (BSP) of SAIL

The original proposal for the diversion of 3279 ha of forest land for iron ore mining was initiated in 1989, which was later reduced to 1000 ha, but was rejected on merit by the Ministry of Environment and Forests in 1998 as it involved felling of a large number of trees with consequent impact on the rich flora and fauna in the area.

During 2005, the BSP submitted a revised proposal for the diversion of 2,410 ha of forest land to the Ministry, which was discussed in the FAC meeting on 25 August 2005. It was decided therein to send a team from the Ministry to inspect the area. After the inspection in 2005, the proposal was again revised to 883 ha keeping in view the observation of the visiting officials and submitted to the Ministry on 4 May 2007, which was recommended for approval by the FAC.

The approval was granted on 21 November 2008 for the diversion of 883 ha of forest land (originally proposed 2410 ha) for iron ore mining with an additional condition that the (NPV) for the forest area would be payable at the rate applicable to areas falling within wildlife sanctuaries (that is, five times the normal rate of NPV).

It took 19 years for the BSP to get an approval on the project during which time it became possible to reduce the demand for forest land by 2,396 ha from 3,279 ha to 883 ha.

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

- introduction of the concept of NPV with effect from 29 October 2002 for the forest land to be diverted for quantification of the value of its goods and services to the society.⁴

The first change meant that the jurisdiction of the Act was broadened considerably, and large tracts of wooded land which were not classified as forests previously now came under the purview of the Forest (Conservation) Act. The second change implied that the 'quantified value' of forest land went up significantly as the environmental services provided by forests were now measured and quantified. Table 19.3 summarizes the extent of forest land diversion for non-forestry purposes before and after these landmark developments. It is evident that during the period from 1950–80, that is, prior to the Forest (Conservation) Act, forest lands were diverted at the rate of 1.43 lakh hectare per annum by the various State Governments/UT Administrations, which came down to as low as 0.32 lakh hectare per annum after 1980. Furthermore, the diversion remained roughly at the same level (0.31 lakh hectare per annum) after legislative changes to the Forest (Conservation) Act with the introduction of the concept of NPV in 2002. This is clearly a remarkable achievement, because lesser diversion took place during a period when the economy grew faster (post-1980), particularly in the post-2002 period. The restrictions in land diversion in the post-2002 period can be partially attributed to the introduction of the concept of NPV described above and a regulatory process that examined the optimality of the project's land requirement and possibility of locating the project outside the forest area.

Conclusion

All over the world, forestry, as one of the uses of land, is dependent on the concept of sustained yield. This is ensured by creating compatible legal systems and other arrangements. In the Indian context, the Forest (Conservation) Act, 1980 is one such legal mechanism which regulates forest land diversion for non-forestry purposes by optimizing its use without unduly restricting the scope

TABLE 19.3
Statement showing Total Area Diverted under Forest
(Conservation) Act, 1980 from 25.10.1980 to 31.7.2008

(Figures in ha.)

S.No.	Period	Total area diverted during the period	Average diversion per year
1	1951–2 to 25.10.1980	41,35,000	1,43,000
2	25.10.1980 to 29.10.2002	6,99,674 *	31,803
3	29.10.2002 to 31.7.2008	1,85,984 *	30,997

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

Notes: During 1951–80, there was no diversion under the category of regularization of encroachment;

* Does not include land diverted for regularization of encroachment.

of infrastructure development required for the fast-growing Indian economy. An analysis of forest land diversion shows that its diversion has fallen significantly after the Act came into being, even in the face of accelerated economic growth. During the implementation of the 1980 Act, about a quarter of the diversion of forest land was accounted for by infrastructure. While it is not possible to compare forest land diversion for infrastructure before the Act with that after it came into being, there is no doubt that the Act ensured that the size of land diverted for infrastructure, as for any other purpose, was more optimal than before as illustrated by the two case studies. Further, as a general rule, the Act, which is quite enabling in nature, allows a proactive project proponent together with supportive State Government officials to hasten the process for land acquisition for infrastructure development significantly, as shown in the Itanagar Airport case. Sometimes, however, there are delays—as illustrated in the case of the Rowghat iron ore mining project—especially in cases where the project authorities demand excessive land. In fact, in its own way, the Rowghat case demonstrates how well the Act executes the dual role it is envisaged to play—the role of not just facilitating land diversion to infrastructure in a structured way but also of protecting forests from random acts of destruction.

³ All those patches of revenue land which were recorded as forests (*jungle/jhari/chhote-bade jhar ka jungle/civil soyam* etc.) in revenue records such as *khasralkhatian* etc. and intimated to the Apex Court by respective State/UT governments in the T.N. Godavarman Thirumulpad case come under the purview of dictionary meaning of word 'forest'.

⁴ In addition to NPV for the land being diverted, the user agencies have to bear the expenses of compensatory afforestation and other expenses towards mitigating the environmental damages including catchment area treatment, wildlife preservation, bio-diversity conservation, and rehabilitation of displaced persons, if any.

Annexure

TABLE A19. 1
State- and Category-wise Diversion of Forest Land for Non-forestry
Purposes before the Promulgation of Forest (Conservation) Act, 1980

(Figures in thousand hectares)

Sl No.	States and UTs	River Valley projects	Construction of roads	Establishment of industries	Agricultural purposes	Miscellaneous purposes	Total
1.	Andhra Pradesh	33.9	0	8.5	153.0	6.8	202.2
2.	Assam	19.7	6.6	2.9	17.6	25.8	72.6
3.	Bihar	1.3	1.1	11.1	48.3	5.8	67.6
4.	Gujarat	35.0	0.3	1.1	21.1	122.9	180.4
5.	Haryana	0	0	0.1	0	18.0	18.1
6.	Himachal Pradesh	7.7	1.2	0	12.2	5.7	26.8
7.	Jammu & Kashmir	0.1	0.2	0	0.3	90.2	90.8
8.	Karnataka	81.3	1.7	1.5	79.5	144.4	308.4
9.	Kerala	7.8	0.2	12.1	94.6	74.3	189.0
10.	Madhya Pradesh	69.2	0.4	24.8	1453.3	262.1	1809.8
11.	Maharashtra	13.0	33.1	7.9	118.8	42.7	215.5
12.	Manipur	0	0	0	0	0	0
13.	Meghalaya	0	0	0	0	0	0
14.	Nagaland	0	0	2.0	0	0.1	2.1
15.	Orissa	46.8	0.8	24.2	8.3	29.2	109.3
16.	Punjab	0	0	0	0.4	8.1	8.5
17.	Rajasthan	15.5	0.3	1.3	33.0	36.7	85.8
18.	Sikkim	0	0	0	0	0	0
19.	Tamil Nadu	45.6	0.1	0.3	6.6	13.0	65.6
20.	Tripura	7.9	0.2	0	11.2	19.7	39.0
21.	Uttar Pradesh	93.5	4.6	19.4	83.8	20.5	221.8
22.	West Bengal	1.7	2.6	2.9	313.7	3.6	324.5
	Total all States	479.0	53.4	120.1	2455.7	929.6	4037.8
23.	A&N Islands	0	0.5	0	7.0	3.1	10.6
24.	Arunachal Pradesh	0.1	0.4	7.1	26.3	6.1	40.0
25.	D&N Haveli	0	0	0	0.5	0	0.5
26.	Goa, Daman, & Diu	0	2.7	0	17.4	1.0	21.1
27.	Mizoram	0	0	0	0	0	0
28.	Delhi	0	0.1	0	0	0	0.1
	All India	479.1	57.1	127.2	2506.9	985.4*	4135*

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

Note: * Includes an area of 25.6 thousand ha for which State-wise details are not available.

TABLE A19.2
Statement showing State-wise and Area-wise Diversion of Forest Land for Non-forestry Purposes under
Forest (Conservation) Act, 1980 during 25.10.1980 and 30.9.2008

(As on 1 October 2008)

Sl No.	State/UT	No. of cases approved	Area diverted (in ha)	Proposals for 0 to 5 ha		Proposals for 5 to 10 ha		Proposals for 10 to 20 ha		Proposals for 20 to 40 ha		Proposals for more than 40 ha	
				No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted	No. of cases	Area diverted
1.	A&N Islands	83	2,766	56	48	3	26	3	40	8	248	13	2,404
2.	Andhra Pradesh	525	44,947	256	553	69	538	62	935	43	1,284	95	41,637
3.	Arunachal Pradesh	131	44,191	42	91	13	91	18	258	30	919	28	42,832
4.	Assam	240	7,571	164	333	27	203	12	181	20	606	17	6,248
5.	Bihar	86	2,558	43	84	7	43	15	239	7	189	14	2,003
6.	Chandigarh	22	49	21	21	0	0	0	0	1	28	0	0
7.	Chhattisgarh	416	89,683	133	224	29	220	60	915	61	1,820	133	86,504
8.	Dadar & Nagar Haveli	197	287	194	52	1	7	0	0	0	0	2	228
9.	Daman & Diu	1	4	1	4	0	0	0	0	0	0	0	0
10.	Delhi	8	20	6	8	2	12	0	0	0	0	0	0
11.	Goa	91	1,727	41	60	5	40	17	252	14	417	14	958
12.	Gujarat	1,222	66,503	963	1,142	68	503	56	801	50	1,439	85	62,618
13.	Haryana	1,430	8,706	1,355	606	22	164	20	302	19	572	14	7,062
14.	Himachal Pradesh	1,240	11,131	1,046	1,657	58	406	42	620	34	939	60	7,509
15.	Jammu & Kashmir	8	1,500	0	0	0	0	1	13	1	34	6	1,453
16.	Jharkhand	234	14,956	93	130	18	138	24	374	21	592	78	13,722
17.	Karnataka	710	43,081	393	641	62	452	70	1,045	81	2,334	104	38,609
18.	Kerala	220	40,987	164	140	18	130	16	213	6	177	16	40,327
19.	Madhya Pradesh	897	3,91,083	479	911	57	440	85	1,290	62	1,845	214	3,86,597
20.	Maharashtra	1,490	91,134	922	1,283	153	1,133	144	2,104	91	2,660	180	83,954
21.	Manipur	23	1,162	14	17	0	0	1	18	1	32	7	1,095
22.	Meghalaya	91	398	83	33	0	0	3	45	3	81	2	239
23.	Mizoram	28	25,485	11	11	1	10	2	31	0	0	14	25,433
24.	Orissa	446	44,092	141	256	31	228	63	934	45	1,304	166	41,370
25.	Pondicherry	1	1	1	1	0	0	0	0	0	0	0	0
26.	Punjab	2,499	77,009	2,387	665	34	250	20	290	23	656	35	75,148
27.	Rajasthan	631	25,077	341	579	94	680	62	886	53	1,549	81	21,383
28.	Sikkim	281	2,232	217	246	17	134	17	253	22	583	8	1,016
29.	Tamil Nadu	410	4,879	336	335	24	183	26	373	15	480	9	3,508
30.	Tripura	247	7,870	207	318	6	44	5	67	11	328	18	7,113
31.	Uttar Pradesh	596	41,770	441	499	37	256	30	435	31	826	57	39,754
32.	Uttaranchal	3,493	62,627	3,071	3,337	202	1,459	108	1,465	32	851	80	55,515
33.	West Bengal	83	4,162	48	67	6	52	10	148	4	126	15	3,769
	Total	18,080	11,59,648	13,670	14,352	1,064	7,842	992	14,527	789	22,919	1,565	11,00,008

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

TABLE A19.3
Details of Category-wise Proposals Received and Approved with Forest Area Diverted
from 25.10.1980 to 30.9.2008 under Forest (Conservation) Act, 1980

(As on 1 October 2008)

Sl No.	Category	Approved/ in-principle	Closed/returned/ rejected/withdrawn	Total	Land diverted (in ha)	Remarks
1.	Dispensary/Hospital	32	10	42	107	
2.	Drinking Water	1,352	94	1,446	1,822	
3.	Hydel	384	45	429	1,11,283	
4.	Irrigation	2,018	572	2,590	1,11,517	Infrastructure Development
5.	Railway	211	19	230	7,233	
6.	Road	4,292	566	4,858	29,132	
7.	School	111	56	167	2,712	
8.	Thermal	32	4	36	4,492	
9.	Transmission Line/ Village electricity	1,835	292	2,127	28,196	
10.	Wind Power	32	0	32	1,906	
	Sub-total of infrastructure projects	10,299	1,658	11,957	298,400	
11.	Defence	208	41	249	131,952	
12.	Encroachments	64	50	114	368,415	
13.	Forest Village Conversion	16	24	40	41,170	Other Activities
14.	Mining	1,546	782	2,328	114,324	
15.	Others	5,907	1,198	7,105	188,329	
16.	Rehabilitation	40	51	91	17,058	
	Sub-total of other projects	7,781	2,146	9,927	861,248	
	Grand total	18,080	3,812	21,884	11,59,648	

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

Table A19.4
State-wise Diversion of Forest Area for various Infrastructure/Development Projects under Forest (Conservation) Act, 1980 during 25.10.1980 and 30.9.2008
(As on 1.10.2008)

Sl No.	State / UT	No. of cases approved	Area diverted	Dispensary/ Hospital	Drinking water	Hydel	Irrigation	Railway	Road	School	Thermal	Transmission line/Village electricity	Wind power	Total	(Area in ha)
1.	A&N Islands	83	2,766	0	10	1	8	0	9	0	0	7	0	35	
				(0)	(81)	(200)	(424)	(0)	(281)	(0)	(0)	(79)	(0)	(1,065)	
2.	Andhra Pradesh	525	44,947	0	25	0	94	16	64	1	0	62	2	264	
				(0)	(129)	(0)	(16,624)	(367)	(587)	(0.4)	(0)	(1,022)	(41)	(18,770)	
3.	Arunachal Pradesh	131	44,191	0	0	8	0	1	52	0	0	10	0	71	
				(0)	(0)	(5,046)	(0)	(25)	(1,322)	(0)	(0)	(646)	(0)	(7,039)	
4.	Assam	240	7,571	0	1	5	4	4	25	0	0	30	0	69	
				(0)	(1)	(4,319)	(57)	(555)	(769)	(0)	(0)	(791)	(0)	(6,492)	
5.	Bihar	86	2,558	0	0	0	4	5	42	1	0	11	0	63	
				(0)	(0)	(0)	(377)	(209)	(996)	(11)	(0)	(19)	(0)	(1,612)	
6.	Chandigarh	22	49	0	0	0	0	2	5	0	0	3	0	10	
				(0)	(0)	(0)	(0)	(2)	(9)	(0)	(0)	(8)	(0)	(19)	
7.	Chhattisgarh	416	89,683	0	0	2	170	3	16	5	8	37	0	241	
				(0)	(0)	(5,719)	(5,796)	(290)	(94)	(3)	(1,252)	(1,788)	(0)	(14,942)	
8.	Dadar & Nagar Haveli	197	287	0	1	0	2	0	128	0	0	20	0	151	
				(0)	(0.1)	(0)	(146)	(0)	(36)	(0)	(0)	(7)	(0)	(189)	
9.	Daman & Diu	1	4	0	0	0	0	0	1	0	0	0	0	1	
				(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(14)	
10.	Delhi	8	20	0	0	0	0	1	1	0	0	0	0	2	
				(0)	(0)	(0)	(0)	(0.4)	(3)	(0)	(0)	(0)	(0)	(3)	
11.	Goa	91	1,727	0	9	0	5	2	17	1	0	6	0	40	
				(0)	(21)	(0)	(36)	(37)	(12)	(0.4)	(0)	(122)	(0)	(228)	
12.	Gujarat	1,222	66,503	0	54	2	172	7	351	3	0	67	0	656	
				(0)	(95)	(4,177)	(3,754)	(92)	(4,611)	(1,949)	(0)	(803)	(0)	(15,481)	
13.	Haryana	1,430	8,706	0	4	3	24	8	285	5	2	67	0	398	
				(0)	(84)	(34)	(494)	(43)	(1,801)	(0.1)	(8)	(198)	(0)	(2,662)	
14.	Himachal Pradesh	1,240	11,131	2	16	146	6	2	598	10	0	119	1	900	
				(1)	(3)	(4,037)	(45)	(3)	(1,661)	(3)	(0)	(2,848)	(34)	(8,635)	
15.	Jammu & Kashmir	8	1,500	0	0	3	0	0	0	0	0	5	0	8	
				(0)	(0)	(1,041)	(0)	(0)	(0)	(0)	(0)	(459)	(0)	(1,500)	
16.	Jharkhand	234	14,956	0	3	3	8	13	25	2	4	41	0	99	
				(0)	(1)	(22)	(1,943)	(1,520)	(47)	(13)	(644)	(838)	(0)	(5,028)	

Table A19.4 (Contd.)

Sl No.	State / UT	No. of cases approved	Area diverted	Dispensary/ Hospital	Drinking water	Hydel	Irrigation	Railway	Road	School	Thermal	Transmission line/Village electricity	Wind power	Total
17.	Karnataka	710	43,081	5 (5)	38 (59)	27 (5,205)	74 (2,297)	12 (451)	51 (282)	16 (30)	0 (0)	114 (1,127)	22 (1,212)	359 (10,668)
18.	Kerala	220	40,987	2 (1)	15 (7)	10 (310)	29 (427)	0 (0)	23 (25)	3 (16)	0 (0)	79 (791)	0 (0)	161 (1,577)
19.	Madhya Pradesh	897	3,91,083	0 (0)	6 (79)	2 (46,942)	214 (27,916)	10 (451)	69 (587)	2 (14)	3 (665)	241 (3,371)	1 (65)	548 (80,090)
20.	Maharashtra	1,490	91,134	1 (1)	118 (804)	2 (13)	649 (32,640)	10 (148)	144 (997)	9 (67)	0 (0)	181 (1,694)	6 (554)	1120 (36,918)
21.	Manipur	23	1,162	0 (0)	3 (2)	1 (195)	0 (0)	0 (0)	7 (225)	0 (0)	0 (0)	5 (672)	0 (0)	16 (1,094)
22.	Meghalaya	91	398	0 (0)	32 (34)	1 (99)	2 (1)	0 (0)	11 (65)	2 (1)	0 (0)	12 (26)	0 (0)	60 (226)
23.	Mizoram	28	25,485	0 (0)	0 (0)	5 (24,688)	0 (0)	0 (0)	10 (427)	1 (159)	0 (0)	1 (54)	0 (0)	17 (25,328)
24.	Orissa	446	44,092	1 (1)	8 (9)	6 (40)	116 (11,523)	8 (1,991)	35 (303)	3 (8)	2 (643)	51 (2,468)	0 (0)	230 (16,986)
25.	Pondicherry	1	1	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
26.	Punjab	2,499	77,009	2 (50)	0 (0)	28 (1,725)	23 (1,190)	15 (27)	337 (1,549)	3 (0.4)	0 (0)	189 (684)	0 (0)	597 (5,225)
27.	Rajasthan	631	25,077	0 (0)	27 (104)	5 (51)	49 (3,359)	8 (165)	117 (2,499)	1 (145)	1 (14)	94 (1,038)	0 (0)	302 (7,375)
28.	Sikkim	281	2,232	0 (0)	14 (40)	26 (529)	4 (4)	0 (0)	120 (599)	0 (0)	0 (0)	29 (266)	0 (0)	193 (1,438)
29.	Tamil Nadu	410	4,879	3 (1)	57 (51)	4 (20)	60 (721)	4 (4)	53 (96)	4 (3)	0 (0)	98 (437)	0 (0)	283 (1,333)
30.	Tripura	247	7,870	3 (3)	0 (0)	0 (0)	1 (3)	8 (306)	19 (396)	4 (9)	3 (118)	6 (270)	0 (0)	44 (1,105)
31.	Uttar Pradesh	596	41,770	0 (0)	8 (7)	2 (632)	39 (828)	67 (370)	197 (2,313)	2 (21)	3 (752)	129 (2,521)	0 (0)	447 (7,444)
32.	Uttaranchal	3,493	62,627	13 (44)	900 (191)	87 (5,447)	256 (766)	1 (123)	1,473 (6,528)	33 (260)	4 (8)	101 (2,842)	0 (0)	2868 (16,209)
33.	West Bengal	83	4,162	0 (0)	3 (20)	5 (792)	5 (146)	4 (54)	7 (8)	0 (0)	2 (388)	20 (307)	0 (0)	46 (1,715)
	Total	18,080	11,59,648	32 (107)	1,352 (1,822)	384 (1,11,283)	2,018 (1,11,517)	211 (7,233)	4,292 (29,132)	111 (2,712)	32 (4,492)	1835 (2,8196)	32 (1,906)	10,299 (2,98,400)#

Source: Records available in the Ministry of Environment & Forests, Government of India, New Delhi.

Notes: Figures in parenthesis indicate forest area diverted in ha. The area figures as indicated in the table have been rounded off to the nearest digit for uniformity.

20 Land Acquisition for Container Terminal at Cochin Port

Beena Mahadevan

Introduction

The Cochin Port Trust (CPT), one among the 12 major ports in India, is an all-weather port strategically located close to the trunk sea routes from Europe to Australia and to the Far East. It has strong connectivity with all parts of the country through well-developed roads, railways, and air network and is marked by all the essential features for developing a container trans-shipment terminal. Cochin was hence selected as the ideal location for the development of the International Container Trans-shipment Terminal (ICTT). In view of these advantages, the Cochin Port Trust mooted a proposal in the early 1990s for the establishment of an ICTT and received ready agreement from the Government of India. The project is to be located at Vallarpadam Island close to the Cochin mainland in Kochi *taluk* of Ernakulam district in the state of Kerala.

A Detailed Project Report (DPR) was prepared in 1991, on the basis of which bids were invited in 1992 for the establishment of the terminal with private participation, but the response was not encouraging. The project report was subsequently updated in 1998, which envisaged development of facilities for handling mother container ships of 8,000 Twenty-foot Equivalent Unit (TEU) capacity. A state-of-the-art terminal with an annual handling capacity of 3 million TEUs was planned. The project was implemented on Build-Operate-Transfer (BOT) contract, which commenced with the signing of the licence agreement between Cochin Port Trust and M/s India Gateway Terminal Pvt Ltd (IGT), a subsidiary of M/s Dubai Port World (DPW) on 31 January 2005. As per the terms of the Licence Agreement, the existing Rajiv Gandhi Container Terminal (RGCT) of the port was taken over

by IGT on 1 April 2005 for operation till the new one at Vallarpadam was commissioned.

Environmental clearance for the terminal construction for ICTT and Special Economic Zone (SEZ) status to the project area was obtained on 2 and 9 November 2006, respectively. Contract for the Phase-I development of the terminal with 600 m berth was awarded by IGT on 22 November 2007 for a contract value of about US\$150 million. Construction work commenced on 15 December 2007 and is in progress. The terminal is expected to be ready for operation by November 2009.

As per the terms of the Licence Agreement with the BOT operator M/s IGT, the supporting infrastructure facilities to be provided/arranged by the port trust before the date of commissioning of the terminal includes a rail connectivity to the project area at Vallarpadam. The experience and lessons from the land acquisition process are given below.

Land Acquisition for Rail Connectivity

Steps for land acquisition were initiated against the requisition of Deputy General Manager (Constructions), Southern Railway, Ernakulam for construction of rail connectivity to the ICTT project site.

An office was established under the district administration for acquisition of land for the above project, headed by a *tahsildar* and comprising junior superintendents, valuation assistants, surveyors, draftsmen, Upper Division Clerks (UDCs), Lower Division Clerks (LDCs), Class IV staff, etc. The employees (38 in number) are on deputation from various establishments and/or on contract appointment. The aggregate monthly salary of

the employees was estimated as Rs 3 lakh approximately and sundry expenses about Rs 25,000. The establishment charges for this office as well as the cost of land acquisition and compensation to evictees were borne by CPT.

Survey works were completed by the district administration in four villages for acquisition of land (including rehabilitation) and the report subsequently submitted to the Government of Kerala for further action such as publication of notice for land acquisition, rehabilitation of evictees, compensation payable, etc.

The extent of land being acquired for this project was about 4.3 ha comprising four villages of Kanayannur taluk, involving a total of 226 acquisition cases. The details are provided in Table 20.1.

TABLE 20.1
Extent of Land Acquired in Kanayannur Taluk
(Figures for four villages)

Name of village	Extent of land acquired in hectares
Edappally North	0.7
Edappally South	0.99
Cheranellor	1.9
Mulavukad	0.8
Total Extent	4.3

Source: Government records.

The publication of the first phase 4(1) notification for acquisition of land was made on 9 April 2007. Subsequent to certain changes in the alignment of the rail connectivity, the second phase 4(1) notification (for a different stretch of land) was published on 10 October 2007.¹ The basic land value was approved first by the District Level Purchase Committee (DLPC) and subsequently by the State Level Empowered Committee. The project was exempted from registration charges and stamp duties etc. by the government in November 2007 vide a government order.

The registration of land under the DLPC scheme was started on 1 January 2008. The land pertaining to the owners who gave consent for acquisition under DLPC value in two villages, Cheranellor and Mulavukad, was handed over to the railways following completion of the registration formalities. But in several cases, people were unwilling to give up their land, leading to agitation

during the course of survey and land acquisition works. The people belonging to these two villages formed the Peoples' Council under the banner 'Janakeeya Samara Samithi' and strongly protested against the alignment. An indefinite hunger strike and relay *sathyagraha* by the *Vaduthala Janakeeya Samithi* lasted for several months. It was the forced eviction of unwilling owners initiated at Moolampilly, which intensified the protests. Media covered these evictions widely, generating strong public opinion against them. Famous environmentalist Medha Patkar was among those who supported and headed the agitators. To overcome the protests, the Government of Kerala issued an order announcing Rehabilitation and Resettlement (R&R) package for the people who were going to lose land. The package comprised 4–6 cents of land, which was considered enough to build a house.² People who got 4 cents felt discriminated against and filed writ petitions at the High Court. Land for rehabilitation was to be given to the people either in the same village where they were living or in close proximity.

The Hon'ble High Court passed an order reducing disparities substantially and in areas where there was shortage of land, the Court directed that monetary compensation be given for 0.5 cent of land. This satisfied everybody and as per the direction of the Court, all landowners (for both Phase I and Phase II) surrendered their land on or before 15 July 2008, bringing to an end the acquisition process for both phases. The land was subsequently handed over to the railways. Thus, from the dates of initial notification, the acquisition for Phase I took about 15 months and Phase II about 9 months.

The Present Status

The rail connectivity with a route length of 8.86 km from Edappally to Vallarpadam is being implemented by the Rail Vikas Nigam Ltd (RVNL) with budgetary support provided by the Department of Shipping. The construction of the rail connectivity, sanctioned by Government of India, at an estimated cost of Rs 246 crore, has already been started by RVNL and the work is in progress. The project is scheduled for completion by November 2009.

Lessons

There are some important points to note from this case. First, the average size of land holding was so small that an acquisition of only 4.3 ha of land affected as many

¹ 3.31 ha of land was sought to be acquired in Phase-I and 0.9 ha in Phase-II for rail connectivity.

² 1 cent=0.01 acre; as part of rehabilitation package, people who lost less than 4 cents, got 4 cents, while those who lost more than 6 cents of land got 6 cents.

as 261 families. Second, forced eviction provoked wide public protests, which compelled the government to consider the R&R package, even though it was not due as per the National Rehabilitation and Resettlement Policy (NRRP)-2007, which makes R&R mandatory for only those projects that involve displacement of more than

400 families *en masse* in the plains. Third, a major feature of the R&R package that made it largely acceptable to the project affected families was that it was offered in terms of land for land and the land that was offered was in close proximity to where the displaced used to live.

21 Land Evacuation, Resettlement, and Rehabilitation

Lessons from the Delhi International Airport[†]

Manisha Gulati

Introduction

The Indira Gandhi International Airport (IGIA) at Delhi is one of the two airports in India that has been handed over by the Government of India (GoI) to the private sector for modernization. The GMR Group-led consortium, Delhi International Airport Limited (DIAL) that won the award faced two challenges. First, it had to get the possession of some land that had been acquired for the Airports Authority of India (AAI); but was caught in acquisition-related litigation. Second, it had to remove encroachments on some parts of land already owned by AAI. This case study highlights the manner in which DIAL has addressed these two challenges.

Project Details

BACKGROUND TO THE PROJECT¹

Delhi International Airport Limited (DIAL) is a joint venture consortium comprising the GMR Group (50.1 per cent), AAI (26 per cent), Fraport AG² and Eraman

Malaysia³ (10 per cent each), and IDF (3.9 per cent). GMR is the lead member of the consortium, Fraport AG is the airport operator, Eraman Malaysia is the retail advisor, and IDF the financial investors. In January 2006, the consortium was awarded the concession to operate, manage, and develop IGIA following an international competitive bidding process. Delhi International Airport Limited (DIAL) entered into an Operations, Management, and Development Agreement (OMDA) with the AAI on 4 April 2006. The initial term of the concession is 30 years, which can be extended by another 30 years. The airport is to be developed in five phases. The first phase which is to be completed by 2010 involves the construction of a new terminal building with a capacity of 34 million passengers per annum.⁴

BACKGROUND TO LAND ACQUISITION

Box 21.1 provides the quantum of the problematic land at the time DIAL took control over the IGIA. This land

[†] This case study has been prepared on the basis of information collected from the DIAL by way of discussions and interviews. The author acknowledges the cooperation and support received from DIAL and its Land and Space Team. In particular, the author would like to thank K. Narayana Rao, Director, DIAL and Lt. Col. (Retd) Verinder Luthra, AGM (Land and Space)—Commercial, DIAL.

¹ See <http://www.newdelhiairport.in/About-dial.asp>

² Fraport AG is the owner and operator of the Frankfurt Airport.

³ ERAMAN Malaysia is a wholly owned subsidiary of Malaysia Airports Holdings, Berhad and is the retail operator at several airports in Malaysia including the international airports at Kuala Lumpur, Penang, Sarawak, Sabah, and Labuan.

⁴ For details on the phased development of IGIA, access <http://www.newdelhiairport.in/new-terminal-building.asp> and <http://www.newdelhiairport.in/master-plan-development.asp>

is essential for the development of the transport corridor (involving road and rail (metro) connectivity to the airport), which is required to be ready for the Commonwealth Games to be held in Delhi in 2010. To keep this timeline, the land in question had to be evacuated by September 2007. It is important to note that while information on the land under encroachment was provided by AAI to the bidders for the IGIA, evacuation of land was not listed as a responsibility of the concessionaire under the OMDA.

Box 21.1

Quantum of Problem Land when DIAL took over IGIA

(A) Land Acquired for AAI but possession not given to AAI

- Nangal Dewat Village—59.84 acres

B Land under encroachment

- Nangal Dewat—3.00 acres
- Mahipalpur—1.50 acres
- Nangal Dairy and Tata Nagar—2.08 acres
- Mahipalpur—Nangal Dairy—8.64 acres
- Potteries (4 nos.)—15 acres

Source: DIAL.

The land under (A) was acquired in April 1972 under the Land Acquisition Act (LAA) of 1894. The AAI was to undertake the responsibility for bearing the costs of rehabilitation of the affected villagers over and above the compensation to be paid by them for the land and the structures on it. The rehabilitation scheme entailed the provision of alternative residential sites for the villagers and monetary compensation of Rs 24 per square metre⁵ for families residing on the land as well as for the displaced industrial units. The cost for construction of houses, however, was to be borne by the villagers themselves.

In 1982, a writ petition was filed by nearly 366 residents of the Nangal Dewat Village, seeking quashing of the notification under Sec. 4 and 6 of the LAA 1894 in respect of their lands and structures. The Delhi High Court granted a limited stay of operation of the award to enable the Government of India to consider the question of rehabilitation of the residents of this village within three months. Consequently, the AAI acquired land in Rangpuri Village within Delhi in 1986 for the rehabilitation and resettlement (R&R) of people affected by acquisition of the Nangal Dewat village. The responsibility for development of this land was entrusted to the Delhi Development Authority (DDA).

In May 1988, the villagers met the Lt. Governor of Delhi and pointed out the need for a fresh survey to identify the families living in the village and not go by the basis of the DDA's plan to provide resettlement as per the survey conducted in 1972. A joint survey conducted by the Land Acquisition Collector (LAC), the Government of National Capital Territory of Delhi (GNCTD), and AAI identified 953 eligible families as against 308 families in the 1972 survey. On the basis of this survey, the DDA revised the scheme for resettlement.

The Challenge before Dial

When DIAL took control of IGIA, 147 cases challenging the land acquisition and the compensation provided by AAI were pending in the Delhi High Court. Further, the number of families living on the concerned piece of land now stood at 1500. Many native families of the Nangal Dewat Village that had been allotted land in Rangpuri had sold that land and continued to stay at their native village (that is, Nangal Dewat). Besides, many native families of this village had sold their land in the village to outsiders who utilized the space for cargo or commercial activities related to the airport. Subsequently, the outsiders refused to hold a dialogue with DIAL about the possibility of giving up possession of the land. Further, they filed petitions in the Delhi High Court seeking alternate land despite the fact that they were not eligible for such land.

At the same time, DIAL was confronted with the problem of encroachment on about 30 acres of land housing 1952 families, comprising mostly poor, daily wage earning, and landless families. This land also had 11 temples.

DIAL's Approach to Land Evacuation

The first task that DIAL did was to form a strategic nine member team to handle with commitment all matters related to land acquisition. The team was headed by an Assistant Vice President and was called the Land Management Department. Delhi International Airport Limited (DIAL) ensured that the team included an employee who was familiar with the local culture and vernacular language of the affected community.

This department petitioned the Delhi High Court to transfer all cases related to this land acquisition under one judge and expedite the hearings. The Delhi High Court granted this request and held hearings from February to May 2007. In view of the lack of coordination between various departments and agencies of the GNCTD on

⁵ This rate was determined in accordance with the rate prevailing in the Land Registry Office on the day the order for land acquisition was issued by the Government.

attending the hearings, DIAL took it upon itself to coordinate with the concerned agencies and ensure that all concerned agencies were adequately represented at the hearings. Further, it requested the Ministry of Civil Aviation (MoCA) to call a meeting of all concerned agencies including the AAI and GNCTD to take stock of the situation. As a result, two working committees—an Apex Committee and a Working Committee—were formed to oversee the progress of land evacuation. The Apex Committee comprised the Chief Secretary, GNCTD; Secretary, Home Affairs, GNCTD; GMR Group and the District Collector. The Working Committee comprised the DDA, Delhi Jal Board (DJB), Delhi Transco Limited (DTL), GMR Group, and was chaired by the District Collector.

The encroachers at Nangal Dewat were not all residential families or poor people, but included well-established commercial establishments running businesses allied to activities at the airport. Some of these establishments had links with local politicians, who opposed the move by DIAL. Besides holding agitations, these political parties also dumped debris in front of the DIAL office. To overcome such opposition, the Land Management Department met with the heads of these parties as well as officials of the District Administration to explain the facts of the case and highlight the importance of the project. It also made attempts to meet with the representatives of the community as well as the affected families to understand their grievances. The familiarity with the local culture and language helped the team build a rapport with the affected community and gain information on the actual status of the families living in the village and the activities being undertaken by the commercial establishments there.

On 31 May 2007, the High Court passed its judgement, ruling in favour of DIAL and gave the petitioners two months to vacate the land. Besides this, the High Court also gave elaborate directions to civic bodies such as DJB, DTL, and the concerned electricity distribution company to ensure the availability of essential services such as water and electricity during this time. The Land Management Department of DIAL chalked out the programme of evacuation in discussion with Additional District Magistrate (South West), GNCTD, AAI, and DDA. Table 21.1 provides the schedule of this evacuation.

During the rehabilitation process, some issues arose in respect of the land allotted to 122 families. These

TABLE 21.1
Schedule for Land Evacuation Programme Prepared by DIAL
Following the Order of the Delhi High Court

Time frame (2007)	Type of land to be taken over
2 July	<i>Gram Sabha</i>
10 July	Commercial Structure
18–21 July	Extended <i>Abadi</i> *
25–28 July	Old <i>Abadi</i>
30–31 July	Harijans

Source: DIAL.

Note: * Population.

families, belonging to the *Harijan* community and some other backward classes, were allotted only 7760 sq. metres against their eligibility for 19,904 sq metres. This happened because while computing the size and category of plots to be allotted to those being rehabilitated, the concerned Nodal Officer of the GNCTD had not taken into account the land holdings of these communities in the extended *abadi* area⁶ due to the inability of these families to produce revenue records substantiating their ownership of the land.⁷ These families resorted to processions and strikes in front of the operational offices of AAI. Having understood the nature of their problem, DIAL requested GNCTD to consolidate the land under occupation by these families in the old as well as extended *abadi* area and increase the size of plots awarded to them at Rangpuri. This process is underway and is taking time as several approvals are required at different levels to implement this.

In addition to the compensation provided by AAI, DIAL offered to pay each family the rent for a period of six months depending on the size of their land holding. This scheme was applicable for villagers who submitted an undertaking in the Court to the effect that they would vacate their plots in accordance with the time frame given by the High Court and hand over their plots to the Additional District Magistrate (South West), GNCTD or LAC, GNCTD.

On the other hand, the evacuation of encroachers on other pieces of land owned by AAI was done in keeping with the *Jhuggi Jhompari* (J&J) resettlement policy of GNCTD (see Box 21.2). Accordingly, DIAL paid Rs 29,000 per squatter family to evacuate them. These families were rehabilitated at Savda Ghevra, which was one of the many pieces of land identified by GNCTD for rehabilitation. In this case too, the Land Management

⁶ Between 1972 and 2006, the village in question had grown substantially. The village, as it existed in 1972, was referred to as the old *abadi*.

⁷ This was in line with an order of the Delhi High Court issued in 2002 that appointed the then Additional District Magistrate (South West), GNCTD as the Nodal Officer and directed him to prepare the list of eligible persons for rehabilitation.

Box 21.2

Delhi Development Authority's Scheme for Resettlement of J&J in 1992

- Eligibility for resettlement confined to squatters who are Indian residents on the project site as on 31.1.90 as evidenced by ration cards held by them.
 - Eligible families to be allotted plots of 18 square metre with 7 square metre undivided share in the open courtyard.
 - DDA to provide 20 per cent of the residential land in the said integrated urban development project @ Rs 825 per sq. metre of the net plotted area as approved by the Lt. Governor of Delhi.
 - For defraying the cost of relocation and resettlement under the scheme, the Slum Wing to be provided with a total sum of Rs 23,000 per target family viz. Rs 10,000 out of the plan funds, Rs 10,000 by land owning agencies, and Rs 3,000 by the respective beneficiaries.*
 - Slum Wing to construct plinths of 18 sq. metre along with WC seats at an estimated cost of Rs 7,500 per target family.
- * The cost of relocation and resettlement as mentioned above was revised by the Department of Urban Development in 1994 to Rs 44,000 per target family. The pattern for funding is as follows:
- Rs 29,000 by the land owning agency;
 - Rs 10,000 as plan support; and
 - Rs 5,000 by the beneficiaries.

Source: DIAL; *Annual Plan 2003–04*, Vol. II, Planning Department, GNCTD, available at <http://delhiplanning.nic.in/Write-up/2003-04/Volume-II/Urban%20Development.pdf>; *Annual Plan 2004–2005*, Volume IV, Planning Department, GNCTD, available at <http://delhiplanning.nic.in/Write-up/2004-05/Volume-IV%20pdf/ch23.pdf>

Department of DIAL ensured a dialogue with the squatters. Further, the relocation of temples on the encroached land is being carried out in accordance with the Religious Structures Relocation Policy issued by GNCTD. While three temples have already been relocated, the relocation of the remaining eight temples is underway.

During the land evacuation process, DIAL provided necessary transport facilities and labour to the villagers to enable them to shift their belongings as well as any material they could salvage from their plots. The local bank branch and post office were also shifted to Rangpuri as part of the rehabilitation process. Children studying in schools⁸ in the area being evacuated were given transfer certificates to schools closer to the new area of residence. Similar assistance was provided to the squatters to enable their rehabilitation.

During the R&R process, DIAL roped in GMR Varalakshmi Foundation, the corporate social responsibility (CSR) arm of the GMR Group to provide basic facilities to the affected people. The Foundation erected tents at the rehabilitated site for temporary accommodation for villagers and arranged floodlights during the night. It also arranged for basic medical facilities and food for them. This Foundation has in fact carried forward its support to the villagers at the rehabilitated site by providing primary education and select vocational training facilities, and by enhancing health and hygiene facilities.

Key Lessons

The experience of DIAL with land evacuation has brought out several lessons. Since the matter of land acquisition was *sub judice*, little could be done to evacuate villagers from the land even though it had been acquired. Further, forcible land evacuation was not practical in the light of the complexities involved. But DIAL did not wait for the judicial process to take its natural course to choose the course of action for land evacuation. Instead, it decided to be proactive and formed a team dedicated to the task of land acquisition and evacuation. The coordination efforts made by this team with the concerned agencies such as MoCA, AAI, and LAC, and various departments of GNCTD resulted in the speedy disposition of cases in the Delhi High Court. The team's familiarity with the local culture and vernacular language of the affected people helped DIAL in understanding the problem confronting it and the actual status of the project-affected people better.

Another important lesson from this experience is that the responsibility of a private sector project developer does not end with the provision of a R&R package. Delhi International Airport Limited (DIAL), for example, provided assistance during evacuation by providing transportation facilities and labour. Further, in partnership with the GMR Group's CSR arm, DIAL ensured support in terms of medical facilities and basic amenities at the land being evacuated as well as at the rehabilitated site.

⁸ There were three schools—two primary level schools and one higher secondary school.

Many large companies in India now have active CSR wings. By viewing R&R as their social responsibility, the corporate sector can make R&R a pleasant experience for the affected people and earn their goodwill.

Finally, the problems related to encroachment were well known at the time of signing the OMDA with DIAL. However, there was no clarity in the OMDA or in the Lease Deed signed between AAI and DIAL on which party

would be responsible for evacuation of the encroachers. In this case, DIAL took upon itself the responsibility of land evacuation. But lack of contractual clarity on such responsibilities at the time of appointment of a private sector concessionaire can potentially lead to complex problems for project developers as well as the R&R of the affected people.

Section V

**OVERCOMING LAND CONSTRAINTS IN
URBAN PLANNING**

22 Integrated Townships as a Policy Response to Changing Supply and Demand Dynamics of Urban Growth

Ravikant Joshi

Introduction

In India, the government plays a major role in the supply of urban land, which is a key determining factor in sustaining the growth of a city and its infrastructure. Excessive regulatory requirements and dominant public sector presence in land arrangements have together resulted in large shortfalls in the supply of urban land as compared to demand. This has been seriously impeding investment in urban housing and infrastructure. Though India initiated economic liberalization and structural reforms in 1991, efforts to liberalize controls on land supply began in earnest only by the late 1990s. While the land supply in urban areas is still public-sector dominated, some measures (such as abolition of Urban Land Ceiling and Regulation Act, 1976, Rent Control Act reforms, and the Special Economic Zone or SEZ Policy to allow development of townships) have been taken in recent years to give the private sector an increased role in the supply of land for urban growth. ‘Integrated township’, which emerged as a response to emerging demands from certain sections of the urban population, is one way of liberalizing the controls on the supply of urban land.

This chapter views the concept of integrated townships from a historical perspective of state intervention in land markets. It studies the concept, its rationale, and the issues arising from it to examine whether it can be a viable instrument for addressing the future of Urban India.

State Intervention in Urban Land Markets—A Historical Perspective

Before the advent of the concept of modern town planning, the British colonial government played no role in the land market—indeed, *laissez faire* was the norm the world over—and land was predominantly supplied by the private sector. Urban growth was unplanned and characterized by poor living standards. State intervention in the urban land market came in the context of urban planning. With the formulation of the Town Planning Act in certain provinces, improvement trusts were set up to prepare town planning schemes. This was accompanied by heightened land acquisition activity under the Land Acquisition Act (LAA) 1894 for public purposes such as construction of public buildings (government offices, hospitals, colleges, schools, etc.) and public amenities (water, drainage, stormwater drainage, roads, public gardens, etc.). Thus, there was an expansion in the role of the public sector in the supply of land for urban infrastructure development but not for urban housing or re-supplying of land for urban growth. It was only in the initial decades after Independence that the Central and state governments acquired a huge quantity of land using LAA, 1894 for setting up heavy industries and basic physical infrastructure (such as dams, railways, and highways), which also included creation of townships and cities such

as Bhilai, Rourkela, Durgapur, Bhubaneswar, Chandigarh, and Gandhinagar.¹

Under Town Planning Acts, a system of preparation and implementation of Master (Development) Plans was introduced in the late 1960s for orderly development of cities as per town planning norms. By 1998, 879 Master Plans were prepared and approved while 158 draft plans were ready and 161 plans under preparation, thus totalling up to 1198 Master Plans.² Urban Development Authorities were set up at the city level for administration of Master Plans. The Master Plan mechanism helped governments to place mandatory land use restrictions (that is, restrictions stating that a given land parcel could only be used for a defined purpose, although the owner was free to sell) and reservations (that is, a given private land parcel is to be reserved for sale only to the government for urban public purpose under LAA, 1894). The LAA, 1894 allows the government to use eminent domain powers to purchase land from landholders (some of whom may be unwilling to sell) for public purpose and unilaterally determine the compensation. In addition, there were other legal

provisions that gave the government controls over private supply of land. For example, there were restrictions on the sale of agriculture land to a non-agricultural consumer or to an outsider (not belonging to the province/region or not belonging to a certain caste category), regulation of agricultural land for non-agricultural uses and even limits on the size of urban land holdings by an individual.³ Thus, the private landholders were subject to restrictions that determined what use their land could be put to, whom they could sell to and at what price, and even how much they could hold.

In general, despite all these powers the state acquired to intervene in the urban land market, the main objective of the regulations that gave the state such powers, namely 'orderly development of cities' could not quite be attained. Many times, these regulations were ineffective because of the exploitation of loopholes of the Acts by the private landholders as well as rent-seeking behaviour of implementers of Master Plans and Urban Land Ceiling and Regulation Act (ULCRA) (See Box 22.1). For example, Town Planning Acts under which Master Plans

Box 22.1

The Urban Land Ceiling & Regulation Act 1976

The Urban Land Ceiling & Regulation Act (ULCRA) was enacted in 1976 (came in to force on 17 February 1976) as a sequel to the imposition of a ceiling on agricultural land 'to prevent speculation and profiteering and to ensure equitable distribution of land in urban agglomerations to subserve the common good'. It imposed a ceiling on the quantum of vacant land that any individual can possess in an urban agglomeration. In 'A' class cities such as Delhi and Mumbai, this was no more than 500 square metres. The excess land identified was to have been acquired by the government after compensating the owners and used to provide housing to various sections of the people. It came in force in 64 towns.

The Urban Land Ceiling & Regulation Act has failed to achieve its objectives due to its poor performance. Out of 2,20,675 ha of estimated excess vacant land, 50,046 ha of vacant land vested in the State Governments. Physical possession was acquired only of 19,020 ha of vacant land by the State Governments. (The Minister of Urban Affairs and Employment in the Rajya Sabha in reply to the Starred Question No. 172 on 8 June 1998.) Thus, only 9 per cent land could be acquired physically in 23 years of its enforcement but more pathetic was the fact that the State Governments could put to use for the purpose of act only 10,909.85 ha of land.

Its dismal performance was attributable to a plurality of reasons. First was the illusory amount of compensation (Re 1 to Rs 10 per sq. mt.), evidencing its confiscatory nature. Second Secs. 20 and 21 of the ULCRA provided a host of escape routes for the landed gentry who were loath to part with their land. These sections empowered the State Governments to grant discretionary exemptions for a variety of reasons, prompting almost all landowners with excess land to claim such exemptions. The ULCRA thus, became a vehicle for corruption. Those who could not or would not bribe their way to get exemption went to court, and the acquisition process became an agonising legal battle.

Finally, the Urban Land Ceiling & Regulation Repeal Act, 1999 was notified in the *Gazette* on 22 March 1999 by Government of India. Since then in last 10 year almost all the States have adopted repeal act.

¹ Though in recent decades, there has been no attempt to create new big townships or cities, but efforts to develop satellite-towns using land acquisition-based development mechanisms have certainly taken place. Planning of satellite-towns was a deliberate approach to supply serviced land to the urban market. A number of satellite-towns have been created in India since Independence, such as Faridabad and Gurgaon near Delhi, Marimlai near Chennai, and so on. Likewise, growth of sub-cities in a few metropolitan cities also has been witnessed, for instance, Dwarka near New Delhi and Navi Mumbai near Mumbai.

² 'A Report: Master Plan Approach Efficacy and Alternatives', by Town and Country Planning Organization, 1998.

³ Urban Land Ceiling and Regulation Act, 1976, which placed a cap on per capita holding of urban land. It empowered the government to acquire land declared excess for urban housing for poor and other public purposes. Further, high transaction tax (stamp duty) on land transactions and absence of clear titles tended to reduce land supply in urban areas.

were prepared and regulated provided wide-ranging discretionary powers to change reservations made or land restrictions imposed under the Act. This often gave rise to corrupt practices to get the Master Plans and micro plans amended. Similarly, the cap on per capita land holding under ULCRA was applicable to non-agricultural land in urban areas. So, in order to avoid losing land, large landowners kept their land under the agricultural status or divided it in the names of relatives, adopted sons, etc. The ULCRA also provided that the state government, instead of acquiring excess urban land from the owner, can allow the owner—on case-to-case basis—to construct houses on that land and sell them to the urban poor at costs approved by the government. This loophole opened the floodgates of corruption, black money, etc. Owners/developers acquired such permissions by paying huge speed money and constructed houses for middle to rich classes. But as they were compelled to sell them at the low prices set by the government keeping in mind the urban poor, difference between market value and government-approved value was collected in cash, thus proliferating black money economy in the housing sector. Further, due to lack of adequate resources, the government often could not undertake development activities, even though large tracts of land were ‘reserved’ for such activities. Thus, while the public sector had neither the will nor the wherewithal to use land efficiently, the private sector was not given enough freedom in terms of supply and use of land. As a result of excessive government control over land supply under the framework of centralized planning, barring some exceptions, urban growth either stagnated in a physical sense or acquired the character of unplanned, unserviced, informal sprawl in the periphery of main cities, where the public sector became the sole supplier of land.

Clearly, several regulations that restricted private land supply and gave the state enormous powers to intervene in the urban land market to carry out some well intentioned objectives, did not serve the desired purpose for which they were created. Against this backdrop, some states have taken measures to reduce barriers to private supply (such as abolition of ULCRA, reduction in stamp duty, liberalization of rent control regime) simultaneously introducing innovative and pragmatic ways of augmenting land supply. In the wake of the government’s inability to acquire and supply land for urban housing and infrastructure, states such as Gujarat and to some extent, Maharashtra followed participatory Land Pooling and Readjustment

(Town Planning Scheme)⁴ mechanism, which ensured the supply of land for infrastructure development from the private sector and at the same time supplied the land free of cost or without invoking LAA, 1894 provisions to the public sector. Allowing the private sector to create integrated townships is yet another step in this direction, which is the focus of this chapter

Integrated Township and its Rationale

Integrated Township Policy, adopted by certain states, is an attempt to mobilize the private sector for the supply of land for urban housing, infrastructure, and other public purposes. Under this mechanism, a developer assembles land by paying private landowners the prevalent market price. Land Acquisition Act (LAA) provisions are not used to acquire land. The developer plans development as per the town planning norms in force, builds houses and infrastructure, and sells the plots, houses, etc. at market rates. The role of the public sector in this process is that of a facilitator and a regulator of town planning, environmental, and social welfare norms instead of a controller and provider of land for urban growth.

The phenomenon of constructing well-developed living spaces with civic infrastructure and luxury amenities is now graduating into the concept of ‘integrating townships’. Integrated townships are large self-sufficient enclaves with homes, schools, offices, work places, malls, multiplexes, private security and high quality water, sewerage, and solid waste management systems. The size of such townships ranges from 100 acres up to thousands of acres. Over 200 such townships covering more than 200,000 acres are under approval for planning and construction especially around the four metros. Integrated townships will be the new face of urbanization—towns that have not seen the gradual organic growth over time that we associate with old and established towns and cities but cellular predetermined and minutely planned structures, stretching over hundreds, even thousand of acres outside the municipal limits of cities.⁵

The rationale for a policy of integrated townships is three-fold: (i) rising demand among the growing and prospering middle class for better housing and amenities, driven by the failure of the public sector to ensure adequate supply of land for urban housing, and provide minimum level of good urban governance and services—water, sewerage, waste management, road network, transport and power, (ii) realization of the necessity to liberalize supply of land for urban growth and infrastructure among

⁴ The Gujarat Town Planning and Urban Development Act (GTPUDA), enacted in 1976 by the Parliament.

⁵ Anjali Puri (2008), ‘Free from India’, *The Outlook*, 18 August 2008.

governments, since cities are centres of economic growth, and (iii) shortage of resources faced by governments to fund infrastructure.

The phenomenon called ‘Gated Communities’, characterized by people of certain caste or class living together in an exclusive geographical area is not new in India.⁶ It existed in the form of caste-based division of living spaces in cities and villages; during the British colonial period, it was given a new dimension in the form of ‘Cantonment Areas’ or ‘Civil Lines’ in which only people connected with the British administration lived. Such islands existed on a varying scale in quite a few cities. After Independence, for some decades Indian cities moved on the path of inclusiveness and cosmopolitan character but some cities in recent years are experiencing ‘Gated Communities’ along religious lines.

A phenomenon such as integrated townships, driven by the demands of a prospering middle class with rising expectations disappointed with the failure of the public sector to deliver good urban governance and good quality of urban life is, however, new. The thought of developing well-ordered walled living spaces with quality construction and amenities such as 24-hour running water supply, drainage system, power backup, parks, club house with gym, swimming pool, places of worship, own public transport facility, shopping area, etc. for the regular Indian middle class (distinct from the exceptionally rich) would never have occurred to either developers or the middle class consumers until a few years ago. But, in the last decade, things have changed rapidly and integrated townships with different levels of civic infrastructure and luxury amenities are increasingly being developed across India.

What is the rationale behind a public policy on integrated townships? Given that the creation of integrated townships is inevitable in view of the changing reality, having a public policy to control its negative aspects makes sense. There is a demand for the kind of infrastructure and lifestyle offered by private townships and there are developers who are ready to satisfy that demand. It is up to the public policy to ensure inclusiveness, fairness, ecological sustainability, and transparency in the integrated townships, which will come under this policy. The Gujarat Policy, as outlined below, is a step in that direction. A few other states such as Maharashtra and Rajasthan have adopted policies on integrated townships. A clear public policy on integrated townships is better than the alternative of unregulated townships growing randomly

with complete disregard for socio-economic and environmental sustainability or case-by-case approval to each township, leading to non-competitive, non-transparent processes breeding corruption. Box 22.2 presents the profile of one such township.

BENEFITS OF INTEGRATED TOWNSHIPS⁷

Coping with the Spurt in Economic Activity-led Urban Growth

India has embarked on massive infrastructure development and industrialization under public–private partnerships, leading to a spurt in economic activity and consequent influx of people in a short time into a specific area where the buzz of the activity is maximum. Local government and other government agencies operating in that particular area do not always have the resources to cope up with the housing and urban infrastructure needs that the sudden inflow of population brings with it. Creation of integrated township in such cases may be an appropriate way of creating and supporting urban growth. With the middle

Box 22.2

City Group Launches Amanora Park Township in Hadapsar, Pune

City Group, a real estate promoter and builder, announced the launch of Amanora Park Town, a unique, exclusive and first-ever complete township project in the state of Maharashtra, under Government of Maharashtra’s Special Township Policy.

The township will be spread over 400 acres and infrastructure such as wide roads, reliable power supply, 24 × 7 water supply, cycle tracks, and footpaths will be developed across the township by the developer. The township will have schools, colleges, hospital, restaurants, and a sports complex within it. Three million sq. ft. of Amanora Market City are planned within the township with hotels, office spaces, club, multiplex, showrooms, hypermarket, etc. The township will provide advanced technological solutions to Amanora citizens such as shopping for groceries and paying with one’s thumbprint, monitoring health statistics of the family on one’s personal cell phone, and monitoring one’s CCTV protected home and garage from one’s laptop.

The first offerings of Amanora Park Town will have 10 towers, each between 18–22 stories high; the first phase of Amanora Park Town will include a choice of 680 apartments of 2, 2.5, 3, 3.5, and 4 bedroom luxury apartments.

Source: <http://www.amanora.com/homepage.swf>, accessed on 13 May 2007.

⁶ Based on articles in *Outlook*, the weekly newsmagazine, 18 August 2008 issue.

⁷ *The Outlook*, 18 August 2008, various articles.

class looking after itself, it allows the government to focus on the poor.

Developing Theme Cities to Become Globally Competitive

Every country in a globalized and competitive world is trying to create unique properties within world-class cities to attract business, such as medical hub cities, educational hub cities, electronic cities, tourism cities, etc. For developing such theme cities, the integrated township mode is eminently suitable.

Addressing Development of Peri-urban Areas

It takes a long time to provide civic services as cities continue to grow in peripheral areas due to continuous influx of people from rural areas and people moving out from the core city in search of better quality of life or to reduce cost of living. As public systems fail to address the needs of peri-urban areas, these areas develop in an unplanned, lopsided, and ill-served manner and cause severe problems when they are merged with the main city. Integrated townships with private sector participation can be a strategic tool to address peri-urban area development to some extent.

Promoting Well-being of Individuals

In a competitive world, prosperity, a major determinant of well-being, depends on one's own productivity, which in turn depends on the quality of urban life. Quality of urban life is determined by good urban governance and efficient urban service delivery. Further, of paramount concern to people is the safety of their children, elders, and assets, which integrated townships provide automatically; indirectly, they take care of the shortage of effective policing. Finally, such townships enrich community life.

Initiatives on Integrated Township Policy

GOVERNMENT OF INDIA'S INITIATIVE

National Urban Housing Policy 2007, taking cognizance of changing demand for land of residents in urban areas states that, 'In view of the fact that 50 per cent of India's population is forecasted to be living in urban areas by 2041, it is necessary to develop new integrated townships'.

Further, Government of India (GoI) vide Press Note No. 4 (2001 series) permitted Foreign Direct Investment (FDI) up to 100 per cent for development of integrated townships, including housing, commercial premises,

hotels, resorts, city and regional level urban infrastructure facilities such as roads and bridges, mass rapid transit systems, and manufacture of building materials on the basis of the following guidelines:

- development of land and allied infrastructure will form an integrated part of the township's growth;
- the minimum area to be developed by such a company should be 100 acres⁸ for which norms and standards are to be followed as per local bylaws/rules. In the absence of such bylaws/rules, a minimum of two thousand dwelling units for about 10,000 will need to be developed by the investor;
- the investing foreign company should achieve clear milestones once their proposal has been approved;
- the minimum capitalization norm shall be US\$ 10 million for a wholly owned subsidiary and US\$ 5 million for joint ventures with Indian partner/s. The funds would have to be brought in upfront;
- a minimum lock-in period of three years from completion of minimum capitalization shall apply before repatriation of original investment is permitted; and
- a minimum of 50 per cent of the integrated project development must be completed within a period of five years from the date of possession of the first piece of land. However, if the investor intends to exit earlier due to reasons beyond his control, it shall be decided by the Foreign Investment Promotion Board (FIPB) on a case-by-case basis.

Though the GoI has not formulated and adopted a separate policy or legislation on only Integrated Township Development, it has provided for it in the Special Economic Zone Act, 2005 and Special Economic Zone Rules, 2006 under Guidelines for Infrastructure in Non-Processing Area of the SEZ. The guidelines provide that housing, office space, commercial space, and service infrastructure (water, sewerage, roads, electricity, treatment plants, hospitals, schools etc.) can be developed in the Non-Processing Area of the SEZ by preparing and getting the Master Plan approved and without claiming fiscal concessions. Many state governments have passed SEZ Policy and Act, which allow Integrated Township Development. Thus, technically each SEZ can develop at least one integrated township.

Though SEZ Acts of GoI and state governments provide indirectly for integrated townships, very few states have formulated the Integrated Township Policy. The Gujarat policy on integrated townships is discussed below.

⁸ Limit reduced to 25 acres, Government of India, Press Note No. 2 (2005), dated 3 March 2005.

THE GUJARAT INTEGRATED TOWNSHIP POLICY 2007⁹

In August 2007, the Government of Gujarat announced a Township Policy, which aimed at *the development of integrated townships through private and market initiatives/ operations but with the attainment of public policy objectives of employment generation, inclusiveness, quality of living environment, and financial and environmental sustainability*. This public policy is the first of its kind, paving the way for ‘a private city with public policy objectives’.

The formulation of a new township policy is based on the view that, ‘knowledge-based activities and businesses are driven by global capital, therefore, locational decisions are taken by comparing the advantages of cities across the world. This means that for Gujarat to attract investments into these sectors, its cities have to compete with similar city destinations across the world. The location of these businesses will be governed largely by the availability of high quality built environment and services. The government intends to proactively facilitate the creation of such destinations in the state in order to attract high end investments and create jobs and business opportunities for the youth of Gujarat’.

The approach of the Government of Gujarat to developing townships will be:

- to support and facilitate the market operations (*a facilitator rather than a provider*) and regulate it only to the extent required to realize public policy objectives;
- to prepare and to implement Master Plans for the areas to be covered by the Township Policy to ensure that while Integrated Township Development occurs in these locations, there is no haphazard development in the surrounding areas;
- to allow only those developers to develop townships to achieve public policy objectives, which have high ratings based on their past record of accomplishment, capacity, and compliance with policy norms;
- to encourage such townships in only those areas where facilities such as access to airports/ railways/ highways, availability of reliable water, power, institutions of higher learning, specialty hospitals, and such other facilities are available or can easily be established. (Vapi to Ahmedabad and Ahmedabad to Rajkot urban corridor); and
- to establish a mechanism for monitoring the township development process to ensure compliance with all the norms under the policy.

The role of the Gujarat Government will primarily remain within the framework outlined below.

1. External Infrastructure—Power/Roads/Water

The government will provide trunk infrastructure (water, roads, electricity, and gas (if feasible) in bulk) in the areas through parastatal bodies and companies of the government on a cost-plus basis with long-term contracts and minimum consumption criteria.

2. Land Procurement Support

The procurement of land will be the primary responsibility of developers and they will have to pay the market price for the land. This facilitation will be determined on the basis of public policy objectives and the rating of the developer. In the case of townships for education and health infrastructure, a higher degree of facilitation will be extended.

3. Green Channel Procedures

A Green Channel for statutory clearances related to land, development permissions, environmental clearances, and such others will be established. This will be accomplished through simplified regulations and procedures, third party verification, and self-certification methods. The level of Green Channel support will be linked to the rating of developers.

4. Special Dispensation

4. Special benefits will be extended that give exclusivity to tourism projects to offset entrepreneurial risk through a buffer zone for Greenfield projects and higher land procurement support for education and health infrastructure townships. These benefits will allow for clusters of townships with similar features which can then comply with infrastructure norms as a cluster rather than independently.

5. Rating of Developers and Projects

A system for rating of developers and projects shall be set up. The rating of a developer will determine the level of support and degree of flexibility offered to the developer in the township development process.

6. Monitoring Mechanism

In order to ensure realization of the public policy objectives of the Township Policy and to ensure the creation of high quality township development, the Government

⁹ Gujarat Integrated Township Policy 2007, published by Gujarat Urban Development Company Ltd, Gandhinagar, available at <http://www.gihed.org/download/Township%20Policy%20Aug%202007.pdf>

will establish systems for concurrent evaluation by third parties including the rating mechanism mentioned in point 5 above. In addition, random evaluation by authorities of the Gujarat Government will also be carried out.

7. Macro-level Planning and Regulation of Development

The Gujarat government will prepare and implement Master Plans for the areas in which township development will be encouraged under this policy. This is with a view to ensure that while Integrated Townships are being developed in the area, the surrounding areas also develop in a planned and systematic manner, and such that the viability of the townships themselves is not undermined.

The salient features of the implementation framework of the policy are given below.

Applicable Area

High power committees formed for overseeing implementation of the policy will delineate such areas. At present, the government is undertaking necessary pre-feasibility studies to identify areas where such townships will be allowed.

Eligibility Criteria

UC No.	Use Category Name	Minimum Land Area (Acres)	Minimum Investment (Rs Crores)	Minimum Assured Employment Generation By Completion (No. of jobs)
1	Technology Parks	100	80	7000
2	Education-based Townships	200	160	2800
3	Medical/ Health Care Townships	150	120	2100
4	Tourism Related Infrastructure	25	20	350
5	Logistics Parks	200	160	2800
6	Residential	100	80	NA

Note: UC—Use Category.

Classification of Townships by Use

Use Category Name	Description	Measurable Parameter	Value
Technology Parks	Parks of IT, ITES, Bio-technology, Apparel, Gems & Jewellery, and other R&D Institutions with ancillary housing	Proportion of total built-up area used for economic activity	70% or more
Education	Complexes of schools/ colleges/universities/	Proportion of total built-up	60% or

	research centres with hostels and ancillary housing	area used for educational facilities	more
Medical/ Health care Townships	Complexes of hospitals/ health resorts/medical colleges/medical research facilities with hostels and ancillary housing	Proportion of total built-up area used for health care facilities	60% or more
Tourism-related Infrastructure	Includes all tourism-related activities with ancillary housing	Proportion of total built-up area used for economic activity	70% or more
Logistics Parks	Includes all large-scale logistics (freight handling) and trading activities (wholesale or retail), with ancillary activities such as office complexes, entertainment complexes, and ancillary housing	Proportion of total built-up area used for commercial activity	70% or more
Residential	Where housing is developed as serviced plots or constructed dwelling units and is contiguous to an accessible economic activity	Proportion of total built-up area used for dwelling units	80% or more
Mixed Use Township	Are also eligible		

Performance Standards

- The developer must provide adequate Operation & Maintenance mechanism for on-site physical and social infrastructure for a minimum period of 15 years,
- Integrated Waste Management Service (IWMS) by the developer or by a contractor appointed by the developer will be mandatory for a township, if the sewage generation in the township exceeds 0.1 MLD and solid waste generation exceeds 0.5 tons/day. The IWMS provider must be an ISO 14001 rated agency, and
- Employment generation must happen as mentioned under the eligibility criteria.

Disclosure Norms

The developer will be required to comply with a specific set of norms to be issued under this policy for compulsory disclosure of information related to the following:

- compliance with the town planning norms;
- compliance with the norms for provision of physical and social infrastructure;
- design and construction specifications of all buildings in the township;

- commitment on level of service of water supply, waste management, and other services to be provided by the developer;
- sharing of information on the contracts entered into with various other agencies providing services within the township, and affecting the welfare of the residents;
- any other matter specified by the 'Competent Authority' that is, the Gujarat Urban Development Company Ltd (GUDC).

Issues and Concerns Relating to Integrated Township Policy

Change in the nature of demand for land in urban areas, manifested in the form of integrated township development, is a reality. It is one of the faces of future urbanization in India which needs to be studied with an open mind. Some critical questions with respect to the integrated township policy of state governments are examined in this section.

The most important concern is how inclusive would these townships be? Would they not shut out the poor? Some poor people—such as those working as domestic helps and drivers in those townships—will perhaps be welcome, but not the rest. But these 'wanted poor' would lose their place in such society/townships when they are no longer useful or are not required by their employers. Even middle class families, in the face of a sudden loss of income may abruptly exit such integrated townships. This is not unlikely, given that there is no line of subsidy from the state for such people; and integrated townships are required to fend for themselves. A related concern is that the integrated townships will make social inequality even more glaring and visible, as class segregation is integral to this model.

The second critical concern is: does not the integrated township policy appear to be elitist? Does it not seek to create elite, well-serviced urban islands? The policy arguably, is not, as it does not initiate the creation of well-serviced urban islands, but merely attempts to facilitate the supply of land for private initiatives and to regulate such urban islands through a system of performance standards, measurement, and disclosure norms. But in a larger sense, this shows the weakness of the government, which is not being able to enforce similar performance standards and disclosure norms for existing municipal bodies, thus shying away from providing citizens higher levels of services. Some may argue that residents of integrated townships can afford the high-cost but reliable services, while several

poor people living in cities cannot. But this argument is not tenable because municipal bodies receive grants from higher-level government, can impose taxes, recover user charges, and subsidize the provision of civic services to the poor. Similarly, what about compliance with town planning, legal, and other disclosure norms, which do not have any financial aspect? Why is a municipal body not required to observe them?

The third critical question of concern is whether such integrated townships will complicate problems of existing cities as the wealthier class of population moves out of parent cities and the existing parent cities lose whatever miniscule financial viability they possess at present. To some extent, this migration will hurt the already fragile finances of the municipalities. But the brighter side of this phenomenon is that it would put pressure on municipal bodies to improve their governance, service delivery, transparency, accountability, etc. to stem the migration.

The fourth concern relates to the kind of liabilities an integrated township creates for the government. It is possible that such townships foster reckless use of natural resources (such as ground water) or generate pollution or traffic pressure on the main city. Similarly, after stipulated time for the developers to manage is over, if the residents of a private township refuse to manage it, it would become a liability on the government. How these concerns are addressed will depend upon what kind of monitoring and regulatory practices are used and what kind of stand the state government takes on taking over institutional responsibility after the initial period is over.

The final issue, related specifically to the policy of Gujarat, is why any developer would like to set up an integrated township within the framework of this policy, if he is able to build one without government facilitation.¹⁰ If developers can do so, then conditions such as inclusiveness and environmental sustainability will not be adhered to. In such a situation, the government will either have to increase incentives (facilitation) so much so that developers cannot ignore them (and follow the integrated township policy) or disallow any integrated township outside the policy and rules. While the second option is clearly a non-liberal policy as compared to the first option, governments will be required to strike a balance.

Summary and Conclusions

Supply of orderly, well-serviced, and adequate land is the most crucial requirement for the healthy growth of urban centres and urban infrastructure. The supply of land for

¹⁰ It may be further noted that other states have not placed so many qualifying, operational, monitoring, and transparency conditions while offering various concessions.

urban needs has undergone changes from predominately private sector-oriented growth to primarily public sector-determined supply, where governments were endowed with various well-intended policy and legal measures to regulate supply and use of land for urban growth and infrastructure. But such measures actually resulted in public sector hegemony, numerous distortions, and barriers in the supply of land for urban growth. In recent years, the GoI and the state governments have been taking steps to provide legitimate space to the private sector to supply land for urban growth and infrastructure. Recent integrated township policy initiatives of some state governments can be viewed as a step forward in this direction.

The changing demand for urban housing by the rich and middle classes is a new face of Indian urbanism. The urban landscape is being increasingly marked by gated communities and integrated townships, which are driven not only by rising demand for better living conditions backed up by a willingness to pay but also the constraints in supply of land and the failure of the state to provide

adequate quality of civic services. Although these townships can and do serve some very useful purposes, they have raised concerns related mainly to their inclusiveness and their potential impact on the parent cities.

While the first best solution is to free the supply of land by removing constraints such as legislations on rent control, high stamp duty and development charges, restriction on sale or conversion of agriculture land, weak land title/record and protection system etc., all these measures will take considerable time to implement, given the political economy of urban governance. In the interim, Integrated Township Policy appears to be an appropriate instrument, as it can facilitate market-based supply of land for integrated townships and create pressures for municipalities to improve their own performance in delivering urban governance and service quality. Some state governments (Gujarat, Maharashtra, Rajasthan etc.) have tried to create public policies in this respect, which is a step in right direction, but it is still inadequate, because there are still some major issues that need to be addressed in times to come.

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23 Reforming Urban Land Management in Gujarat[†]

Bimal Patel, Shirley Ballaney, C.K. Koshy, and Matthias Nohn

Introduction

Of the total population of the state of Gujarat, about 37 per cent lives in urban areas today. Gujarat is undergoing rapid urbanization and it is expected that by 2025, half of the state's population will be living in urban areas. Its cities will have to grow to accommodate this new population. In sheer numbers, this means that approximately 12.5 million more people will need 'serviced' urban land. At 150 persons per ha, approximately 800 sq. km of urbanized land will be required just to accommodate this new growth. Serviced land will also be required for housing the vast numbers of people presently living in urban slums and the more crowded areas of towns and cities; people whose incomes are rising rapidly compared to the past scenario. In addition to this, land with adequate infrastructure will also be required for vast new industrial and trade facilities.

The rapidly rising demand for urban land poses a significant threat to Gujarat's development. The growth and development of cities hold up the promise of taking societies to a new stage of development. As Edward Glaeser of Harvard University said in a recent interview, 'Humans are a social species, and our greatest achievements are all collaborative. Cities are machines for making

collaboration easier. Thus, I am delighted that our planet is becoming increasingly urban.'¹ However, if the rising demand for urban land is not effectively met, because of overcrowding and undermining of economic growth, Gujarat's cities are likely to become less livable. Instead of being a boon, urbanization can become a scourge. Thus, either Gujarat enables a mutually beneficial relationship between economic and urban growth that is virtuously reinforcing or as Anwar Fazal, winner of the Alternative Nobel Prize, has put it, 'If cities do not deal more constructively with poverty, poverty might begin to deal more destructively with cities.'²

The Government of Gujarat has understood that the state is at a very significant turning point and is determined that growth and transformation of the state's cities be rapid, well planned, sustainable, and equitable. It is also committed to managing this growth and transformation by positively using market mechanisms and the energies of the private sector. Towards this end, the state government is committed to assessing and fundamentally improving its urban land management systems; to modernizing urban land and property markets to make them more efficient; to dismantling and reforming the distorting regulatory

[†]This chapter is based on 'Streamlining Urban Planning and Land Management (SUPLM) Practices' in Gujarat, a comprehensive study undertaken by Environmental Planning Collaborative (EPC) for the Gujarat Urban Development Company (GUDC) and supported by World Bank as a part of the Gujarat Urban Development Project (GUDP). In some instances, however, there are a few departures from the original study and these are clearly mentioned. Bimal Patel, Shirley Ballaney, and C.K. Koshy were part of the original project team and are the lead authors. Mr Matthias Nohn helped put together the first draft of this chapter.

¹ Edward Glaeser, in 'How Should We Be Thinking About Urbanization?: A Freakonomics Quorum', *The New York Times* online edition, <http://freakonomics.blogs.nytimes.com/2007/12/11/how-should-we-be-thinking-about-urbanization-afreakonomics-quorum>, accessed on 11 December 2007.

² Citation available online, <http://www.anwarfazal.net/paper-Battle.php>, accessed on 30 November 2008.

systems and interventions; and strengthening institutions for enabling and monitoring the proper functioning of land and property markets.

By reforming its land management system, it hopes to³:

- guarantee ownership and security of land tenure;
- support land and property taxation;
- provide security for credit by enabling collateralized mortgage lending;
- develop and monitor land markets;
- protect and manage state lands;
- reduce land disputes;
- facilitate land reforms;
- improve urban planning and infrastructure development;
- support environmental and heritage management;
- produce statistical data; and
- produce maps for various uses.

The Government of Gujarat commissioned a policy study, 'Streamlining Urban Planning and Land Management Practices in Gujarat.' This policy analysis investigated urban land management laws and practices in the state. Based on this study, the chapter identifies constraints that affect efficiency and makes recommendations to overcome them. Where relevant, it also investigates how urban land management and urban planning regimes interact with one another and makes recommendations for better coordination. In all, 15 key recommendations have been made and are structured in seven sections here: (1) Introduction; (2) Delineating Urban Areas; (3) Building and Maintaining a Land Cadastre; (4) Managing Land Tenure; (5) Registering Land and Property Transactions; (6) Valuing Land; and (7) Conclusions.

Delineating Urban Areas

Presently, considerable confusion, inefficiencies, and legal ambiguities emerge from the fact that urban areas are differently delineated by the revenue and the urban planning administrations.⁴ To decide upon how they should be delineated in the future, it is crucial to understand the origins and characteristics of the two very different regimes.

³ As listed by 'Land Administration Guidelines', United Nations, New York and Geneva, 1996 available at <http://www.ica.coop/house/part-2-chapter4-ece-landadmin.pdf>

⁴ Additional complications and confusions emerge from the fact that municipal boundaries powerfully define urban areas in yet another way. Since the focus here is on urban land and land markets, only revenue and planning boundaries have been dealt with.

⁵ For further reference, see BLRC, Sections 95 and 106.

⁶ Land directly under village, town, or city settlements.

⁷ For further reference, see BLRC, Sections 95, 106, and 131–3.

THE REVENUE REGIME

The Bombay Land Revenue Code, 1879 (BLRC), introduced land management in Gujarat a century and a half ago, and the revenue administration was responsible for enforcing it. The BLRC was, and remains, primarily focused on rural land management and on collection of agricultural revenue within 'revenue areas' as assessed through 'Revenue Surveys' by the District Inspector of Land Records (DILR).⁵

Despite its rural focus, the BLRC also mandates the revenue administration to delineate urban boundaries. *Gamtals*⁶, with a population of above 2,000 persons and the surrounding contiguous areas under non-agricultural use, are required to be delineated as 'City Survey' areas. In City Survey areas, a distinct, more accurate, and differently focused cadastral survey is undertaken by the City Survey Superintendent (CSS)⁷. Though the City Survey mechanism served adequately for delineating urban areas for over a century, over the last few decades it has been unable to cope with the explosive growth of towns and cities. Urban settlements have grown well beyond City Survey boundaries. The reasons for the unsatisfactory performance of this survey mechanism are not difficult to see.

The City Survey mechanism is a reactive mechanism. Parcel-by-parcel, individual survey numbers are given permission to convert from agricultural to non-agricultural use; as and when the demand to convert use is made by the owner of a parcel. Demands for permission to convert agricultural use of land to non-agricultural use are treated conservatively—to ensure that revenue collection does not drop. Only when a large proportion of parcels in the periphery of a City Survey have become non-agricultural, is the City Survey boundary extended. There is no system of extending boundaries in anticipation of the growth of towns and villages and/or the growth of non-agricultural activities. On account of this reactive, parcel-by-parcel and conservative approach, City Surveys have not been able to keep pace with the accelerated transformation of towns and cities.

THE URBAN PLANNING REGIME

Urban areas are also defined by 'Urban/Area Development Authority' boundaries. These boundaries are established

under the provisions of the Gujarat Town Planning and Urban Development Act (GTPUDA), 1976. The Act was a response to the rapid growth of urban areas and the need to effectively manage urban land use and provide urban infrastructure and services. The GTPUDA uses its own approach and protocols for delineating urban areas: indicate the extent to which cities are likely to grow; infrastructure provision is likely to be required in future, and then delineate the extent of the town or city.

Four aspects of the urban planning regime's delineation of urban areas are significant. First, the urban planning regime's approach is proactive; boundaries are drawn in anticipation of future growth. Second, by indicating these limits and expectations, they powerfully determine (or estimate) the extent of urban land markets; and for all practical purposes, most people consider towns and cities to at least extend up to these boundaries. Third, the urban planning regime takes an area-based approach as against a parcel-by-parcel or piecemeal approach. Finally, since urban development authority boundaries are based on anticipated growth typically, they extend well beyond those of City Survey areas.

PROBLEMS OF THE CONCURRING REGIMES

Lack of City-wide Land Cadastres

Defining the extent of urban development areas, and therefore urban land markets, is a development authority function, but building and maintaining of land cadastres is a revenue function. As a consequence, Gujarat's urban land markets operate without unified land cadastres. This problem is taken up in more detail below

Urban Planning and Revenue Administration Objectives are Undermined

The urban planning regime's objective is to promote and direct urban growth. It sees merit in urbanization. The revenue administration, in a bid to protect revenue, is conservative when it comes to converting agricultural land to non-agricultural use. In urban areas where City Survey boundaries have not been extended, the two administrations work at cross purposes and end up undermining each other's policies.

Problems of Data Collection/Sharing and Policy Formulation

The basic units of government administration are the village and the city survey areas. Data for land management is collected at these levels and aggregated at the *taluka* and district levels. Since boundaries of urban planning areas are not coterminous with *taluka* or district boundaries, it

is impossible to use aggregated data for planning purposes. This is not a trivial problem since it undermines effective policy formulation and eventually undermines the socio-economic unity of urban areas.

RECOMMENDATIONS

Reforming urban land management in Gujarat has to begin by ensuring that, first, urban areas are clearly and adequately delineated and second, that this delineation is accepted across all government departments for policy purposes. The first recommendation will ensure that policies and reforms intended for urban land management and urban land markets remain restricted to urban areas. The second will improve coordination between urban policies of various government departments.

Recommendation 1: Boundaries of Urban/Area Development Authorities Defined Under the Provisions of the GTPUDA and Boundaries of Municipalities (where Development Authorities have not been formed) Should be Taken as Urban Boundaries for all Land Management Purposes

The GTPUD Act was designed to promote and direct urban growth. To ensure rapid, sustainable, planned, and equitable urban growth, it is imperative that boundaries of Urban /Area Development Authorities defined under the provisions of the GTPUD Act, and boundaries of Municipalities (where Development Authorities have not been formed) be taken as urban boundaries for all land management purposes. One way to enable this is to extend City Survey boundaries to be coterminous with these boundaries. Of course, the City Survey mechanism will have to be suitably modified and improved.

Recommendation 2: List of Urban Areas and a Map of the Same to be Notified

To ensure that the above defined delineation is accepted across government departments and to enable the new regime's fast incorporation into policy making (even beyond the public sector), maps, lists, and definitions of urban areas will have to be appropriately notified. Figure 23.1 shows the map of urban Gujarat based on the definition in recommendation 1.

Building and Maintaining a Land Cadastre

THE CONTEXT

A 'Cadastre' as referred to here is a basic land information system consisting of two parts: one, a series of maps showing the geometric and location attributes of land parcels and two, a set of text records that describe the ownership

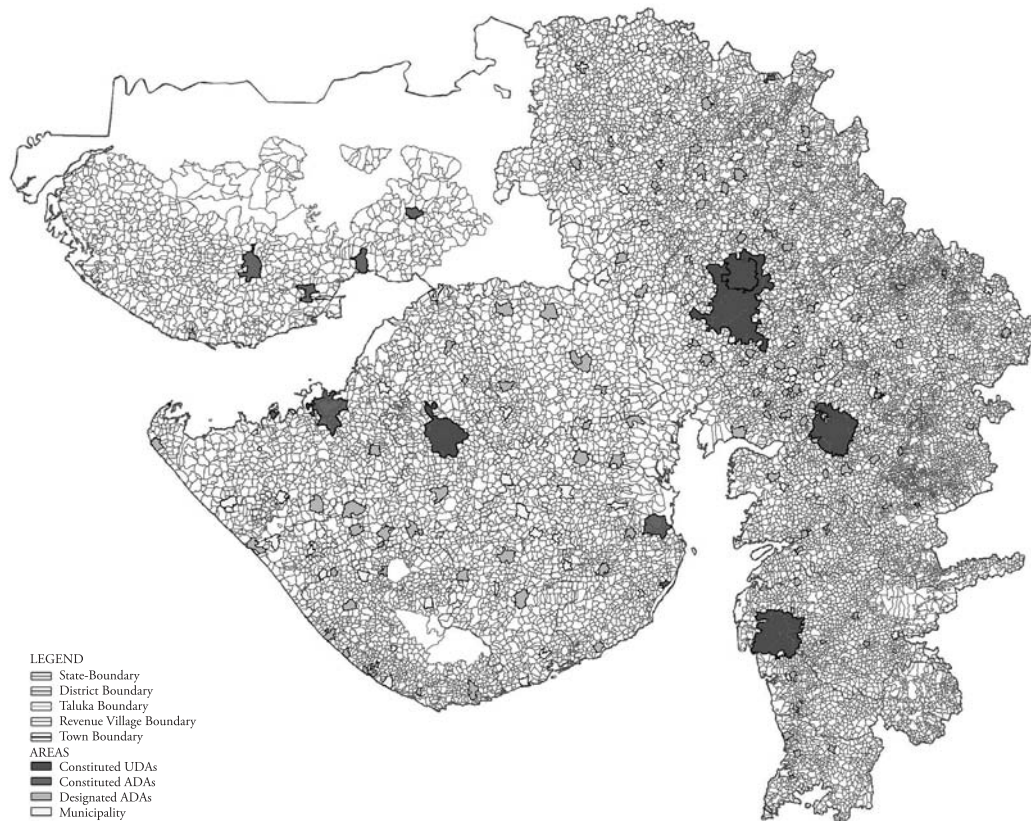


FIGURE 23.1 Map of Urban Gujarat

Source: SUPLM Reports.

attributes of land parcels. A cadastre is a skeletal framework on which an elaborate land and property information system can be built to enable, support and enhance innumerable governance, planning, civil, and commercial functions.

In Gujarat, the function of building and maintaining a cadastre is governed by provisions of the Bombay Land Revenue Code, 1879. Details are prescribed in the Revenue Accounts Manual and the City Survey Manual. Generally speaking, the BLRC requires the following details to be recorded in the cadastre: geometric and location attributes of land parcels (coordinates and maps); property addresses; name of occupant⁸; name of other right holders; details of easements and encumbrances; the nature and duration of tenure; and details of transactions (or mutations in the record). The BLRC, the Revenue Accounts Manual and the City Survey Manual also require the building and maintaining of an extended information system atop the basic cadastre to support (revenue) taxation and some other governance functions. While one marvels at

the simple efficacy, sturdiness, and comprehensiveness of the system as defined a century and a half ago and its continued relevance in rural areas today, in urban areas, due to the pace of growth and the transformation of the economic, social, and political scenario, it has become dysfunctional and urgently requires reform.

KEY PROBLEMS

Lack of a Unified Cadastre

As Table 23.1 and Figure 23.2 show, within urban areas one can find up to seven different 'cadastre situations' where a multiplicity of agencies use different protocols and formats for building and maintaining maps and records. Urban areas simply lack a unified cadastre—that is, not only is there no single database of land ownership but no single agency is responsible for making a city-wide cadastral map. The problem is compounded by the fact that: (i) the depth and nature of ownership information maintained by each of the agencies is different; (ii) the level

⁸ Occupant is a person holding the right to use the land and/or holding primary responsibility to pay land taxes; 'occupant' is popularly referred to as the 'owner'.

TABLE 23.1 and FIGURE 23.2

The Multiplicity of Agencies, Protocols and Formats for Building, and Maintaining Maps Across a Typical Urban Area

Cadastral Situation	Responsible Agencies	Record Format	Map Format
1. Original City Survey	City Survey Superintendent (CSS)	Property Card (PC), <i>Sanad</i>	City Survey Sheet
2. City Survey extended over Town Planning Scheme	CSS, Urban Local Body, Development Authorities	PC, <i>Sanad</i>	City Survey Sheet
3. Agriculture plot within City Survey area	CSS, District Inspector of Land Records (DILR), <i>Mamlatdar</i>	PC 7×12, 6, 8A	<i>Tippan</i> and village map
4. Revenue Area with sanctioned TPS	DILR, <i>Mamlatdar</i> , Urban Local Body/Development Authorities	7×12, 6, 8AF-Form	<i>Tippan</i> , Plan No. 3 OP FP Plan, TPS Survey Sheets
5. Revenue Area zoned for development in DP	DILR, <i>Mamlatdar</i> , Urban Local Body/Development Authorities	7×12, 6, 8A	<i>Tippan</i> , village map, sanctioned layout plan
6. Revenue Area	DILR, <i>Mamlatdar</i>	7×12, 6, 8A	<i>Tippan</i> , village map
7. <i>Gamtal</i>	Panchayat	<i>Akarni</i> Register	n/a

Source: SUPLM Reports.

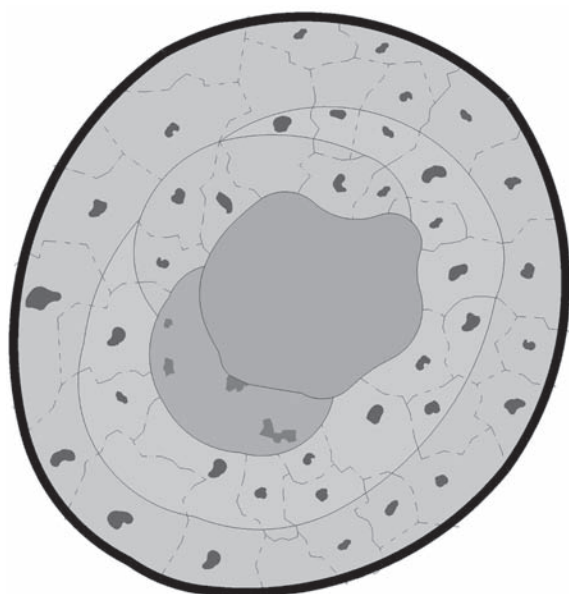


FIGURE 23.2

Source: SUPLM Reports.

of accuracy of maps maintained by the different agencies is varied; and (iii) that all maps do not enjoy the same statutory status. Collating all the different databases and maps is, therefore, not possible without first standardizing accuracy and information in all the different databases. It is widely acknowledged that the complexity of the system renders it opaque to most lay persons and vastly magnifies the importance of lawyers, brokers, and touts who can understand it. While reducing the security of tenure, complexity of the cadastral system increases the power of the lower bureaucracy, increases the possibility of corruption, and substantially the risk involved in land transactions. Broadly speaking, the situation in the land market is akin to that of a unified market operating across various contiguous fiefdoms, each having its own currency and system of weights and measures.

Physical Records and Maps are Poorly Maintained

While it is not possible to give a comprehensive and accurate account of the state of records, it is widely acknowledged that a significant portion of cadastral maps and records is poorly maintained. Though a number of records have been computerized, maps are still not computerized and physical records are still being relied upon for official work. The possibility of losing data is a significant risk that can be easily mitigated.

Lack of Consistency/Inconsistency in the Manner of Preparing City Survey records

The City Survey Manual prescribes the manner in which the property cards and *Sanad* are to be prepared. However, today, owing to a fundamental lack of clarity regarding the objectives of the City Survey (refer below), there is considerable variation in the manner in which they are prepared. Variation can be found within a City Survey area as well as across various City Survey areas. Much seems to depend on the interpretation of individual City Survey officers.

Fundamental Lack of Clarity regarding the Objectives of City Survey in the Present Context

Revenue regulations, taken as a whole, do not mandate the state to create and maintain a built property cadastre. Despite this, building and maintaining a detailed built property cadastre for towns and cities is being viewed as an urgent imperative. Five observations are misconstrued to conclude to this effect:

1. Historically, property cards are used to record rudimentary information regarding buildings on any given parcel of land. The depth of information maintained and the manner of recording it was not consistent across towns and cities. Despite this, today it is fallaciously believed that property cards

have always recorded detailed cadastral information regarding buildings.

2. The Stamp Duty Act and Registration Act apply to both land and built property. That both these Acts treat land and built property to be equivalent is misconstrued to conclude that they are identical.
3. For imposition of Stamp Duty, Revenue officials need to rely heavily on the official built property value cadastre (*Jantri*).⁹ The need to maintain an updated *Jantri* is confused with the need to maintain a built property cadastre.
4. Revenue officials tend to consider the state's obligation to provide the public the service of an adequate built property cadastre to be obvious. They also feel that public demands for a built property cadastre (from which authenticated records of property ownership can be obtained) are strong and legitimate.
5. The relative permanence of buildings and their attachment to land are misconstrued to mean that building floor plates are equivalent and, therefore, identical to land. This observation is then used to conclude that, since the state is mandated to build and maintain a land cadastre, it is also mandated to do the same for built property.

On account of the above, various attempts have been recently made to collect detailed information about buildings and their ownership in a bid to fill out the rudimentary information in the City Survey records so as to build a full-fledged property cadastre for at least the large cities of Gujarat. These attempts seem misguided and are poorly conceived. The need to build robust, high integrity, and accurate land cadastres for Gujarat's towns and cities is far more urgent. Built property cadastres may be built atop it by other agencies.

Records and Maps are not Promptly Updated— Promulgation of Many Very Old TP Scheme Records is also Pending

While it is not possible to give a precise and comprehensive statement of how up-to-date urban land records are, it is widely acknowledged that there is a clear problem on two fronts. First, following the registration of transactions, records and maps are not promptly updated. In fact, on account of the vast backlog of updating work, following a transaction, rigorous follow-up by the new landowner

is necessary for a mutation of the records. Second, mutation of revenue and city survey records necessary to take account of T.P. Schemes—the promulgation of T.P. Scheme records—is also pending since long. The main reasons for this backlog are: inadequate personnel; inadequate technical capacity within the Settlement Commissioner's Office; and complexity of mutation protocols.

The Continued Use of Inaccurate Reference Maps

With revenue areas being rural, protocols prescribed for mapping are rudimentary. Though the DILR (the agency responsible for building and maintaining the revenue area cadastre) is required to maintain detailed geometric attributes of each individual land parcel (*tippans*), it is required to collate this information only in the form of 'diagrammatic' or 'reference' village maps. Though these maps are drawn to a prescribed scale, they are highly inaccurate and cannot be collated further (Figures 23.3 and 23.4). Since urban areas extend over revenue areas, in large portions of many towns and cities the only cadastral maps available are un-collated and inaccurate village maps.

Lack of a Link between Text Records and Maps; No Use of Geographic Information Systems

At the time that protocols for building and maintaining cadastre were defined, computerized geographic information systems (GIS) were unavailable. Unfortunately, despite its widespread application the world over, the concept of GIS technology has yet to be introduced in the cadastral system in Gujarat. It is not that the revenue administration is averse to incorporating computers in its functioning; computerization of text records is fairly advanced. The problem is the unavailability of accurate statutory maps on which a computerized GIS can be built. It is very important to understand that the problem is not technological. Preparing accurate maps using ground surveys or Global Positioning Systems (GPS) and remote-sensing technology is hardly a problem. The real problem is the lack of an effective adjudication mechanism for reconciling new accurate maps with old records and old maps and for promulgating new maps. Without such a mechanism in place, accurate maps of urban areas cannot be prepared and without maps, it is not possible to build GIS systems that can be used for official or statutory work. The lack of GIS systems makes the spatial analysis of data very

⁹ Stamp duty payable when a built property is transacted is calculated as a percentage of the market value of the property. Since use of cash money in property transactions is widespread and the proportion of cash payments in property transactions is high, and since on account of this, only the non-cash (or cheque-portion) of a property's value is stated in official transaction documents registered with the deeds registry, revenue officials rely on assessment of market value of a property in the official built property value cadastre to calculate the minimum stamp duty imposable on a transaction.



FIGURE 23.3 Two Adjacent Village Maps prepared by Joining *Tippans*



FIGURE 23.4 Joining Two Village Maps (of Figure 23.3) Accurately is Impossible;
City-wide Accurate Maps of Gujarat's Urban Areas Non-existent

difficult and this in turn considerably diminishes the efficacy of both land management and urban planning.

RECOMMENDATIONS

Recommendation 3: Build a Unified, Conceptually Clear, Robust and Technologically Advanced Land Cadastre for Urban Areas

For the urban land market to function efficiently and to enable effective urban planning, it is imperative that the present confusion of urban cadastres be replaced by

a unified, conceptually clear, robust, and technologically advanced land cadastre for urban areas. This will require comprehensive verification and updating of existing records; creating new formats for records and maps; and uniform protocols for mutating the new records and maps. Such a cadastre should use the best available GIS technology. The land cadastre should provide a highly accessible and robust platform of high integrity on which further sophisticated and layered information systems can be built. The built property cadastre can be one of the layers added atop it.

Recommendation 4: A Single Unified Agency should be Responsible for Building and Maintaining the Land Cadastre for Urban Areas

A single unified cadastral agency should be made responsible for and empowered appropriately for building and maintaining the land cadastre for urban areas. Such an agency could be administered by either the Revenue Department (RD) or the Urban Development and Urban Housing Department (UD&UHD). It may be beneficial to nest this agency within the RD because: (i) traditionally RD is the custodian of land records; (ii) urban boundaries will continue to expand and it will be relatively easier to convert rural records into urban records if both records are under the command of one department. During the transition to a new cadastre, the Unified Agency should (i) act as a custodian of the different types of records; (ii) perform routine functions; and (iii) build and promulgate an interim cadastre.

The unified cadastral agency will require a clear legislative mandate and adequate enabling legislation to be effective. Additionally, the institutional structure of the agency will have to be carefully determined. It can be a government department, an authority, a government-owned company, or a joint sector company. It will also need to be equipped with adequate powers to raise funds to at least meet its expenses.

Managing Land Tenure

THE CONTEXT

The premise of the Bombay Land Revenue Code, 1879 is that the absolute owner of all land is the state. A person enjoying rights to use a parcel of land is referred to as the ‘occupant’ or ‘*Khatedar*’.¹⁰ The rights of the owners/occupants, however, are not unlimited and restricted under provisions of revenue regulations. From this perspective, the manner in which rights in land are held is called ‘tenure’. Rights are also restricted by plans prepared on the basis of urban planning regulations. Taken in totality, there are usually three forms of restrictions: (i) restrictions on disposal, that is, sale and transfer of land; (ii) restrictions on sub-division or amalgamation of a parcel of land; and (iii) restrictions on use of a parcel of land.

REVENUE REGULATIONS

The revenue regulations define two types of tenures:

- (i) Freehold (also called Old Tenure or OT)

Parcels of land enjoying freehold rights are referred to as ‘alienated’, ‘old tenure’ or ‘unrestricted tenure’. Such land parcels may be: (a) transferred without prior approval of government; (b) sub-divided or amalgamated without prior approval of government; and (c) used for agriculture or non-agriculture (NA) purposes if ‘NA use permission’ is obtained from the government;

- (ii) Restricted rights (also New Tenure or NT, and Restricted Tenure or RT)

Parcels of land with restricted rights are known as ‘unalienated’. Such parcels cannot: (a) be transferred/sold without prior approval of the government; (b) be sub-divided or amalgamated without its prior approval; (c) be used for purposes other than what is permitted. Within this group there are two types of tenures. The first type is referred to as ‘new and indivisible tenure’ (or NT). Lands were attributed this type of tenure when they came under various land grant abolition acts or when they fell under the Gujarat Agricultural Land Ceiling Act. Lands allotted by the government for various public uses (or to landless persons) are also attributed this tenure. The second type is ‘restricted tenure’ or RT which was attributed to all lands granted to tenants as part of the land reforms programme under the Bombay Tenancy and Agricultural Lands (BT&AL) Act 1948.

CONVERTING TENURE

Revenue regulations allow for the conversion from restricted tenure to freehold tenure. While the conversion from RT to OT against payment of defined charges appears to be relatively straightforward, conversion from NT to OT is difficult. The reason for the difference appears to be that most new tenure land parcels were originally granted for special purposes (for example, for charitable purposes). It is widely (and understandably) thought that such restrictions must only be removed under compelling reasons—without allowing owners of such lands to make an undue profit. The foregoing combined with the fact that official land valuation practices understate the market value of the land, make it very difficult to take a pragmatic view when it comes to converting new tenure to old tenure.

Revenue regulations also allow for the conversion of agricultural land to land where non-agricultural use is permitted. The first step in such conversion (in the case of NT or RT land) is conversion to a freehold tenure. The second step is the granting of permission for non-agricultural use.

¹⁰ Popularly however, the occupant is known as the ‘owner’ of the parcel of land.

Historically, the revenue regime was conservative in granting these permissions. Primarily to improve food security and to uphold revenue generation, a rigorous regime was put into place to ensure that: (i) there is a good reason for permitting NA use on the land; (ii) past dues have been paid, and; (iii) a new non-agricultural use-related assessment has been levied. Today, since food security is not as significant a concern and since land revenue is not a significant source of revenue, a conservative approach to conversion of land to non-agricultural use seems anachronistic and counterproductive. Nonetheless, from the government's point of view, this last checkpoint before the land 'moves out of the public domain' remains important: therefore, no less than fourteen No Objection Certificates (NOCs) from varying government departments¹¹ are required before this permission is granted.

URBAN PLANNING REGULATIONS

Urban planning regulations impose a wide range of restrictions on land—minimum/maximum land parcel sizes, uses permitted, sub-division and amalgamation, and building parameters.¹² Although they are not perceived to be as severe as tenure restrictions, they are similar. The only difference is that they do not appear on the title certificate and one has to refer to the development plan to know about them.

SCOPE AND APPROACH OF THE REVENUE AND URBAN PLANNING REGULATIONS

Both, revenue and planning regulations, taken together, impose a formidable matrix of restrictions on land in urban areas. Table 23.2 summarizes the scope and approach of the regulations:

TABLE 23.2
Scope and Approach of the Revenue and Urban Planning Regulations

Regulations	Revenue	Planning
Approach	Reactive	Proactive
Procedure	Parcel-wise	Area-wise
Restrictions		
1. On Transferability	√	
2. On Sub-division and Amalgamation	√	√
3. On Use	√	√

Source: SUPLM Reports.

¹¹ The NOCs are from: Land acquisition, Special Agencies—Narmada Project, Roads and Building, Gujarat Electricity Board, District Industries Commissioner, Gujarat Pollution Control Board, Airport Authority, District Health Officer, Revenue Department, Collector, UDAs/ADAs, Public Works Department, and Income Tax Department.

¹² Restrictions are imposed under the provisions of the GTPUD Act, 1976 and are known as the General Development Control Regulations.

MANAGING LAND TENURE IN MODERN

URBAN GUJARAT

Urban and rural land management pose different challenges—in urban areas, the land is put to an array of non-agricultural uses, whereas in rural areas predominant use of land is agriculture; in urban areas the income or rent from land is transacted in money form, whereas in rural areas it could be the produce; the boundaries between the land parcels tend to be very sharp, land is costly, land changes ownership faster, and the land parcels are much smaller in urban areas, whereas in rural areas the boundaries between the land parcels are not so sharp, land is not so costly, it could remain in a family for generations, and the land parcels are much larger.

In urban areas, with the emergence and strengthening of the land markets and rise of property development, land is increasingly being viewed as a commodity. The land markets serve to allocate the land to various uses. The strategy of planned allocation of land for various uses without relying on market mechanisms is now widely acknowledged to have failed. More subtle and sophisticated urban planning restricts itself to addressing market failures. It has now been widely acknowledged that in urban areas well-functioning land markets are essential for allocating land for various uses, driving development and transformation of cities, and guiding urban planning. If land markets function efficiently, not only is land put to 'best and highest use', its price also remains in check and that the most significant benefits of this can be to the poor.

The urban land markets or prices of land are powerfully influenced by both the revenue and urban planning regulations. In case of planning regulations, once an area is notified as 'urban' or when it becomes a part of the development authority area, it sends a strong signal that now this area can be put to non-agricultural uses, which will yield higher rents. This fuels speculation and land prices rise. Further, the various land use zones, density regulations, and transport and infrastructure networks, which are indicated in the development plan, determine what use a parcel of land can be put to and, therefore, powerfully determine the potential of a land parcel to yield rent. Revenue regulations, on the other hand, because they impose restrictions on transferability, sub-division/amalgamation, and the use of land also powerfully affect the price of land. They represent restrictions that have to

be lifted before the land can be put to the highest allowable use, and hence are a 'cost' that has to be discounted from the potential price of the land.

KEY PROBLEMS

Revenue and Urban Planning Regulations Impose a Formidable Matrix of Restrictions in Urban Areas

As described earlier, while urban planning regulations proactively encourage area-wise urban development, the revenue regulations historically discourage urban development in a reactive and piecemeal manner. The overlap of the two sets of regulations unduly restricts tradability of urban land, prohibits the non-agricultural use of land, and constrains the assembly and reorganization of land.

Restrictive Tenures and Restrictions on NA Use Constrain Supply of Land for Urban Growth

Restrictive tenures, by affecting the tradability of land, constrain legal supply in the urban land market. Although difficult to estimate, sample studies show that in some areas, the proportion of such lands is as high as 20 per cent¹³. The problem is somewhat compounded by the fact that parcels of land with restrictive tenures are scattered, and this severely constrains the assembly of large parcels of land. Ease of assembling large parcels of land directly affects viability of large scale development.

The Protocol of Converting Restricted to Freehold Tenure and Agricultural to NA Freehold is too Complex and Lengthy

The government has not systematically reviewed the relevance of the wide variety of tenures in the present urban context. The present policy of tenure conversion is prescribed in a government resolution, dated 20 December, 2006. It takes into account a number of factors: use (agriculture/non agriculture), location (urban/rural), length of tenure, value of premium, and approvals. A combination of these determines how the 'file moves' for clearance, which department calculates the conversion premium, and the definition of 'urban' keeps changing for approval and calculation of premium. The protocol itself is lengthy and takes too long.

Insistence on the Payment of Premium for Conversion by Original Owner is Impractical

Conversion of tenure requires the payment of a 'premium' to the government and is calculated as a percentage of the market value of land. Technically speaking, this

has to be paid by the owner to convert the restricted tenure to freehold before he/she can sell the land. Sale prior to conversion of tenure is illegal. The premium is a substantial portion of the market value and the only way the owner can raise this amount is by the way of a pre-sale contract. The impracticality of restricting sale before tenure conversion and insistence on the original owner paying for conversion requires addressing.

Premium for Converting Restricted Tenures to Freehold Tenures is Very High

Currently, the premium to convert restricted tenure agricultural lands to freehold tenure lands for NA use is pegged at 80 per cent of the *Jantri* value. This is seen as a way of compensating for low assessments in the *Jantri* as compared to the market value. Together with high rates for stamp duty (also justified for the same reason), these high premiums result in under-reporting of prices and promote use of cash money in land transactions.

The Objectives of Stringent and Elaborate Procedures for Converting Agricultural Land for NA Uses are Irrelevant in Urban Areas

The rationale for the complex and elaborate procedure is: (i) to ensure that there is no indiscriminate conversion of agricultural land to NA uses, the concern being food security; (ii) to ensure buoyancy in land revenue; and (iii) to verify the existence of government interest in the land. If one examines these objectives in the context of a fast developing urban area, they are irrelevant: agricultural productivity is not just dependent on actual land under cultivation, agricultural assessment as a revenue source is inconsequential, and the government interest in land can be easily verified with computerization of records.

Protocols for Converting Agricultural to NA Land are Costly and Time-consuming

A typical NA permission involves 13 steps and takes up to one year or more. Reasons for this are that the records are not updated, the verification process is manual, and the staff is inadequate.

Monopoly of 'Urban Farmers' Distorts Land Markets and is Inequitable

According to revenue regulations, the possession of agricultural land is limited to farmers, defined as those who (already) own agricultural land in the area. This excludes a large part of population from urban land markets and fuels speculation.

¹³ This estimate is based on a study of about 40 town planning schemes prepared by Environmental Planning Collaborative (EPC) and Environmental Planning Collaborative Development Planning and Management (EPCDPM). While preparing a town planning scheme, information on the tenure of all the parcels of land is recorded.

Indiscriminate and Widespread Na Use Permissions Outside Urban Areas Dampens the Demand for Land in Urban Areas and Promotes Growth that is Harmful, Unplanned, and Unregulated

Development in urban areas is planned and regulated as per the provisions of the GTPUDA. Planning, development control regulations, and provision of services imposes a cost on land, which is reflected in the higher prices of land within urban areas and the lower prices of land just outside urban boundaries. This differential in land prices makes it attractive for urban uses to locate just outside the boundaries of urban areas. Indiscriminate and widespread grant of permission for non-agricultural use for urban uses outside urban areas dampens demand for urban land in urban, promotes harmful, unplanned and unregulated growth, and undermines the planning and the system for ensuring planned urban growth. This problem is most widespread in the periphery of cities where non-agricultural use permissions are granted ostensibly for the natural growth of surrounding villages.

RECOMMENDATIONS

Recommendation 5: In Urban Areas, Role and Scope of Revenue and Planning Administrations should be Mutually Exclusive

Presently there is an unintended and confused overlap in the roles and scopes of the revenue and urban development administrations. In the long run, the distribution of the functions could be as follows—the revenue administration should (i) maintain land cadastre, (ii) manage residual tenure restrictions; and (iii) manage collection of transaction taxes/fees. The planning administration should manage: (i) land use; (ii) amalgamation and subdivision; and (iii) property and land tax.

Recommendation 6: In Urban Areas, the Revenue Administration's Approach to Dismantling the Historic Tenure should be Comprehensive and Proactive

New policies and protocols should be developed for comprehensively and proactively dealing with conversion of tenures in a manner that is synchronized with the areas zoned for development in the development plans of the urban area. In the interim, the present 'parcel-by-parcel and reactive' process should be expedited by making an inventory of all tenures and adopting clear policy and guidelines to lift them in phases or groups. In such cases, the protocols should be simplified and shortened.

Recommendation 7: In Urban Areas the rate of Tenure Conversion Premiums should be Lowered and Wherever Possible this should be Taken in the Form of Land

It is widely believed that the rate of conversion premium is high; that this discourages land-owners from applying for tenure conversion; encourages illegal non-agricultural use of agricultural land; and promotes the use of cash in land transactions. The present high rate of premium should be reviewed and lowered if seen fit. This belief is strengthened by experience in other sectors of taxation where lowering of tax rates has raised compliance and revenue generation. A more radical and effective reform would be to substitute proportional fees by a flat administrative charge. In areas where fresh tenure premium schemes are being undertaken, a simple way of bypassing the entire process of assessing the market value of land (a time-consuming and contentious process) can be taking premium in the form of land. A higher portion of land with restricted tenure can be appropriated.

Recommendation 8: In Urban Areas, Revenue Administration should Grant NA Permission Comprehensively

All lands zoned for urban uses in a development plan should be unilaterally and comprehensively converted to non-agricultural use. The one-time conversion fee could be collected along with development permission and the NA assessment can be linked with the property tax levied by the urban local body. The title verification and the various NOCs required could be easily managed with the help of modern technology and building up an accurate urban land cadastre and appropriate databases.

Registering Land and Property Transactions

THE CONTEXT

There are three aspects to a property transaction:

1. *Conveyancing*: Documents (sale deeds) agreeing to the transfer of freehold ownership are passed between the seller and purchaser, usually with the guidance of a lawyer. However, adequate functioning of the state's legal and judicial system is crucial to ensure that (i) such transfers take place efficiently; (ii) the contracts are enforceable, and (iii) there is no risk involved in transactions. These in turn are key to well functioning land markets;
2. *Registration of deeds*: The conveyance documents are registered with the Inspector General of Registration

and Superintendent of Stamps (IGR and SS) and the stamp duty and registration fee is paid. Maintaining a deeds registry enables the functioning of land markets past transactions can be inspected to ensure confidence in the title and compulsory registration enables the imposition of a transaction tax; and

3. *Updating/mutating the Cadastre:* The IGR and SS notify the DILR and CSS about the transactions and the DILR and CSS are then required to mutate the cadastre. However, in practice, the mutation requires ‘follow up’ by the buyers as the DILR and CSS are burdened by backlogs.

The state’s objective of maintaining a deeds registry and requiring registration of transactions is to enable the functioning of land/property markets, impose a tax on the transaction, and update the cadastre.

KEY PROBLEMS

Though Compliance with Compulsory Registration Requirement has Improved, the Cadastre Remains Out of Date

Although it is not possible to measure, it is widely acknowledged that compliance to compulsory registration has improved largely due to plugging of loopholes in the registration process and its technological upgradation, both of which have reduced the buyer’s risks. However, the mutation of the cadastre does not happen in time as there are huge backlogs and usually the onus is on the buyer to follow up with the DILR or the CSS to mutate the cadastre.

Rate of Stamp Duty is Perceived to be ‘Too High’

It is widely believed that the present level at which the stamp duty is pegged encourages widespread tax evasion and is an important factor in promoting the use of cash money in land transactions. As the non-cash portion stated in the official transaction documents is much lower than the market value, the revenue officials are forced to calculate the minimum stamp duty on the basis of the

official land value cadastre (*Jantri*). However, the *Jantri* itself is based on official transaction values which obviously are lower (the cash component is not reflected) and this argument is used to justify the ‘high’ stamp duty rate. It is in a sense a vicious circle of justifications that sustains a system that encourages non-compliance, necessitates falsehoods, and distorts policy.

The Drive to Increase Stamp Duty by Insisting that Each Unit of Built Property being Transacted be Tied Directly to a Share in the Ownership of Land is having the Perverse and Unintended Outcome of Fragmenting Urban Land Ownership and Evasion of Stamp Duty

It is now insisted upon that portions of built property being sold/purchased, be sold/purchased along with their share in land ownership regardless of whether the owner of the built property directly owns the parcel of land on which the built property stands or owns a share in the parcel of land.¹⁴ This is seen as a mechanism to correct the low values of built property in the *Jantri* and improving stamp duty collections. This, however, has three perverse unintended outcomes: (i) prevailing legal arrangements whereby the two ownership rights can be distinct and held by different persons/entities¹⁵ are undermined; (ii) fragmentation of land which affects the transferability of the land parcel and that can impede the functioning of the land market and lock the land under inefficient uses,¹⁶ and (iii) people tend to develop convoluted arrangements to evade stamp duty.¹⁷

RECOMMENDATIONS

Recommendation 9: Registration of Transaction should Effectively Trigger a Mutation in the Land Cadastre

This is dependent on the improvements in the cadastral system—a land transaction should automatically trigger a mutation in the land cadastre—along with systematically dealing with the backlog. This can be an effective way of increasing the value and attractiveness of the registration process.

¹⁴ If, for example, an apartment in a building on a parcel of land is being sold, documents are required to show this transaction both as a sale of the apartment and simultaneously, a sale of the apartment owner’s share in the land on which the apartment building stands.

¹⁵ For example, in case of registered cooperative housing societies, the land is held by the society and the built property by individual members. By insisting on land ownership by shares in proportion, the built property in such a situation, the legality of the cooperative housing society is in question (it is no longer the owner of the land), and collective authority of the association of owners gets undermined which then can severely undermine the collective functions of service provision and building maintenance.

¹⁶ For example, in case of a cooperative housing society of say 1200 apartments, now there will be 1200 owners instead of a single owner for that land parcel. Now if the plot requires to be redeveloped, then all the 1200 owners will be involved in the transaction/decision making.

¹⁷ Refer SUPLM policy paper, pages 68–70, Cast Study of Saubhagya Apartments.

Recommendation 10: Stamp Duty and Registration Fees should be Replaced by a Flat Fee Covering Administrative Expenses¹⁸

Revenue loss could be compensated through allocation of an adequate share of property and/or land taxes. This measure would (i) increase compliance with compulsory registration; (ii) reduce the informal economy; (iii) serve social objectives; (iv) be simple and cheap to collect; (v) encourage trade of urban land to promote allocation efficiency in resources; and (vi) be efficient and equitable.

Recommendation 11: Transactions of Land and Built Property be Separated.

The practice of transacting the share of land in a built property while transacting the built property must be discontinued as this would strengthen the prevailing legal arrangements of built property and prevent land fragmentation. Land and built property cadastres are different concepts and should be separated; a property cadastre or register could be built atop a land cadastre.

Valuing Land

CONTEXT

The state government maintains a fiscal cadastre for land and property called the *Jantri* in Gujarati. The responsibility of maintaining the *Jantri* lies with the IGR and SS. Several improvements to the *Jantri* have already been made on many fronts: (i) computerization; (ii) transition from parcel-based to geographic cluster-based valuation; (iii) improvement of publications that are now easy to read; (iv) increase in transparency through explicitly documented calculations; (v) fresh updates for many areas; and (vi) use of private sector expertise.

In theory, the *Jantri* can be relied upon for calculating: (i) stamp duty/registration fees; (ii) tenure conversion charges; (iii) compensation under the Acquisition or GTPUD Acts; and (iv) rent and sale prices of government properties. However, for the reasons discussed below, it is usually used only for computation of stamp duty and registration fees. Every department primarily relies on the sales data but adopts its own valuation methods.¹⁹

KEY PROBLEMS

Recent Sales Data, the Base Data Used for Valuation, is Highly Unreliable

As discussed earlier, the use of cash money in land and property transactions is widespread and since the sale price

stated in the documents is well below the actual (market) price, all valuation starts with the (correct) assumption that stated values need to be inflated. However, it is difficult to determine by what factor should these values be inflated or to what extent is the cash money used? The belief that stated values can be inflated by some factors presumes that the proportion of cash across transactions is consistent and this is fallacious.

No Systematic Research on the Land Market is Undertaken on an Ongoing Basis

Estimation of the value of the property depends on a variety of external and subjective factors. To be able to undertake the task of valuation, practitioners need to rely on findings of systematic research that provide a comprehensive, reliable, and non-anecdotal understanding of the land markets. There is a complete lack of such research.

Different Departments Use Different and Non-Transparent Methods of Valuation

A variety of methods are used to inflate sales data by various departments. However, there is no consistency amongst them. This has two consequences: (i) duplication of valuation work and (ii) as the different methods are not published, this makes the process non-transparent, which then undermines and discredits the notion of systematic and reliable land valuation in the government.

Despite Best Attempts to Improve them, the Jantri and Other Valuation Procedures are Highly Unreliable Indicators of the Market Value of Land and Property

Despite improvements and attempts at being consistent, the *Jantri* is not considered to be a reliable indicator of the market value of land and built property largely because of the gap between the data and real prices and lack of systematic and empirical research. The problem is compounded by the fact that levy of high transfer/conversion charges (stamp duty/conversion premiums) to compensate for low valuation in *Jantri* tends to distort the process of valuation to build this procedure. The valuation team responsible for preparing the *Jantri* is concerned that accurate valuations will be undeservedly punitive (given the high tax rates, the buyer or the seller will have to pay a higher amount) and hence is torn between the task of inflating sales data to better reflect market value and keeping it low enough to be non-punitive, in a manner that is publicly acceptable and ethically unimpeachable. This leads to an unreliable and undervalued *Jantri*, which

¹⁸ This recommendation was not made in the original study.

¹⁹ Refer Section 7.1, Assessment Report, SUPLM.

in turn motivates the strategy of levying higher taxes. It is a vicious cycle that makes the land valuation process far more a political exercise than necessary instead of being a transparent and rational exercise based on sound research and data.

RECOMMENDATIONS

Recommendation 12: Dependence on Land Valuation Procedures should be Reduced

Unreliability of land valuation procedures makes a strong case for reducing dependence on them. In the TPS mechanism, the dependence on land valuation procedures has been reduced by collecting betterment charges in the form of land quite successfully. Thus, wherever possible, dependence of land management functions on land valuation procedures should be reduced. The merit of collecting premiums for converting tenures in the form of land has already been discussed.

Recommendation 13: Jantri should be Made More Authoritative and Reliable reflective of True Market Value of Land

The government will continue to need a *Jantri* and it is imperative that its quality be improved. Its assessments of land/property values be more in line with the market values. However, this will require: (i) improving valuation process (next recommendation) and (ii) that the declared sales prices be as near as the market prices. The latter is possible only if the use of cash money in the transactions reduces. Reduction of cash money will require a wide variety of measures in a range of sectors and at different levels of government, for example, reviewing taxation policies.

Recommendation 14: Valuation should be Transparent, Professionalized, and Based on Sound Valuation Procedures and Sound Empirical Research

A sound valuation process must be applied to estimate land value with specific, streamlined procedures using

at least two of the three methods available: cost analysis, sales data comparison, and income capitalization. Different values derived may serve as useful checks and balances.²⁰

Recommendation 15: A Single Agency should be Made Responsible for Standardized and Systematic Valuation and Data Promulgation

In view of the dependence on valuation by several government departments, a single agency should be made responsible for undertaking the building of a systematic land and property values cadastre.²¹ This would be based on systematic valuation procedures, updated regularly and be an additional layer atop the land cadastre.

Conclusions

Three issues are clearly evident:

1. The present overlap of revenue and planning regimes is at the root of many inefficiencies and distortions in urban land markets. Tasks need to be redefined and reassigned to specific agencies so that they can be accomplished in a transparent and efficient manner,
2. Gujarat's urban land management suffers from insufficiently considered taxation policies. Present policies have a number of perverse unintended outcomes. Viciously, they promote a culture of non-compliance and strengthen the informal economy;
3. Gujarat's urban land management systems require fundamental reforms; its land markets require modernization to make them more efficient; distorting regulatory systems and interventions need reform or dismantling; and institutions for enabling and monitoring the proper functioning of land and property markets need strengthening.

Reference

Environmental Planning Collaborative (2007), 'Streamlining Urban Planning and Land Management Practices', Assessment Report and Policy Reform Agenda, Legislative Inten-

tions and Proposals, 2007, Gujarat Urban Development Company, Government of Gujarat.

²⁰ This recommendation is based on 'Land Administration Guidelines', United Nations, New York, and Geneva, 1996, available at <http://www.ica.coop/house/part-2-chapter4-ece-landadmin.pdf>

²¹ This recommendation was not made in the original study.

24 Using the ‘Development Plan—Town Planning Scheme’ Mechanism to Appropriate Land and Build Urban Infrastructure

Shirley Ballaney and Bimal Patel*

Introduction

Cities in India are facing three distinct challenges in the development of urban infrastructure. The first challenge is to adhere to a development plan in the face of a strong tendency towards unplanned growth. Second, when land is acquired under the Land Acquisition Act, 1894, a major equity issue arises relating the disparity between those who lose land for a given project and those who do not, but are located close to the project area. This disparity is due to the fact that those who lose land are not only displaced, but also get compensation that does not take into account the potential increment in value of their property due to the project, while those in close vicinity of the project are better off on both these counts. Finally, city authorities do not have adequate resources to finance infrastructure and are not in a position to capture the incremental value of land in the absence of a legal and policy framework. The Gujarat Town Planning and Urban Development Act (GTPUDA), 1976 provides for an effective mechanism that addresses these challenges through a two-stage process called ‘Development Plan–Town Planning Scheme’ mechanism (or the DP–TPS mechanism in short), which works fairly well in Gujarat.

This chapter showcases the preparation and implementation of this mechanism to deliver serviced land for urban expansion in the periphery of cities, which currently constitutes its most extensive use. The chapter also briefly lists the reasons underlying the efficacy of the mechanism.

The Challenge of Delivering Serviced Land for Urban Expansion

Continuing urbanization and increasing affluence indicate that in the coming decades, vast amounts of built space will have to be added to India’s towns and cities. While some of this addition will be accommodated by the densification of existing urban areas, most will have to be accommodated by the expansion of towns and cities into the surrounding countryside. In India, the surrounding countryside is hardly unutilized and usually under cultivation. The agricultural landscape usually consists of irregularly shaped plots in a mosaic and is rarely available in large tracts under single ownership public or private. Therefore, in almost all cases, the first challenge in expanding out into the surrounding countryside involves converting a fragmented agricultural landscape into a serviced landscape, fit for urban uses.¹ This conversion has

* The authors would like to acknowledge the contribution of Mr Atul Patel, Computer-aided design technician at HCPDPM for the drawing in the chapter.

¹ European cities faced a similar challenge during the nineteenth century when, in the wake of the Industrial Revolution, cities rapidly expanded. European responses to the problem are available in Thomas Hall, *Planning Europe’s Capital Cities: Aspects of Nineteenth-Century*

to be on a large scale and not a plot at a time and entails a number of coordinated actions by the public authority. They are mentioned below.

- an area has to be delimited where all landowners can be legally forced to accept the reorganization of their holdings to make the area suitable for urban use;
- landowners have to be identified, their holdings established, and processes put in place for communicating with them;
- irregularly shaped plots have to be reshaped in a more suitable manner for building modern buildings on them; land has to be appropriated for providing a number of common infrastructure facilities, for example, streets, water supply, drainage, electrical facilities, public transport, parks, schools as well as for meeting social and cultural objectives, for example, housing for the poor and museums;
- the infrastructure and amenities have to be planned and built;
- all the above including infrastructure and amenities have to be paid for; ideally the administrative, capital and operations, and maintenance costs for all of the above should be financed by capturing the increment in land value arising as a result of the transformation. This requires the increment in land value to be estimated in a fair and consistent manner;
- ideally the above should be achieved through a consensual process with minimal use of coercion. It is, therefore, necessary to co-opt the landowners into the transformation and note their opinions, suggestions, and objections. It is also necessary to establish a due process for redressing their grievances; and
- lastly, once a serviced urban landscape has been created, it is necessary to regulate private development on plots to ensure that development is harmonious and consistent with the planning objectives for the area and the infrastructure provided.

It is clear that managing all of the above actions in a time-bound and coordinated manner poses a truly formidable technical, administrative and legal challenge.

Methods of Converting Agricultural Land into Serviced Urban Land

LAISSEZ-FAIRE

Given the complexity of bringing into effect a systematic and a *priori* conversion of agricultural land into serviced urban land in the jurisdictional and administrative context of India, most Indian cities have adopted a laissez faire approach. Urban development, led by landowners or developers, is allowed to creep out into the surrounding countryside—a plot or a layout at a time. Usually, a blind eye is turned to such creeping urbanization. Sometimes, a minimal attempt is made to plan or regulate the development and to levy charges. Once an area is built up and if the residents are able to bring sufficient political pressure to bear on the administration, rudimentary infrastructure facilities such as streets, water supply and drainage are provided to the extent that it is physically possible. Letting things be is easy, it requires little foresight and effort on the part of public authorities.²

LAISSEZ-FAIRE WITH MINIMAL PLANNING

This is a variation on the laissez faire approach where an attempt is made to ensure that, in the midst of creeping, haphazard urban expansion, at least a 'right of way' is left open for subsequent provision of trunk infrastructure. The manner in which this is done is as follows. The right of way sought to be left open is drawn up in a statutory city-wide development plan in the form of a network of major roads in the periphery of the city, where it is expected (or zoned) to grow.³ Land for building the network of roads is forcefully appropriated using the Land Acquisition Act. Even though the very drawing up of roads in the statutory plan results in raising land prices in the areas adjacent to the roads, no attempt is made to charge the cost of building roads to those areas. Roads are built usually after development takes place in the vicinity of the roads. Development, which usually takes place in a creeping (plot-at-a-time) haphazard manner, is sometimes regulated to enable the collection of development charges. However, there is usually no systematic attempt to assess and levy betterment charges.

Urban Development, 1997. With ample non-agricultural land available for urban expansion, cities in the United States could respond very differently; see John W. Reps, *The Making of Urban America: A History of City Planning in the United States*, 1965.

² It can be argued that though the laissez faire approach results in a sub-optimal solution, it is better than a forceful administration totally thwarting city expansion. As the Chinese, Cuban, and South African experiences have shown, forcefully thwarting city expansion can impose high social and economic costs and lead to build up of pressures that eventually require drastic corrections.

³ More ambitious development plans also draw up and reserve land for social amenities such as parks and schools in the areas zoned for expansion. For our purpose here, no distinction needs to be made between land reserved for roads and for other facilities.

Land reserved for roads, and therefore condemned for acquisition, is often encroached upon, usually with the full support of owners of such land for whom this is often more beneficial than receiving compensation in lieu of acquisition. If the land is actually acquired, availability of

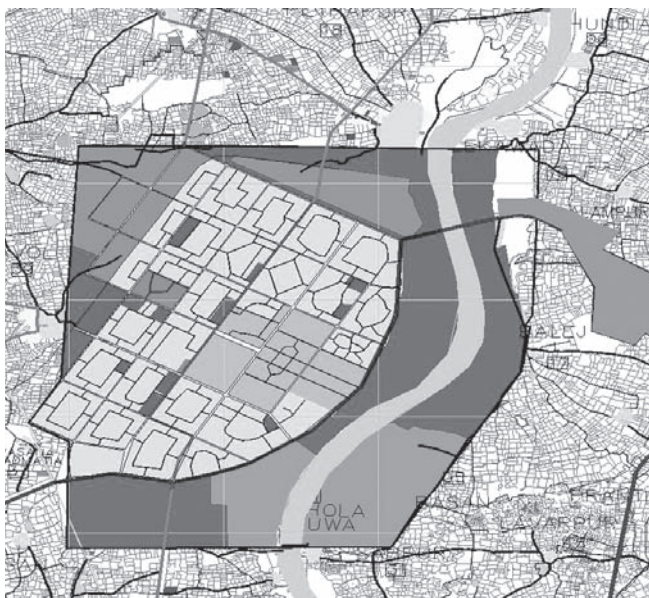
finance for building infrastructure remains a major issue. This is in contrast to the windfall profits that accrue to landowners whose land is not reserved.⁴ In addition to this, haphazard development forces subsequent provision of subsidiary infrastructure to be sub-optimal or inefficient.



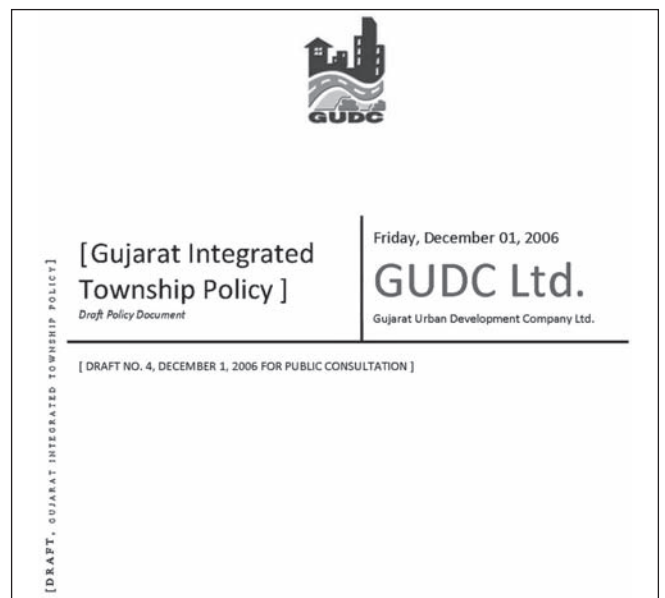
24.1a: Laissez-faire Development



24.1b: DP + Laissez-faire Development



24.1c: Land Acquisition + Development



24.1d: Private Townships

FIGURE 24.1: Methods of Converting Agricultural Land into Served Urban Land

Source: Fig. 24.1a and 24.b—Google Earth; Fig. 24.1c—EPC and Fig. 24.1d—GUDC.

⁴ Urban development planning of this type generates vicious politics between owners whose land is reserved and who stand to lose much and other landowners in the vicinity who stand to gain much. Such a mode of planning has done much to spur corruption and undermine the very idea of city planning.

PUBLIC LAND DEVELOPMENT AGENCIES

A number of cities have constituted powerful public land development agencies, which are charged with the responsibility of providing serviced land for urban expansion. Such agencies are empowered to make statutory city development plans, prepare detailed plans for plotting areas, and design and provide them with social and physical infrastructure. They have the muscle to forcefully acquire peripheral land using the Land Acquisition Act and to raise finances for building infrastructure.⁵ When developed, plots are sold at market prices to defray development costs.

Though this seems an effective approach which gives very high flexibility to envision, plan, and build new urban areas, in practice however, the functioning of public land development agencies has been far from sterling, and today the approach is widely considered to be unviable. The fundamental problems with this approach are as follows. First, this approach seeks to transfer more or less the entire increment in land value resulting from the urbanization to the public agency. By dislocating and dispossessing those whose lands are acquired, this approach imposes very high tangible and intangible costs on them. Slowly, as landowners (farmers) in areas surrounding cities wizen up to this, it becomes politically more and more difficult and economically more and more costly to acquire vast tracts of agricultural land.⁶ Second, because the agency enjoys a monopoly, there is no mechanism to ensure its efficient functioning and has no reason for it to heed the nature of demand. Serviced land provided by such agencies tends to be costly and unaffordable for vast sections of the urban population, either because of operational inefficiencies or because of the adoption of unaffordable planning and engineering standards. Third, the opaque structure of public land development agencies, combined with vast flows of finance, has turned such agencies into unwieldy behemoths, also widely considered to be highly corrupt.

PRIVATE TOWNSHIP DEVELOPMENT

Today, with the increased pace of development and higher aspiration levels, it has become clear that alternatives to haphazard laissez faire development and ineffective public agencies are urgently required. There is also a greater willingness to experiment with market mechanisms and to partner with the private sector. On account of this, a number of state governments are announcing 'Township Policies'.⁷ Here, private developers are encouraged to privately assemble agricultural land in the countryside, wherever they think it is viable to develop serviced urban land or land and buildings ('townships'). Government support is provided in a number of ways. Some states help with land acquisition. Others only promise regulatory support; re-zoning of the land in statutory development plans, and quick 'single-window' approvals. Most assist by providing connectivity to existing infrastructure. Developers are expected to privately raise finances and invest in building infrastructure and/or buildings. Though a number of township policies have been announced, considerable confusion continues to prevail and it seems to be too early to say how this mode of land conversion will play out in the long run.

THE DEVELOPMENT PLAN AND TOWN PLANNING SCHEME MECHANISM

This mode of developing serviced urban land from agricultural land evolved during the early twentieth century in the erstwhile Bombay State Presidency. Today it is used only in Gujarat. It is a two-stage process which is defined in the GTPUDA, 1976⁸ a macro-planning stage and a micro-planning stage. First, the Development Authority⁹ of a town or city draws up a statutory, decadal development plan (DP) for the town or city as a whole; showing where the city is expected to expand into the surrounding countryside. In these new expansion areas, which are usually a mosaic of agricultural plots, the network

⁵ The Delhi Development Authority is the best example of such an agency. This strategy was precisely used in building new towns such as Chandigarh, Gandhinagar, and Bhuvaneshwar. Here however, the objective of providing land for urban expansion was complemented by objectives of identity politics; see Ravi Kalia, *Chandigarh: In Search of an Identity*, 1987.

⁶ City Planning, when combined with this implementation approach, has also contributed to a vitiated politics surrounding city planning and done much to discredit the very notion of city planning.

⁷ Townships are analogous to Special Economic Zones (SEZs) and the distinctions are insignificant for our purpose here.

⁸ This Act was a revision and extension of the Bombay Town Planning Act, 1954, which was based on the even older Bombay Town Planning Act of 1915. The 1976 Act has also been subsequently refined. The latest amendment was made in 2000.

⁹ The Development Authority is also constituted (or designated) under the provisions of the GTPUDA, 1976. The Act provides a completely integrated framework for defining an agency, empowering it to plan, and providing it a mechanism to implement its plan. The GTPUD Act 1976 is administered by the Urban Development and Urban Housing Department, and therefore, Development Authorities report to it.



FIGURE 24.2: Sequence of Town Planning Schemes in the Ahmedabad Development Plan

Source: Environmental Planning Collaborative (EPC).

of major roads and routes for trunk infrastructure is also drawn up.¹⁰ In the second stage, the expansion area is then divided into a number of smaller areas usually between 1 and 2 sq km each. Figure 24.2 shows agricultural areas surrounding Ahmedabad zoned for urban expansion and delineated into a quilt of smaller areas. The Development Authority then, in a phased manner, takes up each of these smaller areas for the development of a Town Planning Scheme (TPS) there, which is a detailed land

reconstitution, infrastructure development, and financing proposal rolled into one.

The Process of Preparing a TPS: An Example¹¹

The process of preparing a typical Town Planning Scheme in the periphery of the city is being focused upon here. The example used is TPS No. 90 Vinzol 2¹² in Ahmedabad. The area of this scheme, measuring 82 ha and consisting

¹⁰ The Development Plan is supposed to be a comprehensive strategic document for the development of the city. It is expected to address a variety of city-wide issues besides growth management in the periphery, for example, zoning and infrastructure development in the existing areas, urban transport and policies for issues such as heritage protection, economic development, and environmental protection. Its preparation also allows for limited public participation. What concerns us here is growth management at the periphery.

¹¹ This section is based on a paper by Shirley Ballaney, *The Town Planning Mechanism in Gujarat, India* 2008.

¹² Prepared for Ahmedabad Municipal Corporation (AMC) by EPC Development Planning and Management Pvt Ltd (EPCDPM), Ahmedabad.

of 80 separate plots of land around Vinzol village in the southern periphery of Ahmedabad, was zoned for urban expansion in the Ahmedabad Urban Development Authority's Development Plan prepared in 1999. Being close to the Mehmedabad Highway and the Sardar Patel Ring Road, it was envisaged that the area would come under intense growth pressure from surrounding industries. As Figure 24.3 shows, in the north the TPS is bounded by the Khari river, on the west by the Mumbai-Ahmedabad Railway line, and on the east and south by other town planning schemes. At the time of preparing

the TPS, most of the land was vacant with Vinzol village within it.

SURVEYING, PREPARING THE BASE MAP, PLANNING, AND ESTABLISHING BONAFIDE OWNERSHIP

Surveying the Area

At the outset the area over which a TPS is to be planned is surveyed in detail. Various topographic features, buildings, structures, trees, fences, infrastructure, etc. are marked including all private possessions that may have to be compensated for when the plan is implemented.

Box 24.1

Town Planning Scheme in Practice: A Case Study of Sardar Patel Ring Road in Ahmedabad

B.R. Balachandran

The Ahmedabad Urban Development Authority (AUDA) published the Revised Development Plan for Ahmedabad in 1997. In this plan, a ring road was proposed around the urban agglomeration of Ahmedabad. During the period of response from the public, AUDA received thousands of objections from owners of land along the proposed ring road alignment. After some serious introspection, AUDA came up with a revised proposal which was published in 1999 and sanctioned in 2002. The revised proposal received very few objections. The publication of the revised proposal was accompanied by an initiative for implementation, which has few parallels in the country.

The proposed ring road was about 76 km long and 60 meters wide. Typically, the Right Of Way for such roads is appropriated using the land acquisition method. However, AUDA decided to use a combination of minimal land acquisition and an extensive use of the TPS mechanism. This requires some explanation. There are primarily two processes adopted by the Gujarat government for appropriation of land for development purposes—Land Acquisition and Land Pooling. Land Acquisition is carried out under the Land Acquisition Act (LAA), whereas Land Pooling is carried out using the provisions relating to Town Planning Schemes in the Gujarat Town Planning and Urban Development Act (GTPUDA). While the LAA can be used in both urban and rural areas, land pooling is applicable only in an urban area: to be more precise, in a Development Area designated under the provisions of GTPUDA.

The LAA enables the government to acquire privately owned land for a bonafide public purpose. While the government can initiate land acquisition for a public purpose directly through the LAA, the process can also be initiated through the provisions of other legislations such as the Gujarat Industrial Development Act (GIDA) or the GTPUDA. For example, if the land was required for an industrial estate to be established by the Gujarat Industrial Development Corporation (GIDC), then the acquisition process would be initiated through the relevant provisions of GIDA. If the land was required for development of a major urban road, proposed in a Development Plan sanctioned under GTPUDA, then the acquisition proceedings would be initiated under the relevant provisions of that Act. In any land acquisition process, the Government retains the option of a negotiated purchase subject to conditions that ensure a reasonable price.

At the time of publishing the revised Development Plan itself, AUDA had tentatively delineated Town Planning Schemes all along the alignment of the proposed Ring Road. Soon after, AUDA initiated an outreach programme and contacted all the landowners affected by the ring road and those owning land in the surrounding area. The AUDA explained the TPS mechanism to them and offered the opportunity to participate in the benefits of building the ring road by undertaking these schemes along the length of the Ring Road, on either side of the alignment. Most of the farmers owning the land agreed to the scheme. A large portion of the 'Right of Way' (RoW) was handed over by the farmers to AUDA on mere verbal assurance. The preparation of the TP Schemes and all the documentation followed later.

Land in approximately 1 km wide belt along the Ring Road was reorganized, creating this road. The original landowners got back land amounting to more than 60 per cent area of their original land holding in locations very close to, if not overlapping their original holdings. Minimal development rights were provided to the properties under the land use zoning proposed in the development plan. As a result, today, one can see large numbers of farmhouse layouts along the Ring Road. While substantial amount of the land in the area has changed hands after the implementation of the Town Planning Schemes, many original owners have retained their lands. Not only that, the original owners were also able to reap the benefits of the land value appreciation that happened as a result of the Ring Road construction as well as implementation of the TPS.

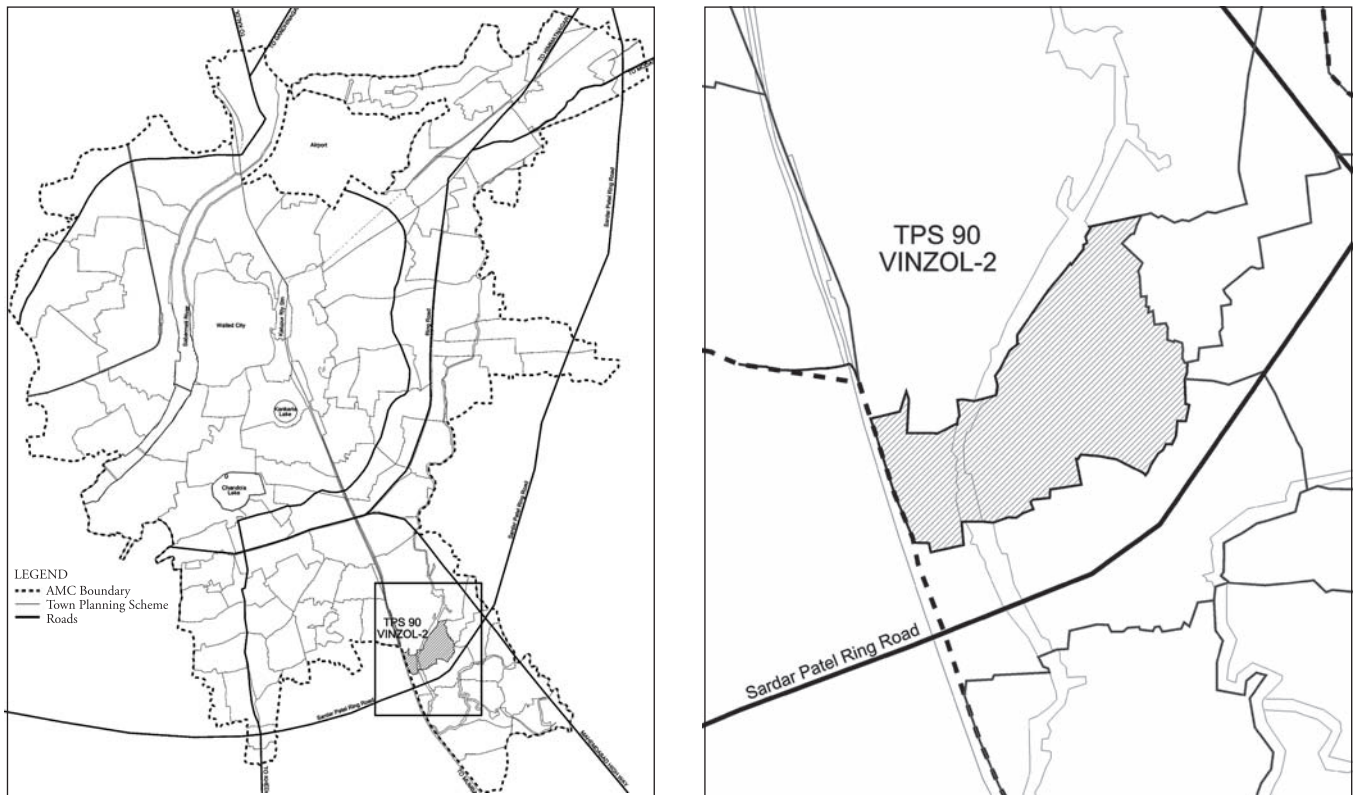


FIGURE 24.3: Location Map of TPS 90 Vinzol 2

Figure 24.4 shows the physical features surveyed and a Base map for TPS 90 Vinzol 2.

Compiling Land Ownership Details

While the area is being surveyed, existing cadastral maps and records are obtained from the relevant office of the Revenue Department and compiled in a prescribed format. Name of the owners, plot area, type of tenure, and encumbrances on the land are compiled. While preparing the TPS, the tenure and encumbrances on a plot remain unaffected.

Preparing a Base Map

The detailed ground survey and existing cadastral maps are collated to prepare a 'Base Map'. Discrepancies are resolved in favour of the plot area in cadastral records unless a portion of the plot has been acquired or has been sub divided/amalgamated and the records have not been updated.¹³ By custom, the base map prepared by the Development Authority is approved and authorized by relevant officers of the Revenue Department. Figure 24.4 shows the base map for the TP Scheme.

Establishing Boundaries of the TPS

The boundary of the TPS is now clearly marked on the base map. Planning considerations, physical features, and other administrative boundaries are taken into consideration while doing this. At this juncture, the intention to prepare a TPS for the area is published in local newspapers. This is the first stage at which the Authority is required to inform landowners. Figure 24.5 shows the boundary of the TPS.

Marking Original Plots on the Base Map

Development a new plan for the area begins by clearly identifying 'Original Plots' (OPs) on the base map and giving each a serial number referred to as the OP number. At this stage, contiguous plots held by the same owner are consolidated as single OPs, and this simplifies subsequent planning and reduces land fragmentation. The map showing the OPs is referred to as the OP Plan in Figure 24.5.

Planning Roads

Any major (city-level) roads, already indicated in the DP (see 3.5 above) and passing through the TPS area are first

¹³ For example, if a plot owner has encroached upon a neighbour's plot and thus the plot appears larger than what the record shows, the boundaries of the plot are corrected in the base map to truly reflect the area in the record.

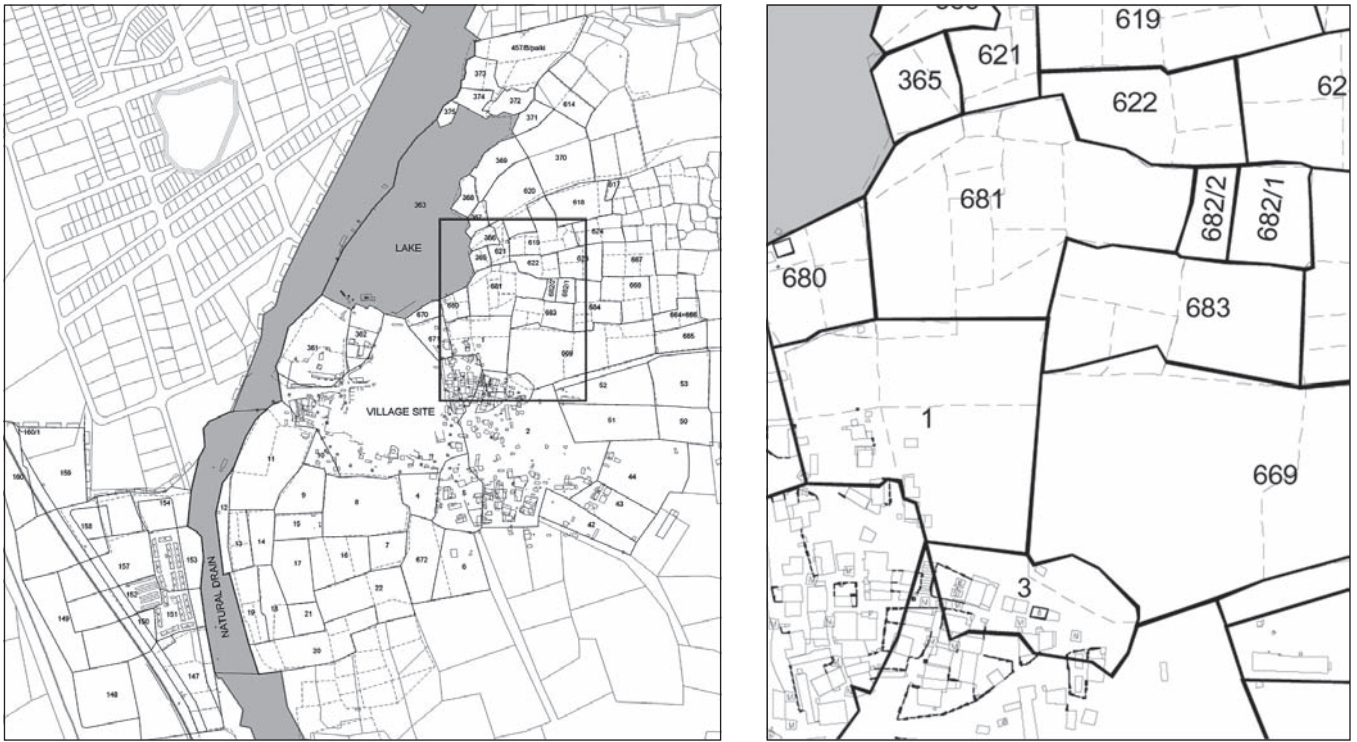


FIGURE 24.4: Physical Features Surveyed and Base Map for TPS 90 Vinzol 2

Source: EPC Development Planning and Mangement (EPCDPM)

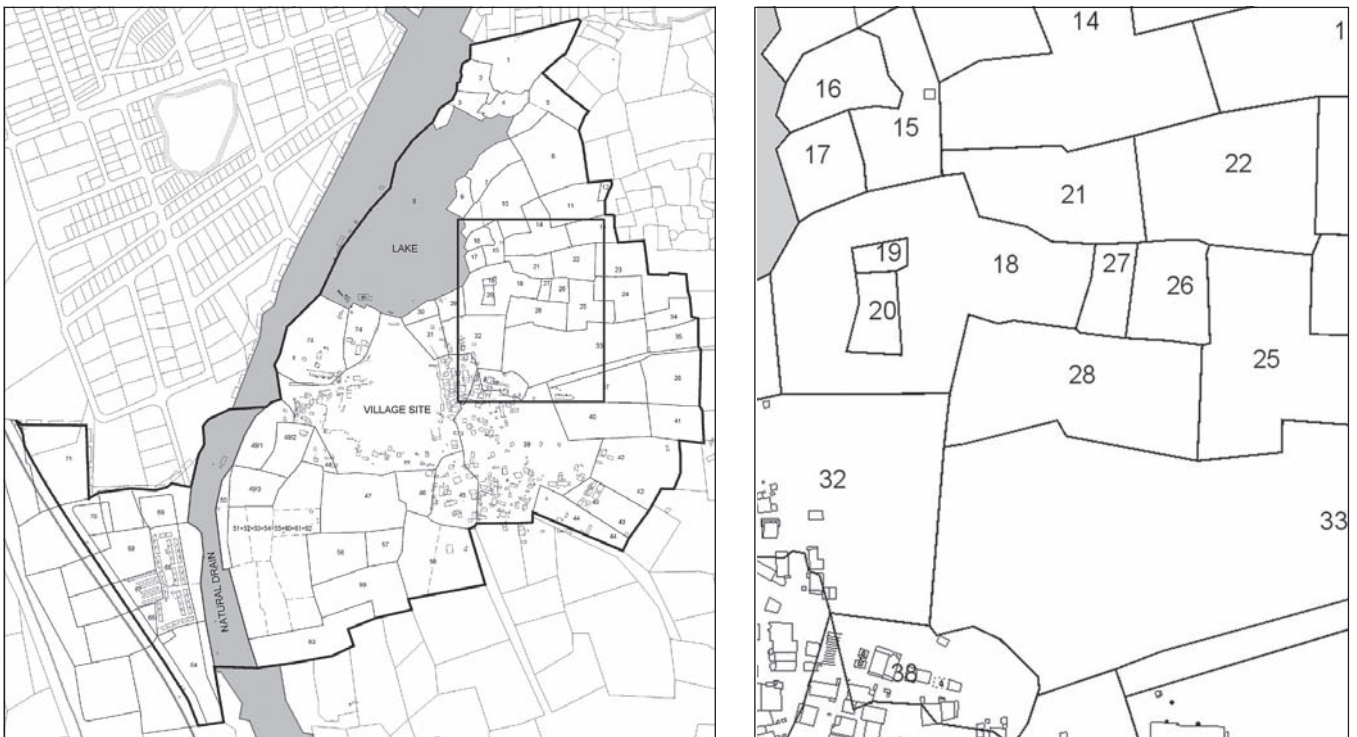


FIGURE 24.5: TPS area with the Boundary and OP Plan

Source: EPC Development Planning and Management (EPCDPM).

drawn up on the OP Map. Following this, the subsidiary road network is designed and drawn up. While doing this, the planner has to envision the future urban character of the area and keep a number of issues related to planning, transportation, and urban design in mind. Efficiency of the road network (that is, proportion of the land used up for the road network) is also a key parameter governing the design of the network of roads. Figure 24.6 shows the road network for the TPS.

Plots for Public Use

Following determination of the road network, plots for a variety of public uses such as schools, parks, health facilities, and housing for economically weaker sections are drawn up. Increasingly, plots are also being set aside for the Development Authority’s land bank¹⁴—to be sold to raise finances for infrastructure development. A key design concern at this stage is to keep the total proportion of land allotted for public plots within the prevailing norm. Figure 24.6 shows the road network and amenity plots in the TPS.

Tabulating Ownership and Original Plot Details

The ‘F Form’ as it is called, shown in Figure 24.7, is the key statutorily prescribed format in which operative information regarding the TPS is tabulated. First, ownership details of each OP are tabulated, followed by its area (see Figure 24.7A). Based on available land sales data from within the TPS area, each OP’s value is estimated and tabulated. While doing so, increments in value, expected on account of the implementation of the TPS, are not taken into consideration.

ESTIMATING THE COST OF DEVELOPMENT, VALUATION, AND COMPUTING BETTERMENT CHARGES

Tabulating Final Plot Sizes

At this stage, the total land area used up for roads and plots for public uses is calculated as a proportion (percentage) of the total land area of the TPS. This is a key figure usually predetermined. Each OP’s area is reduced by this proportion and tabulated as the area of the ‘final plot’ (FP) to be allocated to each OP holder. In other words,



FIGURE 24.6 Road Network and Amenity Plots in the TPS

Source: EPC Development Planning and Management (EPCDPM).

¹⁴ This being a relatively recent practice, a clear policy for use of land banks has not emerged as yet. The Ahmedabad Urban Development Authority has begun auctioning such plots to raise finances for infrastructure development.

FIGURE 24.7: F Form
 Form F (Rule 21 and 35)
 Draft Town Planning Scheme No. 90 (Vinzol-2), Ahmedabad, Redistribution and Valuations Statement
 The Gujarat Town Planning and Urban Development Act-1976

No.	Name of the Owner	Tenure	Survey		Original Plot			Final Plot			Contribution (+) or Compensation (-) under Sec. 80 Column 9(b)-Column 6(b)	Increment Sec. 78) Column 10(a)-Column 9(a)	Contribution Sec. 79) 50% of Column 12	Addition to (+) or deduction from (-) owner being the addition of Columns 11, 13, 14	Net demands from (+) or by (-) owner being the addition of Columns 15, 16				
			No.	No.	Area in	Value in Rupees	No.	Area in	Value in Rupees	Without reference to value of structures						Inclusive of structures	Without reference to value of structures	Inclusive of structures	
1	2	3	3(a)	4	5	6(a)	6(b)	7	8	9(a)	9(b)	10(a)	10(b)	11	12	13	14	15	16
1	Karshanbhai Gandabhai, Ramanbhai Jeevanbhai	457/1 Paiki	21904	547600	547600	547600	547600	1/1 1/2	6133 7010	328572	328572	2821208 3329665	6150872	-2190028	5822300	2911150			2692122
2	Gajtaraben wd/o Punjali Sartanji, Gitaben d/o Punjaji or Collector, Ahmedabad for GOG	RT 373	4755	118875	118875	118875	118875	2	2853	71329	71329	1355246	1355246	-47546	1283918	641959			594413
3	Gauchar, Vinzol Gram Panchayata	374 375	1416 3035 4451	111275	111275	111275	111275	3	2670	66762	66762	1228416	1228416	-44513	1161654	580827			536314
4	Keshavlal Ishwarlal, Baldevdas Ishwarlal	372	3845	96125	96125	96125	96125	4	2307	57677	57677	1107403	1107403	-38448	1049726	524863			4866415
5	Prafull Harishankar and Bhikhaji Manuji V.K. of Lalji Maharaj, Samarsang Ramsingh, Anilkumar Shankarlal	614 371	6576 3035 9611	240275	240275	240275	240275	5	5767	144172	144172	2912264	2912264	-96104	2768093	1284046			1287943
6	Prafull Harishankar and Bhikhaji Manuji V.K. of Lalji Maharajm Samarsang Ramsingh, Anilkumar Shankarlal Mahipatsang Manuji or Collector, Ahmedabad of GOG	RT 370/1 370/2	17705	531150	531150	531150	531150	6	10623	286828	286828	5598453	5598453	-244322	5311625	2655813			2411490
7	Bharatsingh Raghujii, Virubhai Raghujii or Collector, Ahmedabad of GOG	RT 369	6779	169475	169475	169475	169475	7	4069	101715	101715	1932585	1932585	-67760	1830870	915435			847675

(A) (B) (C)

Fig. 24.7 (Contd.)

Fig. 24.7 (Contd.)

1	2	3	3(a)	4	5	6(a)	6(b)	7	8	9(a)	(9b)	10(a)	10(b)	11	12	13	14	15	16
8	Waste Land of Talav, Vinzol Gram Panchayata	363	8	81241	2031025	2031025	2031025	8	81241	2031025	2031025	2031025	2031025	0	0	0		0	
9	Hamantsang, Jesangji or Collector, Ahemdabad for GOG	RT 368	9	2833	70825	70825	70825	9	1700	42491	42491	807324	807324	-28334	764834	382417		354083	
10	Yashvant Kanjibhai, Jashvant Kanjibhai, Raisang Kanjibhai, Jitubhai Kanjibhai, Chinubhai Kanjibhai, Laljibhai Kanjibhai, Sajanben Kanjibhai, or Collector, Ahemdabad for GOG	RT 367	10	12039	421860	421860	421860	10	8438	295317	295317	4218810	4218810	-126543	3923493	1961747		1835203	
11	Bharatsingh Raghuj, Virubhai Raghuj, Bhikhabhai Manuji or Bank of India	618	11	9004	425229	495220	495220	11	5403	162078	162078	2755321	2755321	-333142	2593243	1296622		963479	
12	Private Property of Ramsangji, Jesangji V.K. of Nikanth Mahadev or Ambalal Chaganlal	617	12	809	52585	52585	52585	12	485	26685	26685	259571	259571	-25900	232886	116443		90543	
13	Mahipatsingh Manuji	624	13	5463	273150	273150	273150	13	3278	163884	163884	1704394	1704394	-109266	1540510	770255		660989	
14	Arjanbhai Phuljibhai, Gajaraben Mobatsang, Udiben Mobatsang, Bhikhabhai Mobatsang, Manvaben Mobatsang	619	14	9409	517495	517495	517495	14	5645	310479	310479	2935436	2935436	-207016	2624958	1312479		1105463	
15	Javansingh Amarsang, Udaising Amarsang	621	15	2833	118986	118986	118986	15	1699	71372	71372	861565	861565	-47614	790193	395097		347483	
16	Ranjibhai Motibhai and Dhiruji Aluji V.K. of Nilkanth Mahadev Temple	366	16	1922	57660	57660	57660	16	1153	46129	46129	570849	570849	-11531	524720	262360		250829	
17	Javansingh Amarsingh, Udaising Amarsing or Gujrat State Co. Op. Bank	365	17	1619	5665	5665	5665	17	971	33992	33992	471027	471027	-22673	437036	218518		195844	

(A)

(B)

(C)

Notes: (A) Indicating Ownership, Original Plots and Original Plot Values;

(B) Indicating the Final Plot Values; and

(C) Indicating the Compensation and Betterment Charges.

each OP holder gets a smaller FP. The percentage of land deducted from each OP is the same as the percentage of land of the TPS used up for roads and plots for public uses. Thus, each landowner contributes the same proportion of his land for the creation of public facilities.

Delineating Final Plots

After road and amenity plots are drawn up and sizes of FPs tabulated, they are designed and drawn up. At this stage, the planner has to envision the future character of the area and reshape each of the plots. As far as it is possible, the FP is allotted in the same location as the OP; and the OP is trimmed to make it smaller. Figure 24.8 shows a drawing of the proposed road network, amenity plots, and the FPs.

Tabulating Semi-final Values and Computing Compensation

The process of valuation is continued further. A semi-final (SF) value is ascribed to each FP. Usually, this is the same as the OP value. In some instances, however, there can be a marginal change in the value of the OP—it may increase or decrease owing to the planning proposals such as zone changes, changes in plot shape, changes in the plot size, certain development control regulations, a substantial shift in plots, and proximity to features that may negatively

impact development, etc. The compensation for the land appropriated is now calculated. The compensation to be paid to each landowner is the difference between the product of 'OP value and OP area' and 'SF value and FP area.'

Estimating Cost of Infrastructure and the TPS

The TPSs infrastructure is designed and its cost is estimated. Prevailing norms are followed to set engineering standards. Infrastructure normally includes roads, street lighting, water supply and sewerage, and storm water drainage. Next, the total costs of the TPS are worked out. Apart from the cost of infrastructure, these include compensation to be paid to each landowner, administrative, and legal costs involved in preparing and implementing the TPS.

Establishing the value of FPs and Computing Betterment Charges

The total cost of the TPS is divided by the total land that is given as FPs. This gives the cost of development per unit area of land, which is then to be loaded on all FPs with some consideration to location-related advantage. The value of the FP is the sum of the cost of development and the SF value. Figure 24.7(B) shows the F Form at this point. Next, the total increment or increase in the value



FIGURE 24.8: Delineation of Final Plots in the TPS

Source: EPC Development Planning and Management (EPCDPM).

for each plot of land is worked out. This is the product of both FP value and FP area. The GTPUDA stipulates that about half of the increment can be taken by the Development Authority to finance the cost of works and administrative expenses of preparing the TPS. Taking 50 per cent of the increment in the land value from each plot and deducting the compensation to be paid for the land appropriated, the net demand or betterment charges are estimated. With this, the F Form is complete. Figure 24.7 (A+B+C) shows the final F Form.

PUBLIC PARTICIPATION AND CONSENSUAL DECISION-MAKING

Meeting of Landowners

At this stage, a public meeting of landowners is called to present the draft TPS proposal and to solicit their opinions and objections, if any. A Notice inviting all owners to attend the meeting is published in the newspapers. The meeting is held in a public venue and is conducted by the urban planning staff of the Development Authority. The objective of the meeting is to clarify the procedures and proposals of the TPS and to build consensus.

Modifying the TPS and Appropriating Land for Roads

Based on objections and suggestions raised during the landowners' meeting and on written objections and suggestions sent in by individual owners, the Development Authority subsequently modifies the TPS. Modifications are aimed at ensuring that all 'reasonable' objections are addressed. The modified TPS is sent to the state government for approval. At this stage, it is referred to as the 'Draft TPS' and upon approval, it is referred to as the 'Sanctioned Draft TPS'. After sanction, the Development Authority can take physical possession of the land designated for roads.

Appointment of the Town Planning Officer

On approval of the Draft TPS, the state government appoints a quasi-judicial officer called a Town Planning Officer (TPO) to finalize the Sanctioned Draft TPS. The TPO is supposed to systematically and individually hear each landowner on concerns regarding physical attributes of the final plot, compensation, and betterment charges being levied. The TPO is responsible for

modifying the TPS as he sees fit, finalizing it, overseeing actual demarcation of the reconstituted plots, and handing over possession of TPS plots to land-owners. On account of this, TPOs are required to be technically competent, and by custom, are selected from the pool of urban planners available with the state government.

Hearings by the TPO and Modifications

Three individual hearings are given to each landowner in the TPS. The first two hearings focus on physical proposals of the TPS, landowners are individually notified regarding the opportunity to be heard and submissions or presentations are duly recorded in writing. The TPS is modified twice and referred to as the 'Preliminary TPS'. Notice of 'Award of the Preliminary TPS' is published in local newspapers and the TPS is once again sent to the state government for its approval. After grant of approval, it is referred to as the 'Sanctioned Preliminary Scheme'. This implies that the Development Authority now owns all plots for public use. The TPO undertakes a third set of individual hearings at this stage, which are focused solely on financial issues.

Finalizing the TPS

Based on the hearings and on any clarifications or opinions sought by him from the state government, the TPO makes final modifications to the financial proposals of the Scheme. The TPS, thus modified, is referred to as the Final TPS, which is notified as the 'Award of the Final TPS' in the local papers. Appeals against the Final TPS can only be made in the Board of Appeals constituted for the purpose by the state government. Once appeals are resolved, the state government is required to sanction the Final TPS within three months.

Why does the Two Stage DP-TP Mechanism Work?

Anyone trying to first understand the two stage DP-TP mechanism¹⁵ invariably finds it to be complicated, tedious, unwieldy, long, and ultimately unusable. Indeed, it is a tedious process. Many reforms are urgently necessary.¹⁶ However, even with all its flaws, it has been and remains a very effective planning, infrastructure development, financing, and implementation tool and the best argument in its favour is simply that it works. This can be clearly

¹⁵ As explained above, this is the how the process whereby a city-wide development plan is followed by a number of smaller area TP Schemes is locally referred to.

¹⁶ The authors have recently completed a detailed, World Bank- funded study of urban land management and planning in Gujarat for the Urban Development and Urban Housing Department of the state government, 'Streamlining Urban Planning and Land Management Practices, 2008', which identifies key institutional and legislative reforms required to improve the Development Plan and TPS processes.

seen in that the DP–TP Mechanism has been used for managing Ahmedabad's growth over the last century, on account of which the city not only has an effective road network but manages to build infrastructure before urban expansion takes place in the periphery.

Managing urban expansion in the periphery of cities is only one use to which the DP–TP mechanism can be put. Considered in abstraction, it can easily be seen that the DP process is a powerful strategic planning tool and that the TPS process is a general purpose techno-legal mechanism for delimiting an area and, within it:

- reconstituting properties;
- appropriating land;
- levying charges for infrastructure provision and for other costs;
- levying betterment charges;
- formally informing landowners of proposed plans;
- compensating dispossessed landowners;
- seeking a majority consent and recording their suggestions and objections; and
- for empowering quasi-judicial officers for redressing grievances.

The 'Town Planning Scheme' mechanism is, therefore, a powerful and well-coordinated statutory tool for simultaneously preparing a detailed land appropriation, land readjustment and infrastructure-building plan, a mechanism for financing and implementing the plan, and a mechanism for involving landowners in the process. Being a general purpose mechanism, it can and has been used for addressing a variety of urban land appropriation and infrastructure provision problems. Just in the last decade, it has been used, for example, to reorganize properties to build new roads within the extremely dense-walled city of Bhuj after the 2001 earthquake; to appropriate approximately 4 sq. km of land to build a 60 m wide and 76 km long ring road circling Ahmedabad¹⁷; to appropriate 150 ha of land for an educational campus near Gandhinagar¹⁸; and to finance and build infrastructure while regularizing a swathe of irregular construction.¹⁹

The real question is not whether the versatile DP–TP mechanism works. Nor is it whether it should be extensively used or not. The interesting question is: why does the DP–TP mechanism work? Most people attribute the success of this method to Gujarati pragmatism. While

Gujarati pragmatism, to the extent that it really exists, may well make it work better or faster. In our view, success of the DP–TP mechanism results from the following:

1. The DP–TP mechanism is specified in robust-enabling legislation. The GTPUDA's roots can be found in the Bombay Town Planning Act of 1915. It has been continually improved, and by now, is well tested in court. Further reforms are underway.
2. The mechanism promotes and enables the Development Authority to think and plan at both the macro-level and at the micro level. The bane of a lot of infrastructure planning is a geographically focused view. The DP–TP mechanism requires planners to think at a city-wide level and then allows them to undertake very detailed planning.
3. This mechanism is a spatial planning tool that promotes a comprehensive approach. When developing a spatial plan, a planner is forced to simultaneously deal with all the complexities of an urban area—roads, variety land uses, buildings, infrastructure, traffic, rights of way, and so on. Thinking in a sector-based engineering fashion in the urban context and not anticipating how one piece of infrastructure is linked with the rest and how all the infrastructure connects with living environments in an area is often the main reason why projects fail.
4. This mechanism is simultaneously one of planning and implementation. Not only does it allow the Development Authority to plan on paper, but also provides it tools to raise finances, distribute cost, appropriate land and implement its proposals. Moreover, it provides considerable flexibility since costs and benefits can be valued and allocated in the form of land, location, money, or development rights.
5. It enables coordination across an array of very different tasks. No doubt, in the absence of such a mechanism, many of the tasks described above—to transform peripheral agricultural land for urban use—can be accomplished using existing legislations. Private property can be appropriated using the Land Acquisition Act. Land for low-income housing can be appropriated using the Land Ceiling Act. Municipal legislation allows levying of betterment charges. Revenue laws specify mechanisms for reordering property holdings. However, it would be extremely difficult to

¹⁷ Shirley Ballaney, 'A Participatory Approach to Creating Urban Infrastructure' Sardar Patel Ring Road, Ahmedabad, 2003.

¹⁸ TPS No. 19, Raysan Randesan and TPS 20 Koba, prepared for the Gandhinagar Urban Development Authority, prepared by EPC Development Planning and Management Pvt Ltd (EPCDPM).

¹⁹ TPS No. 97, Naroda North, prepared for Ahmedabad Municipal Corporation, prepared by Environmental Planning Collaborative (EPC).

work with such disparate laws. A number of different authorities and departments would have to work in tandem while being governed by both different government departments and legal clocks. Moreover, many of these legislations are widely considered to be clumsy, outdated, impractical, and unfair. Solving complex urban problems requires a single legal mechanism, under a single control, working towards a single objective.

6. The DP–TP mechanism is simultaneously a technical and legal mechanism. Speaking in more broader terms, it is simultaneously a technical and a governance mechanism. Using it requires paying attention to both technical issues such as engineering, finance, and urban design and governance issues such as deliberative decision making, consensus building, and redressal of grievances.
7. This mechanism is relatively inexpensive. Land does not have to be paid for and infrastructure, planning, administrative (and indeed all other) costs can be realized from the increments in land value. The Development Authority can be simply a ‘no-profit-no-loss’ facilitator.
8. The mechanism works because professionally competent urban planners are available and because they have a relatively strong and institutionalized role for city planning in the local government.
9. A profoundly pragmatic political approach underpins this mechanism. Property rights are respected, costs are distributed, and all owners lose the same proportion of land. Benefits are shared and owners keep a substantial portion of developed land and increment in land value. Planning seeks to use the land market and not thwart it. Landowners are kept involved in

the planning process and their grievances are heard and redressed.

10. Ultimately, the mechanism works because it is widely perceived to be fair and equitable.

Summary and Conclusions

To sum up, the chapter strategically highlights that the Gujarat Town Planning and Urban Development Act (GTPUDA), 1976 provides for an effective two-stage techno-legal process for urban planning and implementation through the ‘DP–TP Scheme’ mechanism. The first stage involves preparation and ratification of a strategic, city-wide Development Plan. The second stage involves preparation and implementation of one or more TPSs to realize proposals of the Development Plan. This stage is quite elaborate and involves a wide range of activities such as delimiting an area, and within it, reconstituting properties, appropriating land, levying betterment charges to finance infrastructure provision, compensating dispossessed landowners, formally informing landowners of proposed plans, seeking a majority consent and recording their suggestions and objections, and empowering quasi-judicial officers for redressal of grievances. The TPS process is thus a powerful and well-coordinated statutory tool, which involves not only a detailed land appropriation, land readjustment, and infrastructure development plan but also a mechanism for financing and implementing the plan, thus involving the landowners in the process. There is evidence that the use of this mechanism to appropriate land can be a more effective instrument than the process defined by the Land Acquisition Act, 1894. This mechanism, which currently works as an instrument of only town planning, can potentially, be used for other infrastructure projects as well.

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25 Land Saving Technology and Systems for Urban Infrastructure

Samantha Bastian, Dhiraj Shetty, and G. Raghuram

Introduction

Land, being a scarce resource particularly in urban areas, plays a key role in shaping the physical infrastructure in any society. Limited availability of land in urban areas is typically a constraint (constraint indicates binding) in designing any new infrastructure. The high premium associated with land and the related rehabilitation and resettlement issues, together with the fact that use of a piece of land for an urban infrastructure project precludes opportunities for future use of the land for any other use, further strengthens the case for efficient land use in the design of infrastructure projects.

It is no surprise that with increasing urbanization, the stress on urban infrastructure in India has continued to rise. This is true for physical infrastructure such as roads, public transportation, and power as well as for social infrastructure in the areas of education and health. Use of eminent domain powers continues to be a contentious issue in India. In recent years, protests against the new infrastructure projects have run into significant delays and cost overruns. Modern technology and management systems can significantly reduce demand for land for building urban infrastructure. As urban India turns towards developing and renewing its infrastructure, it is imperative that we embrace the most modern technologies deployed around the world to conserve land and optimize its utility.

The aim of this chapter is to illustrate some examples of modern land-saving technologies and management systems, particularly in the transportation sector, where large amounts of land and capital resources are utilized.

Japanese Best Practices

India can gain from lessons learned from international experience, especially in countries with limited supply of land, such as Japan.

Japan is an archipelago of over 3,000 islands, with the world's 10th largest population. Japan's population density of 343 per sq. km is comparable to that of India (345 per sq. km).¹ Land use patterns in Japan show a high level of urban concentration. About 45 per cent of Japan's population lives in the largest three metropolitan areas of Tokyo, Osaka, and Nagoya. The Tokyo prefecture (district) has a population density of 5,751 per sq. km.²

In terms of infrastructure, Japan has 23,474 km of railways, 1,183 million km of highways, and 176 airports. Land constraints do not appear to have hindered infrastructure growth. Indeed, in spite of high levels of infrastructural growth and development, Japan has maintained about 70 per cent of its land area under forest cover and open space.³

Japanese culture is in itself space-saving. The *futon*, a traditional folding bed and other space-saving furniture are examples of this cultural attribute. Japan was among the earliest to have petrol pumps with the delivery pipe drawn from the roof, saving space on the ground. (Some pumps in India have recently adopted this, especially in the metro cities). In addition, Japan has a weak eminent domain regime, making land acquisition difficult; this has made otherwise costly land-use innovations viable. Following are some examples of innovations in

¹ United Nations (2006), *World Population Prospects*, The 2006 Revision. For Japan, based on Population Census.

² Chapter 2, Statistical Handbook of Japan, Statistical Bureau, Ministry of Internal Affairs and Communication, Government of Japan, available at <http://www.stat.go.jp/english/data/handbook/c02cont.htm>

³ Available at http://www.gim-international.com/issues/articles/id1014-GPS_and_Forestry_in_Japan.html

infrastructure development, induced by both land- saving policy and high land prices, which have reduced the demand for land.

MAN-MADE OFFSHORE AIRPORTS

The construction and expansion of Narita International Airport saw violent opposition. The conflict revolved around issues related to the tradition of land-ownership in traditional Japanese culture. Therefore, in the next round of airport development, Japan opted for an expensive but socially acceptable approach of reclaiming islands and constructing man-made offshore airports. Kansai International Airport was the first such airport. The construction started in 1987 and the airport became operational in 1994. This was followed by Chubu Centrair (as shown in Figure 25.1) International and Kobe International, which started operations in 2005 and 2006, respectively. The only other airports built on artificial islands are Hong Kong and Macau, both in China.



Chubu Centrair

FIGURE 25.1: Chubu Centrair International Airport

Source: http://en.wikipedia.org/wiki/ch%C5%ABbu_Centrair_International_airport

They are stacked side by side with two units vertically. The number of capsules per hotel range from 50 to over 700.

CAPSULE HOTELS

Initiated in 1979, capsule hotels are a system with extremely dense occupancy. Designed for travelling businessmen, this system has not gained popularity outside Japan. The capsule is a modular plastic or fibreglass block roughly 6 ft by 3 ft by 4 ft (as shown in Figure 25.2).

SKY CITY 1000

Sky City 1000 is a super tall skyscraper project initiated by Takenaka Corporation, aimed to end congestion and lack of green space in Tokyo. It came about as a consequence of high land prices in Tokyo. The design proposes a 3,300 ft tall edifice to house 35,000 residents.⁴

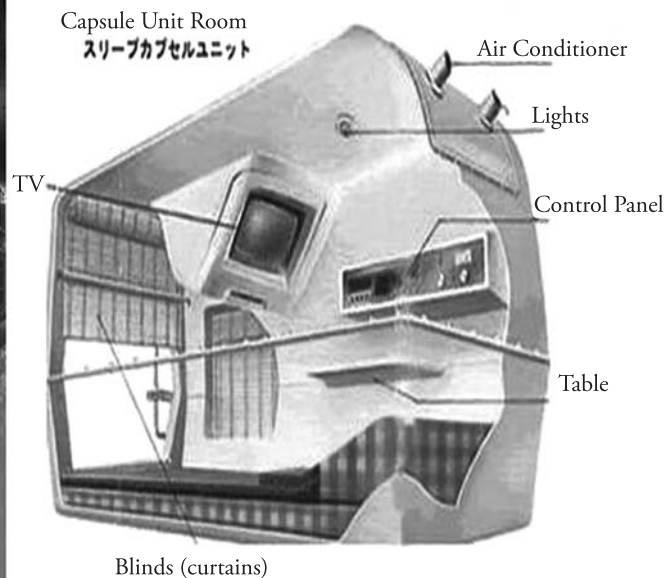


FIGURE 25.2: Capsule Hotels

Source: <http://www.yesicanusechopsticks.com/capsule/>

⁴ Website: http://www.takenaka.co.jp/takenaka_elservice_elsolutions/05.html

AUTOMATED MULTI-LEVEL PARKING

In Japan, the cost of maintaining a car, which is a relatively more land-intensive mode of transport, is high. Fuel taxes are double that of the USA and automobile tax levies and vehicle inspection fees amount to about \$2,000 annually.⁵ Multi-level and automated car parking (as shown in Figure 25.3a) using minimal land originated in Japan and has picked up in many other countries. In Tokyo, efficiency in land use is evident from the large use of bicycles (as shown in Figure 25.3b) [to the extent of 25 per cent]. An automated underground bicycle parking system at Tokyo's Kasai Station accommodates

9,400 bicycles and it takes only 23 seconds to retrieve a bicycle.

SHINKANSEN

Shinkansen, a high-speed rail line, has a system built entirely from the ground up on elevated tracks without road crossings. Started in 1964 for the Tokyo Olympics, the network length is 2,459 km.⁶ This technology is also seen in Taiwan, China, and the UK.

Some key lessons from Japan are as follows:

- in developing urban infrastructure, there is a need to shift focus from capital-saving technologies towards

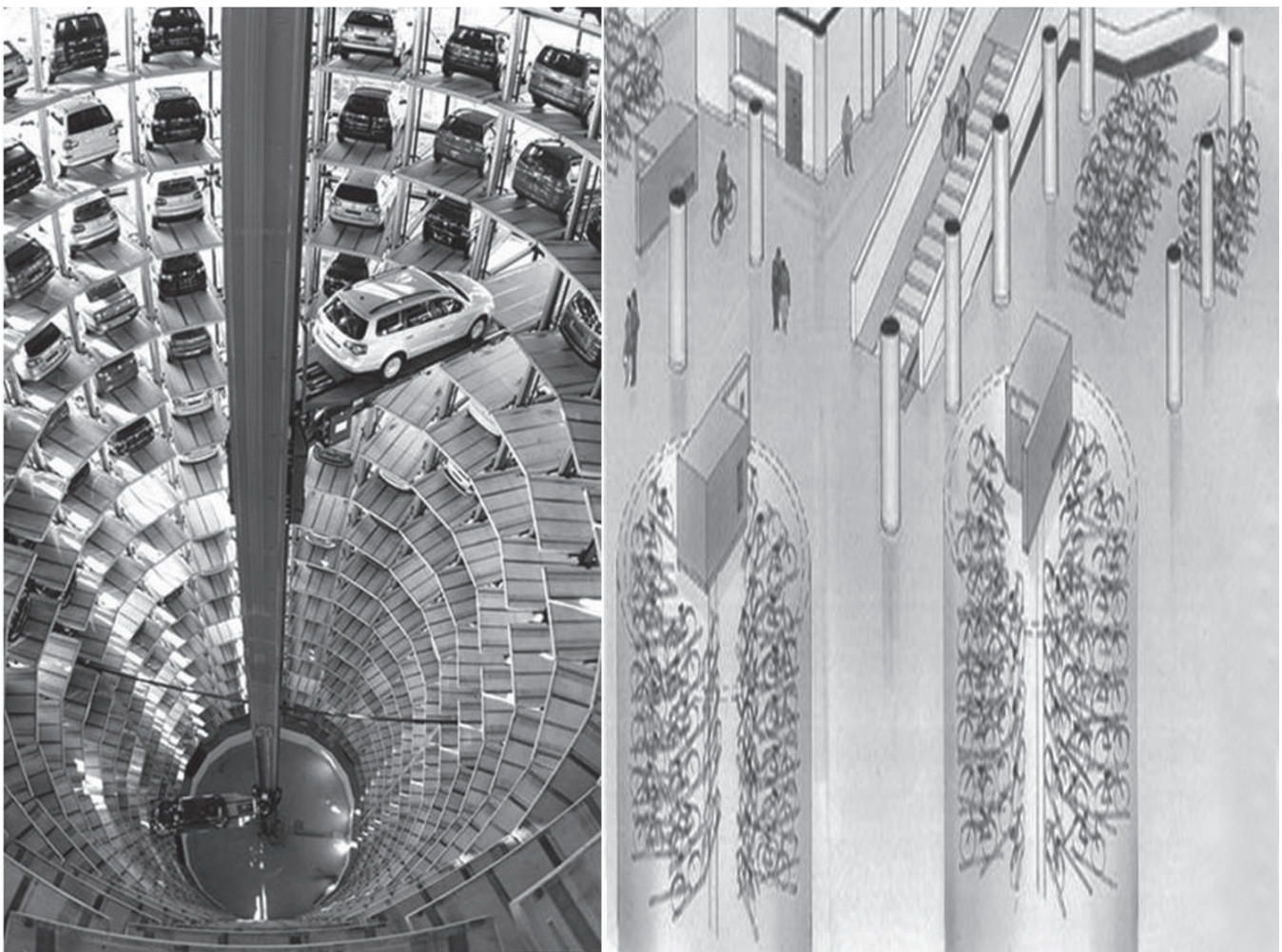


FIGURE 25.3(a) and (b): Automated Multi-level Parking

Source: <http://www.polak.ro/multilevel-automatic-car-park-embeded-system.html>

⁵ Bicycle Statistics: Usage, Production, Sales, Import, Export, International Bicycling Fund, available at <http://www.ibike.org/library/statistics-data.htm>

⁶ http://www.japanraildirect.com/index_trains_shinkansen.cfm

land-saving technologies, as land becomes relatively more scarce than capital;

- the basic approach should be to utilize existing capacity of urban infrastructure to its fullest before appropriating land for building new infrastructure; and
- cities should maintain adequate levels of open space and green cover to provide quality of life for urban dwellers.

Technology-based Solutions for Optimizing Land Use

PARKING

Increasing number of vehicles on the roads not only add to congestion, but also to parking woes. Most of the vehicle users resort to street parking, further narrowing the lanes available for moving traffic.

There is a need for building managed parking facilities in urban cities to cope with the rising demand for vehicles in land-scarce situations. Such facilities can be used for office parking during the day and residential parking overnight (to avoid overnight street parking). The Urban

Local Bodies (ULBs) in some cities have started building multi-level parking facilities to address the parking problem. However, the trick lies in not just building the infrastructure but also putting in place a mechanism that would encourage the use of such parking facilities. The parking fees charged by the ULBs for street parking have not been revised for decades. These fares are heavily subsidized and do not adequately reflect the opportunity costs of occupying that piece of real estate for that period of time. On the other hand, since building a parking facility requires significant investment, Public-Private Partnerships (PPP) are typically favoured.⁷ This would mean that to recover investments, the private partner will have to charge a fee (mutually agreed upon in the PPP contract), which will definitely be higher than what is charged by the ULBs for street parking, thus leaving no incentive for users to switch to such parking facilities. Unless the ULBs take corrective measures to prohibit street parking wherever possible, and in areas of high demand, revise the fee structure to better reflect the opportunity costs, parking structures would not be feasible.



FIGURE 25.4: Shinkansen

Source: <http://en.wikipedia.org/wiki/Shinkansen>

⁷ Operating and Maintaining 250 car parking spaces at Cr2–Nariman Point.

Significant amount of road can be regained by taking parked cars off the streets. This can in turn help in effectively increasing the capacities of existing roads, with minimal investment and no new acquisition of land. If adequate real estate cannot be allotted to develop multiple-level parking, one option is to deploy modern hydraulic parking structures (stack parking) that facilitate multi-level staggered parking. Such structures are comparatively inexpensive and extensively used in some of the most congested cities in the world such as downtown Manhattan, London, Hong Kong, and at airports. Such parking structures would be quite popular in commercial areas which have a cyclical nature of parking traffic. In cities such as New York, the Department of Transportation, in collaboration with private partners, is looking into developing systems that disperse real-time parking information to users.⁸

PUBLIC TRANSPORTATION

Data in respect of the six metropolitan cities in India, for example, show that the number of registered motor vehicles has grown four times faster than the population in these cities during the period 1981 to 2001, while road space has barely increased.⁹ With rising disposable income and inadequate public transportation systems, commuters have been switching from buses to private cars and cyclists to motorcycles. To curb this trend, and possibly to reverse it, it is necessary to make public transport systems more widespread and convenient in terms of travel comfort and speed.¹⁰ This is so because mass public transportation systems carry more passengers per unit of space as compared with private vehicles. For example, a bus carrying 40 people is allocated only two and a half times the road space that is allocated to a car carrying only one or two persons (National Urban Transport Policy). Public transport systems such as Bus Rapid Transit System (BRTS), Metro, and Monorails not only help alleviate congestion and pollution, but also help in effectively reducing demand for more capacity, which in turn reduces the need to appropriate more land. Of the various technologies available for public transportation, BRTS is becoming increasingly popular in India because of its relatively low cost and flexibility in implementation. It essentially involves a

dedicated bus lane separate from all other traffic modes, high frequency buses, greater adherence to schedule, and technologies that facilitate real-time tracking of buses, passenger information system, and priority treatment of buses at intersections. The BRTS in Bogota, Colombia, significantly helped in reducing the number of private vehicles plying during peak hours and reduced travel time by 32 per cent and emissions by 40 per cent at the same time.¹¹ When choosing amongst alternate public transportation systems, effective utilization of land and the footprint of the proposed projects must be considered. For example, in densely populated areas, monorail systems have an edge over light rail transit systems in terms of minimal footprint/space requirements.

Another aspect that needs to be taken into account is the opportunity cost of building permanent infrastructures above the ground. Most of the cities in advanced countries (such as London and New York) have metro lines that run underground within city limits, thus placing minimum footprint at ground level. In India, most of the upcoming metro structure is above the ground, because the capital costs involved in underground metro are comparatively high. However, while assessing the desirability of metro systems above the ground vis-à-vis underground, one must take into account the costs such as displacement costs and the restrictions on future development in the city, which are involved in putting a permanent structure above the ground level. Further, the ULBs should have a long-term master plan that projects all future physical infrastructure requirements, so that the presence of one does not hinder the design and development of others.

Conclusion

The issues mentioned above are only some of the many that can be looked into. There are numerous such examples where innovative approaches can lead to significant savings in demand on land. It is critical that the concerned authorities adopt such measures in their efforts to develop infrastructure in the country. Land in India, particularly in the urban areas, is increasingly becoming a premium resource, and therefore, public policies need to be supportive of more optimal utilization of land and land-saving innovations should be encouraged.

⁸ Integrated Parking Solutions, Inc. in Cooperation with NYCDOT, Parking Carma, and Econolite provides a real-time smart parking application demonstration, available at <http://news.moneycentral.msn.com/ticker/article.aspx?Feed=BW&Date=20081002&ID=9223;4> <http://www.mmrdamumbai.org/docs/Notice%20Pay%20&%20Park%20%20at%20cr2.doc73&Symbol=IGPK>

⁹ National Urban Transport Policy, Ministry of Urban Development, Government of India.

¹⁰ <http://www.idfc.com/pages/policyadvisoryquarterly/Policy%20Group%20Quarterly%20No1.pdf>

¹¹ BRT system reduced travelling time 32 per cent, reduced gas emissions 40 per cent, and reduced accidents 90 per cent; available at http://www.c40cities.org/bestpractices/transport/bogota_bus.jsp

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Section VI

LEVERAGING LAND FOR DEVELOPMENT

26 Unlocking Land Values to Finance Urban Infrastructure^{*†}

Land-based Financing Options for Cities[‡]

George E. Peterson

Raising capital to finance urban infrastructure is a challenge. One solution is to ‘unlock’ urban land values—such as by selling public lands to capture the gains in value created by investment in infrastructure projects. Land-based financing techniques are playing an increasingly important role in financing urban infrastructure in developing countries. They complement other capital financing approaches such as local government borrowing, and can provide price signals that make the urban land market more efficient.

Land has a long history as an instrument of infrastructure finance. When Baron Haussmann rebuilt Paris during the Second Empire, he used public powers to acquire the land that was converted into grand avenues as well as excess land that lay along the path of reconstruction. The excess land served as collateral for borrowing that financed new roadways, water supply, and natural gas and sewer lines. Gains in the value of city-acquired land were used to repay the public debt.

Land-based financing is now becoming an important element of urban infrastructure finance in developing

countries, especially where cities are growing rapidly. Table 26.1 summarizes several recent land-based financing arrangements and compares their magnitude with other sources of urban capital investment funds or total capital spending. The scale of land-based financing is surprisingly large.

As part of the capital financing mix, land-based financing has significant practical advantages. Most techniques generate revenue upfront, reducing dependence on debt and the fiscal risks that debt financing can introduce. Land sales and one-time development charges can also be easier to administer than property tax systems that require periodic valuations of all taxable property.

Land-based financing of infrastructure can be divided into three categories: developer exactions, value capture, and land asset management.

Developer Exactions

Developer exactions require developers to go beyond installing infrastructure facilities at their own site. They oblige a developer to finance part or all of the costs of

* This paper was prepared in the spring of 2008. The global economic crisis has changed real estate conditions in many countries, but the principles of land-value capture remain valid

† This article is based on a book entitled *Unlocking Land Values to Finance Urban Infrastructure* authored by George E. Peterson and published by the World Bank and the Public–Private Infrastructure Advisory Facility (PPIAF) Trends and Policy Options Series No. 7. It was produced through support by the World Bank Urban Unit and the PPIAF. The original article was published in PPIAF’s Gridlines series and can be found on website www.ppiaf.org

‡ George E. Peterson is a Consultant to the World Bank and other international institutions in municipal finance and infrastructure investment. Before retirement, he was Senior Fellow in International Public Finance at the Urban Institute, Washington, D.C., and before that director of the Public Finance Centre of the Urban Institute.

TABLE 26.1
Selected Cases of Land-based Financing in Developing Countries

Location and activity	Amount and use of proceeds	Comparative magnitude
Cairo, Arab Republic of Egypt: Auction of desert land for New Cities (May 2007, 2,100 hectares).	\$3.12 billion, to be used to reimburse costs of internal infrastructure and build highway connecting to Cairo Ring Road.	117 times total urban property tax collections in country; equal to 10 per cent of national government revenue.
Cairo, Arab Republic of Egypt: Private installation of 'public' infrastructure in return for developable land (2005–present).	\$1.45 billion of private infrastructure investment, plus 7 per cent of serviced land turned over to government for moderate-income housing.	Will provide infrastructure for a range of basic services covering more than 3,300 hectares of newly developed land, without financial cost to government.
Mumbai, India: Auction of financial centre land (January 2006, November 2007, 13 hectares) by Mumbai Metropolitan Regional Development Authority (MMRDA).	\$1.2 billion, to be used primarily to finance projects in Mumbai's metropolitan transportation plan.	10 times MMRDA's total capital spending in fiscal 2005; 3.5 times total value of municipal bonds issued by all urban local bodies and local utilities in India since 1995.
Bangalore, India: Planned sale of excess land to finance access highway to new airport built under public-private partnership.	\$500 + million on hold; land will be used instead for ministry buildings and government-built industrial space.	Minimum sale proceeds were projected to considerably exceed costs of highway construction and acquisition of right-of-way.
Istanbul, Turkey: Sale of old municipal bus station and former administrative site (March and April 2007).	\$1.5 billion in auction proceeds, to be dedicated to capital investment budgets.	Total municipal capital spending in fiscal 2005 was \$994 million. Municipal borrowing for infrastructure investment in 2005 was \$97 million.
Cape Town, South Africa: Sale of Victoria and Albert Waterfront property by Transnet, the national transportation authority (November 2006).	\$1.0 billion, to be used to recapitalize Transnet and support nationwide investment in core transport infrastructure.	Sale proceeds exceeded Transnet's total capital spending in fiscal 2006; equal to 17 per cent of 5-year transport investment plan prepared in 2006.
Bogotá, Colombia: Betterment levy.	\$1.0 billion collected during 1997–2007, and \$1.1 billion planned for 2008–15, for financing city street and bridge improvement programme.	Betterment fees finance 50 per cent of street and bridge improvements. Other planned sources of financing: \$50 million International Finance Corporation loan; \$300 million international, peso-linked bond issue.

Source: Peterson (2009).

external infrastructure needed to deliver public services to the site. Thus, developers are required to build subdivision roads and also help pay for major access highways to the area. They may be required to help pay for the trunk lines that deliver water and for wastewater removal and treatment systems. In some cases, investment responsibilities are assigned through formal public–private partnerships. In the New Cities area outside Cairo, a private developer is undertaking \$1.45 billion of infrastructure investments including many that are traditionally the public's responsibility, in return for free allocation of desert land (see Table 26.1).

Developer exactions have become one of the main mechanisms for increasing private investment in 'public' infrastructure. Developers recover the cost of investment

when they sell the developed land. Much potential remains for this form of land-based financing. Consider the United States, where impact fees typically are designed to require that growth pave its own way when it comes to infrastructure costs. A sub-division developer may be required to pay as much as \$35,000 per standard housing unit to finance the off-site infrastructure costs associated with growth.

Best practice impact fees are based on urban development plans that identify the incremental infrastructure costs associated with development at different locations within the urban region. Formal analyses of this type may be impractical in developing countries given their planning and data requirements. But simple versions of development fees will likely be used to shift larger shares of public infrastructure costs to private developers and

ultimately to the purchasers of new housing and new business sites.

Value Capture

Value capture builds on the principle that the benefits of urban infrastructure investment are capitalized into land values. Because public investment creates the increase in land values, many land economists have argued that the government should share in the capital gain to help pay for its investment. Public authorities have used a variety of instruments to capture the gains in land value created by infrastructure investment. Betterment levies, which impose a one-time tax or charge on gains in land value, are one such instrument. Most countries in the world have experimented with betterment levies at some point, typically taxing away 30–60 per cent of the gain in land value attributable to infrastructure projects.

Under modern conditions, betterment levies have proved difficult to administer. Attempts to identify with precision, parcel-by-parcel, the gains in land value resulting from public works projects have proved both ambitious and contentious. And the tax rates, at 30–60 per cent or even higher, are too high to impose unless accuracy in measuring the tax base can be assured. For this reason, betterment levies have fallen out of favour as a significant revenue source, often in the face of court judgements challenging the assessment process.

Colombia has for long used a form of betterment levy, *contribución por mejoras*, to finance public works. But reliance on the scheme declined sharply in the 1980s and 1990s, for the same reasons found elsewhere. Gains in land value due to infrastructure projects were difficult to estimate. The process involved high administrative costs and led to countless legal disputes. In the past several years, however, Bogotá has simplified its approach and converted the betterment levy into a general infrastructure tax more loosely associated with gains in land value.

Rather than estimate parcel-by-parcel, the gains in land value due to individual investment projects, Bogotá has packaged its street and bridge improvement programme into a city-wide bundle of public works projects, all financed in part through a city-wide betterment fee that is broadly differentiated by benefit zone and other factors. Thus, Bogotá has been able to revive *valorización* as an effective infrastructure financing tool. The approach is being replicated throughout Colombia.

Value capture through public land sale is another vehicle for recouping public infrastructure costs. It involves the sale of land whose value has been enhanced by infrastructure investment. If the public sector owns the

land, it can internalize the benefits of public investment and capture the gain through land sales. China has financed a large part of its urban infrastructure investment in this manner. For a major urban highway project, a municipality can transfer the land surrounding the highway to a public–private development corporation. The corporation borrows against the land as collateral, finances highway construction, then repays debt, and obtains its profit by selling or leasing land whose value had been enhanced by access to the new highway.

The potential for recouping infrastructure costs from increases in land values is illustrated by metropolitan Recife, Brazil.

Figure 26.1 shows how land values are affected by different types of urban infrastructure investments, at varying distances from the City Centre. The author estimates that, on an average, investing in wastewater removal leads to gains in land value 3.03 times the cost of investment, paving roads to gains 2.58 times the cost, and providing piped water supply to gains 1.02 times the cost.

Land Asset Management

Value capture seeks to recover gains in land value specifically attributable to infrastructure investment. Land asset management recognizes that the balance sheets of many public entities are already top-heavy with urban land and property assets. At the same time the cities in which the

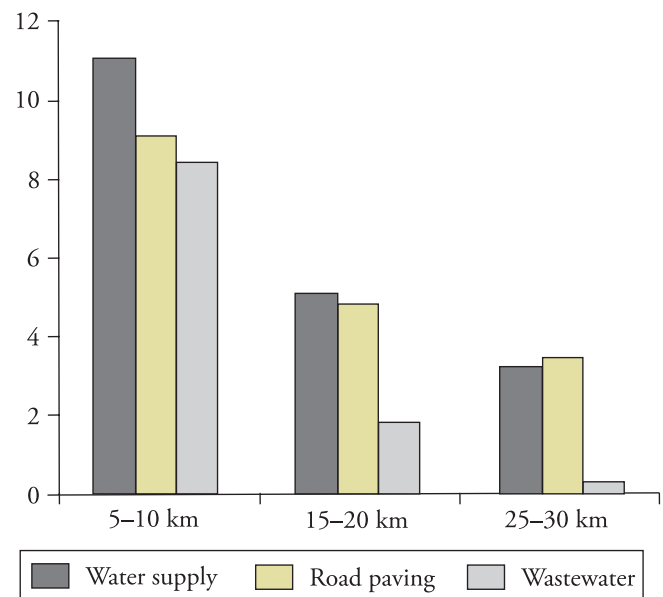


FIGURE 26.1 Infrastructure Investments in Recife, Brazil, Create Clear Gains in Land Value. Gains in Value by Distance from City Centre (US\$ square metre)

Source: Smolka (2007).

property is located suffer acute infrastructure shortages. Under these conditions, it can make sense for public authorities to exchange land assets for infrastructure assets. They do this by selling or leasing publicly owned land and using the proceeds to finance infrastructure investment. Rather than using land-based financing instruments to finance individual investment projects, public entities undertake a strategic examination of their balance sheets and decide to exchange underused or vacant land for infrastructure.

Several of the transactions summarized in Table 26.1 are of this type. As can be seen, urban land sales have the potential to generate substantial revenues. At the same time the sale of valuable, vacant land parcels accelerates private investments in locations that are critical to urban development. As important as the revenue yield is the policy rationale underlying the transactions: that municipal governments and infrastructure agencies should adopt more strategic methods of land asset management. A critical element of this approach is to divest non-core land assets so that the government can concentrate its financial resources and management attention on core infrastructure responsibilities. The sale of government-owned land has the added advantage of steering private investment to areas where it is most productive and filling in gaps in the urban development pattern.

Risks of Land-based Financing

There are important risks associated with land-based financing of infrastructure. Three risks in particular deserve emphasis:

- *Urban Land Markets are Volatile, and Recent Transactions may Reflect a Land Asset Bubble.* Urban land prices in developing countries cannot steadily increase by 20–30 per cent a year. So, it is critical that proceeds from land sales or other forms of land-based financing be used for infrastructure investment and not be allowed to trickle over to the operating budget, where current spending can become dependent on unrealistic expectations of future land price increases.
- *Land Sales often Lack Transparency and Accountability.* Many land sales are conducted off-budget through private negotiation. Studies have shown that competitive

auctions can greatly enhance revenues—in some cases increasing the realized land price per square metre by a factor of 10 or more. Equally important is transparent public accounting for the use of revenues. Otherwise, the large sums produced by land sales invite corruption or bureaucratic capture by the agency that has legal title to the land.

- *Government Authorities may be Tempted to Use Restrictive Zoning to Drive up Land Values or Abuse Developer Exactions When Strapped Financially.* Such practices can harm the local economy, raise real estate prices unduly, and distort urban development patterns.

Conclusion

Land-based financing offers powerful tools that can help pay for urban infrastructure investment. For an urban region considering this strategy, a logical place to start is with an inventory of land assets owned by government agencies. Such an inventory would identify current land use and the market value of land. The government can then decide which land parcels would be more beneficial to urban development if sold to private developers, with the proceeds dedicated to infrastructure investment. Where such inventories have been carried out, the government typically discovers that public agencies own far more undeveloped land than it had realized.

Next, public officials should address the potential for developer exactions and related fees. Preliminary analyses for Mumbai, India, for example, have concluded that if Mumbai is to finance its ambitious long-term development plan, developer fees or similar new, land-based financing techniques will have to generate more than \$10 billion to finance infrastructure investment. Developers are receptive to such charges (which will be passed on to buyers) as long as they help streamline the process for development approval.

Value capture can then fill in specific gaps in the infrastructure financing plan. A generalized approach to betterment fees, such as that used in Bogotá, becomes politically acceptable when a majority of the population believes that the benefits of infrastructure improvements outweigh the tax costs. This has been true most frequently of road improvements and other transport projects with highly visible pay-offs.

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27 Potential of Land and Land-based Instruments for Infrastructure Development in Urban Areas

Ramakrishna Nallathiga

Introduction

Land is a fundamental resource for urban development. The availability of urban/developed land is finite at any given point of time and it faces competing demand for its multiple uses. Every land parcel is also unique with inherent topographic, natural features, and man-made facilities in or around it. Such uniqueness delivers an inherent local monopoly power to the landowner.

Urban land can be broadly distinguished into public and private land. While public land caters to common uses such as roads, transport, and open spaces for community recreation, private land is exclusively for the use of its owner/lessee. Inadequacy of land in public domain, or congestion, therein reduces the value of land in private domain, while land put to public use (such as roads, parks, and waterfronts) to remove congestion or improve amenities can increase the value of private land.

Urban land in India is largely owned by private landowners. Such land, if required for public purposes, has to be acquired by paying monetary compensation. But, when such land is put to public use, for example, in terms of infrastructure development, it causes an increase in land value or 'betterment' for the adjoining land parcels belonging to private owners. It is the 'unearned increment' or 'betterment' that gives an opportunity for the public authorities to mobilize private land and utilize land-based instruments for the development of land in public domain and for the development of city infrastructure.

There are various ways in which land/land-based instruments could be used for achieving public infrastructure development. Some of the options are discussed in the sections that follow.

Land Acquisition-based Options

LAND EXPROPRIATION

The Land Acquisition Act (LAA), 1894 which provides for land expropriation for public purpose has been widely used by public agencies to acquire land for public infrastructure development. Urban local governments acquire land as envisaged under the City Master Plan or as notified in the state government gazette for various urban infrastructure development projects.¹

LARGE SCALE/BULK LAND ACQUISITION (LAND BANKING)

The concept of land banking calls for advance acquisition of large quantities of undeveloped land for use in the distant future for the public purpose (large-scale housing, public buildings, and infrastructure development). Land acquired for a land bank can be purchased either compulsorily (that is, expropriation) or non-compulsorily.

The technique or option of land banking has huge potential for infrastructure development, as it makes land readily available (no delays due to land procurement issues) and most importantly, allows for relatively cheap purchase

¹ In fact, many states have acquired vast amounts of land for the development of new cities and townships.

of land and subsequent recovery of cost of development through sale or lease of land. This is not just a tool to influence the pattern of development in accordance with overall planning objectives; it can also be used as a means to control the land market and to prevent land speculation. Land banking has especially been implemented in urban fringe areas where vast agricultural areas can typically be purchased at the value based on current permitted land use

(ESCAP–Economic and Social Commission for Asia and the Pacific/CITYNET–The Regional Network of Local Authorities for the Management of Human Settlements, 1995). Land banking is a long-term development strategy which is now used even by large private real estate developers and construction houses. Boxes 27.1 and 27.2 show examples of extensive land banking operations in Delhi and Navi Mumbai.

Box 27.1 Land Bank in Delhi

The most important experiment of large scale public acquisition of land for urban development has been that of the Delhi Development Authority (DDA). The land bank in Delhi, which commenced in 1961, allowed DDA to take control over the land designated for urban development, and then subdivide and service it to direct and control the development of the city. The financial success of the land bank is indicated by the increase in the revolving fund set up for the purpose from Rs 5 crore in 1961 to Rs 206.8 crore in 1981, an increase of 4136 per cent (41.36 times).

However, apart from the fact that DDA now is financially strong, the land bank technique has not evolved into an efficient land management tool because of prevalent acquisition, disposal, and development policies giving rise to the following problems:

1. The acquisition process under the LAA, 1894 was cumbersome. The appropriateness of the level of compensation has also been controversial since it was based on the value of the land at the date of notification, which could be 20 years before the actual transfer.
2. It was stipulated that the serviced land should be disposed off by auction to the highest bidder except in specified cases. Land disposed off by means other than auction created the problem of inappropriate allocation procedures favouring more influential population groups. As of 1982, 14,669 plots had been distributed to low-income groups, which is about 44 per cent of the total amount of plots distributed. Although the high-income group constituted only 8 per cent of the population, they received 38 per cent of the plots and 58 per cent of the residential land area.
3. It has not been possible for DDA to provide land at affordable prices to low-income beneficiaries resulting in large scale *Jhuggi Jhoppadi* (slum) colonies.
4. Land values, instead of being regulated due to the land banks, have increased considerably because of DDA's policy to auction very few plots at a time and treating the maximum price quoted in such bidding as the real market price. Such a policy resulted in artificial increases in the land price through deliberate scarcity.

Source: ESCAP/CITYNET (1995).

Box 27.2 Bulk Land Acquisition and Development in Navi Mumbai²

The concept of building a satellite township in order to decongest Mumbai city was mooted in the 1960s. The City and Industrial Development Corporation (CIDCO), formed under the Indian Companies Act, 1956, was given the mandate of converting about 344 sq. km marshy land in Thane and Raigad districts into a new city. Privately owned land covering 86 villages measuring 15,954 ha within the present limits of Navi Mumbai and additional villages measuring 2870 ha were acquired by the Government of Maharashtra.

City and Industrial Development Corporation (CIDCO) carved out 14 nodes—small townships—of the land with a view to facilitate comprehensive land development and to give it an identity of a new city. It acquired 194 sq. km land, of which 141 sq. km was private land, including about 23 sq. km salt-pan land and 53 sq. km government land. By the year 2000, CIDCO had developed about 118 sq. km of land, of which 54 sq. km is saleable under various land uses and it has sold about 22 sq. km.

City and Industrial Development Corporation (CIDCO) went much beyond the concept of mere real estate development; and it planned and constructed all the railway stations in Navi Mumbai and used the space for commercial purposes as well. For better connectivity with mainland Mumbai, the Thane Creek Road Bridge and Vashi Bridge were opened as early as in 1973 and the Sion–Panvel highway was built later to reduce travel time. A commuter railway line was built in 1992. The integration of transportation into land development led to faster organization of economic activities and population growth in Navi Mumbai.

Source: Available at <http://cidcoindia.com>

² Shaw (2004) notes that the CIDCO model has been successful on the whole because of the property market boom that followed the stock market boom during the 1990s and the pick-up of demand for land thereafter.

Master Plan-based Options

An important aspect of town planning is the preparation of a Master Plan for city development, which many cities possess. The Master Plan serves as a blueprint for the city's development and also as an instrument that balances the various development needs of the city, including the need for public infrastructure development as well as for residential, commercial, and institutional purposes. Zoning and development control are its important constituents. 'Zoning' or reservation is an instrument used to control land use in any given piece of land in an urban area, regardless of whether the area is under private or public ownership.³ This does not prevent the land from being sold; the only requirement is that the use cannot be changed from what is stipulated in the Master Plan. Zoning aims at promoting efficient and equitable use of land, resolving conflicting claims for the use of the same land, and removing negative externalities.

Zoning not only lays down the nature and use of land, but also the extent of development on a given piece of land. The latter is done by setting limits on Floor Space Index (FSI) or Floor Area Ratio (FAR). The FSI/FAR limits can and do vary within a city. Typically, FSI/FAR limits of an area with higher accessibility are higher. These features of the Master Plan—namely control on land use pattern and restrictions on development intensity—create opportunities for financing urban infrastructure, which are discussed below.

INCENTIVE ZONING

Instead of using zoning as a 'negative' or 'controlling' instrument, it can be positively used to incentivize desired land uses and development. These incentives may take the form of relaxations in planning/development permission formalities or payment of graded fees. It needs to be ensured that incentive zoning is planned such that the social benefits outweigh social costs. For example, in the case of industrial/service parks, the land zoned for light industries within the demarcated area can be sold at an incentive price to prospective firms/industries so that they move to these locations. This is the case where strategies such as cluster development and city development may get aligned over urban land to be mutually beneficial. Hyderabad has proposed several development zones with demarcation of land for bio-tech, info-tech, textile, gems and jewellery, and incentives are offered to the firms.

TRANSFERABLE DEVELOPMENT RIGHTS

Instead of resorting to compulsory land acquisition for the purpose of creating public amenities in the reserved areas, it is possible to achieve these objectives of the Master Plan by providing incentives to the private landowners. This is possible when the development right over land is separated from land and is made utilizable either *in situ* or *ex situ*. In such cases, the development right is called Transferable Development Right (TDR), which can be used by the landowner/the developer or can be sold to other landowners or developers. Thus, it becomes a potentially significant instrument of developing and financing urban infrastructure.

In the traditional urban planning approach, the development potential of land is fixed *in situ*; it is not transferable but has to be consumed at site. The TDR instrument is meant to facilitate the utilization of surplus development of a site to be developed *ex situ*. Since its advent, the TDR instrument has been utilized in the following ways:

- Where landowners are required to provide public amenities (retail markets, dispensaries, schools, parking places, parks, garbage pick-up areas, etc.) as per the reservations stipulated by the Master Plan. The TDR allows the landowners to develop a site reserved for an amenity in the development plan using full permissible FAR/FSI on the plot, subject to agreeing to hand over the built-up area of such amenities to the local authority free of all encumbrances. Thus, the local government is not required to acquire land or develop infrastructure by spending its scarce funds. Further, the owners receive full FAR/FSI as compensation in lieu thereof. The area utilized for the amenity does not form part of FAR/FSI calculation. The incentive FAR/FSI can then be used either *in situ* or *ex situ*. The Municipal Corporation of Greater Mumbai (MCGM) has used this form of TDR application generously (see Box 27.3).
- Local governments undertake TDR programmes to use the market to implement and pay for development density and location decisions (Hanly-Forde et al. 2006). These programmes are based on the assumption that each unit of land in a city has the potential to accommodate at least some level of development. The potential level of development of each parcel of land is determined by property zoning, land use, and development control regulations. Essentially, the differential

³ At the time of drafting of the Master Plan, the existing uses are accommodated to the extent possible. Where such accommodation becomes difficult, the land is acquired by the government.

Box 27.3
TDR Utilization in Mumbai

The MCGM adopted a practice of TDR under Regulation 34 of the Development Control Regulations for Greater Bombay, 1991. These regulations were framed in accordance with the provisions of the Maharashtra Regional and Town Planning Act, 1966.

Such an award entitles the owner to a Development Right Certificate (DRC), which he may use or transfer to another person. If the FSI granted cannot be used on the land not covered by acquisition, the landowner is free to use the additional FSI on his lands located in other parts of the city or to sell the same to other landowners, subject to the constraint that it cannot be used in the island city (which is already crowded) and to other building by-laws. This way, the exorbitant costs of acquisition of urban land for public purposes could be met by a system of compensation in kind rather than in cash.

The TDR Regulations are built upon the long experience of the MCGM in using FSI as a development control instrument. By using the TDR concept, the MCGM was able to acquire about 900,000 sq.m of space reserved for public purpose by the year 2000 as per the Development Plan without paying any cash compensation whatsoever. On a conservative estimate of land value at Rs 4000 per sq. m, the cost of land obtained free of cost amounted to about Rs 360 crore.

Source: CGG (2004)

development potential of land can be utilized in a positive manner to preserve certain land uses which are required to be kept with little or no development on site; while at the same time, this unutilized development potential needs to be tapped for beneficial use in other sectors, such as residential housing. Transferable Development Rights (TDRs) essentially serve as a mechanism to achieve this objective.

- The TDR scheme allows for exploiting the full potential development of land by transferring the development density of land and, by implication, population density as well. Here, on the whole, the amount of development in the city will remain the same with more development taking place on the sites with high development potential (such as those sites with better infrastructure, proximity, and site characteristics) while preserving those sites which either need to be preserved or have poor site characteristics and infrastructure.

Land Assembly-based Approach

PLOT RECONSTITUTION

The Plot Reconstitution (PR) technique was introduced in India by the Bombay Town Planning Act, 1915 and has been widely used in the states of Gujarat and Maharashtra, selectively used in Kerala and Punjab, and occasionally used in Tamil Nadu and Andhra Pradesh (Gurumukhi 2003). In Maharashtra and Gujarat, PR is implemented as Town Planning Scheme (TPS) under the Maharashtra Regional and Town Planning Act, 1966 and the Gujarat Town Planning and Urban Development Act, 1976, respectively. In Maharashtra, between 1915 and 1985, TPS projects with area coverage ranging from 200–800 ha were implemented in several towns. Due to inordinate delays in their completion, all the concerned parties,

especially the government showed less and less interest. Gradually, the scheme was phased out in Maharashtra.

A TPS is usually prepared for an area of about 100 ha, particularly in those pockets which are under pressure of urban development and need priority attention (*ibid.*). A TPS is prepared in two parts, physical and financial. These two parts are linked through a mechanism of compensating adjustment/reconstitution of plot/site based on its original size and the land value. The scheme is conceptualized as a joint venture between the local authority and the landowners who voluntarily agree to pool their land, redistribute the reconstituted plots of land among themselves, and share the development cost.

For preparation of the scheme, land parcels with common ownership are marked with original survey number/plot number on a map. All such original plots form one area for planning purposes. In the layout plan, areas are demarcated for roads and streets as well as public and semi-public spaces; and the remaining area is then planned into regular plots known as final plots. The final plots, though reduced in size but better in shape, buildability, and accessibility, are allocated to the landowners preferably in close proximity to their original plots. The owner also gets compensation for the area deducted for public spaces and roads. Since the reconstituted plot has better accessibility and good potential for development, its value gets enhanced. Part of such increment in land value is contributed for the cost of development work in the scheme. The landowners will get the net amount of the increment value of the plot worked out after deducting the amount of compensation payable for the loss in area.

LAND POOLING/READJUSTMENT

Land pooling and readjustment (LPR) is essentially a plot reconstitution technique carried out at a much

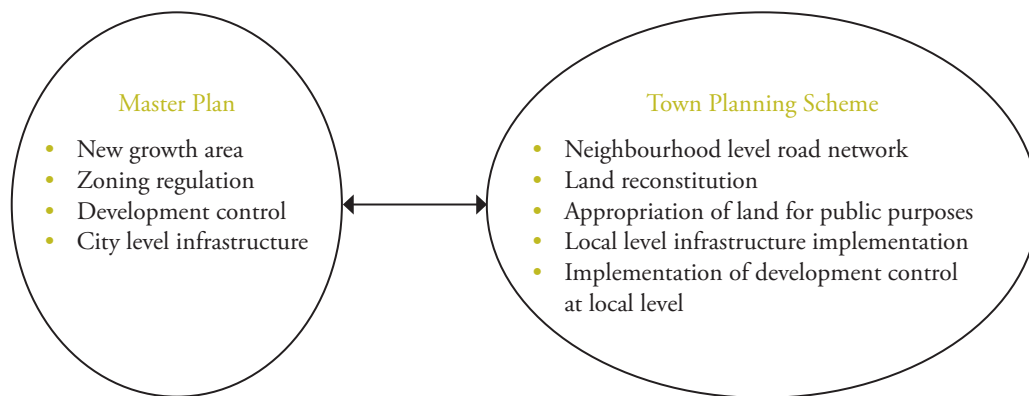


FIGURE 27.1 Relationship between Master Plan and Town Planning Schemes

Source: Gurumukhi (2003).

bigger scale. Land Pooling and Readjustment (LPR) is a process whereby a public authority assembles numerous small parcels of land without paying compensation to its owners. The authority then sub-divides such assembled lands for urban use returning most of the building sites to the original owners in proportion to the value of their land contribution (cost-equivalent land) and permitting them the right of alienating such sites. The authority retains a portion of the assembled lands, applying them partly to provide civic infrastructure amenities such as roads, parks and gardens or schools, and the remainder for public sale to recover the cost of development. Thus, land pooling is a temporary and hypothetical form of public ownership to achieve unified control over large areas of land and an instrument of financing public service installations during the crucial and expensive land development stage of urban growth' (Archer 1985). Figure 27.2 provides the generic process followed under both the approaches.

THE BENEFITS OF PLOT RECONSTITUTION AND LAND POOLING/READJUSTMENT

- The conversion of urban-fringe lands from rural to urban use usually takes place by the sub-division of separate landholdings and is subject to the problems of scattered land and building development, poor sub-division design, backlogs in the provision of public utility and road works, land shortages, excessive land speculation, and high land prices. Both PR and LPR approaches can reduce these problems;
- Both the approaches offer many of the benefits of large-scale land development projects. The consolidation of small landholdings for their unified planning, servicing, sub-division, and redistribution provides an opportunity to derive these benefits and redistribute among the community;

- Most importantly, the PR and LPR approaches greatly facilitate development and financing of urban infrastructure. This is demonstrated as follows—the local authority can appropriate or get 30 to 40 per cent of the total TPS land for public purposes without paying any compensation or suffering any time delays as landowners voluntarily participate in the exercise; and
- Local authority under this approach can legally appropriate land from common pooled land (within above overall 30 to 40 per cent share limit) as seed capital to finance infrastructure development. Such land parcels can be sold to raise funds for infrastructure development.

Public–Private Partnership Models

GUIDED LAND DEVELOPMENT

Guided Land Development (GLD) or Guided Urban Development (GUD) is a land management technique for guiding the conversion of privately-owned land in the urban periphery from rural to urban uses. The concept emerged in response to *ad hoc*, uncontrolled urban development in which informal housing and other development occurs with no regard to formal planning. It is also a response to the limited availability of urban land for economically weaker sections in urban areas. Guided Land Development (GLD) uses the provision of infrastructure as a mechanism to guide urban development. It is done in partnership with landowners who pay for the cost of servicing their land through donation of land for public infrastructure and payment of a betterment levy.

The principle behind GLD is that the government agency entrusted with urban planning or land development proactively selects the areas where it feels development should take place and provides the essential/relevant

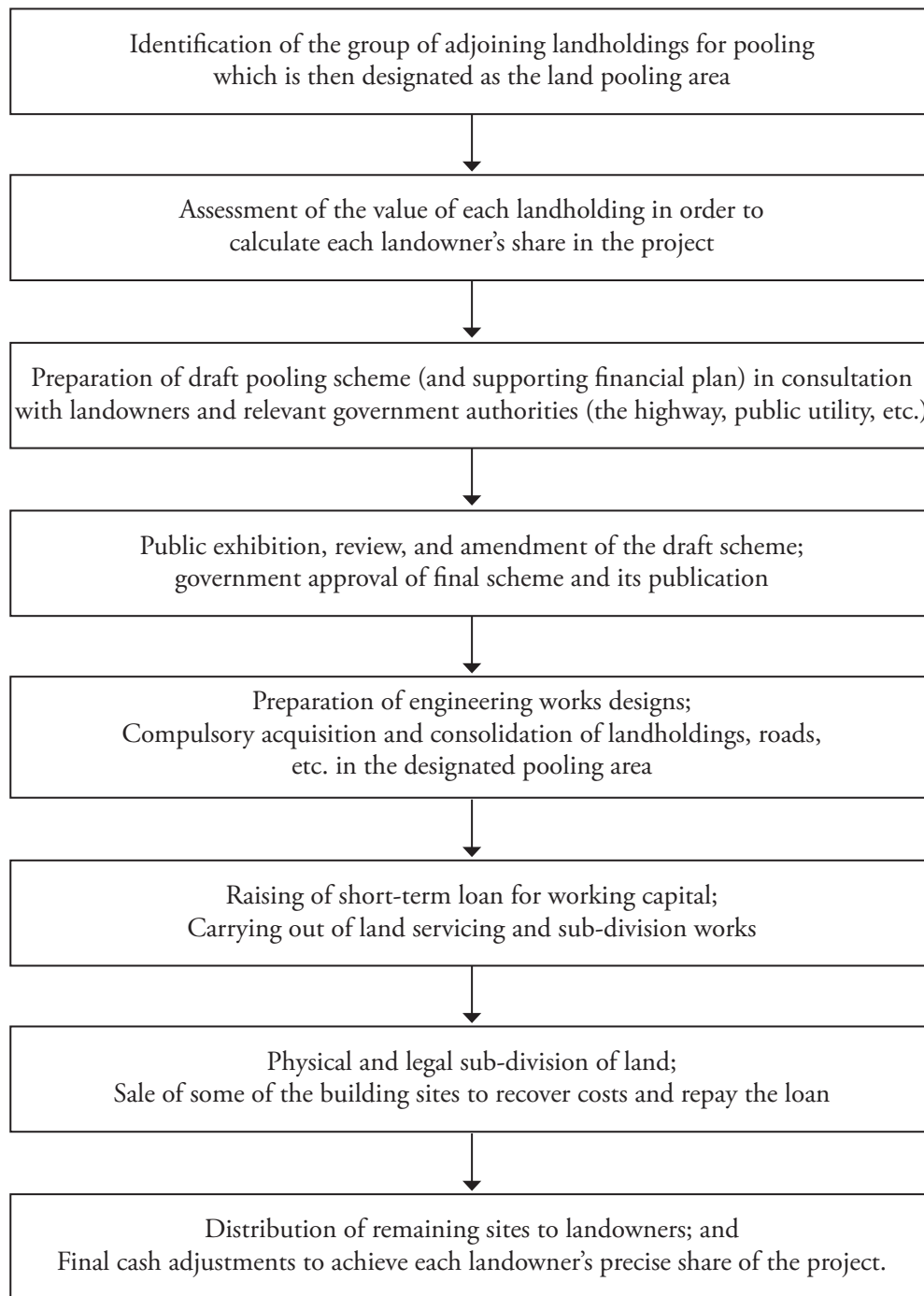


FIGURE 27.2: Land Pooling/Readjustment Implementation Flow Diagram

Source: Based on Archer (1985).

infrastructure in those areas. This encourages private land developers to develop land in that area.

The advantages and disadvantages of GLD are similar to land readjustment and land pooling. The only advantage of GLD over LPR is that the government need not decide the amount of land to be returned to the landowners at the end of the project. The key advantage of the approach

is that it is less costly than outright land acquisition and more equitable than land banking. The cost effectiveness of the GLD approach results from the fact that land development is planned, designed, and implemented with the landowners of the designated area, who donate land for roads and right of way for infrastructure and public spaces, as well as pay a 'betterment levy' to meet the costs

of the project. The betterment levy is justified because of the increase in the value of land due to the provision of infrastructure and conversion of land use from rural to urban.

Guided land sub-division may be quite enticing on paper but it is often fraught with difficulties on the following grounds:

- First, as the scheme depends on the consent of the landowners, it cannot be applied in areas with fragmented land ownership. Too many landowners mean that greater time and effort is needed in building consensus; and
- Second, collection of betterment levies, particularly on an annual basis may not be acceptable to landowners. Even if it is acceptable, they may for various reasons, default on the payments; and legal action against them may take a very long time. Moreover, it may be politically difficult to repossess land of small landowners who are most likely to default.

In India, GUD has been applied in Chennai, under the World Bank-assisted Tamil Nadu Urban Development Project with Chennai Metropolitan Development Authority (CMDA) as the nodal agency. The objectives of the scheme are stated as follows: (i) ensuring the provision of a high percentage of serviced plots for low-income families at affordable prices (approximately 75 per cent of the total plots to be for Economically Weaker Sections/Low Income Groups (EWS/LIG)); (ii) providing incentives to the private landowner/developer to participate in the provision of low income shelter solutions by guaranteeing fair return on investment (guidelines recommended profit of 20 per cent to 30 per cent). However, the results of this model are not known.

JOINT LAND DEVELOPMENT

Some innovative approaches to public–private partnerships for assembly and development of land and the provision of shelter are given below.

Haryana Joint Development Model

Under the Haryana Urban Development Authority Act (HUDA Act), 1977 and the Haryana Development and Regulations of Urban Areas Act (HDRUA), 1975 (unique to the state of Haryana), competent authorities permit participation of private developers/colonizers/builders to assemble parcels of land that exceed the limits set by the Urban Land Ceiling and Regulation Act (ULCRA). The HDRUA of 1975 and its by-laws stipulate that the private developers must first apply for a licence from the State Director of Town Planning, stating the

details of the land and the project. The land must be within a township/city development scheme which has been prepared by HUDA and sanctioned by the state government. The developer must also prove that he is a ‘bonafide’ landowner and ‘has a good track record’.

The licence granted has mandatory provisions (Gill 2002); and the developer must:

- Pay external development charges to HUDA on a gross area basis (net sq. m basis for water) to cover the off-site costs of water, sewerage, surface drainage, roads, landscaping, and community facilities. Rates are set by the Act’s by-laws and are periodically revised;
- Reserve 20 per cent of the created residential plots of land for LIG and EWS housing categories (plots below 55 sq. m in area) with such plots to be allotted to beneficiaries under a system and at a price laid down by HUDA. In addition, 25 per cent of created plots must be sold on a ‘no-profit no-loss’ basis;
- Put 30 per cent of the proceeds of land sales into a separate account to be used for development;
- Maintain the completed colony for five years; and
- Return any excess profit to the state (a ceiling of 15 per cent profit on total project costs is imposed).

To ensure compliance with these conditions, the developer must take out a bank guarantee in favour of HUDA. The Chief Town Planner, in granting a licence, may impose additional conditions at his discretion, such as a time limit for development. Initially, the agreement was primarily for plotted development, but over time, the emphasis has shifted to luxury apartments. The initiative allowed developers to develop land, which was otherwise frozen under the ULCRA.

The HDRUA, 1975, has to date been applied in only a couple of instances in the state. The most ambitious and visible of such schemes is Gurgaon Township, actually a satellite township of the New Delhi Metropolitan area. The Gurgaon case is particularly interesting because of the total township area, half is being developed by private developers and the other half by HUDA itself, with HUDA responsible for overall planning and off-site infrastructure (see Box 27.4).

Power of Attorney Arrangements (Parshwanath Model)

Private cooperative arrangements such as power of attorneys operating in Gujarat and other parts of the country may also bring in the supply of land for the purposes of integrated development of land. The arrangements may be governed by appropriate laws of organization and land. The Parshwanath Group, for example, has made efforts to

Box 27.4

Joint Development Model: Gurgaon Township

Gurgaon City is an old town 32 km from Delhi on the national highway to Jaipur. Anticipating rapid growth, the Haryana Department of Town and Country Planning prepared a development plan for the large Gurgaon township. The Plan envisaged new urban areas on 4,550 ha of which 2,923 ha were to be primarily residential and the rest to be dedicated to industrial, commercial, and public use. Of the total new residential area, 51 per cent is being developed by HUDA itself, with land acquired from farmers under LAA, 1894. The rest is being developed by private real estate companies.

Public Sector Development

In the 1,490 ha of residential areas being managed by HUDA, almost all land is being developed as serviced plots. Land was acquired from farmers at very low prices by compulsory purchase under LAA, 1894. Plot sizes range from 50 to 600 sq. m, and are sold sporadically in lots to citizens who have signed up under a complicated registration process which includes income statements for EWS and LIG plots (50 to 125 sq. m). Demand for plots has far exceeded supply at any point of time and vetted beneficiaries are chosen by lot. The prices for these lots are low by market standards.

Private Sector Development

The 1430 ha in Gurgaon reserved for private development have been acquired by five main real estate companies: DLF Ltd, Ansal Group, Unitech, Utility Builders, and the ITC Group. As stipulated in HDRUA, licences for acquisition of separate discrete sections (usually ranging from 25 to 60 acres) had to be obtained. The first licences were issued in 1980 and the licensing/acquisition process continued through 1984.

Controversies

Land prices negotiated between private developers and farmers were significantly higher than those set by government for compulsory purchase. This led to the first of many frictions between the public bodies and the developers.

Further, the fact that in areas of Gurgaon developed by HUDA, these norms related to the EWS/LIG categories were apparently only half-heartedly applied, contributed to the climate of mistrust. Also, heavy external development charges had to be paid to HUDA by developers, in spite of the fact that there appeared to be very little development visible. By 1986, it was estimated that of all HUDA investments in trunk infrastructure, 70 per cent went for roads and practically none for water, drains, and sewerage.

In July 1986, the Haryana Government served over 200 showcase notices to most of the private developers, threatening to cancel their development licences. Developers were accused of non-compliance with conditions of the HDRUA, including non-payment of external betterment charges, not submitting accounts, etc. The developers countered the allegations by filing court cases against the Haryana Government and, after a two-year period in which development work in Gurgaon was suspended, compromises were reached, and in 1988, licences were restored and land development was renewed in a much better climate.

Source: Gill (2002).

assemble land at a low rate of Rs 15 per sq. m at Naroda (Gujarat) in 1981. In this model, a novel arrangement was made between the landowners and the developer who identified land and booked it by paying a token amount, or taking an option of revenue sharing. Subsequently, the company entered into an agreement with the landowners to develop land under a 'power of attorney' arrangement. The land assembled by this single group was of 67 ha and, therefore, the Urban Land (Ceiling and Regulation) Act, 1976 was applicable. The Parshwanath Group sought exemption under sec. 21 of the Act, according to which, in case 10 per cent of the acquired land was meant for housing the EWS, the exemption clause was applicable. The exemption was granted in 1987. Meanwhile, the Group also got their plans sanctioned through the Ahmedabad Urban Development Authority.

Conclusion

Land mobilization for urban and infrastructure development has assumed greater importance in view of the increasing levels of urbanization. The traditional methods of land mobilization have primarily relied upon eminent domain legislation, with the public agencies assuming the primary role in accomplishing bulk land acquisition. The experience of such an approach has been mixed.

The Town and Country Planning Legislation of Indian states also provide for urban and infrastructure development in the framework of Master Plans which comprise zoning, development regulation, identification of new growth areas, and provision for infrastructure. However, the Master Plan framework has not proved to be very effective in fostering infrastructure development, particularly in the suburban and peri-urban areas. Poor

implementation has reduced Master Plans to just plans on paper, underlining the need for more viable alternatives (TCPO 1998). It is important to make use of alternate instruments such as incentive zoning and accommodation reservation to bring land under development. Further, land pooling and plot readjustment methods can be used as meso- and micro-level tools for implementation of the Master Plan. The master plan objectives and urban and infrastructure development can be achieved better when market-based instruments such as TDR are used to incentivize individual land owners.

Given the limited success of public agencies in mobilizing land resources and achieving infrastructure

development, the potential role that private parties can play has assumed importance, particularly after the 1980s. Urban development authorities in several states have come up with proposals for land and infrastructure development under public–private partnerships. Guided land development and joint land development have been attempted in several parts of the country, with the latter gaining importance. Several urban development authorities have been concentrating on managing the land acquired and acquiring new land, but they need to do more on infrastructure creation, which can be better achieved through partnerships with private players for joint development of land.

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28 Charges on Land and Development Rights as a Financing Resource for Urban Development

Vidyadhar K. Phatak

Introduction

Many urban local bodies (ULBs) in India are facing enormous infrastructure deficit, often because they do not have the wherewithal to fund the investment backlog. Property tax, which is the dominant source of revenue for most ULBs, has not been able to achieve adequate buoyancy due to many constraints such as rent control legislations, inefficiency in updating property rolls, political resistance to periodic assessment, etc. Further, in some cases, where it is possible to impose user charges such as water and waste water, municipalities have typically set the user charges at rates below the cost recovery level. At the same time, the ULBs' revenue expenditure is growing at a fast pace due to expanding population, whose expectations from civic services are also increasing. As a result, few ULBs generate the revenue surplus that could be potentially used to service debt for infrastructure projects which are generally large and indivisible. Given their financial weaknesses, ULBs have not been able to raise enough resources either from commercial institutions or through municipal bonds.

Private investment in Build, Operate, and Transfer (BOT) or in Public Private Partnership (PPP) mode has also been meagre, because user fees that can secure non-recourse financing are practically impossible for ULBs. They, therefore, have to often depend on transfers from state governments or the Central Government to fund infrastructure projects. Availability of resources even through this route has not been adequate. Besides, these

transfers result in an erosion of the ULBs' autonomy. Given the shortage of funds from conventional sources and difficulties in borrowing, ULBs have been attempting to explore unconventional sources that do not involve borrowing. Charges on land and development rights are one such source, which is the focus of this chapter.

The chapter begins by reviewing the evolution of conceptual understanding of charges on land and development rights and then examines various alternatives of extracting land-linked capital contributions for urban development and renewal and the issues underlying them, with special reference to India.

Land and Development Rights: Evolution of Conceptual Understanding

While communist economies dogmatically believe in common ownership of land, in the market-based economies it is widely believed that the market value of land belonging to an individual increases primarily because of the efforts and investments by others, particularly in the urban context. This happens when the urban infrastructure is put in place or improves by the choice of others to urbanize an area. The gains in the value are considered as 'unearned income' or 'windfall benefits'. It has been argued that such unearned income should come back to the community. The theoretical underpinning of this concept and the practices that are followed are described below.

In the capitalist world, Henry George (1879)—while supporting the idea of private ownership—was perhaps the first to argue way back in the nineteenth century that rent in the economic sense (that is, returns attributable to land) should belong to the community, as rent is not the result of the efforts of the landowner. He stated, ‘I do not propose to purchase or confiscate private property in land... It is not necessary to confiscate land—only to confiscate rent. Taking rent for public use does not require that the state lease land; that would risk favouritism, collusion, and corruption. Government already takes some rent in taxation. With a few changes in our tax laws, we could take almost all. Letting owners keep a small percentage would cost much less than renting through a state agency. Using the existing machinery of the government, we may assert the common right to land without any shock. Therefore, I propose that we appropriate land rent for public use, through taxation’. As a justification for taxing land rent, he stated, ‘The value of land does not express the reward of production. It is not like the value of cattle, crops, buildings, or any of the things called personal property and improvements. Land value expresses the exchange value of monopoly. It is not in any way the creation of the individual who owns the land. It is created by the growth of the community. Hence, the community can take it all...’.

Further, he strongly asserted that taxation of land rent would not reduce the land-owners’ incentives for higher production; and that such an act may indeed stimulate economic activities on land. ‘A tax on land (unless it exceeds actual rent) cannot check production in the slightest degree—unlike taxes on commodities, or exchange, or capital, or any of the tools or processes of production... Taxes on land actually tend to increase production—by destroying speculative rent, which impedes production when valuable land is withheld from use. Industrial depressions originate in speculative land values. They then propagate themselves over the whole civilized world, paralyzing the industry. With regard to production, a tax on land value is the best tax that can be imposed. Tax manufacturing, and you inhibit manufacturing. Tax improvements, and you lessen improvement. Tax commerce, and you prevent exchange. Tax capital, and you drive it away. But take the whole value of land in taxation, and the only effect will be to stimulate the industry, open new opportunities, and increase the production of wealth.¹ He further argued that tax on land rent should be the only tax.

Although his arguments constitute the basis for extracting part of the rent (or unearned income) from the landowners, taxation as proposed by Henry George is not practised anywhere on a significant scale. A few countries such as Australia and New Zealand have site-value taxation whereas Pennsylvania (a state in the USA) adopts differential rates for land and buildings (rates for land being higher than that for buildings).²

NATIONALIZATION OF LAND DEVELOPMENT RIGHTS IN THE UK

In the UK, an Expert Committee on Compensation and Betterment under the Chairmanship of Justice Uthwatt was appointed in 1941 to make an objective analysis of payment of compensation to landholders in case they are denied the right to develop and recoveries of betterment in case they are free to develop. The Committee assumed that there would be national planning with a high degree of initiative and control by the Central Planning Authority to ensure that the best use of land (with a view to secure economic efficiency for the community and well-being of the individual), recognizing that this would involve the subordination of the personal interests and wishes of landowners to the public good. The Committee asserted that in theory, compensation and betterment should balance each other. In practice, however, they do not, and under the prevailing system of land ownership, it was not possible to devise any scheme for balancing them. If all the land in the country were to be in the ownership of a single person or a body, the necessity for paying compensation and collecting betterment on account of shifts in value due to planning would disappear.

But a policy of land nationalization was rejected because it would: (i) arouse keen political controversy, (ii) involve unprecedented financial operations which may not be feasible, and (iii) entail the establishment of complicated administrative machinery. Short of immediate nationalization, the Committee felt that the only solution to the compensation–betterment problem with regard to undeveloped land is that the rights of development should be vested immediately in the state, on payment of fair compensation. Such vesting has to be secured by the imposition of a prohibition against development without the consent of the state, accompanied by the grant of compulsory powers of acquiring the land for the state whenever required. As regards developed land, its piecemeal transfer to public ownership, as and when

¹ George (1879).

² Litchfield and Connellan (2000).

required for planning and other purposes, would be less cumbersome a task than what would be involved in the immediate wholesale nationalization. Power to purchase, much wider and simpler in operation than under existing legislation, should be conferred on public authorities.

While all these recommendations were translated in legal provisions in 1947, the recommendation to impose a periodic levy on increases in annual site value, with the object of securing such betterment for the community as and when it was realized, enjoyed or realizable, was rejected.³ Since 1947, at least three attempts have been made to capture land value gains or planning gains—all unsuccessful. One of the verdicts has been that ‘the state expropriates property rights, and then charges those from whom it has taken those rights for granting permission to use them on its terms. A betterment levy is wrong in principle, and like most things that are fundamentally wrong, it will always fail in practice’.⁴

DEVELOPMENTS IN THE USA AND CANADA

In parallel developments, Americans and Canadians stayed clear of the controversies related to the scope of property rights and methods of exacting unearned income. The financing of capital improvement in US cities is primarily through municipal bonds, revenue, and general obligation, and these bonds are serviced through property tax and user fees. During the 1980s however, state and federal assistance to cities fell, even though some cities were expanding rapidly. Following the prevailing practice meant that the existing population would have to pay higher taxes to pay for the growth in the future. This was naturally resisted and the notion that ‘growth should help for itself’ became stronger. State legislations enabling the imposition of impact fees for financing off-site infrastructure was enacted first in California and Florida and then followed by many states.

THE PROBLEM OF POOR COUNTRIES

In contrast to the first world, Hernando de Soto (2001) analyses the third world situation and observes that ‘... at least 80 per cent of the population of these (third world) countries cannot inject life into their assets and make them generate capital because the law keeps them out

of the formal property system. ... People hold and use their assets on the basis of myriad disconnected informal agreements where accountability is managed locally. Without the common standards that the legal system brings, they lack the language necessary for their assets to talk to each other. There is no use urging them to be patient until the benefits of capitalism trickle down their way. That will never happen until the firm foundations of formal property are in place’.⁵ He, of course, does not directly address the question of financing infrastructure. But the important fact that he brings out is that before considering how property could be used for raising finances for infrastructure, it is necessary to bring majority of the city dwellers that currently survive in extra-legal context into the formal property system. Implicitly, this would not only help improve their economic status but also help infrastructure finance.

THE INDIAN PERSPECTIVE

In India, there has been policy support for the exaction of land rent or betterment for community use. The Fifth Five Year Plan encourages the State ‘to use land as a resource for financing urban development by recouping the unearned income which otherwise accrues to private land owners’.

Earlier, the report of the Committee on Land Policy (1965) observed that there is no escape from large scale public acquisition if the question of guiding urban development or the provision of adequate housing and other facilities has to be tackled effectively.⁶ Further, large-scale advance acquisition of land would be in the interests of the society as a whole. It is perhaps the only way to put an end to speculation in land and to capture subsequent increases in land values. These surpluses, when realized by the public authorities, would benefit the community in multiple ways.

This ideology led to large-scale (compulsory) acquisition of land by agencies such as Delhi Development Authority in Delhi and by City and Industrial Development Corporation of Maharashtra (CIDCO) in Navi Mumbai. The aim was to develop the acquired lands and then sell or lease them for residential and commercial purposes. These agencies, however, acquired much more land than they planned to dispose off in the near future. In other

³ Heap (1973).

⁴ Gummer (2004).

⁵ de Soto (2001).

⁶ The objectives of India’s urban land policy (1965) include achieving optimum social use of urban land; making land available in adequate quantity, at right time and for reasonable prices to both public authorities and individuals; encouraging cooperative community effort and bona fide individual builders in the field of land development, housing and construction; and preventing concentration of land ownership in a few private hands. Planning Commission.

words, they held on to acquired land for a long time. With the city and its infrastructure growing over the years, the acquired land gained substantial value, which these agencies eventually realized. The surplus helped them finance investment in infrastructure.⁷ This practice, however, is becoming rare, as large-scale acquisition is becoming increasingly difficult.

Alternatives for Raising Resources from Land

The alternatives for raising financial resources from land can be classified into four main categories:

- Impact fee or development charge,
- Area-linked development charge,
- Betterment levy or land value increase tax (LVIT), and
- Sale of development rights.

This section examines the issues involved in using impact fees and development charges for urban development in India.

IMPACT FEE OR DEVELOPMENT CHARGE

The 'rational nexus' between the cost of providing infrastructure and the fees charged has been upheld by the US courts as the cardinal principle of judging the legal validity of impact fees. It is noteworthy that the objective is to recover the incremental cost of infrastructure and not a share of 'unearned income'. It was possible to follow this legal dictum in the US on account of its well-established practice of preparing 'capital improvement plans'.^{8, 9} In the Indian situation, adoption of such a system faces the following problems:

- The principle 'growth pays for itself' followed in the USA implies that impact fees do not cover the cost of clearing the backlog of infrastructure investment. It is possible to follow this stipulation on account of the well-established practice of preparing capital improvement plans. Indian cities, however, do not generally follow such a practice (with the exception of mission cities participating in the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) that are required to prepare City Development Plans including Capital

Investment Plan, 2006–13). Consequently, it is difficult to estimate and attribute cost to additional infrastructure required to new developments proposed.

- The infrastructure investment requirements are so high that the required impact fees based on 'growth pay for itself' principle would be too high to implement.
- The requirement of preparing capital improvement plans as the basis of impact fees design and then using them as the basis of convincing the tax payers and then withstanding the judicial scrutiny would make the system administratively complex.

AREA-LINKED DEVELOPMENT CHARGE

Indian laws have bypassed the question of assessing the impact of new development in terms of infrastructure demand and investment needs as the basis of charging fees. Instead, a development charge or fee in terms of rupees per square metre is levied; individuals pay this charge depending on the area of their land or building and the jurisdiction their property falls under. For example, the Maharashtra Regional and Town Planning (MR&TP) Act, 1966, provides for 'Levy, Assessment, and Recovery of Development Charge'.¹⁰ The development charge, according to these provisions, is related to the area of land and buildings, with minimum and maximum rates of development charge per square metre laid down separately for Greater Mumbai, other Corporations and Councils, and it is stipulated that the development charge is recoverable in instalments from the grant of Commencement Certificate to the completion of development. A similar charge, called External Development Charge (EDC), is levied in Punjab at the time of granting licence for colonizing rural land.¹¹ Being linked to area, these levies lack buoyancy, as the rates normally do not keep pace with inflation or actual cost of infrastructure provision.

BETTERMENT CHARGE OR LAND VALUE

INCREASE TAX

Betterment charge, or LVIT, is a levy on the landowners in the cities to recoup from them a part of the land value gains or 'unearned income', which results from public investment in infrastructure. Following is an illustration of Acts that enable the levy of betterment charge.

⁷ For evaluation of the experience of DDA, see *Report of the Task Forces on Housing and Urban Development—I, Planning of Urban Development*, (1983), Planning Commission, Government of India.

⁸ *Policy Guide on Impact Fees* by American Planning Association 1997 available at <http://www.planning.org>

⁹ Development Charges Act, 1997, S.O. 1997, Ontario, Canada.

¹⁰ Chapter VI-A of Maharashtra Regional and Town Planning Act, 1966.

¹¹ New External Development Charge Policy, 2004, Punjab Government Notification No 17/17/01-5HGII/6930 dated 23 June/6 July 2005.

- The Mumbai Municipal Corporation Act, 1888 (as part of Improvement Schemes),
- The Mumbai Highways Act, 1955,
- The Maharashtra Regional and Town Planning Act, 1966 (as a part of Town Planning Schemes),
- The Mumbai Metropolitan Regional Development Act, 1974 (for recouping land value gains occurring due to schemes executed by the Authority), and
- The Maharashtra Housing and Area Development Act, 1976.

The content, form, and basis of these acts differ. However, the basic logic is that any improvement and action by the public authority towards urban infrastructure development increases the value of the land and the benefit of increment in the value of the land has to be shared between the landowner and the public authority. In all these acts, there is a provision of recovering half of the increase in the value. The Highways Act offers the owner an option of paying the betterment charge in terms of land equal to the value of the betterment charge.

The experience of recovering such betterment charges has, however, not been particularly encouraging. This is on account of the difficulties in attributing the rise in land value to a particular cause and the inevitable litigation that follows.¹²

Apart from the problems of measurement of land value increase, what is critical is the event of taxation. If the tax is levied on completion of the infrastructure project, landowners argue that the land value gain is notional, actual gain would occur only at the time of transaction, and therefore, tax, if any, should be levied on transaction. This further compounds the problems of measurement and uncertainty of cash flow.

An alternative to taxing the land value increment on account of infrastructure is taxing the value of property at its inception to obtain capital receipts for financing urban infrastructure. The legal basis of charging such a tax already exists in the area of development. The tax base could be changed to value of the property at its inception. The use of tax revenues for capital infrastructure could be ensured by creating a 'ring-fenced fund' in the ULB. Similar provisions already exist in the MR&TP Act, 1966. However, there are two main objections to this tax, which stem from its similarity to stamp duty:

- *The tax may be considered anti-reform.* As the system of assessment of property prices for stamp duty is by now well-established (at least in Maharashtra), it would be the natural choice for being the basis for value-based

development charge as well. Cutting down stamp duty, which is seen as a source of high transaction cost, is an important part of urban reforms agenda. Value-based development charge would be resisted in this backdrop. But the main difference that needs to be highlighted is that stamp duty is a transaction tax levied on every transaction, whereas development charge is a one-time tax levied for financing infrastructure development. It is thus a benefit tax with a transparent use of tax proceeds for development that would benefit the tax payer;

- *The incidence of the tax may be on home buyer making houses even less affordable.* The incidence of exactions could fall upon the landowner, developer, or home buyer, depending on the demand–supply balance. In a housing market, characterized by shortage, the developer would pass the cost on to the home buyer. In the present situation in many Indian cities, this is likely to be the case. In an over-supplied market, however, the developer would pass the exaction back to the landowner through a lower purchase price. In a more balanced market than either of these two extremes, the developer would absorb the cost of the exaction. With the reforms in the land and real estate market in India, the incidence of development charge should fall on either original landowners or on the developers.

SALE OF DEVELOPMENT RIGHTS

Development rights over urban land are controlled through instruments called Floor Space Index (FSI) or Floor Area Ratio (FAR), both standing as identical concepts. The FSI or FAR is the ratio of the total floor area of buildings on a certain location to the size of the land of that location. Thus, an FSI of 2.0 indicates that the total floor area of a building is two times the gross area of the plot on which it is constructed, as would be found in a multiple-storied building. By limiting FSI in a city through regulation, the city authorities effectively limit floor space in the cities. The aim of this regulation is to control congestion in a city and to regulate the load on municipal services. The FSI can vary across cities and even within different regions of a city.

As cities grow, limits on FSI have become a constraining factor to urban development. Recognizing this, some cities in India have begun to liberalize the FSI limit, provided the builders agree to pay defined sums to the authorities. In other words, development rights have begun to be sold. Mumbai, for example, has decided in 2008 to increase the upper limit on FSI in suburbs from 1 to 1.33 by charging

¹² MMRDA (1999).

a premium on FSI in excess of 1.¹³ This has been brought in force through an amended Development Control Regulations under the Town Planning Act, 1966.¹⁴ However, the provisions resorted to are about development control regulations and do not explicitly empower the planning authority or government to charge for excess FSI. The premium is related to the valuation of the property under the stamp duty legislation. The revenue from the sale of development rights is split equally between the state and the local government.

A fundamental question in this regard has been raised. Although to ‘acquire, hold, and dispose off property’ is no longer a fundamental right, there still exists a legal right that states, ‘No person shall be deprived of his property save by the authority of law’ (Article 300A of the Constitution of India). In line with this constitutional position, right over land includes the right to develop it, subject to reasonable restrictions on health and safety considerations. However, the sale of development rights in Mumbai implies that development rights are owned by the government, which can sell them to landowners at a price. The basic question is how the state acquired the development rights in the first place.¹⁵

In the case of Mumbai, the price of development rights reflects the extreme scarcity created by land use zoning and uniformly low FSI. The effort to sell the FSI, therefore, means exploiting the scarcity that is created by regulations in the first place. Given the fact that nearly 70 per cent of the population of Mumbai lives in undesirable habitat, the idea of selling FSI appears perverse. Similar views have been expressed in the UK as well. The state does not compensate for restricting property rights. It cannot properly add ‘insult to injury’ by charging for the exercise of those rights, particularly when it has decided the circumstances and imposed the restrictions under which those rights can be exercised. That really would be theft—as it becomes clear if we express it as an equation. The state expropriates property rights and then charges those from whom it has taken those rights for granting permission to use them on its terms. ‘Ah!, say the expropriators, it is we who have given increased value to the development process by creating a shortage. We, therefore, should get that value.’¹⁶

France and Brazil have used similar measures in the past. In 1975, Paris attempted to use this measure but

gave up soon. In Curitiba, Brazil, it was used to finance public transit.

Although the sale of FSI is being increasingly seen as very attractive for Indian cities, it suffers from legal and economic infirmities mentioned below:

- The amount charged for extra FSI cannot be treated as tax because according to the Indian Constitution, no tax can be levied without the authority of law; and as of now no such law exists;
- The amount charged cannot be treated as fee because no ‘rational nexus’ exists between the amount charged and the service rendered or investment incurred;
- The transaction has to be treated as ‘sale of development rights’ but it would amount to sale of something that the state does not own. Unlike in the UK, development rights have never been nationalized in India; and Even if we presume that all development rights are vested in the state, such a monopoly would be subjected to the apprehensions expressed by Henry George in 1879.

The above analysis shows that the fundamental concept of ownership of land still remains nebulous. State and local governments have been proposing schemes of charging for additional FSI. Implicit in these schemes is an assumption that development rights are owned by the state while private rights are confined to bare land in its current use. It appears that the practice has not been legally tested. Floor space index (FSI) is a town planner’s technique of controlling externalities. Can it be turned into a tool of restricting property rights and then charging for relaxing the constraint? Clarity of property rights is fundamental to development in market economy and, therefore, exigencies of raising finances should not muddle these rights.

Summary

To sum up, there is a theoretical basis for the state to exact part of the rent in the economic sense (that is, returns attributable to land) for public use. Some countries in the developed world have used this logic to exploit land rents as a source of financing urban infrastructure. Substantial increase in the property value in urban areas has made this option attractive. Instances of such practices are found in the developing countries as well, including India. In India, although the practice has begun, it has been largely

¹³ As long as the FSI is below or equal to 1, there is no charge.

¹⁴ Hyderabad Urban Development Authority in its draft Master Plan 2020 proposed a premium on FAR in excess of 0.75 for plots in excess of 250 square metres in 2003. It was proposed that the maximum permissible FAR would be 2.5. However, later the Government of Andhra Pradesh removed FAR as a tool of controlling intensity of development.

¹⁵ Phatak (2008).

¹⁶ Gummer (2004).

confined to Maharashtra. Before such practices can be made popular in other parts of the country, it would be useful to examine the issues raised in this chapter, particularly the ones relating to the legal system. Once the legal issues are settled, it would be easier to make a more optimal choice among the various alternatives available and states would feel more confident about adopting them.

Administrative feasibility and revenue potential would be the determining factors; but such initiative should not be at the cost of distortions in the land market. So, the menu available for using land and development rights for financing infrastructure is rich and varied; but the selection has to be legally sound and care has to be taken so as not to cause any distortions in the land and real estate market.

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Annexure

A28.1

A28.1: Comparison of Methods of Raising Resources for Unban Infrastructure Development

Measures	Area or value linked development charge	Sale of development rights	Betterment levy or LVIT	Impact fee or development charge
Legal feasibility	Area linked development charge is already provided for in laws like Maharashtra Regional and Town Planning Act, 1966. But adopting value base would need separate legal provisions.	A development right is an integral part of notion of land ownership. Development rights are not yet nationalized. Legal basis for their sale is weak.	Legal support is available in many existing Acts.	There is no legal support for US or Canadian type of impact fees that are related to explicit assessment of incremental investment in off-site infrastructure. But area linked development charges are provided for.
Tax base	Area as tax base has problem of buoyancy, as rates tend to remain static. Value of property at the time of development.	This is not a tax or fee in the strict sense. Premium could be based on the market price.	Increase in land value attributable to provision of infrastructure.	Cost of providing infrastructure to new development. On area or value of land and buildings in different uses.
Administrative complexity	Area can be unambiguously measured. Assessing value is routinely done for stamp duty purposes and does not add to administrative complexity.	Since FSI computation is physical it is simple. The premium being linked to rates determined for other taxation purposes administrative complexity is not a serious problem.	Difficult to measure the tax base, especially the increment attributable to infrastructure investment. Likely to be contested by owners not transacting property.	In the absence of a well-established practice of preparing and publicly adopting capital improvement plans, it would be administratively complex to establish 'rational nexus' between the cost and new development as expected in US impact fees. But area or value based development charge is administratively the least complex.
Revenue potential	Revenue potential in area linked charge suffers from lack of buoyancy. Value linked charge can overcome that problem.	Revenue potential can be manipulated by keeping the base FSI low to increase price of incremental FSI and/or development rights can be released in the market in small doses to extract higher price—inherent problems of monopoly .	Revenue potential is currently limited to 50 per cent of the betterment.	In case of impact fees it is limited to cost of development, but recovery depends upon rate of new development. Area linked development charge cannot keep pace with inflation.

29 Financing Infrastructure for Railways using Railway Land

Sanjiv Garg*

Introduction

The Indian Railways (IR) owns about 4.3 lakh hectares of land in the country (that is, 0.13 per cent of the total land area in India), of which 44,000 hectares is vacant land.¹ Historically, IR has not been able to mobilize this asset to its advantage for resource generation. In recent years, however, the IR has acquired a more commercial outlook and is on the constant look-out for opportunities to leverage all its existing resources, including land for revenue gains. Meanwhile, with the promise of sustained economic growth, new and more attractive opportunities for using land to generate financial resources have emerged. It is widely recognized that barring the land directly under the railway track, nearly all the land that remains has the potential for commercial exploitation. Even below the ground level, the IR can lease 'Right of Way' (RoW) for laying optical fibres, pipelines, etc. Similarly, above the ground level, immense scope exists for commercial and industrial use, especially, given the incredible advantage of proximity to rail connectivity. The Railways have begun to seize these opportunities to finance railways-linked infrastructure for public use. As a result of the recent initiatives taken by the IR, the accrual of earnings from land resources has shot up to Rs 467 crore in 2007–08 from Rs 92 crores in 2002–03 (see Table 29.1).

This chapter reviews the past experiences of the IR and analyses the new initiatives being undertaken, to provide

TABLE 29.1
Earnings by Indian Railways from Land

Year	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
Rupees (crores)	92.00	116.00	200.80	201.40	356.00	467.00

Source: Ministry of Railways.

a fair and accurate assessment of the resource-generating potential of railway land in India.

Miscellaneous use of Railway Land and The Policies of IR

It can be seen from Table 29.2 that 75.7 per cent of the 4.3 lakh ha of land in 2006 was under use for operation and allied purposes (such as track, stations, training establishments, production units, stores, godowns, staff quarters, and colonies). The remaining land was either vacant or under miscellaneous use such as afforestation, 'grow more food' programme, and so on. As much as 10 per cent of the land was lying vacant, not put to any use at all.

Whatever little effort was made in the past to generate revenue from railway land, it was concentrated on miscellaneous usage and very little attempt was made to bring vacant land under commercial use for non-tariff resource

* The author would like to acknowledge the useful inputs provided by Ashok Gupta, Member, Rail Land Development Authority, while preparing an earlier draft of this paper. However, all errors and omissions are entirely the responsibility of the author. Also, the views expressed in this paper, are those of the author himself, and do not in any way reflect the views of the IR or of Rail Vikas Nigam Limited.

¹ The defence sector is the largest landholder with about 7.0 lakh hectares of land.

Table 29.2
Use Pattern of Railway land in 2006–07

Land Use	Area (in lakh ha)	Percentage of total land holding
Track and structures including stations, colonies, etc.	3.26	75.7
Afforestation	0.45	10.5
'Grow More Food' Scheme	0.06	1.4
Commercial licensing	0.03	0.7
Other uses such as pisciculture	0.04	0.8
Encroachment	0.02	0.5
Vacant Land	0.45	10.4
Total	4.31	100.0

Source: *Indian Railways: Annual Report and Accounts, 2006–07* (issued in February 2008), p. 27.

generation. The policies of the IR with regard to miscellaneous use and the experience of their implementation are outlined below.

AFFORESTATION OF RAILWAY LAND

For over five decades, tree plantation has been undertaken on vacant railway land along the railway tracks as well as near workshops and railway colonies through departmental/contractual efforts bringing over 45,000 ha, that is, 10.5 per cent of railway land under the green cover.² Until recently, as a matter of policy, railway land in mid-section (that is, land located between two railway stations alongside the railway track) was being entrusted to the State Forest Departments for undertaking afforestation. Plantation was undertaken by the forest department at locations jointly approved by the IR and the forest department. Though this helped in providing green cover, the IR faced problems with the State Forest Departments due to non-execution of agreements, denial of legitimate access for undertaking routine safety works connected with railway operations, difficulties in getting back the land for railway purposes, and so on.

PLANTATION OF *JATROPHA CURCAS* FOR PRODUCING BIO-DIESEL

As part of 'National Mission on *Jatropha Curcas*', which aims at producing bio-diesel, the IR has taken up its plantation on a large scale mainly by the side of the railway track through departmental effort.³ Plantation of *Jatropha* has also been taken up under commercial scheme. A Memorandum of Understanding (MoU) has been signed between IR and Indian Oil Corporation

(IOC) for producing bio-diesel for use by the former. For this purpose, about 180 hectares of railway land on the Western Railway has been handed over to IOC on a lease basis at nominal charges for plantation of *Jatropha Curcas*, which has been completed in 48 hectares.

COMMERCIAL PLANTATION

The IR has also decided to undertake plantation on railway land by involving private parties (in joint ventures), who would share the total revenue generated from use of land by way of plantation. According to the model devised by the IR, while private parties shall provide all the funding, material, expertise, and labour for the growth and management of the plantation at its own cost, the IR will contribute the land for a specific period of 15 years with a provision for extension of another 15 years. Fourteen sites under the scheme have so far been finalized on Northern, North Eastern, and Southern Railways.

'GROW MORE FOOD' SCHEME

Prior to October 1984, to help augment food production, the IR had been permitting licensing of spare railway land for cultivation both to railwaymen and outsiders. However, on account of a number of factors such as non-payment of dues, the administrative burden of the licencing process, difficulties in preparation of agreements, and retrieval of land when required for railway's use, it was decided in 1984 to withdraw the land given for cultivation under 'grow more food' scheme after expiry of current license and utilize the same for afforestation. As an exception to this, continuation of licences in case of Group 'D' railway employees, outsiders belonging to scheduled castes/scheduled tribes (SC/STs), landless labourers, and other weaker sections of the society was permitted on merit of each case with the specific approval of Chief Engineer/General Manager of the zonal railway.

Later, when it was observed that land licensed to railway employees for growing vegetables, etc. in station yards in the Mumbai suburban section had remained largely free from encroachment, the matter was re-considered. In February 2000, the IR decided to revive the licensing of railway land to railway employees in identified urban areas for cultivation as an anti-encroachment measure and also to earn some revenue. Under the scheme, the land is licensed only to railway employees belonging to Groups C and D, only for growing vegetables, crops, etc. for a period of 2 years, extendable up to 5 years. Land is

² During the year 2005–06, about 108 lakh trees were planted on railway land.

³ So far, 264 lakh saplings have been planted.

not being licenced to outsiders or state governments for cultivation. The licence fee is fixed by the IR based on the revenue-generating potential of the land.

COMMERCIAL LICENSING

Plots of railway land at stations, goods sheds, sidings (known as commercial plots) are licensed for stacking/storing of goods moved by rail. Such licensing helps the IR in attracting/retaining traffic. These licences are given by the IR on an annual basis subject to the fulfilment of traffic commitments by the licensees of the plots. No permanent structure is allowed to be constructed on such land. Railway land is also licensed to schools, welfare organizations, and development of shopping complexes for the welfare of railway employees. Further, shareable railway land is licensed for bulk oil installations and setting up retail outlets (by oil companies), steel yard, coal dumps, and private sidings, which offer substantial traffic to the IR. Railway land is also leased to Central/State Governments/Public Sector Undertakings on long-term basis. The rate of licence fee for various types of plots is provided in Table 29.3.

TABLE 29.3
Licence Fee Structure for Commercial
Licensing of Railway Land

Item no.	Types of plots	Annual licence fee as a percentage of land value
1.	Railway related activities such as City Booking offices, Out Agencies etc.	6
2.	Ordinary Commercial Plots—without structures	6
3.	Ordinary Commercial Plots—with temporary structures for stacking/storing:	
	(i) Covered Area	7½
	(ii) Open Area	6
4.	Steel Yards/Coal Dumps, Bulk Oil Installations etc.	7½
5.	Land used to lay private sidings	6
6.	Shops/Retail Depots etc.	10

Source: Lok Sabha Secretariat, Twenty Fourth Report of Standing Committee on Railways (2006–07) on 'Land Management', Ministry of Railways (Railway Board), New Delhi. Ch. II, p. 15

LICENSING OF TANKS AND BORROW PITS

FOR PISCICULTURE

Licensing of borrow pits/tanks for pisciculture is also allowed by the IR. While first preference is invariably given to the cooperative societies formed by railway employees, these tanks/pits can also be licensed to registered fishermen

cooperative societies, subject to the safeguarding of IR's overall financial interests and the imposition of licence fees commensurate with the prevailing market rate. The IR may resort to public auction or open tender in case no such society comes forward. The period of fishing rights may be permitted for one to five years. The IR has to execute suitable licence agreements with the parties before handing over possession of borrow pits/tanks.

Constraints to More Optimal Land Use

One of the major limitations of the approach followed by the IR in the past has been the absence of a dedicated departmental unit to manage land optimally. The set-up that dealt with this subject had many other responsibilities. Indeed, the commercial development of railway land was not defined as one of the railway activities in the Railways Act, 1989 restricting the commercial use of railway land.

While these constraints have since been addressed, some constraints continue. The state governments from or through whom the land is acquired are generally resistant to change in land use necessary for commercial exploitation by the IR. Besides these, there are the usual problems of slow decision-making and encroachment. Although encroached land accounts for only a small fraction of IR's total land, encroachment is a significant problem, because it occurs in areas with very high revenue earning potential. Over 2,000 ha of railway land has been encroached mostly in and around urban areas particularly in metro cities. In a place like Mumbai, this has also created a problem of safety and led to speed restrictions on tracks adjoining encroached land.

New Initiatives by the IR

The new land use policies of the IR aim at:

- promotion of passenger business on vacant land such as expansion of passenger facilities, new stations/platforms, reservation and booking offices, budget hotels, world class stations through Public–Private Partnership PPP, etc.;
- development of available land for the benefit of railway staff such as railway housing, offices and welfare buildings, market centres, utility centres (banks, ATMs, etc.);
- commercial development of railway land and airspace, realization of revenues from unutilized land; and
- prevention of encroachment and improvement in the ambience of the surrounding land.

To facilitate the renewed thrust on commercial exploitation of land, a new chapter (Chapter IIA) was inserted

in the Railway Act, authorizing the IR to set up the Rail Land Development Authority (RLDA).⁴ Further, Sec. 11 of the Indian Railways Act, 1989, which empowers the IR to execute various works required for 'the purpose of constructing and maintaining a Railway' was amended to include a new sub-clause for 'developing any railway land for commercial use'.

RAIL LAND DEVELOPMENT AUTHORITY

The establishment of RLDA was notified in the Gazette in September 2005 and it became functional from January 2007 after notification of rules. The principal function of RLDA is to 'develop railway land for commercial use as may be entrusted by the Central Government for the purpose of generating revenue for the IR by non-tariff measures'. These non-tariff revenues are expected to finance upgradation or maintenance of railway network. The RLDA would focus not just on land under miscellaneous use but vacant land as well. As stated earlier, IR has approximately 44,000 ha of vacant land, a substantial part of which is not required for operational purposes in the foreseeable future and has good commercial potential.

The Railway Board has so far entrusted RLDA with about 110 sites aggregating more than 700 ha in phases. In addition to taking up the bidding process for the first lot of 10 sites, RLDA's empanelled consultants are working on 37 other sites to take them forward to the next stage. These sites include prime locations at New Delhi, Mumbai, Chennai, Hyderabad/Secunderabad, Bengaluru, and Kolkata. The sites on which the bid process has been initiated by RLDA are located in Delhi, Kolkata, Bengaluru, Gwalior, Kanpur, and Visakhapatnam. After carrying out comprehensive feasibility studies through reputed consultants, RLDA invited bids for qualifying the developers. The developers for these 10 sites are being selected.

POSSIBLE REVENUE MODELS FOR RLDA

There are various revenue models through which RLDA can generate revenue for IR using land. One such model entails leasing out of land with upfront payment of lease charges either in single instalment or staggered over 1 to 2 years with nominal annual land rent for the entire lease period. Another possible model is to have a joint venture with the developer and to have a mix of upfront payment and revenue share from the joint venture. This may be more effective for major sites such as Bandra in Mumbai.

The RLDA, in both these models, plans to set lease periods ranging from 30 to 90 years, depending upon the type of development, without any outright sale or possibility of conversion of leased land to freehold land.

The third model is based on budget pronouncements (2007–08) and relates to colony development (that is, rebuilding old railway quarters) financed through commercial development of railway land. The RLDA was directed by the Railway Board to develop PPP proposals to this end initially in the metros. The PPP route can potentially modernize the vast railway colonies by bringing in modern housing and design concepts, construction technologies, and improving the quality of colonies both in terms of functionality and aesthetics. In return for these, developers are allowed to develop commercial real estate such as office space, shopping malls, and residential complexes. The PPP route can thus also ease the supply of additional real estate (floor area) in urban areas by freeing up underutilized railway land and may contribute to price stabilization in rapidly growing urban centres (see Box 29.1).

Box 29.1

Redevelopment of Old Railway Colonies: The Case of Sarai Rohilla

In his budget speech for the 2007–08 budget, the Minister of Railways announced that in order to bring about fundamental improvement in the condition of staff colonies, their development and maintenance through public–private partnership will be explored. In line with this announcement, the RLDA identified Sarai Rohilla in Delhi as one of the first 10 sites (site-wise details can be accessed at www.rlda.in), where along with commercial development, as a pilot scheme it has been proposed to rebuild about 700 staff quarters with modern layout and specifications through the developer at no cost to IR, apart from generating substantial earning as upfront lease charges to IR. The commercial real estate development of this site of 15 ha has been awarded to a private developer (ABW Infrastructure Private Limited) by RLDA for Rs 1,026 crore in October 2008 for a 99-year lease period. With the slump in real estate prices following the recent global economic slowdown and the financial downturn, however, the viability of these initiatives may be affected.

Source: (i) www.rlda.in and information accessed from RLDA; (ii) Venugopal Pillai (2008), 'Cash Crunch May Hit Rail Land Sale', *Project Monitor*, Vol. 8, Issue 25, October 20–26, available at www.projectmonitor.com

⁴ It was originally conceived as the 'Indian Railways Land, Air Space and Property Development Authority', in 2001 to be set up through a separate Act. However, it was eventually set up through amendment of the existing Railways Act, 1989 (Amendment No. 47 of 2005).

POSSIBLE RISKS FOR RLDA AND THEIR MITIGATION

One of the possible risks in commercial development of railway land through private participation relates to change in land use. As pointed out earlier, change in land use is a contentious issue between the state (and local) government and IR and is also vulnerable to legal challenge. However, now RLDA, by virtue of Amendment No. 47 of 2005 in the Railways Act, 1989 can independently decide on land use, that is, the type of commercial development on railway land, based on market feasibility studies, without seeking formal land use change clearances. Nevertheless, for comfort of the developers, RLDA is associating with and co-opting local authorities into the process from its inception, before even inviting the bids.

One of the concerns of the local governments has been that such independent development initiatives by an agency like RLDA could be at cross-purposes with urban plans. To mitigate this concern, the contracted developer by RLDA is expected to follow local developmental norms and obtain requisite sanctions of plans from local municipal authorities. This not only precludes the possibility of unplanned haphazard growth, but also facilitates clearances required for public utility services which the developer needs to secure from local bodies once such approvals are obtained.

To mitigate the risk of encumbrances on the land, RLDA will ensure encumbrance-free and timely handing over of sites to developers, in accordance with the approved phasing plan. There are penalties laid down for RLDA in the Lease and Development Agreement for any delay beyond the stipulated grace periods. The RLDA will also ensure cooperation of railway staff in areas involving redevelopment. For protecting lenders' interest, the Substitution Agreement permits them to replace the developer, should he default. The Upside Clause in the agreement provides for utilization of additional floor area ratio, if available, by additional payment on pro-rata basis. These are some of the safeguards which have been built into the Lease and Development Agreement to protect interests of both IR (as landowner) and the developers. With experience, further improvements are possible in the future.

PROJECTS UNDER DEVELOPMENT BY OTHER ENTITIES

In addition to RLDA, initiatives have been taken by other entities such as Ministry of Railways, Concor, and Indian Railway Catering and Tourism Corporation Ltd. (IRCTC) to put railway land to more optimal use. Some examples are given below.

Logistics Park Scheme

The IR has already invited bids for development of an integrated logistics chain, which will use rail transport to service the growing retail sector. The IR will provide land under a lease or concession agreement and will also provide rail-linkages to suit different volumes and needs of the park. In return, the bidders are required to guarantee a minimum volume of rail freight traffic.

Station Modernization Project

Under this project, about 25 railway stations are to be developed into world class stations on PPP basis along the lines of Delhi and Mumbai airport schemes of Airports Authority of India. The concept is based on selling space over platforms and land close to stations for property development. The concessionaire is expected to construct and maintain the operational and passenger areas at its own expense and share the revenue earned from real estate. The space will be transferred back to IR at end of concession period. New Delhi, Patna, Mumbai, and Secunderabad stations are being taken up for redevelopment in the initial phase.

To start with, New Delhi station of Northern Railway has been chosen as a pilot project. A consultant has been appointed to prepare the master plan and another to advise IR on the legal and financial aspects in this regard. The concessionaire will develop the station, limiting the IR's role to definition of broad parameters. It is expected to be a Rs 9,000 crore project comprising Rs 3,000 crore of real estate. A new master plan for 86 ha land around the station with 1.3 floor area ratio has been prepared and a three-level station is proposed to be developed with departure concourse at +1 level, arrival concourse at -1 level, and platforms at ground level with the provision of shopping malls, passenger utility areas, etc.

Elevated Suburban Rail Corridor at Mumbai

To overcome the land availability constraint, there is a proposal to develop a 60 km double-line elevated corridor (Chrchugate–Virar) for running airconditioned trains for which the feasibility study is in progress. The alignment of the corridor would be along the existing RoW with the Western Railway and the new stations are proposed to be constructed above the existing stations. It is estimated to cost around Rs 10,000 crore and would be developed on a PPP basis. The existing stations would have to be maintained and refurbished by the concessionaire.

It is also expected that the corridor would have one million passengers per day. Under the proposal, the

concessionaire would be free to fix tariffs and would manage part of the retail activities. It is envisaged that 30 per cent of the capital funding of the project would be through real estate and 20 per cent revenue of the project would be from non-tariff commercial activities. The bidding is proposed to be conducted on maximum revenue-sharing basis.

Other Land Use Schemes

The IR has conceived of several other schemes for creating new infrastructure (through the PPP route) that make optimal use of railway land. Some such schemes are: (i) Inland Container Depots, (ii) Installation of ATMs at railway stations and elsewhere on railway land, (iii) Installation of 6,000 automatic ticket vending machines

on PPP basis, and (iv) Budget hotels, shopping malls, and food plazas.⁵

Summary

The IR holds a substantial amount of land that is not required for operational purposes in the foreseeable future. Instead of disposing off this land, the IR has decided to use the land more optimally to generate revenue that could finance its infrastructure needs and at the same time help it serve the customers better and improve the welfare of its employees. Experience shows that with organizational initiatives and innovations, it is possible to raise substantial resources through commercial exploitation of unutilized/underutilized vacant railway land and air space.

⁵ 72 food plazas at various railway stations of IR have already been commissioned by IRCTC up to May 2009 and another 40 are in the pipeline.

30 Lessons from Leveraging Land

A Case of Bangalore–Mysore Infrastructure Corridor[†]

G. Raghuram and Satyam Shivam Sundaram

Introduction

The Bangalore–Mysore Infrastructure Corridor (BMIC) was a pioneering project in leveraging land for generating adequate revenue for financing an expensive infrastructure project. The project was conceived as early as 1988 with the twin objectives of connecting Bangalore and Mysore with an expressway and developing infrastructure (mainly townships) around the expressway. The idea was that the same developer would develop both the expressway and townships. The potential revenues generated from leasing the properties in the townships so developed would act as incentive for the developer to construct the expressway. Twenty years later, the project is still incomplete. This chapter outlines the events that impacted its course and pace since inception. It highlights the road-blocks and controversies that plagued the project and draws lessons from the mistakes.¹

Project Details

SUMMARY OF EVENTS

A tender was invited by the Government of Karnataka (hereafter referred to as ‘the government’) on 28 September 1988 for the development of BMIC. Only one consortium consisting of Pune-based Kalyani Group, Pennsylvania-based SAB Engineering, and Boston-based Vanasse Hangen Brustlin (VHB), both in the USA, submitted the bid. The bid was accompanied with conditions that land acquisition responsibility and the cost for the same

would be borne by the government. The government did not accept the conditions as it was keen on developing the project without investing any budgetary resources. It decided to develop the project in the Build-Own-Operate-Transfer (BOOT) mode.

Around the same time, the government approached the Asian Development Bank (ADB) for funds. The ADB studied the proposal and found that the project was financially unviable. However, it agreed to finance the project, if the government shared 20 per cent of the construction cost along with the land acquisition cost. The ADB also wanted the government to take the responsibility of acquiring land. Again, the suggestion did not find favour with the government for the same reason and it continued to explore other options (see Figure 30.1). One of them was to widen the existing State Highway (SH) 17 between Bangalore and Mysore and convert it into an expressway. Another plan proposed to develop SH 86, a slightly longer but parallel route to SH 17. The ADB, based on its study, declined to extend any financial support to these projects, as they were expected to entail large scale Resettlement and Rehabilitation (R&R) due to ribbon developments along the road. Towards the objective of improving connectivity between Bangalore and Mysore, ADB preferred a plan of doubling the existing railway line since land acquisition would not be an issue for this option. The government was not keen on the rail project as: (i) it envisaged major coordination challenges with the Indian Railways and

[†] Research assistance by Mr Neeraj Tulsyan is acknowledged.

¹ A more detailed description of the events can be obtained from Working Paper No. 2007.02.04 published in IIM-A.

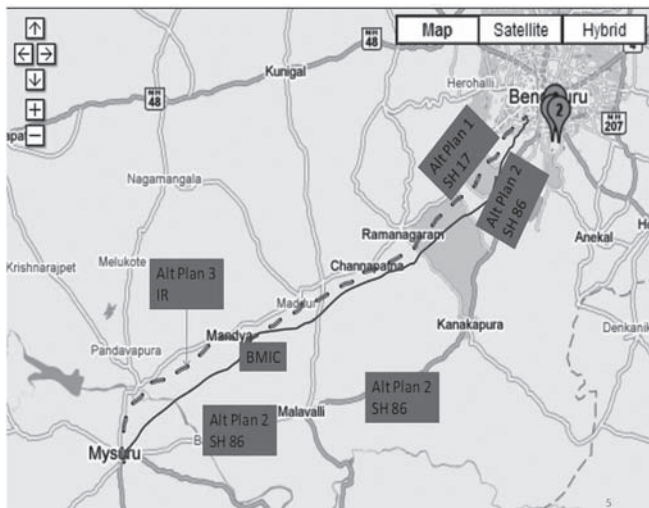


FIGURE 30.1: Project Alternatives

Source: www.googlemaps.com

(ii) given the financial condition of Indian Railways and the number of outstanding projects, this railway link was not expected to be among Indian Railways' priorities.

In 1994, Larsen and Toubro Engineering Construction & Contracts (L&TECC) division expressed interest in developing the Bangalore–Mysore expressway project on BOOT basis. However, this did not result in any further action. There is no clear answer as to why the EOI² of L&T ECC was ignored while soon after as a part of a larger sister-city development agreement, a Memorandum of Understanding (MoU) was signed on 20 February 1995 between the government and the Kalyani–SAB–VHB consortium in the presence of Chief Minister of Karnataka and the Governor of Massachusetts, USA. According to the terms of the MoU, the consortium had to conduct preliminary investigations and surveys for the expressway project and submit a detailed project report. A high-level committee (HLC) was constituted under the chairmanship of the Minister of Public Works Department (PWD) to review the report. The consortium under the guidance of HLC recommended that the township development concept (leveraging of land for generating revenue) was essential to make the project viable. It also recommended the themes, locations, and size of the proposed seven townships.

After further negotiations with the consortium, the number of townships was reduced to five (and acreage to 4,285). These townships were expected to house over

500,000 people and support a variety of activities including corporate, commercial, farming, marketing, industrial, and tourism. The government then administratively cleared the project on 6 November 1995, for execution by the consortium. The expected project cost of over Rs 20 billion, including construction and land acquisition, was to be borne by the consortium.

A Government Order (GO) No. PWD 32 CSR 95 was passed on 20 November 1995, authorizing acquisition of 18,313 acres of land,³ under Karnataka Industrial Areas Development Board (KIADB) Act, for the development of a four-lane (convertible to six lanes) expressway (including peripheral road, link road, and attendant facilities in and around Bangalore) and five townships between Bangalore and Mysore. The project lease period was set at 30 years from the date of completion, after which it was to revert back to the government. The cost of land acquisition (including R&R costs) was to be borne by the consortium.

The land requirement aspects of the project were not well-received, especially by those who had to give up their land. According to an estimate by Environmental Support Group (ESG), the project was likely to dislocate over 1,500 farming families due to direct displacement and up to 200,000 persons indirectly⁴ (www.esgindia.org).

The consortium registered a special purpose vehicle (SPV) called Nandi Infrastructure Corridor Enterprises Ltd (NICE), on 16 January 1996, under the Companies Act, 1956, for the development and implementation of the project. On 9 September 1996, the consortium entered into a 'Consent and Acknowledgement Agreement' under which they assigned their rights obtained through the GO (20 November 1995) and the MoU, in favour of NICE. In April 1997, the 'Framework Agreement' (FA) was signed between NICE and KIADB. As per this agreement, the government notified 20,193 acres of land for acquisition under the KIADB Act. When only 18,313 acres of land had been initially authorized, the enhancement to 20,193 acres in 1997 was not properly and transparently justified in any public document.

Farmers were asked to choose from three options: '(i) fair compensation at market price and a job per family, (ii) fair compensation and subsidized housing, or (iii) an equivalent land and either a small compensation for moving and hardship or a job' (GO PWD 32 CSR 95). On 14 October 1998, the KIADB formally awarded

² Expression of interest.

³ 5,110 acres for expressway and 13,203 acres of township land.

⁴ Indirect displacement includes those who lose control over natural and environmental resources, and are thereby deprived of the traditional means of livelihood, to be distinguished from direct displacement where land, property, or employment is lost.

the project to NICE on BOOT basis. The project was to be completed in three phases (see Figure 30.2). Phase I of the project consisted of: (i) 41 km of peripheral road (75 m width) connecting NH 7 and Hosur road (near Electronic City) to NH 4 and Tumkur road (near Peenya Industrial Area), (ii) 9.1 km of link road and 12 km of expressway connecting the first township, (iii) Corporate Centre near Bidadi, and (iv) Commercial Centre near Bidadi. Phase II of the project consisted of: (i) Farming and Marketing Centre near Ramnagar, (ii) Industrial Centre near Ramnagar, and (iii) 24 km of expressway. Phase III consisted of: (i) Eco-Tourism Centre near Srirangapatnam, (ii) the remaining portion of expressway, and (iii) the elevated section of the link road.

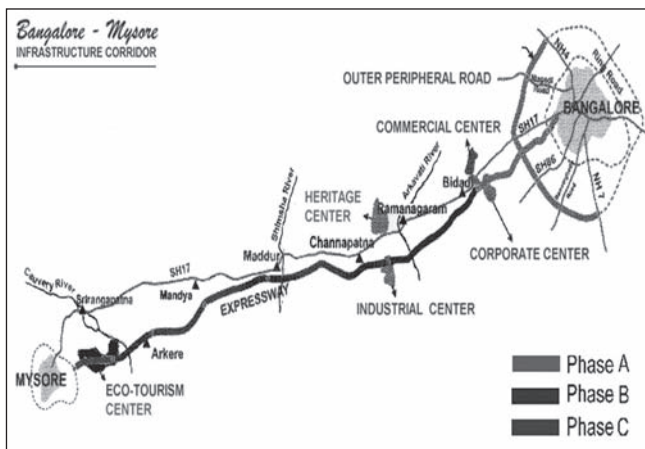


FIGURE 30.2: Project Details

Source: www.nicelimited.com

The project also included construction of toll plazas, provisioning of petrol bunks, truck terminals, bus terminals, public amenities, trauma care, hazard management centre, traffic control, storage facilities for the goods, and power generation and distribution centres. It was envisaged that the right of way of the expressway would carry telecommunication cables (fibre optic cables), power, and gas lines. The project also included construction of 400 MW Power Plant, two thousand million cubic metre (TMC) Water Supply pipeline, and Sewerage Treatment plant over the three phases.

Nandi Infrastructure Corridor Enterprises Ltd (NICE) applied for clearances from various government agencies. The clearance from Karnataka State Pollution Control Board (KSPCB) required public hearings. The first public hearing was held on 9 March 2000 in Bangalore and subsequent hearings were to be conducted at Mandya

and Mysore. However, there was lack of serious effort on the part of both NICE and the government to increase awareness among the Project-Affected Persons (PAPs) and the general public. These hearings were postponed due to lack of public information regarding the project. Conceding to the request of various organizations, the Deputy Commissioner, Bangalore Urban District, promised to release necessary documents in the public domain. Hearings were then conducted in Mysore, Mandya, and Bangalore. On 1 August 2000, the KSPCB issued a 'No Objection Certificate' (NOC) to the project contingent on several conditions. On 8 August 2001, the Ministry of Environment and Forests (MoEF) gave a clearance to the road/expressway component of the project, subject to meeting the specified conditions.

In the mean time, the government conceived the Karnataka State Highway Improvement Project (K-SHIP) for improving 2,300 km of highways at a cost of Rs 20,300 million. This did not include any work on SH 17 or SH 86 in view of the BMIC. The K-SHIP was proposed to the World Bank for funding, which was granted on 24 May 2001. In July 2002, the government decided to include the widening of the SH 17 from two to four lanes as part of K-SHIP. The Chief Minister also assured prompt action from the government for doubling the railway track between Bangalore and Mysore. These events threatened the viability of the expressway. It is not clear why the government engaged in these uncoordinated activities where one venture threatened the survival of the other or rendered it irrelevant

Nevertheless, work towards the BMIC continued and an agreement related to toll franchise and land lease was signed between NICE and the government in August 2002. Subsequently on 16 August NICE achieved financial closure for the road component. The project cost was estimated to be Rs 8,400 million, with the promoters investing Rs 3,600 million, and the balance being raised from banks and financial institutions. A consortium of banks led by ICICI had agreed to finance the project. However, environmental activists and other citizen groups opposing the project complained to the Reserve Bank of India (RBI) regarding violation of certain guidelines by these banks. The alleged violation was with regard to mortgaging of project land for financing. Since the legal counsel suggested that this was permissible, no visible action was taken by the RBI.

During this period,⁵ active print and electronic media brought out many articles regarding alleged violation of

⁵ *Benami* land around the expressway corridor had led to increase in personal wealth of many individuals. Denotification/notification of land was allegedly done using money power as detailed in the article mentioned in footnote 6.

laws by various politicians and bureaucrats for personal gains in the BMIC project.⁶ These articles pointed to an increase in demand for land from 20,193 to 29,140 acres and notifications/denotifications of land to satisfy vested interests.

Further, many Public Interest Litigations (PILs) were filed against the project on various grounds. In response to one of the PILs, a single bench of the High Court of Karnataka, in December 2003, quashed the land acquisition for the townships while upholding the land acquisition for the expressway. The government and NICE appealed to a division bench of the High Court.

Amidst controversies, construction work on BMIC started in March 2004.⁷ The work commenced at seven locations. Some of the initial activities included excavation work for constructing interchange facility including a four km stretch at Sompura (commencement point for the expressway), and construction work of a peripheral road from Hosur passing through the B–M Kaval forest area. In the first phase of the project, a stretch of 62 km (including peripheral and link road), was expected to be completed by August 2005. The second phase was to be completed by August 2006 and the third phase by August 2007.

Some of the political parties submitted a memorandum to the Governor against the project. The project was opposed on the premise that it was full of irregularities and benefited some vested interests, having ignored the farmers whose lands were being acquired. The parties also alleged that the total land acquired was much higher than the required land for the construction of expressway and five townships as agreed in the project award document. The Governor asked for the project details from the Chief Secretary. In response to the information sought by the Governor, the Special Deputy Commissioner, KIADB informed that the land acquired as of 2004 was 29,258 acres. However, the earlier identified excess land (2,728 acres) had been denotified. The letter also revealed that land acquisition was based on the requirement indicated by the promoter company and not on the basis of any technical drawing/maps approved by the government.⁸ This indicates that no significant attempt was made by the government to verify actual minimum technical land requirement for the project. Based on the requisitions sent in by the project proponent, land was notified, acquired, or denotified.

Thus, four different figures of land attainment for the project have been thrown up—18,313 acres authorized for acquisition in 1995, 20,193 acres notified in 1997, followed by a land requirement of 29,140 acres in 2002, and the letter to the Governor in 2004, which stated that ultimately 29,258 acres had been acquired as of 2004, while 2728 acres had been denotified. There was no systematic tracking of the acquisition process. Accountability came in through agitations, PILs, and petitions by opposition parties drawing public attention.

In May 2004, the state elections were held and the new government decided to review the project. In November 2004, the government constituted a Review Committee chaired by K.C. Reddy to inquire into the excess land allocation. The Chairperson of the Committee had earlier given a go-ahead to the project as part of the HLC. The Committee submitted its interim report in a month stating that 2,450 acres of excess land was allocated. The Report was accepted by the government. Consequently, the government withdrew its application as a co-appellant before the division bench started hearing the arguments. (As mentioned earlier, the single bench had quashed land acquisition for the township part of the project, against which the then government had appealed.)

Two legislators filed a PIL in the High Court with a plea to scrap the project as it was surrounded with too many controversies. At the same time, many PILs were filed requesting court intervention in completing the project at the earliest possible.

On 11 April 2005, the division bench of the Karnataka High Court dismissed the PILs filed by the legislators and directed the state government and its instrumentalities, including the KIADB, to execute the project as originally conceived. The court also quashed the GOs of 4 November 2004 and 17 December 2004, constituting a review committee, and an expert committee respectively, to monitor the progress of the project. (The committees had indicated that 2,450 acres of excess land had been acquired.) The reports of the committees and the action taken thereof were quashed. During the hearings, the court further decided to initiate contempt of court proceedings against the Chief Secretary and the Under Secretary of the state for withholding information regarding the project during the hearing.

⁶ <http://www.esgindia.org/campaigns/bmic/press/A%20controversial%20project.htm>, Vol. 21, Issue 2, 17–30 January 2004.

⁷ In spite of the apparent ‘hurdles’, NICE carried on the project activities. It received land at the rate of Rs 1 million per acre and sold approximately eight acres of it, after development, at a price of Rs 3.75 million per acre to the Indian Machine Tool Manufacturers Association for establishing a Convention Centre (Sale Deed Agreement, 2003).

⁸ http://www.esgindia.org/campaigns/bmic/docs/CM-Memorandum-June162006.SCANS/SplDy%20Commissioner%20KIADB%20to%20Proj%20Co-ord%20BMICP-22May2004_p2.gif

The High Court order was challenged in the Supreme Court by the government and the active groups. On 20 April 2006, the Apex Court also ruled in favour of the project and commented that the government action was mala fide as the same officer who had awarded the project could not have found excess land at a later date. There were evidences of due diligence from the government side while awarding the project when the number of townships had been reduced to five from seven. As a response to the court order, on 19 June 2006, the government issued specific orders to the PWD to provide rest of the acquired land to NICE for completing the project.

On 14 July 2006, the first stretch of the first phase was opened. However, even on the inaugural day, further controversies arose. It had been mentioned in the Framework Agreement that NICE was to intimate the PWD to inspect the road before it could be thrown open for motorists, which it had not done. A notice was sent to NICE by the PWD stating that the road should not be opened for traffic without clear approval by the government.

On 2 October 2006, KSPCB withdrew consent for the BMIC project after it found alteration in the road alignment, which was in alleged violation of the conditional environmental clearance granted by the MoEF in August 2001. In November 2006, the Supreme Court dismissed a review petition (against the project promoters by the government) of its earlier order.

Some active groups filed an application on the alignment of the expressway near Gottigere Lake in Bangalore. The petition was driven by environmental concerns. The Court had to give a judgement on whether construction of a bridge should be allowed across the lake or the adjacent forest land be used for connecting the Bangalore-end of the expressway. On 27 January 2007, the Supreme Court issued notices to the state government and NICE. While the Court allowed NICE to go ahead and complete the first phase of the project, it barred NICE from carrying out any construction along the Gottigere Lake. The government decided not to hand over the land in this area stating that the matter was under active consideration of the court. This is another instance where it was demonstrated that proper impact assessment was not carried out in the initial stages. The fact that the expressway would pass through the vicinity of Gottigere Lake with the attendant consequences should have been known way back in 1995.

Nandi Infrastructure Corridor Enterprises Ltd (NICE) filed an appeal with KSPCB against its order that

withdrew the NOC. In response to this, the Karnataka State Environment Authority (KSEA) inspected the 47 km peripheral road. On 8 July 2007, the KSEA, in their report, conveyed five instances of deviation in alignment and hence the appeal was rejected.

With the withdrawal of the NOC and other controversies that plagued the project, NICE appeared to have lost legitimacy in the eyes of the rest of the world because, on 5 August 2007, Global Infrastructure Consortium (GIC) put forward a proposal indicating that it would accept the terms and conditions of the Framework Agreement of 3 April 1997 and would like to take up the project under the Swiss Challenge method.⁹ They were also ready to pay the cost of the existing infrastructure as evaluated by an independent agency while taking over the project. On 30 August 2007, it was decided that a global tender should be called for fresh bidding of the project. A notification was issued by the PWD on 17 September 2007, inviting competitive proposals from entities or consortiums in this regard.

Nandi Infrastructure Corridor Enterprises Ltd (NICE) filed a petition in the Supreme Court against the government notification of inviting fresh bids. It argued that they had already invested Rs 12 billion in the project and had made further commitments to third parties running into few billions. They also argued that this government action amounted to contempt of Court since it was against the specific direction issued in April 2006 by the Apex Court asking the parties to complete the project as soon as possible. Subsequently, on 28 September 2007, a stay was put on the government notification. However, the Apex Court agreed with the government that it was within its right to cancel the contract provided irregularities or breach of contract was established.

On 25 April 2008, the Executive Committee, led by the Governor overturned the decision (to withdraw the project from NICE and invite fresh bids through a global tender to implement the project) of the previous government. On 9 May 2008, the decision of the Executive Committee was stayed by the Election Commission on grounds of violation of the model code of conduct in view of the impending elections. Elections were held in May 2008. The new government ratified the Governor's earlier order of cancelling the global tender. The Supreme Court also ruled against the Election Commission directive.

On 8 October 2008, the government decided to release 102 acres of land for completing the link and the periphery road. Despite this release, problems persisted on some stretches in terms of further release of land or clearances.

⁹ Under the Swiss Challenge method competitive bids are solicited from other prospective bidders and the original proponents are given a chance to match them.

ASSESSMENT

The project was mired by controversies related to quantum of land, environmental clearances and adherences thereof, and procedural lapses. These were aggravated by frequent changes in political leadership. The government took a hands-off approach while NICE was only interested in pushing the project through despite the odds. Clearances and approvals were often acquired amid controversies of vested interests and personal gains rather than clear commitments to meeting specified conditions. So, each obstacle was viewed in isolation and resolved with a here-and-now approach. The active groups (NGOs and citizen groups) also took a piecemeal approach by focusing on a particular issue of interest at that point rather than trying to take a holistic view of the project.

Hence, none of the stakeholders looked at the broad perspective to diagnose the specific ills that afflicted the project or tried to anticipate the pitfalls that could arise at a later stage while planning the project.

Discussion and Key Learnings

NEED FOR CLARITY AND CONVICTION IN THE CONTEXT OF A NOVEL PROJECT STRUCTURING

The idea of leveraging land was a novel dimension in this project. However, the government lacked clarity and conviction. The scope/definition of the project was itself questioned. While the single bench of the Karnataka High Court viewed the project as an expressway project, the division bench of the High Court and the Supreme Court considered it as an integrated township project.

The notice for land acquisition was served under the KIADB Act and the purpose was stated as 'industrial use'. Some farmers contested that the notice was vague in its message as the exact use was not stated. Many believed that the government could not legitimately acquire land for private townships under the pretext of public interest¹⁰ using the KIADB Act. Public Interest Litigations (PILs) were filed with by those who believed in this view. A single judge bench of the High Court agreed with the view and ruled against the project, quashing the 40 per cent of the total land acquired (for townships). However, the division bench set aside the order of the single judge bench. Finally, the Supreme Court verdict cleared all doubts claiming that the project was an integrated infrastructure corridor and not just an expressway where land parcels were given for real estate development in order to boost the returns.

A clarity in the government communication regarding the scope/definition (whether integrated infrastructure corridor or expressway project) would have reduced the number of litigations.

The public hearings witnessed disorder and violence as some stakeholders (farmers, environmental support groups, different citizen groups, etc.) were not convinced about the benefits of the project. As stated earlier, the government had to postpone the scheduled public hearings in Mandya and Mysore due to lack of awareness about the project among public. Some citizen groups claimed that in spite of their best efforts, information regarding the project was not shared in the subsequent hearings as well.

The lack of clarity over the scope and effort to keep all the stakeholders involved led to legal battles and delayed the project. It also led to heavy politicization and created further impediments.

CLARITY ON QUANTUM OF LAND

The quantum of land was not clear. The GO of 1995 identified 18,313 acres as the land requirement for the project. In 1997, the FA specified 20,193 acres of land while the formal award of the contract to NICE in 1998 specified 23,846 acres. By 2004, KIADB had notified 29,258 acres for land acquisition. Thus, discrepancy in land requirement created both political and legal obstructions for the project.

One of the possible reasons for the varying requirement was that the land acquisition was planned based on the communication sent by NICE and not on the approved drawings/maps of the project. According to a letter sent by the special deputy commissioner, KIADB to the Project Coordinator, BMIC, 'Land acquisition notifications were issued based on the requirement indicated by the promoter company and not on the basis of any technical drawing/maps as approved by the Government in PWD or the project report'. Another reason could be collusion of vested interests. The decision to notify or denotify a plot could have been taken depending on the personal gain that could be made by the politicians and the administrators.¹¹ This rent seeking was facilitated by the absence of any detailed project report which gave the decisionmakers absolute discretion.

NO PROTECTION AGAINST POLITICAL RISK

Changes in government (political risk) affected the speed at which the project progressed. According to various

¹⁰ Some of the land parcels were physically separated from the expressway.

¹¹ <http://www.esgindia.org/campaigns/bmic/press/A%20controversial%20project.htm>, Vol. 21, Issue 2, 17–30 January 2004.

newspaper reports as well as Supreme Court observations, approvals and facilitating activities slowed down whenever a particular political party was a part of the government. Even the government's stand in various courts kept changing, depending on the party that was heading it. The government went to the extent of reviewing the project and scrapping the same. This happened in spite of earlier rulings of the Supreme Court that reversal of stand should not be taken by governments every time there was a political change.¹² Opportunity for rent seeking, which enhances political risk, arose primarily due to lack of detailed groundwork on the project, which provided enough scope for administrative discretion in the name of 'public good'.¹³ This enhanced the political risks of the project.

LACK OF TRANSPARENCY AND OPEN COMPETITIVE BIDDING

Some of the controversies can be attributed to lack of transparency regarding the agreements signed between KIADB and NICE. The agreement barred either of them from revealing the exact details of the project including the details of the land acquired (Project Award Document, 1998). The land requirement varied from 18,313 to 29,258 acres over the years of project implementation without providing any basis. It appears that the alignment was also modified. Lack of information was not helpful in curbing either PILs or demonstrations on the ground by the activists against the project. In fact, it made them believe that there was something wrong in the project.

The project was awarded on negotiation basis even though another player (L&TECC) had also shown interest in the project in the event that the same was envisaged on BOOT basis. Competitive bidding would have established trust in the public and political circles.

NO PROTECTION AGAINST RENEGING UTILITIES

Nandi Infrastructure Corridor Enterprises Ltd (NICE) had entered into an agreement with Bangalore Water Supply and Sewerage Board (BWSSB) for use of more than 150 MLD of water which was 1/4th of the amount of the water supplied to Bangalore city. Thus, the project was expected to adversely affect supply of water to the city. To add to this, there were ongoing disputes on the Cauvery river water between Tamil Nadu and Karnataka. The BMIC was expected to receive 85 MLD of waste

water free for non-potable use, depriving farmers who used it for various agricultural purposes. This was also a region with extensive irrigation network based on the Cauvery river basin.

In January 2008, BWSSB decided not to permit NICE to shift water and sewerage lines in four locations as it could have affected water supply and sanitation in the city. This was something that should have been anticipated at the outset of the project and not as an afterthought. Shifting of the pipeline was essential for the completion of the alignment in the prevalent form. In spite of repeated requests from NICE, the pipelines were not shifted, stating technical opinion. On 24 January 2008, the Karnataka High Court directed the BWSSB to shift the water and sewage pipelines in four locations so that NICE could complete the peripheral road, which was part of the BMIC project.

CONFLICT OF INTEREST OVERLOOKED

Many of the government staff joined NICE after their retirement. In fact, at least half a dozen high ranking bureaucrats who were associated with the Framework Agreement were employed with NICE at a later stage.

Concluding Remarks

The project pioneered the idea of leveraging land for infrastructure projects. Lack of clarity, conviction, and transparency led to excessive delays in the project. Inadequate transparency was evident in the selection of the project developer and was manifested by the frequent PILs filed by different groups relating to: (i) non-use of critical resources including land and water, and (ii) detailed project design. The project developer had been selected based on the interest shown by it rather than open competitive bidding.

Judicial interventions led to delay in the execution of the project. However, when appealed to, it also came to the rescue of the project.

Various events that occurred as the project unfolded point at how governments can—with impunity—take unilateral and inconsistent decisions with major adverse consequences. The main reason for this appears to be rent-seeking. To ensure success of infrastructure projects, which are typically long-term and hence have to pass through different political regimes, it is imperative that projects are protected against these risks.

This project has been delayed substantially and the costs of such delays to the economy are very high. Also, the

¹² *State of Uttar Pradesh and Another vs Jobri Mal* (Indlaw SC 423: 2004, AIR (SCW) 3888) and in *State of Haryana vs State of Punjab and Another* (Indlaw SC 40: 2002).

¹³ <http://www.esgindia.org/campaigns/bmic/press/A%20controversial%20project.htm>, Vol. 21, Issue 2, 17–30 January 2004.

increased costs arising mainly out of governance issues, as shown in the paper, ultimately get transferred to the tax payers and users of the facility for no fault of theirs. This raises questions of fairness. The important lesson from this is that unless governance issues are anticipated well

in advance and addressed, infrastructure projects may get unduly delayed. They may even become unviable, costing the economy a great deal of resources. One such governance issue is land, particularly if private sector participation is involved.

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Section VII

**INTERNATIONAL EXPERIENCE IN
MANAGING LAND**

31 Land-related Rights, Land Markets, and Institutional Framework

A Review of International Experiences

Piyush Tiwari

Introduction

Land is a crucial and complex resource required for development activities—crucial, because no development activity is possible without land and complex, because land is associated with several opportunities to use, invest, and secure. Organization of these opportunities often requires legal statements defining rights, restrictions, and responsibilities. These rules are necessary but not sufficient to turn opportunity sets specified by the rights into marketable commodities; they need to be complemented by appropriate institutional changes. In other words, for more efficient functioning, markets have to be ‘built’. Most countries suffer from inefficient land markets and have tried a number of formal and informal approaches to ‘build’ land markets. Building land markets is not about usual land reforms involving land redistribution, but entails creation of opportunities for commodification of land unrestrained by volume of available land (Wallace and Williamson 2006). Not surprisingly, in providing effective framework for land markets, the focus has shifted from narrow approaches such as simple titling to more comprehensive land administration (Barnes 2003).¹

Four components of a technically satisfactory land administrative system, as described by Palmer and McLaughin (1997) and Wallace and Williamson (2006) are:

- *Juridical*: defines rights by allocating land, transaction tracking and legalization, delimiting of parcels, demarcation of boundaries on ground, adjudication of disputes, registration of titles, and keeping a record of the same;
- *Regulatory*: establishes opportunities for use and resources through restrictions such as zoning, designation of special areas, etc;
- *Fiscal*: organizes economic aspects of land—policies to increase revenue collection, incentives to consolidate and redistribute land or use land for particular purposes; and
- *Information management*: regarding land registrations for juridical purposes; valuation, taxation and zoning for fiscal purposes; and other information systems that support planning and enforcement of regulation;

Most efforts related to enhancing land-market efficiencies have concentrated on one or more aspects of the land administrative system described above. Agencies involved in the administration of land and regulations that affect use and allocation of land such as planning and land acquisition are key players in the land markets. Though, broadly countries have tried to strengthen regulations

¹ Further, land administration debate has also moved on from formal tenure-based systems to recognize ‘communal titles’ in scenarios where individual titles are not in demand or are difficult to establish.

and reorganize the institutional structure, which includes agencies involved in land planning and acquisition, experiences with regard to success differ. The objective of this chapter is to review international experiences and innovations related to approaches aimed at making land use administration and management efficient, keeping in view all the four components of land administration system and focusing on four areas: institutional response to information management, land use planning, establishment of rights and tenure security, and use of eminent domain.

Institutional Arrangements for the Management of Land

There are three key features of land administration institutions impinging on the efficiency of land markets which relate to decentralization, autonomy, and comprehensiveness of information. International experience shows that practices differ across countries on each of these features.

DECENTRALIZATION

Decentralization of land administration activities promotes greater information symmetry, facilitates broader participation, and improves access, which result in better plans and better allocation of land resources.² Decentralization of land institutions maintaining Land Registry³ and Cadastre⁴ is critical to optimizing access to land and creating sustainable systems (Barnes 2003).

Many cities around the world have a registry system at the local level but usually the legal cadastre remains centralized (*ibid.*). Property taxation agencies, which are among the primary users of registry and cadastre, remain at the municipal level. Planning agencies which also use registry information and cadastre are either part of municipalities or operate as separate agencies. The lack of integration of registry and cadastre functions has been a big problem, as many examples from Latin American cities demonstrate. The World Bank (2001) argues that the cadastre and registry functions should be managed by a single institutional entity for efficient functioning. There are examples of countries such as El Salvador, which have

a combined institution that performs these functions. Problems also arise if there are parallel systems of registries as in Peru where rural and urban land registries were separate. The urban–rural distinction in land registry is not very common, but for cadastral institutions, it is commonly practised. Peru has designed a new combined registry system that is parallel to the traditional system and offers the advantages of simplicity and efficiency.

AUTONOMY

Certain countries such as El Salvador and Guyana have undertaken initiatives to make key land administrative institutions more independent and autonomous. This allows these institutions to generate more business, for example, through selling land-related information and offering wide-ranging services. These steps allow land institutions to remain continually efficient and relatively free of interference. Innovative public–private institutional arrangements often emerge as a consequence (for instance, the land registry in Ontario, Canada). The other advantage of this approach is that land-related information, which is also crucial for development activities particularly by the private sector, is more easily available. Lack of information creates opportunities for rent-seeking behaviour on part of those who have access to information, thereby hindering competition, which is so important for efficient operation of land markets.

COVERAGE VS ACCURACY

Another question that becomes important while developing institutions for land administration is whether these institutions should accord high priority to accuracy of land-related information or to complete coverage, possibly at the expense of quality. There are proponents of both options (Barnes 2003) but as a practical matter, an information system is more useful if it covers complete jurisdiction even if there is some imprecision associated with feature, locations, and boundaries. However, the degree of imprecision should be limited to an extent which does not compromise the usefulness of information beyond which the inaccuracy would impose serious limitations to the use of information.

² Although it has been widely recognized that land is a local subject and decisions concerning land are best made at local levels, land administrative institutions in many countries, for example in Latin America and Caribbean, have remained highly centralized.

³ Land Registry records the ownership of land.

⁴ Cadastre is a comprehensive register of the metes and bounds real property of a country, and commonly includes details of: ownership, tenure, precise location, dimensions (and area), cultivations (if rural) and the value of individual parcels of land. Metes and bounds is a system or method of describing land, 'real' property, or real estate. Typically, the system uses physical features of the local geography, along with directions and distances, to define and describe the boundaries of a parcel of land.

Land Use Planning

Needham (2006) identifies two approaches to land use management. One is through land use planning, which imposes restrictions on the use of land rights and provides a framework for what can be developed and what cannot; differences on this issue can be sorted out under the purview of public law. The other is the enforcement of rights associated with the use of land without impinging upon the rights of others. The differences in case of the latter are sorted out under private law. Different countries weigh and use public and private laws differently while legislating on land use management. In the US, determination of land use is entirely under the jurisdiction of private law; in other words, the role of government through planning is very limited. Land use management in Southern European countries relies on planning, which falls within the domain of public law. Whether the US system achieves economic efficiency compared to the one which leans more towards public law, is not clear (*ibid.*). However, on a transaction cost basis, public law-based systems are more expensive than the ones where people negotiate or sort out their differences privately. The difficulty with public law is that many public rules do not encourage innovative solutions that facilitate development. There are, however, examples from countries such as Japan and Singapore where land use planning has assisted or even led developmental initiatives.

SUCCESS OF LAND USE PLANNING IN JAPAN AND SINGAPORE

The planning system in Japan has played a crucial role in leading and reconfiguring land use in Tokyo. In response to globalization of Japanese firms, the nature of employment in Tokyo changed from manufacturing-based employment to service-sector jobs (Kidokoro et al. 2001). An implication of this transformation was that manufacturing moved out of central Tokyo and started to concentrate in the western corridor of the Tokyo Metropolitan Region. This led to the emergence of the Keihin industrial belt, where petrochemical and steel industries are clustered. Market-led transformation of Tokyo's land use caused concerns among planners, which culminated in the adoption of a set of policies aimed towards spatial decentralization. The main problem with the market-led transformation was the haphazard nature of development on the periphery of Tokyo where manufacturing was getting concentrated. The other problem was that service sector was replacing in an incoherent manner in the business district of Central Tokyo.

Planning in Japan is carried out at three levels—national, regional (for eight regions), and local. Japan has formulated strategic national plans in the form of national development plans (NDPs) since the 1960s. In addition, various regions also formulate regional development plans. Detailed land use and development plans are prepared at the local level as city plans. An important feature of the planning system in Japan is the strategic cooperation at various planning levels. Though balanced regional development has been the goal of the plans right from the onset of the planning process, it has gained greater prominence as Tokyo has become over-concentrated and acquired high density. The Fourth NDP, published in 1986, specifically focused on decentralized multi-polar national development. Decentralization was further reinforced in the Fifth NDP published in 1998 (Takafusa 2004). National Capital Region Development Plans complemented objectives of the NDP.

At the local level, there was huge support for national government policies concerning balanced regional development. During the 1960s and 1970s, many communities lobbied with the government to offer incentives and build large infrastructure to attract industries in their regions (Kidokoro et al. 2001). Oil shocks of 1973–4 and 1978–9 and deteriorating environment due to rapid development of heavy industries shifted the focus of national plans to high-tech industries such as micro-electronics, automobile, and consumer goods. Following up on the success of regional growth poles for heavy industrial development, the Ministry of Trade and Industry promulgated 'technopolis policy' in 1980, which proposed the development of technopolis growth poles. National Development Plans (NDPs) focused on complementary policies for regional development of high-tech industry-based economies. Despite substantial funding, not all technopolis growth pole areas succeeded and the technopolis programme did not succeed in producing R&D centres in high-tech industry (*ibid.*). Successful R&D firms and high-tech industries, however, continued to be located in the Tokyo Metropolitan Region.

Singapore, which has a unique status as a city-state, has also actively used planning as a tool to influence land use to achieve economic objectives. In terms of population and land area, Singapore is smaller than most major capital cities in Asia Pacific. Natural resource-wise rich Singapore is severely constrained—half of its water supply is imported from Malaysia. Singapore's lack of natural resources has been compensated for by its unique geographical location within the region which has helped in developing Singapore as a service economy. In economic terms, Singapore is now the seventh largest in Asia.

Planning, especially in land use, played a major part in Singapore's economic development. Singapore has a single-tier government system which is responsible for planning at local and national levels. Being a city-state, Singapore faces severe land constraints. Land use planning and management has aimed at controlling urban land demand through cross-border immigration restrictions and at influencing land supply through land acquisition (Chia 2001). During the 1960s, the major priorities of urban planners included: meeting housing shortage, urban renewal to clear the slums, revitalizing the city centre, and improving the living environment. In 1971, Singapore prepared a concept plan to guide the city's physical growth over the next two decades. The plan provided for high density housing, industries and urban centres in a ring formation around a central catchment, linked together with an efficient public transportation system (ibid.). Over time, central areas became congested and the next concept plan introduced in 1991 followed a strategy of decentralization. New centres in the east, north, north-east, and west were planned, each serving up to 800,000 jobs, with the objective of bringing jobs closer to homes. At the central location, a new downtown area was created to meet the needs of the expanding service sector through hotels, shopping centres, offices, and night-life facilities.

The planning system through the selective release of land for pre-determined land use has helped Singapore achieve its economic objectives. Now, the quantum of international trade is more than three times Singapore's gross national product (ibid.). Until 1990, Singapore was the largest recipient of Foreign Direct Investment (FDI) in industries targeted for export markets in the region. Singapore is the third largest financial centre in Asia after Tokyo and Hong Kong and over the years it has developed as a risk management centre with active foreign currency trading, money market operations, and trading in capital market instruments (ibid.).

Establishing Land Rights and Tenure Security

World Bank, US Agency for International Development (USAID), and other multilateral institutions have long argued that greater tenure security is a pre-requisite for the development of efficient land markets and many countries in Central and Eastern Europe, Latin America, Africa, and Asia (particularly China) have undertaken land administration measures to improve tenure security. The theoretical basis for much of the work that has been done to formalize property rights is the evolutionary theory of land rights (Barnes and Griffith-Charles 2006). The

theory argues that since land is supply-inelastic, demand pressures on land increase its value and when values rise, landholders demand improved tenure security via a state administered process of adjudication and title registration (ibid.). Since titling and registration are part of the land administration system, the demand pressures on land essentially necessitate improvements in existing land administration systems. The theory, as discussed in Barnes and Griffith-Charles (2006), postulates that formal land titles and better land administration systems which offer greater tenure security, motivate title holders to invest in their land, and banks to provide credit on favourable terms. Improved land administration reduces transaction costs. Adjudication and provision of clear titles reduce land conflicts. This theory has been exported to all regions around the world and many developing countries have initiated programmes to formalize land rights.

EXPERIENCES OF CENTRAL AND EASTERN EUROPEAN COUNTRIES IN CREATING LAND-RELATED RIGHTS

An important aspect with regard to establishment of land and property rights in Central and Eastern Europe (CEE) has been that these regions transitioned from a system where these rights were completely non-existent. The experience of CEE countries in establishing land rights in a short span of two decades is worth noting. The CEE countries were formerly centrally planned economies, where the socialistic model did not provide free choice across supply options for consumers. The state ensured that important services such as housing, health care, and education, etc. were provided free of cost. In these circumstances, the state acquired all resources for production (including land) and determined their use pattern. A key feature of the socialistic model was complete absence of urban land markets. Nationalization had reduced private ownership of land. Cities without land markets produced spatial patterns which were distorted by numerous inefficiencies. The most important step in the development of private land markets in CEE has been the restitution of land rights or compensation for confiscated land rights. In East Germany, Czech Republic, Slovenia, Albania, and Bulgaria, land was restituted to heirs of previous owners. The process has been extremely time-consuming but in some markets such as Prague, it has infused huge investments into the economy. The whole process of establishing land markets required a number of issues to be tackled in order to clarify property rights arrangements. These include: (i) establishment of a legal definition of freehold and leasehold property rights; (ii) unambiguous definition of property; and (iii)

establishment of mechanisms for transferring property from public to private sector. One of the difficulties in establishing private market for land in Poland was the existence of multiple claims to titles in its major cities such as Warsaw. Most of the land in the Central part of Warsaw is still under dispute or under counter claims. The Czech Republic, Slovakia, and Bulgaria have introduced guarantee of private ownership through legal changes in 1990–1. Russia does not recognize private ownership of land but allows 49-year leases (a similar system is used in China and Hong Kong). Most of the CEE markets are still in the process of establishing land information/registration systems. These initiatives are creating conditions for the development of private property markets.

Local governments and planning systems play an important role in the establishment of land markets. Inefficient planning systems constrain development activities, increase transaction costs, and deter investments. In terms of planning in CEE cities, the authorities in Budapest (Hungary), where municipalities compete for investment, have been most effective, while in Warsaw, the authorities have not provided policies for future long-term development. Problems in Warsaw arose due to inconsistent objectives of municipalities and lack of understanding of land markets among planners.

CHINESE EXPERIENCE IN CREATING LAND USE RIGHTS

As in the case of CEE, China started its transition from a system where land and property rights were completely non-existent. China's experimentation with the creation of land markets, however, has been very different from CEE countries. All land in Mainland China was either state-owned or under the collective ownership of village communities. State retains the right to requisition rural land from rural collectives for public purposes and the ownership of rural land is allowed to be transferred to the state (Qingshu et al. 2002). Prior to 1980, the government allocated land use rights mainly to state enterprises, on no fee basis. Further, transfer of land use rights was not permitted. There was no mechanism for determination of land values. Economic liberalization policies that were introduced in China since 1978 required land market reforms particularly related to land acquisition, property rights assignment from state to private entities, and transfer of land tenure in the market. Chinese property market institutions have transformed substantially since the 1980s.

They have put in place a mechanism to determine the price of properties and also a mechanism to assign property rights. Before 1980, there was no price mechanism by which property rights could be transferred. With the

issuance of Provisional Policy on the Use of Land by Joint Venture Enterprises by the State Council on 26 July 1980, a land use fee system was established. All joint venture companies were required to pay a land use fee. In 1982, the city of Shenzhen, which was granted special status as Special Economic Zone, became the first city to charge land use fee based on location. The success of this system in revenue generation led other cities such as Fushun and Guangzhou to also adopt the land use fee system in 1984. By 1988, a total of 100 cities in Mainland China had adopted a land use fee-based system (Feng and Yeung 2004). Later that year, the State Council introduced an ordinance to levy urban land use tax throughout the country which replaced the land use fee system. Tax rates were set according to the size of the city.

Another important institutional development took place in China when in 1987, a system, similar to Hong Kong, that permitted the user to transfer leases to other enterprises or individuals was introduced. Shenzhen's Special Economic Zone was the first city to introduce this practice but it was later adopted by several cities such as Fuzhou, Haikou, Guangzhou, Shanghai, and Tianjin (*ibid.*). In 1988, a Constitutional Amendment provided the legal basis for transfer of land use rights. Later in 1990, the State Council introduced the Provisional Ordinance on the Sale and Transfer of the Tenure of the Urban Land of the People's Republic of China, which prescribed sale, transfer, leasing, mortgage, and termination of land use rights (*ibid.*). Shenzhen witnessed the interplay of developers, local government, and state-owned enterprises forming coalition in the development of built environment (Han and Wang 2003).

The planning system, according to China's Urban Planning Act, 1989, comprises three levels—master plans which are usually made for 20 years and guide development of land use and location of major projects; detailed plans which are made for 5 years and are for immediate implementation which set out development codes such as plot size, building height density etc.; and zoning plans that provide further details to the master plan so that there are adequate guidelines to prepare detailed plans. An example of these plans is Chongqing's development plans (*ibid.*), which are drawn up at all the three levels. An important feature of Chongqing's developments plans is that these are flexible enough to take into account interests (often commercial) of various parties.

Governments could achieve multiple objectives through participation in/facilitation of development activities by creating structures for flexible land use policies and efficiency in their implementation. Development activity in China is carried out by public and private sector

companies. Developers are initiators of projects and work in close cooperation (usually partnership to avoid red tape) with the government. Government is the supplier of land and regulates the development process. At the local level, city governments compete to attract investments by facilitating development of high quality commercial buildings. Clean and modern built environment is considered as evidence of government achievement, which is very important for government officials to demonstrate progress to higher administrative levels. State-owned enterprises have land use rights. A large chunk of the land use rights are located in central city locations. These enterprises have also participated in the development process to boost their profits, which could subsidize their production costs and staff welfare (Han and Wang 2003). These are negative aspects of over indulgence by the government.

Inefficiently functioning and opaque land markets can be transformed into efficient markets, as China has demonstrated. Land prior to 1980s was allocated without levying any rent. In land allocation, there was absence of land value, no time frame was prescribed for land use, and no further transaction was allowed (Qingshu et al. 2002). While land users were not required to pay any fee to landowners (state), in case of requisition of land by the state, the state has to pay 'land requisition fee' to rural collectives for requisition of land or a resettlement fee for the use of existing urban land. Table 31.1 presents

the nature of current land markets, actors, and basis for transaction price for various types of transactions involving land and land use rights in China.

Mechanisms to determine prices for transfer of land use rights, particularly during early stages of development in China have been irregular. As documented by Han and Wang (2003) for Chongqing, the transfer of land use rights from government to developers used a negotiable price that was not made public. As the next stage of property market transactions has started to set in, other price mechanisms based on open market auction or free market transactions have started to take place.

China has strengthened its legal and regulatory framework considerably. Market-based pricing mechanisms for land use rights have also evolved and matured over the last two decades. China has instituted effective legal measures for the compulsory acquisition processes. With these measures in place and much more information being available, Chinese land markets have been gaining maturity.

EXPERIENCE OF OTHER COUNTRIES WITH OTHER FORMS OF MANAGING PROPERTY RIGHTS

Evolutionary theory of land rights, which is largely built around the idea of land as an individually owned economic commodity, has been criticized in regions such as Africa, where complex land tenure structures exist.

TABLE 31.1
Land Market in China

Type of transaction	Nature of land market	Actors	Subject of transaction	Basis of transaction
Rural land acquisition for administrative allocation to work units	Land ownership by state	1. State (buyer) 2. Rural collectives (sellers) 3. Work units (users)	Land ownership	Requisition fee
Acquisition of rural land for leasing	Land ownership by state	1. State (buyer) 2. Rural collectives (sellers)	Land ownership	Requisition fee
Conveyance of land use rights (LURs) by acquisition of rural land	LURs conveyance market	1. State (seller) 2. Land users (buyer)	LURs	Land price
Conveyance of LURs by acquisition of urban land	LURs conveyance market	1. State (seller) 2. Land users (buyer)	LURs	Land price
Conveyance of LURs of administratively allocated land on commercial basis	LURs conveyance market	1. State (seller) 2. Existing land users (seller) 3. New land user (buyer)	LURs	Payment to state and existing land user
Transfer of LURs on commercial basis	Market for transfer of LURs	1. Land user (seller) 2. Land user (buyer)	Paid LURs	Land price

Source: Adapted from Qingshu et al. (2002).

Privatization of land tenure is not always the quickest way for establishing efficiently functioning land markets, as has been demonstrated in the CEE countries. In Latin America, Mexico, for example, has created the necessary conditions for the privatization of community land but the progress has been slow. Often due consideration (such as trust and reciprocity) has to be given to informal social institutions to produce security of tenure and dispute resolution (Jones and Ward 1998). Alternate arrangements could also be created for recording land titles/rights. Namibia has combined the land record system with registries on marriage, inheritance, women's rights, and debt, thereby producing an efficient system of land administration.

Formalization and regularization of land tenure has been on the agenda of even non-socialist countries due to the existence of communal tenure, informal tenure, or a weak land record system. In Brazil, individual land rights have been enshrined in the Civil Code for centuries. However, legal tensions have constrained the ability of the government to regularize tenures for squatter settlements. For historical reasons, South Africa had produced a land tenure system which had denied freehold tenure to black households or offered complicated non-collateral permits to some. South Africa is now contemplating a non-discriminatory land tenure regime which would recognize various tenure options and opportunities for communal property acquisition.

Does formalization of land tenure always lead to an increase in land market activity? The answer to this question is ambiguous. In some countries such as Thailand, it did. In former socialist countries as well land market activity has increased. There are, however, also examples where the land market activity did not increase. Barnes and Griffith-Charles (2006) conclude that in St Lucia, which undertook land formalization programmes, market activity did increase in initial periods but with time, the effects of other economic factors became far more important, and in fact led to a decline in formal land market activity. Their study also found formal titled property reverting back to informal systems primarily through inheritances. Landowners perceived that the transaction costs of the registry were higher than the *de facto* costs.

USE OF EMINENT DOMAIN

Governments often resort to acquiring land using their powers under the doctrine of 'eminent domain', which empowers the state to acquire land for public purposes, subject to payment of just compensation. Eminent domain, as applied in the US, enables the government to compulsorily acquire land for public projects such as

roads, highways, and parks. Although the US Supreme Court has leaned towards a wide discretion for the state in using eminent domain, there has been opposition to the use of the doctrine for supplying land to private parties. For instance, it took several lawsuits over ten years for land to be assembled for Times Square in New York. In Europe, the European Convention on Human Rights gives citizens protection from arbitrary limitation by the state on exercise of private property rights (Hong 2007).

Outcome of such acquisitions are usually 'suboptimal', challenged in Court of Law and loaded with huge enforcement costs. There are issues related to efficiency since in government-led land acquisitions, market mechanisms are not operative and compensation depends on the political situation. Further, fair market value does not reflect the value of assembled land which in a way creates no incentive for owners to cooperate and transfer their assets to the government quickly.

Is there an alternative to eminent domain? Hong (2007) argues that land readjustment is better way of land assembly, which has been used in many countries and has succeeded in reducing transaction costs. The principle behind land readjustment is instigated 'land-for-land' swapping or property rights exchange. Private owners are compensated with serviced land of similar value. When an individual's interest in property is in conflict with the community at large, consensus building through negotiation and persuasion is the first resolve. Coercion should be employed only if parties have exhausted all options and have failed to compromise.

'Land swaps' have been tried in some road-widening projects under Land Acquisition Act, 1894 in India. However, due to weak institutional design, a win-win outcome for all involved is rarely achieved. Usually the private owner loses out in the process. In countries such as Japan, Israel, Germany, Hong Kong, etc. where land readjustment has been successful an essential element is the participation of all involved—public, government agency, developer, and political leadership. Institutional conditions also favoured land readjustment in these countries. Israel has tightened the definition of public use and consequently state intervention in acquisition of land is very limited. In Japan, rights of private owners are very strong and courts have favoured private property protection. The only viable option for land assembly is through land readjustment. In Hong Kong, the government did not collect impact fees from developers to support the redevelopment of the Lai Sing Court Apartment Complex. The incentive was so high that developers were willing to share part of the profits and negotiate with participating owners. In addition, owners

received relocation compensation, an apartment unit with close resemblance, on the same floor and at the same orientation. Land readjustment has benefits compared to the compensation method found in compulsory purchase as it allows original owners to partake in land redevelopment, thus enabling them to enjoy the financial gains generated by the project.

Conclusion

Land is an important market asset and offers opportunities for producing capital for economic development. Investment inflows into cities which have more efficient land markets have tended to be larger. However, efficient land markets are not just about scale of trading but also about development of systems that can separate and reconstruct tenures that allow an owner to reduce his rights by creating derivative interests to permit actual use by an owner of lesser rights. Once competencies to fragment the way land is used develop, markets produce mass transactions that deliver substantial land redistribution (Wallace and Williamson 2006). Such a transformation requires not only institutions and tools, described above but social tools also.

Countries that have been reviewed above and that have attempted to reform land institutions have differed from each other on one or more of the following aspects:

- (i) The nature of state (centralized vs decentralized);
- (ii) The power of the state (enforcement ability);
- (iii) Socio-cultural acceptance of formal state (as opposed to customs);
- (iv) Degree of and stage of economic development; and
- (v) Initial conditions (prior to initiation of change).

It is, therefore, tempting to hypothesize that the success and failure of land-related reforms would be a function of ground conditions that have existed within a country. Testing this hypothesis would require a detailed analysis linking land reform outcomes to ground conditions, which is beyond the scope of this chapter, which aims to present only a review.

The limited review presented here highlights varying degrees of success with respect to the use of formal institutions and regulations in 'building' land markets. One

main reason for limited success in developing efficient land markets has been the narrow view within which these regulations and institutions attempt to make markets efficient. Improving land records by itself, for example, is not sufficient to improve market functioning, unless complemented with the ability to work with abstractions (Wallace and Williamson 2006). Opportunities start unfolding when one starts to view land not just in the mere tangible physical form but in the context of rights that are associated with it. These rights could then be unbundled and traded in complex ways. For example, it is not necessary for a development project to acquire (own) land and all rights associated with it, if it was proving difficult. Rather the project could lease the land from landowners and exploit ('use' aspect of land) it for production purposes. It is also not necessary that the land is acquired by the government for economic development purposes, other models such as land readjustment could bring in desired results even when voluntary exchanges of private purchases become difficult.

Common themes, however, emerge which could be adapted in different countries with different legal and institutional structures:

- clarity of purpose of government for involvement in land;
- flexible planning system to take into account interests of various parties;
- public-private partnership in land management and recording of land rights;
- protection of private interest in property and involvement of NGOs in negotiation rather than use of land acquisition acts;
- decentralization of administrative agencies involved in land management; and
- land tenure regularization to the extent markets demand it and with full recognition of local practices with regard to tenures.

In more evolved concept of markets, quantity of land available is not the issue. Multiplication of land interests and layering of opportunities could create unlimited potential for secondary and derivatives market, which could then support commercial activities (*ibid.*).

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32 Land Administration in Countries with State Ownership of Land

Biswanath Debnath and Tarun Choudhary

Acquisition through the use of eminent domain powers and issues related with the associated compensation have been areas of concern in the development process across the world. It is not surprising that compensation provided in case of compulsory acquisition has a basis in law in countries where private ownership of property is recognized by law. But, what about the countries where land is owned by the state and the law recognizes only the land use rights.

This chapter documents the land administration, acquisition, and compensation practices in three such countries—China, Ethiopia, and Mozambique. Accordingly, the chapter is organized in three self-contained parts.

China¹

OWNERSHIP AND USER RIGHTS

Land ownership in China falls into one of the two categories: land can either be owned by state or (collectively) by Collective Economic Organizations (CEO). Land in the urban areas of cities is owned by the State, whereas land in rural and suburban areas is owned by peasant collectives, except for those portions which belong to the State as provided for by law. House sites and private plots of cropland and hilly land are also owned by peasant collectives.

The concept of CEO is the outcome of a planned economy and is not a legal term. In China, farmers constitute around 80 per cent of the population. The Chinese government recognizes a single village (sometimes several villages) as a CEO. The land in that area is owned by the

CEO and is distributed to the villagers for the purposes of cultivation or residence.

State-owned land and the land owned by a peasant collective may be used by groups or individuals. Groups and individuals that use land have the obligation to protect, manage, and also make rational use of the land. Land owned by peasant collectives of a village or town are operated and managed by CEOs of the respective village or town. Such land is operated under a contract by members of the CEOs for crop cultivation, forestry, animal husbandry, or fishery. The duration of such a contract is generally 30 years. The land owned by the state may be operated under a contract of mutually agreed duration by groups or individuals for similar purposes as CEOs, but also for commercial purpose with government approval.

There are legal implications of differentiating the state land from the collective land. As per the law, unless a piece of collective land is requisitioned, that is, it is converted from the collective land to state land on approval by the government at provincial level or above, it is not permitted to be used for commercial projects such as office buildings, condominiums or industrial complexes. But in practice, it often happens that the collective land is illegally used to construct commercial projects for monetary gains.

LAND USE RIGHTS SYSTEM

One of the instruments that has contributed to rapid urban and economic development of China is the Land Use Rights System (LURS). It separates land use rights from land ownership, so that individuals and private users can access land through LURS. This has two implications:

¹ Based on the Law of Land Administration of the People's Republic of China, 1986.

(i) the system has promoted the development of land use rights (primary) markets in which prices of these rights and market mechanisms begin to affect land use and land allocation decisions, and (ii) it has created an institutional capacity for local governments to raise much needed revenues to finance urban redevelopment. Until October 2008, there was no secondary market in land use rights.

In October 2008, China enacted a reform regarding the transfer of land use rights; and the new rule allows farmers to lease or transfer land-use rights. Now the government will establish markets where farmers can 'subcontract, lease, exchange, or swap' land use rights or join cooperatives.

LAND ACQUISITION AND COMPENSATION MECHANISM

Land acquisition along with the institutional scheme of leasing public land has greatly contributed to China's urban and economic development. Since land cannot directly be acquired by the requiring bodies from collectives, land acquisition works on two grounds, that is, converting rural collectively owned land to state-owned land, and institutionalizing powers of local governments so that they can, at low cost, expropriate land from farmers and then sell/lease it to developers at much higher prices. The system thus gives the local governments monopolistic powers by virtue of which they can acquire land at controlled prices and at the same time, make sure that they get sufficient revenues from land leasing. In case urban development occurs on land outside the city or town boundaries, the government first acquires that land from the collectives and then leases it to the land user(s). Local governments profit enormously from this transfer, as they are enabled through the legislation to purchase the land cheaply from farmers and then lease it at a much higher price to land developers and investors.

As the state virtually owns all land in cities and towns, the state demands a huge upfront leasing fee (known as the Land Conveyance Fee). Land is leased typically for 30 to 70 years, depending on the type of land use. Land used for industrial, educational, technological, and scientific purposes, etc. is leased for a maximum of 50 years whereas land for commercial, tourist, or entertainment purposes can be leased for a maximum of 30 years. Land for residential purposes is leased for 70 years.

The Land Acquisition Law (LAL), 1999 and the Chinese Constitution specifies that the state may lawfully acquire land owned by collectives. '... compensation for

cultivated land requisition should include three components: compensation for land, funds for resettlement, and compensation for attached assets and green crops on the land. The compensation amount for the first item is 6–10 times the Derived Land Productivity (DLP), which is the average annual production per hectare in the preceding three years. The amount for the second item is 4–6 times the DLP, subject to a maximum of 15 times the DLP. The combined amount of the former two items is set at a maximum of 30 times the DLP'.² It may be noted that upon approval from the provincial authorities, however, the total compensation can be increased to support economic rehabilitation of the displaced, but it cannot be greater than 30 times the Average Annual Output Value (AAOV). Standards of land compensation for requisition of other types of land are prescribed by the provinces, autonomous regions, and municipalities.

Local governments are required to take actions to guarantee the timely and complete payment of land compensation, resettlement subsidy, attached facility compensation, and young crops compensation, assuring that the displaced villagers will not suffer income loss due to land acquisition. Provincial and municipal governments are required to approve increased resettlement subsidy to those displaced villagers who cannot maintain original living standards with the land compensation and subsidy offered as per the current regulations, or who cannot afford being covered by social security insurance.

LAND ACQUISITION ISSUES AND PROBLEMS

Flaws in Institutional Framework

The LAL, 1999 states that any development on non-urban land even by an individual must be carried out on state-owned land. Since the bulk of non-urban land is owned by the collectives, this means that the state has to acquire land from the collectives and lease it to the individual. This inevitably expands the legal scope of land acquisition.

Flaws in Compensation Standards

Lower standards and levels for compensation are applicable for projects of national interest (such as highways and energy development) vis-à-vis purely commercial projects. Thus, the Law allows the local governments to exercise their political powers to under-compensate farmers for their land, if it is being acquired for a project of national interest.

Also, in urban areas, market value compensation is payable to people whose buildings are demolished under the

² Economic and Social Commission for Asia and the Pacific.

Urban Buildings Demolition Relocation Administration Regulations of 2001 (UBDRAR), whereas for similar damage, the people in rural areas are compensated based on the average annual agricultural productivity of the land being acquired.

Ethiopia³

OWNERSHIP AND LAND REFORMS PROGRAMME

Rural and urban land in Ethiopia belongs to the state. The peasants of the country have a right to get land allotted to them for free from the state for the purpose of cultivation. To ensure that all citizens have an equal opportunity to earn a livelihood and have equal access to living, the state determines the size of both rural and urban land being allotted to its citizens. The State also has the authority to lease out land to private investors.

Land reforms were announced in March 1975, which brought an end to multiple land tenure systems in the country. After the reforms, all rural land was nationalized without compensation, tenancy was abolished, and hiring of wage labour on private farms was disallowed. All commercial farms came under state control and the state granted each peasant family 'possessing rights' to a plot of land not to exceed ten hectares. Since then, the State proclaims itself to be effective in defining access, distribution, and tenure terms of user rights.

THE REAL PICTURE

The land tenure system is regulated as portrayed by the above laws, but the country mostly follows the customary law and traditions. There are significant differences in land management practices and their implications across communities in Ethiopia. Each household has their own private land holding for exclusive use and in addition, households use common lands for grazing and other purposes. Land cannot be sold or bought; it can only be redistributed by the local government. Descendents of a family, however, inherit the land use right in practice.

LAND ACQUISITION AND RESETTLEMENT & REHABILITATION

The state has the right to acquire property for development that is in public interest. The Constitution recognizes resettlement and rehabilitation as a civic right and mandates the state to provide monetary (or alternative) means of compensation including relocation. By signing credit agreements with international development agencies such

as World Bank for projects such as the Rural Capacity Building Project (2006), the Government of Ethiopia has committed itself to abide by the international best practices for resettlement and rehabilitation. Each individual has the right to refuse the compensation rate proposed and take his case to the court if he finds the compensation to be under market value.

The replacement cost for agricultural land is the pre-project market value (or pre-displacement market value, whichever is higher) of land of equal productive potential or use, located in the vicinity of the affected land, plus the cost of land preparation to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. Also, the state has to rebuild structures such as huts, houses, farm outbuildings, etc. For compensating the land acquired in urban areas, the replacement cost is defined as the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and located in the vicinity of the affected land, including the cost of any registration and transfer taxes. For houses and other structures, the replacement cost is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure plus the cost of (i) transporting building materials to the construction site, (ii) the cost of any labour and contractors' fees, and (iii) the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

Mozambique⁴

LAND OWNERSHIP

Mozambique achieved independence from Portugal in 1975. The country witnessed a socialist regime post independence with a centrally planned economy. The 1987 Land Regulation Act permitted concessions for private land use rights to be awarded by the state and established that a title constituted the only legal evidence of the transfer of rights from the state to any national or foreign citizen. A new Land Law was passed in 1997 with substantial non-governmental organization (NGO) participation in its development and implementation. The new law covers all regulations for key aspects of land occupation and use.

³ Based on the Resettlement Policy Framework, The Federal Democratic Republic of Ethiopia, 2004.

⁴ Based on Law of Land, 1997, Constitution of Mozambique.

MOZAMBIQUE LAND LAW, 1997

Salient Features

The Law states that the land in Mozambique is owned by the state and may not be sold, alienated, mortgaged, or attached. Communities, individuals, and companies only gain land use rights (leases) of the land and these rights can be transferred, but not sold or mortgaged. Land use rights are gained by occupancy or by state concession for a period of up to 100 years. The establishment, modification, transmission, and termination of the right to use land are subject to registration. Also, communities or individuals occupying land for more than 10 years acquire permanent rights to use that land and do not require registration documents. The Law allows the transmittance of the rights to use and exploit the land via inheritance. The right to use and exploit the land for economic activities is subject to a maximum of 50 years and the courts must accept verbal evidence from community members about occupancy. (Verbal testimony was restricted under the previous law, which gave absolute preference to paper titles—this clearly worked against peasants.)

LAND ACQUISITION, COMPENSATION PRACTISE, AND LAND REDISTRIBUTION

For any development project that is in public interest, the state can acquire land from its lessees and can demolish the structure built on it as per the Urban Construction Legislation. But, the right of eminent domain says that

individuals and entities have the right to equitable compensation for expropriated assets and they possess the right to a new and equal plot of land.

The compensation fee for resettlement is in accordance with the local authority, which determines the standards of compensation. As far as possible, the infrastructure development projects have to follow the land-for-land compensation policy for all rural households affected by development projects. However, in practice, land distribution in many instances is difficult due to scarce land resources of equal value. As a result, many rural households do not receive adequate or good quality cultivable land, thus making their livelihood and rehabilitation difficult and eventually impoverished due to project interventions. Cash compensation is provided to collectives for community-wide mitigation measures with limited or no follow-up of individual rehabilitation measures.

The households losing their farmlands are given land-for-land through redistribution of land generally available within the village. Although the Mozambican Land Law does not permit sale and purchase of land, considering the difficulty of replacing land of equal value, in exceptional cases, cash compensation is paid where there is a lack of replacement land available for redistribution. The compensation rate is determined/negotiated according to ground conditions and is based on the agreement reached between the district government and the affected people after extensive consultation on the matter.

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REPORT ANNEXURE

33 The Infrastructure Sector in India, 2008

Manisha Gulati

Introduction

The World Economic Forum's 'Global Competitiveness Report, 2008–09' has identified inadequate infrastructure as the biggest impediment to doing business in India. Predictably, it is also the area that has received significant attention from the Government of India (GoI), which made grand announcements related to policies, financing norms, and government spending, some of which have been partially motivated by the objective of stimulating domestic demand in the face of economic slowdown. While the recent economic slowdown has provided a context for boosting infrastructure development, complex red tape is emerging at the state level (in terms of multiplicity of agencies and number of clearances required) as states are increasingly getting involved in the planning and execution of infrastructure development.

The overall strategy has, however, not changed. While pure public sector investment in infrastructure is possible, the thrust of the spate of recent policy and regulatory reforms has largely been on stimulating private sector involvement either through 100 per cent investment or at least Private–Public Partnerships (PPPs). Indeed, attracting private capital into infrastructure sector has become the cornerstone of the strategy for infrastructure development for the past few years. The year 2008 saw several efforts in this direction. What has been the performance of individual sectors? Have the past and current initiatives begun to show results? How did the success or failure to introduce reforms impact the performance? What new

constraints and challenges have emerged? The chapter reviews the key developments in each infrastructure sector in terms of these questions.

Telecom

The telecom sector has continued to grow in 2008, boosted by multiple initiatives to create the base for the next phase of growth. With over 429 million connections at the end of March 2009,¹ India has emerged as the third largest telecom network in the world and the second largest among the emerging economies of Asia. The overall teledensity reached 36.98 per cent at the end of financial year (FY) 2008–09.² The structure and composition of telecom growth has undergone substantial change in terms of wireless versus wireline phones. Not only are wireless subscribers more numerous than wire line subscribers, but they are also growing much faster. Wireless subscribers have now reached 391.76 million. By contrast, the wireline subscriber base is only 37.96 million.³ At this pace, where about 10 million telephones are being added every month, the target of 500 million connections by 2010⁴ seems well within our reach.

The Department of Telecommunications (DoT) and the Telecom Regulatory Authority of India (TRAI) have taken a number of initiatives aimed at boosting competition in the market place, while protecting the interests of the Indian consumer. Some of the initiatives taken in this regard are the issuance of guidelines for 3G

¹ Press Release No 38/2009 dated 21 April 2009, Telecom Regulatory Authority of India.

² Ibid.

³ Ibid.

⁴ *Annual Report 2007–08*, Department of Telecommunications, Ministry of Communications and Information Technology, GoI.

services and Broadband Wireless Access (BWA), proposal to Internet Service Providers (ISPs) to terminate internet telephony calls on phones (including mobile phones),⁵ and proposal to allow Mobile Virtual Network Operators (MVNOs)⁶ to facilitate a more efficient use of existing telecommunication infrastructure.

To galvanize competition, launch new services, and expand network coverage, GoI announced the 3G policy, which would set the stage for the roll-out of 3G services in the country. The policy for 3G spectrum allocation has undergone several amendments. In its final version, the policy has made auction of 3G spectrum mandatory for both Global System for Mobile Communications (GSM) and Code Division Multiple Access (CDMA) operators.⁷ The policy allows winners of 3G licences to get 2G spectrum without additional entry fee. It also allows successful foreign bidders to acquire Indian operators without having to wait for the three-year mandatory lock-in-period for a shareholder to sell stake, as was stipulated earlier.

The GoI has already granted 3G spectrum to the state owned operators, Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL), in each of their circles. These operators are exempt from participating in the auction, but will have to match the highest bid received in the auction. This implies that while some circles will be able to accommodate only one or two private players, others will have no private players on account of limited availability of 3G spectrum. Bharat Sanchar Nigam Limited (BSNL) and MTNL have already launched 3G services in some circles, thereby having a clear head start over their private sector rivals, tilting the playing field in their favour.

The GoI has also decided to auction spectrum for BWA in a manner similar to 3G spectrum. The DoT has indicated the availability of 2.3 GHz frequency band in addition to the previously notified 2.5 GHz band for these services. It has also changed the roll-out obligations for these services and removed the provision of covering specific areas within two years of allocation of spectrum. Four blocks will be auctioned, each having a Pan India reserve price of Rs 1010 crore. It is expected that the auction of BWA spectrum will catalyze the growth of broadband through wireless technology, specifically in the rural segment, and help overcome one of the key factors

limiting the growth of broadband in the country: the last mile access. In addition, the mandate of Universal Service Obligation Fund (USOF) has now been enlarged for providing support for broadband services.⁸

The auction of spectrum for both services has, however, been delayed due to a variety of reasons such as difficult conditions in global financial markets and disagreements between DoT and Ministry of Finance on the floor price for spectrum. Considering that the service roll-out following the allotment of spectrum will take at least six months, such delays are only undermining the interests of consumers, who stand to benefit from the host of new services and products that 3G will facilitate.⁹

Besides the introduction of new and consumer-friendly services, measures have been taken to promote efficient use of existing telecommunication infrastructure. Telecom Regulatory Authority of India (TRAI) has given a go-ahead to the MVNO model, which will enable licensed service providers to resell their spectrum to MVNOs, who would then provide direct services to consumers. It has recommended that a separate licence be issued for them with no roll-out obligations. The MVNO would be allowed to offer any or all services that the mobile network operator (MNO) can offer, subject to the agreement between MNO and MVNO. The MVNO's subscribers would be included in the parent MNO's subscriber base for the purpose of spectrum allotment where subscriber based criterion is applicable for spectrum allotment. There would be no limit to the number of MVNOs attached to an MNO. However, an MVNO would not be allowed to get attached to more than one MNO in the same service area.

With increasing penetration in urban areas, operators have also been exploring ways to tap the large rural market, and in doing so have been actively supported by the regulator and the government. Policy initiatives for rural telephony include the proposal to waive off the licence fee for rural wireline and wireless services and reduction of the levy towards the USOF from 5 per cent to 3 per cent of the adjusted gross revenue in case of existing operators who have already covered over 95 per cent of rural areas in their licence areas. Further, the TRAI has abolished access deficit charge (ADC), which used to be paid by telecom operators to the

⁵ Earlier, a call from a computer could legally be made only to another computer within the country and not to a phone.

⁶ TRAI has recommended that an MVNO be defined as a licensee that does not have spectrum of its own, but can provide wireless (mobile) access services to its own customers through an agreement with the licensed access provider.

⁷ However, allocation of additional spectrum for 2G mobile services continues to be subscriber linked.

⁸ So far the USO mandate was restricted to supporting wire lines and by providing village public telephones and rural direct exchange lines.

⁹ The Regulator had given its recommendations on 3G mobile services in 2006.

incumbent, that is, BSNL¹⁰ for providing service in rural areas. It is expected that this move would result in lower tariff thereby promoting higher penetration of telecom services in rural areas. However, the GoI amended the USOF rules to compensate BSNL to the tune of Rs 2000 crore per year for three years.

Typically characterized by lower incomes compared to urban areas, the rural areas historically did not attract much private investment, as operators did not see scope for making adequate profit due to low penetration and unattractive average revenue. This deprived the rural areas of the benefits of competition. The picture, however, began to change in 2006–07, when the government invited competitive bids for (minimum) subsidy from the USOF for setting up passive infrastructure and for offering mobile telecom services in areas where there was no existing fixed wireless or mobile coverage. This scheme covered 7871 infrastructure sites (towers) in 500 districts spread across 27 states. The aggressive bids, including those by private players, reflected a change in perception about the viability of rural telephony. Some operators even offered to pay the government for being allowed to provide mobile services instead of taking money from the USOF. In 2008–09, the USOF invited proposals from operators and stand-alone tower companies to set up another 11,000 mobile towers across India to cover the other uncovered areas. In terms of the actual roll-out of the sites that have already been awarded, less than 50 per cent (3,316 of 7,505¹¹ towers) of the targeted infrastructure sites have been commissioned by operators till January 2009.¹²

Following the encouraging response from private operators on sharing of passive infrastructure, DoT has allowed service providers to share active infrastructure. Under the terms of the guidelines outlined, sharing of active infrastructure (limited to antenna, feeder cable, radio access network, and transmission system) is permitted based on mutual agreements between service providers. In order to encourage infrastructure sharing in rural and remote parts of the country, DoT has decided not to grant any subsidy if a newly erected tower is not shared. It is expected that all these initiatives will help increase rural tele-density from the current low of around 13 per cent¹³

to 25 per cent by the end of the 11th Plan, representing 200 million rural connections.¹⁴

A policy initiative which has significant potential for raising competition among operators and improving the quality of service to consumers relates to the mobile number portability (MNP), which allows all existing mobile phone subscribers in the country to switch to other operators providing better services while retaining their numbers. This will bring great relief to mobile subscribers fed up with poor quality of service provided by their operators, but reluctant to shift to another on account of the hidden cost of switching networks, that is, circulating their new number. As a result, MNP will also reward those operators with better customer service, network coverage, and service quality. As per the guidelines issued by DoT, the country has been divided into two MNP zones, consisting of 11 service areas with two metros in each zone. Though the government has taken over two years to act on TRAI's recommendations—made in March 2006—to introduce MNP, it now aims to implement MNP in the metros and category 'A' circles by mid-2009 and in the rest of the country by the end of 2009. The Department of Telecommunications (DoT) has awarded MNP licences to Telechordia and Syniverse. It remains to be seen whether these companies can meet the target for implementation of MNP as laid down by GoI.

Another consumer-friendly initiative has been the launch of Internet Protocol TV (IPTV). It is defined as multimedia services such as television/video/audio/text/graphics/data delivered over IP-based networks to provide high quality sound and picture, security, interactivity, and reliability. It allows a viewer to pause live transmission as well as to record multiple programmes at the same time. The Ministry of Information and Broadcasting (MIB), on recommendations from TRAI, allowed access service providers and ISPs with net worth more than Rs 100 crore and having requisite permission from the DoT to offer these services. There are, however, many issues that need to be addressed. The lack of clarity on content control and FDI norms for this new broadcasting platform has led to conflict between telecom operators and cable operators. While cable operators are governed under the Cable

¹⁰ BSNL has a licence to operate in all circles except Delhi and Mumbai.

¹¹ The original number of towers to be set up as per agreements was 7,871 but was revised to 7,505 after addition/deletion based on actual field survey and coverage achieved thereof in accordance with the terms and conditions of the agreements.

¹² Implementation status of USOF, Office of Administrator USOF, Department of Telecommunications, Ministry of Communications and Information Technology as updated at <http://www.dot.gov.in/usof/implementationstatus.htm>

¹³ Press Information Bureau, Government of India, Year-end Review of Department of Telecommunications, Ministry of Communications and Information Technology, 2008.

¹⁴ *Annual Report, 2007–08*, Department of Telecommunications, Ministry of Communications and Information Technology, GoI.

Television Network Regulation Act, 1995 for content control, telecom operators are not. Other issues relate to pricing of content, revenue sharing models, competition from cable/satellite operators, and quality of service.

Transport

ROADS

Progress in road development in 2008, as in the past few years, was tardy despite several policy announcements. A new model-bid document was put in practice for Public–Private Partnerships (PPP) projects to be implemented under the National Highways Development Project (NHDP) along with a new toll policy to allow operators to levy and raise user charges. But litigation and debate over the norms laid down (particularly relating to the qualification process) in the model bid documents, though eventually addressed, delayed the much-needed impetus to bidding for and awarding of projects under the NHDP.

The model bid documents include the Model Request for Qualification (RFQ) and Request for Proposal (RFP) and the Model Concession Agreement (MCA). The new bidding norms provide for the prequalification of six bidders at the RFQ stage on the basis of scores allotted to their experience and net worth. The norms also bar companies from putting in financial bids if they are shortlisted at the RFQ stage for eight projects during a two-month period (preceding the due date for financial bid), or if they have won four projects during the same period. In such cases, the bidder next in line in terms of ranking would be included to keep the number of shortlisted bidders at six. However, for projects proposed to be bid out after March 2009, the GoI has removed the norm for shortlisting of bidders and allowed all bidders qualifying at the RFQ stage to submit financial bids. This has been done in view of the following reasons:

- several shortlisted companies have withdrawn bids after being shortlisted at the RFQ stage due to the shortlisting norms,
- the number of qualified bidders available to fill such gaps is low, and
- poor response was received in the bid process for some projects.

Under the adopted MCA, all project parameters such as the concession period, toll rates, price indexation, and technical parameters are provided upfront to the bidders. They are required to specify only the amount of grant

sought by them. The bidder who seeks the lowest grant is awarded the contract. This system allows bidders to seek negative grant, that is, instead of seeking a grant, a bidder may offer to share the project revenues with the government. Other salient features include indexation of user fee to the Wholesale Price Index (WPI), revision of concession period with variation of traffic growth,¹⁵ 50 per cent of land acquisition by the National Highways Authority of India (NHAI) before awarding a project and acquisition of the remaining 50 per cent of land within six months of awarding the contract.

In line with the provision of an annual increase in user charges in the MCA and to improve the viability of road projects to be implemented in PPP mode, GoI approved a new toll policy known as the National Highways Fee (Determination of Rates and Collection) Rules, 2008. The policy—which is yet to be implemented—specifies the base user fee for four- or more-laned sections of the national highway (refer to Table A33. 1) and stipulates that the user fee on two-lane sections of the National Highway on which the average investment for upgradation has exceeded Rs 1 crore per km will be 60 per cent of the former. It also specifies the base fee for use of structures such as bridges, bypasses, or tunnels, providing for a more direct linkage between the cost of construction of the structure and the toll rate. This is in contrast to the earlier toll policy, under which only the length of the road stretch was taken into account while computing the toll, irrespective of variation in construction costs. The base user fee so determined by this policy will be revised annually to the extent of 40 per cent of increase in WPI.

Though these policies are in the right direction, the actual progress in road development has not been satisfactory. It has become clear that India will not achieve the targets laid down for the NHDP, which aims at upgrading, rehabilitating, and broadening 50,000 km of our national highways (NH) in seven phases by the original target completion dates. As of February 2009, only 20 per cent of the total road length under NHDP had achieved completion. The progress of the individual phases is provided in Table A33.2. It can be seen that in the case of Phase II and Phase III, the target completion dates have been postponed.

The award of new projects was also slow on account of delays in the finalization of model-bid documents, regulatory, and commercial reasons as well as litigations. In fact, NHAI was able to award only 7 projects during April 2008–January 2009. The cap levied on the number of

¹⁵ For example, a shortfall of 5 per cent in the target traffic after 10 years would lead to extension of the concession period by 7.5 per cent thereof. On the other hand, an increase of 5 per cent in the target traffic would reduce the concession period by 3.75 per cent thereof.

TABLE A33.1
Toll Tariffs for National Highways (4 Lanes or More) for Base Year 2007–08

	Basic toll tariff for highways	Toll charges for permanent bridge, bypass, tunnel			
		Cost of structure (Rs crore)			
		10–15	15–100	100–200	Above 200
Base rate of fee per km (in Rs)	Base Rate (in Rs)	Addition to base rate (in Rs)			
Car, jeep, van, or light motor vehicle	0.65	5	1	0.75	0.5
Light commercial vehicle, light goods vehicle or mini bus	1.05	7.5	1.5	1.15	0.75
Truck or Bus	2.20	15	3	2.25	1.50
Heavy construction machinery, earth-movers or multi-axle vehicle (3–6 axles)	3.45	22	4.5	3.40	2.25
Oversized vehicles (7 or more axles)	4.20	30	6	4.50	3

Source: National Highways Fee (Determination of Rates and Collection) Rules, 2008, Ministry of Shipping, Road Transport and Highways, GoI.

TABLE A33.2
Status of NHDP as at the end of February 2009

Activity	Road length for implementation (km)	Length completed (km)	Length under implementation (km)	Balance length for award (km)	Proposed completion schedule	
Phase I	Golden Quadrilateral (GQ)	5,846	5,719	127		
	Port Connectivity	380	206	168	6	
Phase I & II	North-South and East-West	7,300	3,357	2,994	791	2009
	Others	962	775	167	20	
Phase III	Widening existing NH with high traffic density and connecting important locations to 4/6 lane	12,109	711	1,954	9,444	2013
Phase IV	Widening existing single/ intermediate highways to two lane	20,000	–	–	20,000	NA
Phase V	Six laning of GQ and other select stretches	6,500	90	940	5,470	2012
Phase VI	Construction of expressways	1000	–	–	1000	2015
Phase VII	Construction of stand alone ring roads/bypasses, flyovers, elevated road, tunnels, over bridges and under passes	700	–	–	700	2014
Total		54,797	10,858	6,350	37,431	

Source: NHAI.

highway projects a company can bid for and finally execute resulted in low response or withdrawal of bids in case of new projects. Commercial factors such as low viability of BOT projects due to high interest costs, traffic inadequacy, stiff penalty clauses in the event of delays in completion, and the liquidity crunch on account of the economic slowdown added to non-participation by bidders.

Key issues impeding timely implementation of projects that have been awarded are delays in land acquisition

and obtaining clearances, slow dispute resolution, lack of oversight/ implementation capacity of the NHAI, and lack of coordination between different government agencies. Shortage of skilled manpower, cash flow problems, and inadequate capacity with development and construction firms has also contributed to the delays.

The situation faced by the Pradhan Mantri Gram Sadak Yojana (PMGSY) is also grim. Launched in 2000, PMGSY is a Rural Roads Programme involving about

375,000 km of new road construction and 372,000 km of upgradation/renewal of roads, with the objective of providing connectivity through all-weather roads to all unconnected habitations with a population of more than 500. Under the programme, the GoI provides 100 per cent grants to the states. 194,740 km and 194,131 km of road length was due to be constructed and upgraded, respectively between 2005–06 and 2008–09 under the programme. Only 41 per cent of the new road construction and 69 per cent of road upgradation has been achieved by the end of 2008–09.¹⁶ The PMGSY has also been criticized on account of instances of diversion of funds, non-compliance of the tendering process, and unreliable monitoring in implementation, following a report based on test check of records for the period 2000–05 by the Comptroller & Auditor General (CAG) of India.¹⁷

MARITIME TRANSPORT

Ports

Low productivity and infrastructure bottlenecks continue to stifle the performance of major ports in the country. Longer turnaround time and cumbersome evacuation of cargo are other problems facing Indian ports, despite their efforts at modernization of cargo handling mechanisms.

The GoI has tried to improve the enabling environment for Private Sector Participation (PSP) were by finalizing the MCA for building and operating new terminals at existing ports. The MCA has replaced the model licence agreement that has been in use in major port projects since March 2000. It can also be applied, with some modifications, to the transfer of existing port terminals from the government/port trust to the private sector. It stipulates a maximum concession period of 30 years and provides for revision on the basis of variation in traffic growth.¹⁸ The MCA also provides for selection of the concessionaire on the basis of the revenue share offered to the concerned port trust. The concessionaire in turn is allowed to levy user fees for the project facilities and services in accordance with the relevant order of Tariff Authority for Major Ports (TAMP).

The TAMP, on its part, in line with the suggestions of the GoI Task Force on tariff setting and bidding parameters for PPP projects in major ports, has notified guidelines for upfront tariff setting for container, iron ore, coal, liquid bulk terminals, and multi-purpose berth projects awarded under BOT/BOOT arrangements at these ports. The guidelines provide for determination of tariff ceilings on the basis of a normative cost-based approach while allowing a 16 per cent return on capital employed. These tariff ceilings will be automatically adjusted to inflation to the extent of 60 per cent of the variation in WPI every year and reviewed every five years.

However, the GoI kept revising the MCA during the year. As a result, this MCA has not yet been applied for the offer of new projects by any of the major port trusts. There are other issues that remain unaddressed as well. The PSP frameworks across major and minor ports are not uniform.¹⁹ Problems relating to dredging and draft levels are complex.²⁰ Hinterland connectivity is still inadequate and it is important to make haste in improving connectivity to ports.

The progress in the development of major ports was rather slow in 2008. The capacity of major ports increased from 543 million tonnes per annum (MTPA) in March 2008²¹ to only 555 MTPA in March 2009. Further, significant projects were awarded in 2008. These include development of (i) three new terminals for crude oil and oil products, coal, and iron ore by the Ennore Port Limited, and (ii) an offshore container terminal by the Mumbai Port Trust to a consortium of Gammon and Dragados S.P.L., one of the largest port operators of Spain. Known as the Indira Container Terminal, the container terminal at Mumbai Port involves the development of two offshore container terminal berths with a capacity to handle about 1 million TEUs.

The scenario has been somewhat better in case of minor ports. The Gujarat Maritime Board (GMB) has appointed private players for developing the greenfield ports at Simar, Sutrapada, and Khambhat. The Simar Port has been awarded to Shapoorji Pallonji, which would also set

¹⁶ Bharat Nirman, <http://bharatnirman.gov.in/road.html> and Press Information Bureau, GoI, Year-end Review of Ministry of Rural Development, 2008.

¹⁷ Public-Private Partnership in implementation of road project by National Highways Authority of India (PSU), (Performance Audit—Report 16 of 2008), 2006–07; Comptroller and Auditor General of India.

¹⁸ There can be an increase of up to 7 years in the concession period if the traffic growth rate is lower than projected.

¹⁹ While only terminals are offered on PSP in major ports, the whole port can be offered to PSP in case of minor ports. Similarly, while major ports are subject to tariff regulation, minor ports operate without any tariff regulatory oversight.

²⁰ This refers to (i) the problem of silting in the port entrance and channels which affects the depth within port waters as well as the approach channel and (ii) the fact that the available depth in port entrance and channels are inadequate for large size vessels to pass through them.

²¹ Department of Shipping, Ministry of Shipping, Road Transport & Highways, Government of India, available at <http://www.shipping.nic.in/writereaddata/linkimages/Port%20Capacity3012727747.pdf>

up a liquefied natural gas terminal and develop facilities for coal handling at the port. The other two ports have been awarded to Larsen and Toubro (L&T) and IL&FS, respectively. The Maharashtra Maritime Board has awarded the development of the Redi port and Vijaydurg port to Earnest John Group and Hindustan Infrastructure Project and Engineering Pvt. Ltd, respectively.

Meanwhile, Phase I of the Krishnapatnam Port located in Andhra Pradesh, achieved commercial operation in July 2008 and Gangavaram Port commenced trial commercial operations in August 2008. The Krishnapatnam Port is being developed on build-operate-share-transfer basis in three phases and will be able to handle vessels up to 2,00,000 DWT upon completion of the third phase. On the other hand, Gangavaram Port will be able to handle up to 300,000 DWT vessels with 29 berths, in a series of phases over a period of 50 years.

Amongst the states, Kerala has announced plans to develop ports at Beypore, Azhikkal, Alappuzha, Thangassery, and Ponnani. It is in the process of setting up a Maritime Board that will act as an umbrella body for overall supervision and coordinated development of maritime activities carried out by different agencies/departments.

An emerging area of thrust in the ports sector is the development of international trans-shipment hubs. Trans-shipment refers to the shipment of goods to an intermediate destination before reaching the final destination. Ships carrying cargo (which requires to be transported to multiple destinations) unload their shipment at a trans-shipment port. From there, the cargo is shipped to its final destination. A trans-shipment port also acts as a 'switching point' for cargo carried by deep sea vessels operating on transcontinental trade routes. The aim of trans-shipment hubs is to not only boost port traffic but also reduce dependence on other countries' ports. These hubs are being developed at Cochin (Vallarpadam Container Terminal Project), Vizhinjam (Vizhinjam International Seaport and Container Trans-shipment Terminal), and Positra. While the terminal at Cochin is being developed by M/s. Dubai Port International, Dubai, the project at Vizhinjam has been awarded to the consortium of Lanco Kondapalli Power Pvt. Ltd, Lanco Infrastructure Ltd, and the Malaysian Pembinaan Redzai Sdn Bhd.²² The port at Positra has been awarded to the consortium of the Port of Rotterdam, the Port of Sohar, and Sea King Infrastructure Ltd.

Ship building

To ensure the growth of the ship building industry and increase the industry's international competitiveness, there was a government scheme which involved the provision of 30 per cent subsidy on the bid price to shipyards on all export orders and ocean-going merchant vessels more than 80 m in length sold in the domestic market. The scheme had expired in August 2007. The GoI is considering the revival of the ship building subsidy scheme. It is proposed that incentives would be limited to export orders bagged by the domestic shipyards through a global tendering process.

At the state level, the Government of Gujarat is in the process of finalizing a ship building policy that seeks to extend tax holidays to ship building projects for 5 years. It is proposed that such projects would be entitled to the same fiscal and duty benefits as those granted to the special economic zone (SEZ) projects of GoI and would be exempted from octroi.

The National Maritime Development Programme (NMDP), GoI's flagship programme for development of port infrastructure, also envisages the establishment of two shipyards in India of global standards, one on the East Coast and another on the West Coast. The GoI has nominated Ennore Port Limited and Mumbai Port Trust as the nodal agencies for East Coast and West Coast, respectively. The Mumbai Port Trust has received proposals for considering the locations of Poovar in Kerala, Kundle Beach in Tadri Port in Karnataka, and Tuna Tekra near Kandla Port in Gujarat for a shipyard.

Inland Waterways System

Inland waterways, which have historically been neglected, have now been given a new thrust. The GoI is pursuing the development of a robust inland waterways system as an alternative means to roads and railways for the movement of goods. The National Waterways Authority of India (NWAI) is executing an action plan to make the existing three national waterways fully functional by March 2010 for export of fly ash to Bangladesh and transport of coal, gypsum, clinker, and cement within the country. These waterways are the Allahabad–Haldia stretch (1620 km) on the Ganga, the Sadiya–Dhubri stretch of the Brahmaputra (891 km), and the Kollam–Kottapuram stretch of West Coast Canal along with Champakara and Udyogmandal Canals (205 km) in Kerala.

²² The appointment of a concessionaire for the Vizhinjam International Deepwater Seaport had earlier run into trouble when the Central Government denied permission on security grounds because the bid for the project had been won by a Chinese company. The project has been awarded to the consortium led by Lanco Kondapalli Power Pvt. Ltd upon re-bidding.

Two more waterways, namely Kakinada–Puducherry Canals integrated with rivers Godavari and Krishna, and East Coast Canal with Brahmani river and Mahanadi delta were declared as new National Waterways. Given the decisive cost and environment-friendly potential of inland waterways there is an imperative need for the public sector to kick-start the boom by launching some pilot projects and invite private sector participation for expansion thereafter.

AIRPORTS

The aviation sector saw a phenomenal growth in the past few years. Some of the factors that resulted in higher demand for air transport include the growing prosperity of the middle class, low airfares offered by low cost carriers, growth of the domestic tourism industry, increasing outbound travel from India, and the overall economic growth of India. Since the middle of 2008, however, the sector has been witnessing a marked downturn, mainly due to the global economic melt-down and consequent slowdown of the Indian economy.

Passenger traffic has slowed down, particularly in the domestic aviation market, thereby affecting the revenues of the full cost carriers (FCCs), low cost carriers (LCCs), as well as the airports (see Box A33.1 on the status of the airline industry in India). Data released by the Airports Authority of India (AAI) indicate that between April 2008 and January 2009, the total number of passengers decreased by 6 per cent with domestic passengers registering a decline of 14 per cent. The data also indicate that freight traffic reduced by 13 per cent in the same period with international freight traffic registering a decline of 19 per cent. The increase in capacities during the years of high growth, together with falling demand for recent months, have hurt the industry financially.

Despite the decline in traffic, airport infrastructure continues to be under enormous pressure as evidenced by severe congestion at many metropolitan airports on account of inadequate landing slots, parking bays and runways, and unavailability of space. Airport services at many non-metro airports are not geared for handling even the current level of traffic flow.

Box A33.1

Turbulence in the Airline Industry in India

India's airline sector has run into significant difficulties. Oil prices reached unprecedented levels in the middle of 2008, resulting in higher fares and decline in demand. The problem was exacerbated by the slowdown in the economy as a result of the global financial crisis. A sharp fall in the value of the rupee against major foreign currencies made it less attractive for Indians to travel abroad.

Domestic passenger traffic has been particularly hit. The slump in passenger traffic led to over-capacity with airlines. High fuel prices till the third quarter of 2008 left them with huge outstanding fuel bills. Several airlines made unprecedented moves to rationalize routes; delay, defer or cancel aircraft deliveries; and prune their fleet induction programme. The airline industry reduced its capacity by 17 per cent in the first half of 2008–09. Other measures pursued by the airline industry to overcome their financial difficulties included measures to improve per capita productivity of employees, reduction of ticket commissions to 0 per cent, and increasing base fares by 10–15 per cent.

While the airline industry continues to bleed, an unexpected operational alliance has emerged. Jet Airways and Kingfisher, the largest private carriers, formed an operational alliance to overcome some of the financial difficulties. Key elements of this alliance included code-sharing on domestic and international services, joint fuel management, common ground handling, network rationalization, frequent flyer reciprocity, and sharing of human resources.

High fuel costs coupled with intense competition also put pressure on the LCCs, forcing them to re-brand themselves. Air Deccan re-branded itself as 'Kingfisher Red', targeting higher yielding passengers, while Jet Lite and Go Air re-branded themselves as value carriers (positioned between an LCC and FCC). Go Air was looking at getting a lease of life with British Airways (BA) planning to take a controlling or significant minority share. British Airways (BA) intended to establish an Indian intermediary company to hold its investment in Go Air. However, since the prevailing foreign direct investment policy in the country did not allow foreign carriers to hold equity, directly or indirectly in domestic airlines, the deal was grounded.

Besides the private airlines, the state-owned Air India is also facing difficulties not only due to falling demand and weak load factors, but also a bloated cost structure. For 2008–09, its losses have been projected at Rs 2,156 crore. Air India's integration with 'Indian' has also been slow, squandering synergies, and the competitiveness that could have been extracted from their union.

The GoI has taken various steps to meet the challenges in the aviation industry. These include abolition of the custom duty on import of Aviation Turbine Fuel (ATF) and staggering of dues of airlines to oil companies over a period of six months. Several state governments have also reduced the sales tax on ATF. The fall in global crude prices since September 2008 has also provided a lifeline to the airlines, which consequently reduced fares to woo back passengers.

Meanwhile, the International Air Transport Association as well as some airlines have requested the GoI to review its policy of not allowing foreign airlines to pick up a stake in domestic airlines. The GoI has not changed its stance in this regard.

Source: Author's own.

In a significant milestone for the sector, the Greenfield airports at Hyderabad and Bangalore have started operations under PPP initiatives since March and May 2008, respectively. Modernization at Delhi and Mumbai airports is underway while that at Chennai and Kolkata has finally started. The modernization and expansion of the airports at Chennai and Kolkata is being undertaken by the Airports Authority of India (AAI). The AAI is funding 80 per cent of the project cost for both these projects through internal resources and the balance 20 per cent through commercial borrowings.

On the policy front, though the civil aviation policy is yet to be finalized, many proposals outlined in the policy have been implemented. The bill for setting up an Airports Economic Regulatory Authority of India (AERA) has been passed by the Parliament; a ground handling policy has been finalized; a more liberal Foreign Direct Investment (FDI) regime has been adopted, and the policy on Greenfield airports has been approved by the government.

The Airports Economic Regulatory Authority of India Act, 2008 has enabled GoI to initiate the process of setting up AERA. The main objective of AERA will be to regulate tariffs of aeronautical services, airport development charges, and user fees in respect of all major airports—defined as airports which have or are designed to have annual passenger throughput of more than 1.5 million—and to monitor performance standards of airports relating to quality, continuity, and reliability of service as specified by GoI or an authorized entity. However, if at any stage it is felt that an airport with less than 1.5 million passenger throughput, needs to be brought within the purview of AERA, GoI will notify it as a major airport, thereby bringing it under the jurisdiction of AERA.

The AERA Act also proposes setting up of an Appellate Tribunal that would have the powers to adjudicate disputes between two or more service providers or between a service provider and a group of consumers. In addition, the Tribunal would have powers to hear and dispose off appeals against directions and orders of AERA.

Given that AERA will be responsible for determining and reviewing the tariff structure for aeronautical services; its establishment has become a pressing need for the Bangalore International Airport Ltd (BIAL), now known as Bengaluru International Airport and the Mumbai International Airport Ltd (MIAL). While the airport at Hyderabad has introduced a User Development Fee (UDF) of Rs 375 for passengers undertaking domestic

travel, BIAL has been allowed to charge a UDF of Rs 260 for such passengers. The UDF is to be used for development, management, and operation and maintenance of airport facilities. Currently, the UDF is an ad-hoc fee that will be finalized by AERA upon its establishment. Though the concession agreement signed between BIAL and GoI prior to the commissioning of the airport permitted BIAL to introduce UDF within three months of launching commercial operations, it was allowed to do so more than seven months after starting commercial operations. At the same time, the proposal of MIAL to increase aeronautical charges by 10 per cent has been put on hold until the establishment of AERA.²³

Meanwhile, the Ministry of Civil Aviation (MoCA) has issued draft guidelines for the levy of UDF at airports, outlining the aspects that need to be considered when setting these charges. The guidelines provide for a pass through of the cost of capital employed to the users through the UDF which includes 14 per cent return on equity, depreciation, operational and maintenance expenses, and taxes incurred by the airport operator. A cap has been stipulated for expenses such as personnel costs, operations and maintenance, and pre-operative expenditure that have not been verified. On the revenue side, the guidelines establish that the sum of total aeronautical revenue and a portion of non-aeronautical revenue are to be considered as the basis for fixing the UDF. This ad hoc fee will be determined for a period of four years and will be reviewed after two years.

To promote the development of new airports in the country, GoI has approved the policy for Greenfield airports, which provides a clear-cut architecture of the approval mechanism for setting up of new airports including guidelines for granting technical approvals by various agencies involved in setting up of an airport. Under this policy, no prior approval is needed to set up such an airport beyond 150 km of an existing civilian airport. However, relaxation of any guideline or existing rule would be considered for approval by a Steering Committee constituted under the chairmanship of Secretary, MoCA. Airports for cargo and non-scheduled flights and heliports do not require the approval of MoCA and may be approved at the level of Directorate General of Civil Aviation. However, activities relating to air traffic services, security, customs, and immigration on any Greenfield airport would be reserved for Central Government agencies.

Greenfield airports to be set up by the AAI would be constructed and financed through PPP concessions. The

²³ According to MIAL, a 10 per cent increase in aeronautical charges after the third year of operations was outlined in the business plan approved by GoI prior to being awarded the contract to operate the Mumbai Airport.

GoI has granted approvals for such airports at Mopa in Goa, Navi Mumbai and Sindhudurg in Maharashtra, Kannur in Kerala, and Bijapur, Simoga, Hassan, and Gulbarga in Karnataka. In the case of airports such as those in the north-eastern states which do not generate enough revenues to attract PSP, AAI would set up the airports upon approval from GoI.

In order to increase competition and offer a greater choice to airlines, GoI has finalized a policy on ground handling at major airports involving the basic activities of passenger handling. The policy makes three parties eligible to carry out ground-handling operations—the respective airport operator, subsidiary companies of the two national carriers, viz., Air India and ‘Indian’ or their Joint Ventures (JVs) specialized in ground-handling services, and service providers selected through competitive bidding on revenue-sharing basis by the airport, subject to security clearance from the government. The policy was expected to come into effect from 1 January 2009, but its implementation has been deferred.

Major airports are attaining milestones rapidly as they complete each phase of development. While the airport at Hyderabad has the country’s longest runway and taxiway as well as the country’s first open access model fuel hydrant system,²⁴ the one at Delhi has become the first airport with three operational runways, with the new runway nearly doubling peak-hour capacity from 35–40 to 70 aircraft movements per hour.

However, the modernization of non-metro airports has not seen any progress during the year. This is mainly on account of differences between the AAI and the Planning Commission on the model to be adopted for city-side development at these airports. While the AAI wants to adopt the model of maintenance contracts, the Planning Commission favours the concession route. The Inter Ministerial Group (IMG) has stepped in to review the scope of work as well as framework for this development. For airports where private players have been pre-qualified for city-side development, the process has been stalled and the IMG’s decision is awaited.

RAILWAYS

The Indian Railways (IR) has staged a dramatic turnaround after being written off as a financially unviable concern. Dynamic pricing based on commodity elasticity of demand for rail transportation, replacement and renewal

of assets, reduced expenditure, increase in productivity, focus on capacity utilization, computerization of railway systems, induction of new technologies, and prevention of revenue leakages are some of the factors that have played a critical role in its resurgence. The cash surplus of IR has risen steadily from Rs 9,000 crore in 2004–05 to Rs 25,000 crore in 2007–08.

To ensure the sustainability of this turnaround, the Ministry of Railways (MoR) is preparing a ‘Railway Vision 2025 Document’, which will set forth the targets of IR for the coming 17 years in the field of operational performance and quality of service. The document will also detail an action plan for achieving the stipulated targets and necessary investment plans thereof.

Meanwhile, IR is moving from being just a rail infrastructure provider to the provider of end-to-end logistics solutions as an integral part of the supply chain management. It is also continuing with its policy of leveraging private capital to fund rail infrastructure development. However, there have been delays in the actual implementation of its PPP models. While ironing out issues related to such delays, MoR has taken several new initiatives to fulfil its objective of playing a larger role in the transport segment. These include policies for development of Multimodal Logistics Parks (MLPs) along the Dedicated Freight Corridor (DFC) and development of new railway terminals for bulk commodities and finished products to reduce the overall logistics cost in the supply chain.

The MLPs so developed by IR will serve as hubs for aggregation and distribution of cargo and transfers from rail to other modes, and vice versa. They will be equipped to serve containers, loose cargo and bagged consignments, and piecemeal cargo and would provide a wide range of logistics-related services such as container terminals, bulk/break-bulk cargo terminals, warehouses, banking and office space, and facilities for mechanized handling, sorting and grading, cold chain, etc. to handle freight. The Ministry is in the process of identifying locations for these MLPs and preparing business models as well as the MCA for inviting private sector in their development.

Besides MLPs, IR has also permitted the private sector to construct: (i) terminals for bulk commodities where they will be handled in loose condition and (ii) terminals for unloading finished products. Wharfage, demurrage charges, terminal charges, and busy season surcharge will not accrue in case of the former category. For the

²⁴ The open access model means that any oil company can supply fuel to airlines as per bilateral agreements. This model is the first of its kind in India and has successfully been deployed in major international airports such as Hong Kong. The storage tanks are connected to the apron through underground pipelines forming the hydrant system. They cater to the fuel needs of all airlines. Anyone who is authorized by GoI and has a valid contract with the airline companies is allowed to supply fuel through these pipelines.

latter, the policy allows the waiver of all charges except demurrage charges. It also permits third party traffic at these terminals for which only terminal charges and wharfage will be exempted. Developers of both types of terminals will, however, be required to guarantee at least half a million tonne traffic per annum during the first year and one million tonne per annum from the third year onwards in the event that they develop these terminals on land owned by IR.

The IR has also extended the scope of PSP in rail connectivity projects. Earlier private assisted siding rules permitted private parties only to have connectivity from the main line. With the launch of Railways' Infrastructure for Industry Initiative (R3i), IR has allowed PSP in the construction of a normal railway line besides a siding, R3i, which excludes coal and iron ore traffic from its purview, provides two models for the development of rail connectivity projects, viz., Advance Contribution Model and SPV model.

The Advance Contribution Model permits PSP in those new lines which are 20 km or more in length and have a minimum rate of return of 12 per cent. The financing contribution of the developer for such lines would be decided on a case-to-case basis in view of factors such as traffic projections, prior financial commitments of IR, etc. but would in no case be less than 50 per cent. On the other hand, the Special Purpose Vehicle (SPV) model is applicable for lines likely to be embedded in the existing rail network as well as lines taking off from the main land and terminating into a dead end terminal such as a port. Indian Railways (IR) would hold equity of 26 per cent in the SPV, which will be granted a concession of 25 years and a share in the revenue of the line.

Besides development of new infrastructure, IR is also pursuing the modernization and upgradation of existing infrastructure. However, its initiatives have not met with success in all cases. The MoR had initiated the process for award of concession for re-development and modernization of the New Delhi Railway Station on Design, Build, Finance, Operate, and Transfer (DBFOT) basis. The project involves remodelling of the railway yard; upgradation and re-development of the existing railway station and associated buildings; and development of the surrounding railway land followed by operation and maintenance. However, the bidding process has been delayed due to delays in clearances from agencies

such as the Delhi Development Authority, the Municipal Corporation of Delhi, and the Delhi Traffic Police, who do not appear to be in favour of including development of commercial properties as part of re-development of the existing railway station due to concerns of increased road traffic, parking, etc.

Urban Development

India has the second largest urban system in the world with 310 million people and 5,161 cities and towns. Urbanization has become irreversible with the urban population expected to reach 575 million by 2030 at the current rate of growth.²⁵ The transition to an urban society, however, has neither been accompanied by a corresponding increase in the supply of basic urban services such as water supply and sanitation services, city roads, and public utilities such as street lights and pavements; nor by adequate supply of land and housing. Very little investment has been materializing in this sector because of two main reasons. First, the Urban Local Bodies (ULBs) have neither the financial resources nor the capacity to undertake large investment exercises. Second, the sector is in the grips of a vicious cycle of low-investment, poor service, and low willingness to pay.

To overcome the resource constraint and introduce urban reforms, the GoI had launched the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in 2005–06, which aims at improving urban service levels in a financially sustainable manner in 63 identified cities. However, the pace of reforms under this programme has not been satisfactory. While 351 projects worth Rs 33,602 crore were sanctioned under the Urban Infrastructure and Governance sub-mission of JNNURM till November 2008, only 22 projects were physically completed.²⁶ Figure A33.1 provides the sector-wise status of projects sanctioned under JNNURM. For the cities not covered under JNNURM, GoI had launched the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT). Under this programme, Additional Central Assistance (ACA) has been released in respect of 505 projects in 415 towns out of 691 projects, covering 558 towns approved by State Level Sanctioning Committees. The release comprises almost 50 per cent of allocation for the entire Mission period. Physical work relating to 45 projects has been completed under this scheme.²⁷

²⁵ *Annual Report 2007–08*, Ministry of Urban Development, GoI.

²⁶ Speech of the Minister for Urban Development, GoI at the Economic Editors Conference 2008 as available from the Press Information Bureau, GoI and Press Information Bureau, GoI. Year-end Review of Ministry of Urban Development, 2008.

²⁷ Press Information Bureau, GoI, Year-end Review of Ministry of Urban Development, 2008.

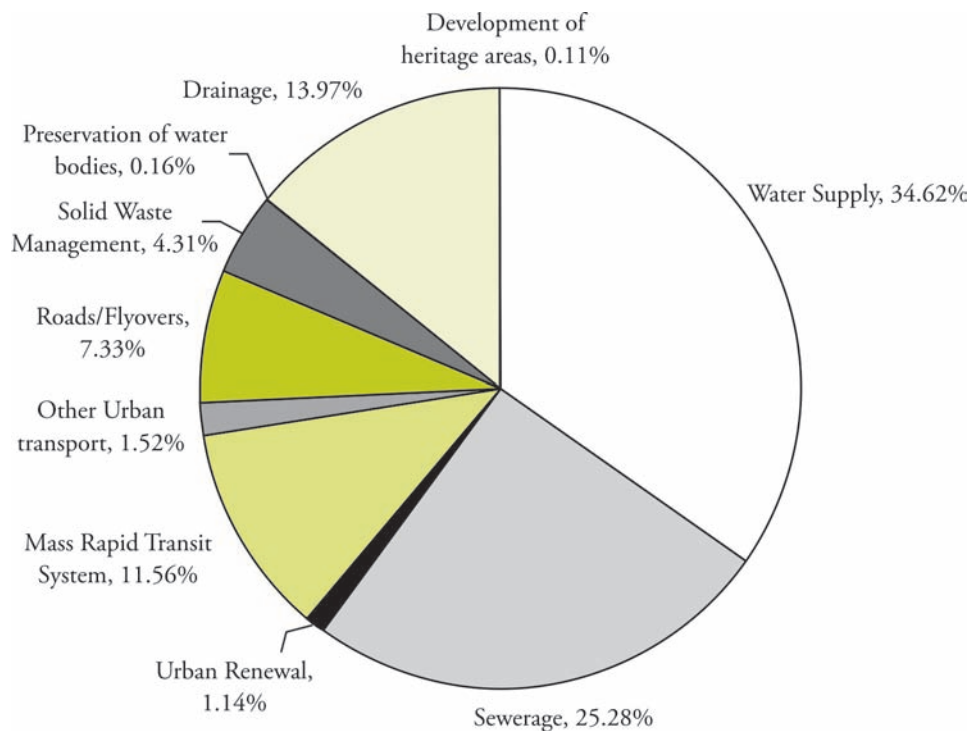


FIGURE A33.1: Sector-wise Sanction of Projects under JNNURM as of January 2009 (as % of Total Project Value)

Source: Newsletter, Volume I, Issue I, January 2009, Ministry of Urban Development.

URBAN WATER SUPPLY AND SANITATION

The GoI announced the National Urban Sanitation Policy (NUSP) in November 2008 to comprehensively deal with the challenges in urban sanitation in India's cities. The policy envisages transforming all towns and cities of India into 100 per cent sanitized, healthy, and liveable spaces; and ensuring sustained public health, and improved environmental outcomes for all its citizens. The main components of the policy are awareness generation and bringing about behaviour change; achieving open defecation-free cities; sanitary and safe disposal of waste; promoting proper usage and maintenance of household, community, and public sanitation facilities; extending access to sanitation facilities for poor communities and un-served settlements; and strengthening ULBs to provide sanitation services by supporting need-based capacity building and training at the state level.

A number of states, including Maharashtra and West Bengal, are in the final stages of having an approved state sanitation strategy, while Madhya Pradesh, Orissa, and Uttar Pradesh have initiated the process of developing such a strategy. Meanwhile, Sikkim has become the first state in the country to achieve 100 per cent sanitation.

The Ministry of Urban Development (MoUD) instituted an initiative under the NUSP, known as *Nirmal*

Shahar Puruskar, which will rate cities according to various sanitation-related parameters and present awards for excellence in performance. The performance parameters for sanitation are included in the Service Level Benchmarks (SLBs) developed by MoUD. The SLBs also cover standard performance parameters in the areas of water supply, sewerage, solid waste management, and storm water drainage and are intended to serve as standard performance parameters to be monitored by ULBs. It is expected that these SLBs will result in improved delivery of basic urban services by benchmarking performance among cities besides making ULBs more accountable to the community.

In the water supply segment, the highlight of the year was the signing of concession agreements for PSP in water supply in Haldia and Latur. The Haldia Development Authority (HDA) entered into a concession agreement with the consortium of Jamshedpur Utilities & Services Company Ltd, Ranhill Utilities Berhard (Malaysia), and IDFC Projects Limited for the setting up of a 25 MGD water treatment plant along with the operation and maintenance of the existing and new water supply system for a period of 25 years. Latur adopted a 10-year concession model to implement a 24x7 water supply scheme in its urban areas through which the existing network will be upgraded. The private parties involved in

the scheme include UPL Environmental Engineers Ltd, Hydro-Compe Enterprises, Cyprus and Subhash Projects and Marketing Ltd.

Urban Transport

To overhaul the structure of governance for the transport sector in cities with over a million population, the National Urban Transport Policy (NUTP) had envisaged the setting up of Unified Metropolitan Transport Authority (UMTA) with statutory backing to undertake coordinated planning and implementation of urban transport projects. While UMTAs have been set up in Jaipur, Mumbai, Chennai, and Hyderabad, only a land transport authority has been floated in Bangalore. Andhra Pradesh is the only state that has given a legislative backing to its state government's decision of setting up a UMTA in Hyderabad. Other state governments have only used administrative decisions.

Hyderabad also has the distinction of awarding the biggest contract on a PPP basis in the public transport segment in the country. The Hyderabad Metro Project, a new milestone in urban transport, saw a negative grant from the winning bidder and will be undertaken on a DBFOT basis for a concession period of 35 years.

A study undertaken by Wilbur Smith Associates for MoUD to establish a comprehensive and reliable baseline of the transport scenario in urban areas for formulation of future policies and programmes for management of urban transport, has computed a transport performance index,

measuring the efficiency of the transportation system, for select 30 cities (see Figure A33.2). This index is a composite index of several indices reflecting public transport accessibility, service accessibility, congestion, bus transport supply, safety, slow moving vehicles, and on-street parking interference. While Chandigarh and Delhi emerge as the top two cities on this index, Gangtok is the worst.

The study projects the total urban transport investment requirements for the 87 cities covered under the study till 2027 at Rs 4,35,380 crore, 67 per cent of which will be required during 2008–17. It pitches for a dedicated transport fund to finance this investment. Accordingly, MoUD is urging state governments to set up a dedicated urban transport fund by earmarking state and local taxes. While Surat and Pimpri-Chinchwad have set up such a fund, Delhi is in the process of doing so.

With a view to creating incentives for investment in public transport systems, GoI is providing substantial financial assistance for metro rail projects and Bus Rapid Transit Systems (BRTS). For example, for BRTS in Delhi, Bengaluru Kolkata, and Chennai, GoI is providing financial assistance up to 35 per cent of the project cost as equity and loan as joint project promoter with the state governments. Bus Rapid Transit System (BRTS) projects have also been approved for Ahmedabad, Bhopal, Indore, Jaipur, Pune, Surat, Rajkot, Vijayawada, and Vishakhapatnam at an estimated outlay of Rs 4,510 crore covering 409 km with financial assistance of Rs 2,065 crore from GoI.

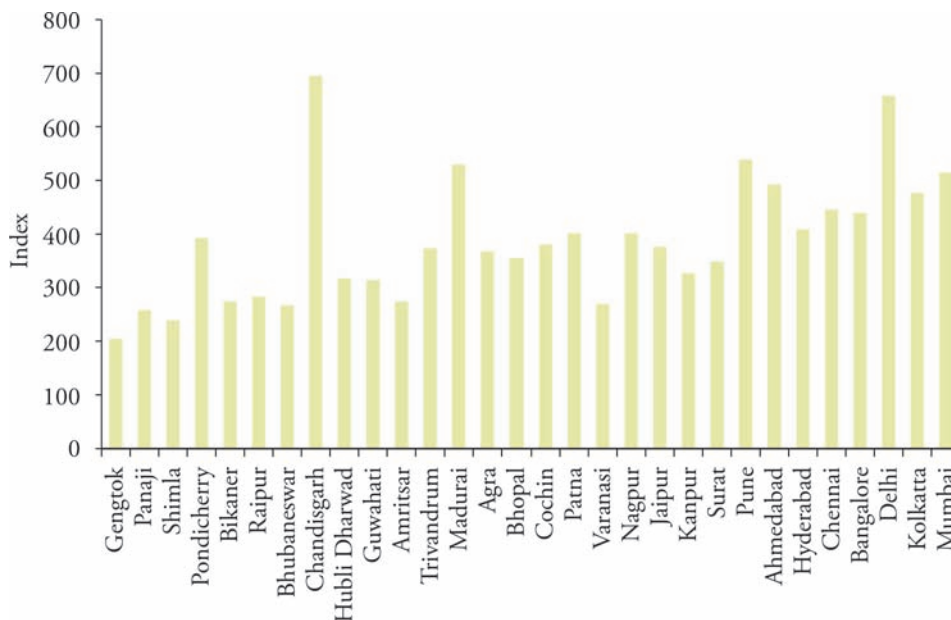


FIGURE A33.2: Transport Performance Index for Indian Cities

Source: Study on Traffic and Transportation Policies and Strategies in Urban Areas in India, Wilbur Smith Associates, May 2008.

However, the implementation of BRTS in Delhi has left much to be desired. The biggest shortcoming of this project have been the decrease in road width to provide for the BRT corridor on existing roads and badly planned movement of pedestrian traffic across the BRT corridor. The Standing Committee for Urban Development, in its thirty-seventh report submitted in December 2008, has suggested that Delhi should abandon the other 5 BRT corridors as approved earlier.

To overcome such failures and ensure better implementation of urban transportation projects, GoI has finalized toolkits and guidelines for bus service improvement and BRTS, parking and non-motorized transport, and comprehensive mobility plan.

Power

The power scenario in the country continues to look bleak. During 2008–9, the country faced peak deficit of 12 per cent and energy deficit of 11 per cent, with the western and north-eastern regions recording peak deficits of 20 per cent or more.²⁸ This shortage is emerging as a cause of concern in light of a study by McKinsey & Company that projects a rise in demand for power from around 120 GW at present to 315 to 335 GW by 2017 (100 GW higher than most current estimates) if India continues to grow at an average rate of 8 per cent for the next 10 years. The study states that meeting this demand will require a five- to ten-fold increase in the pace of capacity addition with a tripling of installed capacity from the current level of about 140 GW.

Despite the continuing and impending power crisis, the progress of capacity creation has been slow. Many projects, particularly those developed by the private sector, are facing delays because of issues such as environmental clearances, resettlement and rehabilitation concerns, land acquisition problems, law and order, and fuel supply. Even the Ultra Mega Power Project²⁹ (UMPP) initiative of the GoI has slowed down. While GoI has awarded the UMPP at Talaiya to the successful developer two years after starting the bidding process, other UMPPs are still at nascent stages of preparation and there is a long time before they can be taken up for bidding.

The performance of existing generation plants in terms of quantum of electricity generated has not been impressive either, with actual generation between April 2008–February 2009 being only 93 per cent of the target for this period. Inadequate fuel supply (both coal and gas) have contributed significantly to the decline in thermal generation, while inadequate availability of water has led to sluggish generation from hydroelectric plants.

The power sector has faced acute coal shortage in a number of existing plants and has blamed coal companies for less production and poor supply. However, coal companies do not agree. Coal India Limited (CIL) maintains that it supplied nearly 99 per cent of the total committed quantity in the first four months of the current FY and was meeting over 98 per cent of its annual action plan for the power companies.

The picture is not rosy for gas-based power plants either. The commissioning of several such plants has been delayed due to the shortage of gas. For existing gas power plants, the proposed Gas Utilization Policy gives preference to fertilizer units followed by LPG and petrochemical plants, and then power. In the case of Greenfield projects, the power sector has been accorded the lowest priority. Moreover, the policy is silent on the quantity of gas to be allocated to each sector. Not surprisingly, the Ministry of Power (MoP) has been expressing concern over the proposed policy and has demanded the highest priority in gas allocation from future domestic gas discoveries for the existing gas power plants.

One of the most important achievements during the year was the announcement of the new Hydro Power Policy which was pending since November 2005. The policy addresses several problems faced by states in the development of hydro projects, including the manner of allocation of such projects to the private sector. The important features of this policy include exemption from tariff-based bidding up to January 2011 for private sector hydro projects, clarity on the criteria for allocation of projects,³⁰ measures for local area development,³¹ and permitting 40 per cent of generation on the basis of merchant capacity delinked from Power Purchase Agreement.

²⁸ *Power scenario at a glance*, April 2009, Central Electricity Authority, New Delhi.

²⁹ Ultra mega power projects are an initiative for development of coal-based generation projects with a capacity of 4,000 MW or above on the basis of tariff-based competitive bidding. To facilitate the tie-ups of inputs and clearances, project-specific shell companies have been set up as wholly owned subsidiaries of the Power Finance Corporation Ltd. These companies undertake all background work including obtaining all necessary clearances prior to award of the project to the successful bidder.

³⁰ State governments are required to award project sites to private sector developers based on their experience, financial strength, past record of performance, and turnover in comparison with the size of the project.

³¹ The policy stipulates that the 12 per cent free power to be provided by a project to the host state government as per provisions of the Hydro Policy of 1998 will be supplemented further by an additional 1 per cent. This additional 1 per cent will be earmarked for a local area

The MoP has also finalized the model-bid documents for procurement of power through tariff-based competitive bidding process under Case 1 bidding procedure (that is, where the location, technology, or fuel of the plant is not specified by the procurer).

In the transmission segment, the bidding for development of transmission systems, has picked up pace with the nodal agencies, Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) inviting bids for development of 4 projects on Build, Own, Operate, and Maintain (BOOM) basis. These projects, started in 2006, had been considerably delayed. These bids have been invited on the basis of the model bid documents finalized by MoP for selection of the Transmission Service Provider (TSP) under the tariff-based competitive bidding route.

Meanwhile, the Girish Pradhan Committee, in its report submitted to MoP, has recommended the ring-fencing of load dispatch centres to make them fully autonomous. The Committee has recommended that state governments expedite the separation of financial accounts of the respective State Load Despatch Centres (SLDC) from those of the transmission company and complete the same by 31 March 2009. Implementation of these recommendations would give a fillip to the Central Government's effort to separate load despatch function from transmission utilities.

In the distribution segment, GoI's flagship programme, Accelerated Power Development and Reform Programme (APDRP), which aims at restoring and sustaining the financial viability of the power distribution sector, has undergone a third makeover. It has been restructured and re-christened as Restructured Accelerated Power Development and Reforms Programme (R-APDRP) and will cover towns and cities with population of more than 30,000 (10,000 in case of special category states). The programme focuses on establishment of base line data, and reduction of Aggregate Technical and Commercial (AT&C) losses through strengthening of sub-transmission and distribution network and adoption of Information Technology (IT). Initially 100 per cent funds for projects involving establishment of base-line data and IT applications for energy accounting and 25 per cent funds for regular distribution strengthening projects will be provided through loan from GoI (90 per cent for special category states). The entire amount of loan and interest in the former category will be converted into grant once the establishment of the required base-line data system

is achieved and verified. In case of regular distribution strengthening projects, up to 50 per cent (90 per cent for special category states) loan and interest will be converted into grant in five equal tranches when AT&C loss is reduced to 15 per cent on a sustainable basis for a period of five years.

Open access, one of the key pillars of competition in the power sector, is yet to be a reality despite its foundations being laid in 2003 by the Electricity Act, 2003. An Inter-Ministerial Task Force set up to examine the status of open access and recommend measures for operationalizing open access acknowledged that it has so far been available only to captive consumers. There are no cases of open access to consumers who are already connected to the grid and drawing their requirements from a distribution company. The Task Force has recommended that a quarter of GoI's discretionary allocation of 15 per cent of the existing generating capacity of Central sector plants be made available for direct sale to open access consumers and plants, 50 per cent of the unallocated quota of new plants be reserved for sale to such consumers. It has also suggested that APDRP assistance should only be released to states that demonstrate an actual increase in open access supplies to consumers that are not captive.

Though distribution reforms have remained slow, the emergence of two power exchanges has been one of the most encouraging developments in the energy sector in recent years. While the Multi Commodity Exchange (MCX)-led India Energy Exchange (IEX) started operations in June 2008, the National Stock Exchange of India Ltd (NSE) and National Commodities and Derivatives Exchange Ltd (NCDEX) promoted Power Exchange of India (PXI) was launched in November 2008. With a gradual increase in the scope of operations of these exchanges and launch of new products, these exchanges will make significant contribution to electricity market development in the country. Meanwhile, MCX has also launched futures trading in electricity. In a first of its kind development in India, MCX has made available eight weekly contracts and four monthly contracts for such trading.

NON-CONVENTIONAL ENERGY SOURCES

Grid-connected renewable power has been a major focus area in the Ministry of New and Renewable Energy (MNRE), which has issued policy guidelines to promote the development of grid-connected solar and wind power projects. For grid-interactive solar Photo Voltaic (PV)

development fund, aimed at providing income generation and welfare schemes. Besides this, 100 units of electricity per month would be provided by the developer to the affected families for a period of 10 years from commissioning of the project.

projects, support will be provided for capacity up to 50 MW on BOOM basis, with the limitation that maximum cumulative capacity of 10 MW can be set up in a particular state. A maximum amount of Rs 12 and Rs 10 per unit would be provided as incentive for electricity generated from solar PV and solar thermal route, respectively and fed to the grid from a plant of 1 MW capacity and above.

A similar scheme was launched for the development of wind power. This scheme involves the provision of an incentive of 50 paise per unit for wind power projects with minimum installed capacity of 5 MW, commissioned at sites validated by the Centre for Wind Energy Technology and selling power to the grid. It remains to be seen whether this policy will provide a significant boost to the wind power sector as it does not favour those who set up capacities for captive consumption, third party sale, and merchant plants.

A noteworthy development on the solar energy front has been the opening up of India's first solar complex, namely Rabi Rashmi Abasan in Kolkata. Spread over 1.76 acres, this complex has 25 private houses and a community centre with a net connected load of 380 kW, of which 58 kW is supplied using roof-integrated solar PV. Power can also be drawn from the grid on a need basis. The state utility has fixed a rate of Rs 12 per unit to be paid for the grid-inputted solar power on a monthly basis. The development of solar power has also gained prominence with the launch of the National Action Plan on Climate Change by GoI, which proposes to generate 10,000 MW of solar energy by 2020 by setting up a national mission on solar energy. The details of this mission are being finalized by MNRE.

Another focus area in 2008 was waste to energy (WTE). The MNRE has developed a scheme for setting up of five pilot projects on energy recovery from municipal solid waste in accordance with the directions of the Supreme Court of India. The scheme provides for financial assistance of Rs 2 crore per MW subject to a limit of Rs 10 crore per project, besides project development assistance of up to Rs 10 lakh per project.

The GoI has also approved the national policy on biofuel. The policy envisages a target of 20 per cent blending of biofuels—bioethanol and bio-diesel produced from non-edible oilseeds in waste/degraded/marginal lands—by 2017. The policy stipulates a minimum support price (MSP) with provisions for periodic revision for bio-diesel oilseeds and a minimum purchase price (MPP) for the purchase of bio-ethanol by the oil marketing companies.

While the MSP will be determined subsequently by Bio-fuel Steering Committee, the MPP for bio-ethanol would be based on the actual cost of production and import price and that for bio-diesel would be linked to the prevailing retail diesel price. No taxes and duties would be levied on bio-diesel.

NUCLEAR POWER

The Indian nuclear power industry is expected to leapfrog in the coming years following the lifting of the three decades old nuclear trade embargo, making way for India to re-enter the global nuclear market. India can now engage with 45 member nations of the Nuclear Supply Group (NSG) as an equal partner in civil nuclear cooperation including fuel, technology, and spares. Besides signing the Nuclear Cooperation Approval and Non-proliferation Enhancement Act with the United States, India has signed a civilian nuclear cooperation agreement with France and Russia. At the initial stage, Russia will help India build two additional nuclear power plants at Kudankulam.³² It is expected that the opportunities for technology transfer and fuel import now available to India will enable nuclear power capacity addition of 20,000 MWe by the year 2020.

French energy firm Areva, the world's largest nuclear power company, has signed an agreement with the Nuclear Power Corporation of India (NPCIL) to supply about 300 tonnes of uranium annually. The fuel is enough to generate about 1,500 MW power, which is over 35 per cent of the country's installed nuclear power generation capacity. This agreement will, therefore, provide a lifeline for our nuclear plants that have been running at less than 60 per cent of their capacity in view of shortage of fuel.

Meanwhile, the Atomic Energy Commission has issued a directive that any public or private company planning to set up nuclear power plants in the country will have to form a JV with NPCIL as a majority stakeholder. Accordingly, NTPC Ltd has formed a JV with NPCIL to foray into nuclear power generation. Private players, on the other hand, are waiting for the necessary amendment to the Atomic Energy Act, 1962 to allow private companies to set up nuclear power plants.

Conclusion

At a time when speedy development of infrastructure, with enhanced PSP, is imperative to facilitate our economic growth and prosperity, the global economy

³² Even before the NSG waiver, Russia was helping India build two 1,000 MW nuclear power plants at the same site. Russia, however, had to wait for the NSG waiver to India for a more focused nuclear cooperation.

is in turmoil. The macroeconomic impact of the global economic turmoil has been relatively muted in India due to the overall strength of domestic demand and the predominantly domestic nature of investment financing. Nevertheless, our economic growth has slowed down. The size and extent of the economic quake in the aftermath of the global financial crisis are still unknown and the extent of impact of the slowdown in the longer term on the ambitious programme of infrastructure investment designed for the Eleventh Five Year Plan period will be known much later.³³ But it is already clear that sluggish economic growth for a protracted period will compound the problems currently faced in infrastructure development in the country.

To meet any investment targets against this backdrop, India will need a significant number of projects that are well planned and financially viable. Another challenge will be to create an enabling environment that assures investors of predictability and a level playing field. This will require, among other things, removal of policy and institutional hurdles to investment, sectoral reforms to allow increased competition, credible regulatory oversight, and efficient mechanisms for dispute resolution. Unless the government exhibits a sense of urgency in addressing these issues, it is unlikely that we will achieve even a significant part of the investment target set for the Eleventh Plan.

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³³ The Planning Commission has envisaged infrastructure investments of over US\$ 494 billion at 2006–07 prices during the Eleventh Five Year Plan (2002–07).

INDIA INFRASTRUCTURE REPORT 2009
Land—A Critical Resource for Infrastructure
3iNetwork

The acquisition and use of land is emerging as the single largest constraint to India's infrastructure building endeavour. Land acquisition is a very sensitive issue since it affects the livelihood of displaced households and those who have difficulty in transitioning from traditional skill sets. It also adversely impacts the sociocultural canvas of those affected. Attempts by the government to use *eminent domain* powers to acquire land are increasingly facing resistance from displaced people all over the country. Legal, policy-related, and implementation deficiencies lie at the heart of such ongoing contestations. In an effort to walk the balance between the interests of the displaced, and the acquisition of land for infrastructure, policymakers are increasingly turning their attention to compensation, resettlement and rehabilitation (R&R), and other land-related issues to provide potential resolutions. Using land as a means of financing infrastructure and overcoming land constraints are other challenges being explored.

The *India Infrastructure Report 2009* with multidimensional contributions by social scientists, researchers, environment specialists, independent consultants, academics, and bureaucrats discusses:

- Land markets
- Acquisition policy framework and processes
- Compensation, rehabilitation, and resettlement
- Innovative solutions to overcome urban land constraints
- Leveraging land as a financing instrument for development
- International experiences in land management

The IIR is an invaluable resource for policymakers, academics, business persons, and finance professionals. It is a collaborative effort by academics, professionals providing infrastructure services, and policymakers under the aegis of the 3iNetwork. The network is managed by the Infrastructure Development Finance Company (IDFC), Indian Institute of Management, Ahmedabad (IIMA), and Indian Institute of Technology, Kanpur (IITK).

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