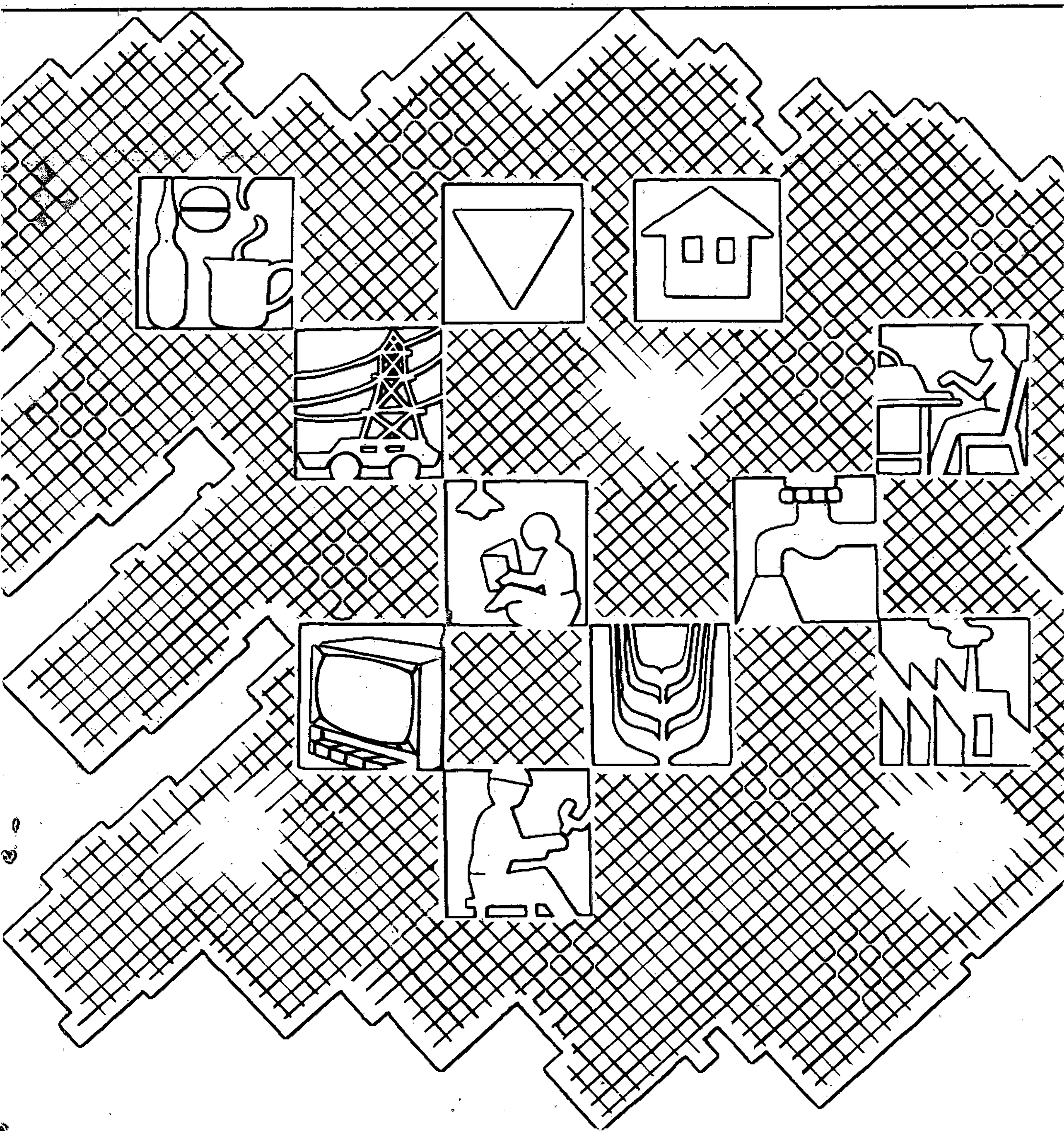
yojana

Vol. 37 : No. 6 April 15, 1993 Rs. 3



Development Diary

Central Plan Outlay For 1993-94

* Central Plan Outlay fixed at Rs. 63,936 crore.
 ......32% higher than in 1992-93.

* Rural Development gets Rs. 5,010 crore.
 ......increase of 62% over current year.

* Rs. 3,306 crore for Jawahar Rozgar Yojana. To create 1100 million man-days of employment; 3.5 lakh young persons to be trained under TRYSEM (Training of Rural Youth for Self Employment).
 ......Integrated Rural Development Programme gets Rs. 630 crore. 27.36 lakh rural families below poverty line to be assisted.
 ......Rural Water Supply Programme allocated Rs. 740 crore against Rs. 460 crore in the current year.

* Rural Electrification......3,210 more villages to be electrified ; 2.76 lakh pumpsets to be energised; and 2.5 lakh single point connections to be given to rural masses below the poverty line under Kutir Jyoti Scheme.

* Petroleum & Natural Gas allocated Rs. 12,114 crore.
 ......nearly double the size of 1992-93.
 ......28.65 million tonnes crude oil production and 19.66 billion cubic metres of natural gas targeted.

* Outlay for Power up by 22% to Rs. 6,269 crore.
 ......Installed capacity to go up by 4875.4 MW.
 ......Power generation target fixed at 317.8 billion units.

* Railways plan outlay increased from Rs. 5,700 crore to Rs. 6,900 crore, including Rs. 400 crore for Konkan Railway; 2,550 track kilometres to be renewed and 200 route kilometres of new lines to be completed.

yojana

Vol. 37 : No. 6
April 15, 1993
Vaisakha 25, 1915

YOJANA seeks to carry the message of the Plan to all sections of the people and promote a more earnest discussion on problems of social and economic development. Although published by the Ministry of Information and Broadcasting, YOJANA is not restricted to expressing the official point of view. YOJANA is published in Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Marathi, Punjabi, Tamil, Telugu and Urdu.

Editorial Office : Yojana Bhavan, Sansad Marg, New Delhi-110001. Telephone : 3710473, 3717910, 3715481 (extensions 2644, 2643, 2402, 2319). Telegram : Yojana.
For new subscriptions, renewals, enquiries please contact : The Business Manager, Publications Division, Patiala House, New Delhi-110001. Tel. 387983.

Subscription : One year Rs. 60, Two years Rs. 108, Three years Rs. 144.

Union Budget 1993-94

THE General Budget for 1993-94, presented by the Finance Minister Dr. Manmohan Singh to Parliament, has proposed substantial reduction in customs, excise and import duties, particularly for items of mass consumption. Relief has been given to a large number of consumer items to protect the common people from inflation.

In addition to full exemption for coffee and tea and reduction of excise duty on vanaspati by Rs. 400 per tonne reduction has been granted on air-cooler, electric fans, domestic eletrical appliances, dry cell batteries, printing and writing ink, radio sets, tooth powder, biscuits, noodles and roasted cereals, plastic moulded luggage and matresses and varying items using rubber. Excise duty has also been reduced on a number of capital goods and instruments at a uniform rate of 10 per cent. For the power sector 5 per cent reduction has been proposed.

To help automobile, television, refrigeration and airconditioning industries to fight recession, significant relief has been proposed by reducing excise duties. Commercial vehicles not using petrol are to pay eight per cent less excise. The duty on chassis of these vehicles have also been decreased to fifteen per cent whereas the duty on building the chassis of buses and similar passenger vehicles has been fully exempted. The excise on three wheelers and motor cars has also been reduced by eight and fifteen per cent respectively. The colour T.V. sets will be charged Rs. 675 to Rs. 2,585 less excise duty. The duty on refrigerators and airconditioners will also come down from Rs. 175 to Rs. 2250 and from Rs. 6,800 to Rs. 15,100 respectively per piece. Excise duty on bulk plastic resins has also been reduced by eleven per cent.

The existing duty structure on metals has been sought to be rationalised. The ad valorem rates on ferrous metals will have two slabs at 12.5 and 15 per cent. The present duty rates on aluminium are to be replaced by one uniform rate of twentyfive per cent. Instead of varying rates for non-ferrous metals like copper, zinc and lead a uniform duty of fifteen per cent has been proposed.

The excise duty on plywood used in paper making is lowered by 14.5 per cent so that non-conventional raw materials are increasingly used for manufacture of paper. Excise duty on match boxes are also reduced and the present concessions are to be restricted to registered cooperative societies or those recognised by KVIC or the State KVIB. The duty on talcum powder, shampoos, face and shaving cream is also to come down by 50.75 per cent. However, the rates of excise duties on tyres, tubes and flaps are to marginally go up, as also the duty on molases by about twenty-eight rupees per tonne.

The Finance Minister has proposed to enhance the limit for exemption on registration of small scale units from 7.5 lakh to 10 lakh rupees. He said, by accepting certain recommendations of the Estimates Committee and Public Accounts Committee, it has been possible to raise the duty exemption limit of all units producing goods worth upto Rs. 30 lakh.

He further said that small units are to receive MODVAT credit, only on the basis of duty actually paid.

Concessions

Agriculture, Textile and Health sectors have received both customs and excise duty concessions. Import duty on items of machinery used for agriculture, horticulture, forestry and poultry farming has been reduced by 30 per ent. Import duty on some specified items of export in textiles, leather, marine products and gems and jewellery industries have been reduced to 25 per cent.

The import duty on specified bulk drugs has been drastically reduced to 25 per cent. A uniform rate of 50 per cent duty is proposed on specified drug intermediates. In respect of homoeopathic medicines, the duty is further reduced to 15 per cent. Full exemption has been given to specified non-electronic life saving medical equipment to accelerate indigenous production of medical instruments.

Relating to indirect taxes, import duty on projects and general machinery has been reduced to 35 per cent from the present 55 per cent. Projects in certain priority sectors like coal mining and petroleum refinery will now have to pay only 25 per cent duty. To stimulate competitive spirit among the domestic capital goods industry, a reduction of 25 per cent is allowed on components of general machinery which is presently taxed at either 40 per cent or 35 per cent.

Various types of machine tools in the Capital goods sector are now proposed to be brought under three duty rate slots of 40, 60 and 80 per cent. A uniform rate of 40 per cent will be levied on hand operated tools used by artisans and skilled workers.

Lower merged duty of customs at 5 per cent ad valorem for the ship breaking industry has been announced. The electronic industry will attract a uniform rate of 25 per cent of duty. The import duty on specified raw materials for the manufacture of optical fibre cables is reduced to 20 per cent to modernise and boost the telecom sector.

For the Film Industry, duties on jumbo rolls of cine-positive films have been reduced to 20 per cent and on finished film rolls to 40 per cent and on negative cine films to 25 per cent. Import duty on raw materials and items for production of non-conventional energy has been reduced by 15 to 20 percentage points.

Dr. Manmohan Singh announced full exemption from import duty for Jamdanee saris imported from Bangladesh. Accredited journalists will enjoy a one time facility to import specialised equipment with no tax upto Rs. 60,000. He also said, general baggage rate has been further reduced to 150 per cent. The export duty on iron ore and unpolished granite is withdrawn.

Priority Area

The final priority is the exports, which have to be made a national endeavour, so that the country can move fast to manage the balance of payments withouts financing from abroad. The expenditure and tax proposals in the coming year's budget have been tailored to meet these objectives.

Admitting that the securities scam has revealed weaknesses in the supervisory system of banks, Dr. Singh said, as per the recommendations of the Narasimham Committee the Reserve Bank has decided to strengthen bank supervision within it. The Government aims to reduce the Statutory Liquidity Ratio, SLR, further from an effective average level of about 36 per cent at present to about 25 per cent over the next three years. He justified the proposal for reducing the interest rates of banks by saying that the rate of inflation has also come down. Lowering of interest rates, he said, will help the economic recovery in the coming year.

The flow of rural credit from the institutions is expected to rise by about Rs. 3,000 crore in the coming year, increasing by 20 per cent. The present strategy of withdrawing protection from the industry and integrating the economy with the global economy, will certainly help agriculture, as it will moderate the high industrial prices, which farmers have to pay. This will also bring a more competitive exchange rate to make agricultural and agro-based exports more profitable. Following these norms, banks will have to provide over. Rs. 10,000 crore for taking care of the bad and doubtful advanes in their portfolios.

Economic Scenario

Outlining the present economic scenario, the Finance Minister said, the annual rate of inflation has come down from as much as 17 per cent in August 1991 to below 7 per cent now. The growth of the economy, which declined to 1.2 per cent in 1991-92, is expected to be around 4 per cent in the current financial year. The fiscal deficit has also come down from 8.4 per cent of the GDP in 1990-91 to about 5 per cent in the current year.

Production is beginning to recover and fear of being swamped by imports following liberalisation have proved to be exaggerated. Dr. Singh said, the market exchange rate of the rupee has remained relatively stable and the investment climate has improved considerably since Augus 1991, the approvals given for foreign investment proposals upto the end of January this year amount to an equity investment of 2.3 billion US dollars.

Dr. Singh, however, admitted that the fiscal imbalances are still large, and the economy is still vulnerable to external shocks and loss of confidence. He said, the riots and disturbances in December and January have disrupted domestic production and exports and cast doubts on Government's determination to go ahead with the economic reforms.

Outlining the priorities of the economic policy, Dr. Singh announced, the fiscal corrections should be continued so that the inflationary trends are curbed and the deficit of the Central State Governments are further reduced. Fiscal manoeuvre gained by restraining expenditure has to be used to boost development expenditure in the coming year, particularly for alleviating poverty and development of the villages and of vital social services like education and health.

Import Payment

All imports will henceforth be paid also at the market rate. The details of the new system will be notified separately by the Reserve Bank of India. The Finance Minister announced an increased allocation which is to go up from Rs. 17,500 crore in the current year to Rs. 19,180 crore in the current year. The Government will keep its commitment on Farm Loan Waiver Scheme on which the expenditure will be R. 520 crore. Food subsidies will account for Rs. 3,000 crore and the Government will try to keep the burden of food subsidy at a reasonable level. No separate provision has been made for additional dearness allowance which may become payable next year.

To protect the viability and the financial health of the Banking system, a provision has been made in the budget for a large capital contribution of Rs. 5,700 crore to the nationalised banks next year to meet the gap created by the application of the first stage of the norms. The State Bank of India as well as other nationalised banks which are in a position to bear the additional capital needs for rural development will be allowed access in the capital market to raise fresh equity to meet their shortfall over the next three years. This will help the banks to expand lending, but the Government will continue to retain majority ownership and therefore effective control of the public sector bank. As the legal process for realising bank dues is tortuous and time-consuming through courts, special tribunals will be set up to expedite legal action by the banks and a legislation to this effect will be brought next year.

The Finance Minister has proposed to appoint a high-power Committee to go into the need for reforms in the insurance industry to make it more competitive; the Committee is to submit its recommendations within six months. Under the dual exchange rate regime introduced last year, import licensing was eliminated on many capital goods, raw materials, intermediates and components, which made them freely importable against foreign exchange bought in the market. The system has worked well and the market exchange rate has been remarkably stable, but the dual rate is hurting exporters and other foreign exchange earners. Responding to many exporters, the Finance Minister expressed his desire to uuify the exchange rate and still manage the balance of payments with reasonable stability in the rate. It is for this reason that the dual rate arrangement is to be eliminated and all exporters and other foreign exchange earners will henceforth be allowed to convert their entire earning at the market rate.

(Courtesy : AIR)

HIGHLIGHTS

Massive reduction in customs, excise and import duties, particularly on items of mass consumption.

Income tax exemption ceiling remains the same; standard deduction raised to Rs. Fifteen thousand for the salaried class.

Twelve per cent surcharge on personal income above Rs. one lakh is to stay for one more year.

Five year tax holiday proposed for profits and gains of new power generation and distribution unit.

Coffee and tea fully exempted from excise and duty on vanaspati reduced.

Color T.V. sets, refrigerators and airconditioners to cost less.

Import Duty on machinery for agriculture, horticulture, forestry, poultry keeping and certain pesticides reduced.

Excise on polyester and nylon yarns lowered and import duty on specified bulk drugs drastically reduced.

Defence outlay increased to Rs. 19,180 crore, a rise by Rs. 1,680 crore than that of the current year.

The bank rate is lowered by one per cent and the maximum interest on deposit reduced from twelve to eleven per cent.

Outlay on education is raised by over thirtyseven per cent to enlarge primary education and adult literacy.

Dual exchange rate regime eliminated.

Exporters and other foreign exchange earners permitted to convert cent per cent earnings at market rates.

Special tribunals to be set up to expedite legal action by banks to enforce recoveries.

The net budget deficit is estimated at Rs. 4,314 crore.

Budget : 1993-94

What They Say

The Hindu

THE Union Finance Minister, Dr. Manmohan Singh, must be congratulated for presenting a budget that pushes the economy firmly forward on the road of reform, removing the doubts and uncertainties created by the political problems of the last two months. If the unprecedented give-away of Rs. 4,522 crores in customs and excise duties and Rs. 300 crores in direct taxes should bring cheer to the nation as a whole, it can hardly be characterised as populist. Indeed, it addresses squarely the problems the economy is facing and represents an imaginative and politically sensitive attempt to take the economy forward after the restrictive approach of the last two years. Gloomy predictions that the Government would obstinately proceed along the IMF-ordained route of deficit reduction, ignoring nationally important and socially sensitive sectors and letting anti-poverty programmes fall by the wayside have been proved false. After the correction of the last two years, the Finance Minister has had a great deal of room to manoeuvre, even while enlarging the Central Plan and a stepping up allocations for agriculture, rural development, anti-poverty programmes and defence.

At the end of a seemingly impossible exercise, the budget deficit that emerges is just Rs. 4,314 crores, the lowest in a decade. Even the broader measure of the budget's impact on the monetory system, the fiscal deficit, is around 4.5 per cent of the GDP which is within tolerable limits, considering that it had gone up to 8.4 per cent in 1990-91. Had the Government pursued the task of fiscal deficit cutting single-mindedly, it could perhaps have been held well below 4 per cent but it has opted for a bolder approach to stimulate an economy important sections of which are facing recessionary trends. It has for long been recognised that customs duties are unconscionably high and, through pushing up investment and productionn costs, have contributed substantially towards creating a high cost economy.

A surprising feature of the budget is that it has left the direct tax structure virtually untouched except for marginal changes. One promise made last year which the Finance Minister has not kept is in the area of corporate tax reform. A reduction in the corporate tax rate as held out last year and some form of investment allowance were widely anticipated and it was the absence of these elements no doubt that made the stock markets fall. Even the expected gesture to the middle class in the form of a higher income tax exemption limit has not materialised, though the standard deduction for salary earners has been raised marginally. Indeed the task of fiscal reform remains incomplete and the Government has a long way to go before it can claim to have in place a reasonable and stable direct tax structure that would endure and serve the needs of the economy.

The Times of India

Dr. Manmohan Singh's third budget is a truly remarkable exercise in achieving the seemingly irreconciliable objectives of boosting economic growth and employment and advancing towards the main goals of the ongoing reform programme, namely, reducing the fiscal and foreign exchange deficits and curbing inflation. What is more, by further liberalising imports and making the rupee fully convertible on the trade account, the finance minister has erased doubts about the future of reforms. Indeed, he has ensured India' integration in the world economy and its emergence in due course as a trading nation of consequence in the global market.

A convertible rupee, when seen together with the overall budgetary package, will help reduce the foreign exchange deficits in two ways. First, it will make exports more attractive as every dollar earned will yield more rupees. Secondly, convertibility will enhance the inflow of capital into India. Non-resident Indians will now have the incentive to send their remittances through official channels rather than through the black market *havala* route. There is also the possibility that those who have stashed away money abroad may bring it back as foreign exchange into the country. And now that the government has signed the Multilateral Investment Guarantee Agency convention, convertibility will encourage a higher inflow of foreign investment as investors abroad will not only find India a much better business destination than it was but will have the confidence that the country will not stray from the course of reforms.

The Economic Times

It looks like an election budget, but isn't. Dr.

Manmohan Singh has slashed taxes in a veritable cascade unrivalled in the history of India. Not even in past election years have finance ministers given away anything like the Rs. 4,522 crore of customs and excise duty cuts announced by Dr. Singh.

Unlike other finance ministers, Dr. Singh has not given lollipops to voters by being fiscally profligate. On the contrary, he plans to reduce the fical deficit by around 0.5 per cent of GDP, the third successive year of fiscal contraction. So his tax cuts do not represent pre-election politiking. They carry the very different lesson that good economics can be good politics.

The Budget marks a watershed in the reform process. Dr. Singh's first two budgets were fire-fighting ones, stressing the taming of inflation and the fiscal deficit. Structural reforms was limited in this early phase.

This first phase of the reforms is over, now that inflation has been controlled and the foreign exchange reserves are at a healthy level. The stage is now set for faster growth in 1993-94, followed by a boom in the next few years. After stepping on the brakes for two budgets, Dr. Singh is now stepping on the accelerator. This explains his multiple cuts in customs and excise duty, which should stimulate both investment a consumer spending. These tax cuts go a fair way in the general direction of the Chelliah Committee recommendations.

Many people are stunned that he has managed to increase the Central Plan outlay by 32 per cent, unify the exchange rate, raise rural development spending (mainly antipoverty schemes) by 62 per cent. He has combined this with huge tax giveaways, and yet curbed the fiscal deficit. Is this witchcraft ? Or perhaps statistical legerdemain ? No, the miracle has apparently been achieved by a mixture of luck and good management.

Dr. Singh has failed dismally in one respect. The revenue deficit is going to balloon to Rs. 17,630 crore next year, against the budgeted Rs. 13,882 crore for 1992-93. He is wrong to borrow money to finance revenue deficit. He would have been well advised to limit his tax cuts to say Rs. 3,000 crore in order to get the revenue deficit down.

Indian Express

The sop of an increase in the standard deduction (for personal income tax payers) has not mitigated the disappointment over the absence of a hike in the tax exemption limit. Hopes raised by the Chelliah Committee's recommendation to raise the taxable limit attracting the surcharge too have been dashed. What is ominous is the Finance Minister's admission that expanding the tax base is not the easy task it had been assumed to be by the mandarins of the North Block. Dr. Manmohan Singh has said as much in declining to implement the Challiah committee's recommendation to bring down the corporate tax rate. Tax reform has been put on the back burner. The transfer of resources from the Government to the private sector, the key to market-led growth, has to await more propitious times.

The modest incentives to exports the budget provide will not enlarge the supply of foreign currency, the demand for which will sheet up as a consequence of duty reliefs. The rupee, now made convertible on the current account, will slide, specially if public investment rises as touted by the budget. Since the convertible rupee will have to be managed with borrowings from the IMF, public investment will have to be held down to avert undue devaluation. The budget for 1993-94 is a sleight of Hand.

The Statesman

Except for the initial uphoria of a unified exchange rate-undoubtedly the focal point of Dr. Manmohan Singh's latest exercise, in a desperate bid to push up exports-the Union budget for 1993-94 is at best lack-lustre and at worst a gamble. To be fair to the Finance Minister, with the Government having run the fortunes of this resource-rich country into the ground, there was little apart from some arithmetical tinkering that he could do and even that manoeuvrability was virtually sacrificed when he was required to give away an unprecedented Rs. 4,500 crores by way of Excise and Customs reliefs. This again was a part of his promise to the institutional lenders.

He would do well to inject an element of realism into North Block by looking at China instead. An equally populous country with similar prolems has attained a 13 per cent growth in its gross domestic product and in the process attracted global invetments worth $ 12 billion. India seeks such funds in borrowings.

The Hindustan Times

Finance Minister Manmohan Singh's Central Budget for 1993-93 exudes a high degree of confidence which justifies his claim that the nation has left the phase of crissis management behind and is now set to move ahead. The indicaters of the turn around are several. The success in correcting fiscal imbalance is evident not only in bringing down the fiscal deficit to 5 per cent of the GDP, but in pegging the coming year's budget deficit at no more than Rs. 4314 crore which in percentage terms should turn out to be less than 5 per cent. This achievement has been attended by a decline in the inflation rate. Also a leash on profligacy has enabled the Government to substantially raise the outlays for key growth sectors like industry and agriculture as well as the social setors such as rural development, health and family welfare and human resource development.

Contd.....on page 29

Highlights

* No increase in fares for Second Class ordinary up to a distance of 100 kilometres. The fare will go up by 10% for distances beyond 100 kilometres.

* The freight rates for all goods proposed to be raised by 10% for distances upto 500 km and 12% for those beyond.

* Fares for AC First Class, First Class, AC Sleeper, AC Chair Car and Second Class Mail/Express to be raised by 10% for all distances.

* A new class of travel designated as 'Sleeper Class' to be introduced. The fare of this Class will be 25% higher than that of Ordinary/Mail/Express Second Class but no separate sleeper surcharge to be covered. The minimum chargeable distance for this Class to be kept at 200 kilometres.

* Fares for Second Class Monthly Season Ticket to be raised.

* Insurance Scheme to cover cases of deaths/injuries as a result of train accidents, terrorist attacks, bomb blasts, etc. to be launched.

* Railways to carry 20 million tonnes more of revenue earning traffic over the level of 350 million tonnes expected in the current year.

* Tariff proposals which come into effect from 1.4.93 are expected to yield Rs. 1,848 cr. in the year 1993-94.

* A new Capital Fund being set up. It will be financed from the internally generated resources and will meet part of the Plan requirements.

* Railways expect to carry 370 million tonnes of originating revenue earning traffic in 1993-94.

* Plan size fixed at Rs. 6,500 cr. with a budgetary support of Rs. 960 cr. It is the first time that more than 70% of the Plan outlay is being funded by the resources generated internally after payment of dividend in full.

* Gauge conversion target fixed at 1,600 kilometres. Rs. 810 crore allocated for gauge converion.

Economic Survey : 1992-93

THE latest CSO estimates for 1991-92 suggest that economic growth was only 1.2 per cent, significantly lower than the growth of 2.5 per cent projected in last year's *Economic Survey* (Table 1). The prospects for the current year are distinctly better and growth of GDP is expected to exceed four per cent in 1992-93.

Aftr a slightly delayed start, the monsoon turned out to be very good in all areas other than the middle Gangetic plain. The kharif food grain harvest is likely to show a rise of as much as eight per cent. The coarse grain crop, estimated at 34.7 million tonnes is almost 32 per cent higher than 26.3 million tonnes in 1991-92. The sugarcane crop lacked rain in the North at a crucial time and the total crop is likely to be 7.7 per cent lower at 230 million tonnes. But the cotton crop, at 11.7 million bales, is excellent. The kharif oilseed crop is estimated to be 10.5 million tonnes, 17.7 per cent above last year and equal to the record crop of 1988-89. With another bumper harvest of mustard expected in the coming rabi, the supplies of edible oils are likely to be very comfortable. The agricultural situation this year is broadly satisfactory and even with a modest growth in rabi crop, agricultural output could be five per cent higher than in 1991-92.

In contrast, the industrial sector has continued to suffer from recessionary conditions through 1992-93, though performance is better than in 1991-92. Production in the period April-October 1992 shows a growth of 3.8 per cent. This is better than the marginal decline recorded in the same period of 1991-92, but it is well below the normal trend growth of industry. Industrial production in 1992-93 has been slow to recover for a number of reasons. Import restrictions which accounted for the poor performance in 1991-92 were completely removed by the end of 1991-92 when the new Liberalised Exchange Rate Management System was introduced. However, while quantitative restrictions on imports were not a constraining factor in 1992-93, the high cost of imported inputs, reflecting changes in the exchange rate, probably acted as a restraining factor in import-intensive industries. The new exchange rate will, however, help exports, and the resulting export stimulus would stimulate industrial production in more export-oriented sectors. However the export response will come only with a lag.

There is evidence that industrial growth is accelerating. The moving average. annual index of industrial production was stagnant 7 months earlier and now shows a growth rate of 2.2 per cent in the year ending October 1992. The extent of disruption in December and January is not yet easily quantified but if the industrial recovery continues at the pace observed in recent months, the industrial growth rate for 1992-93 as a whole could reach four per cent.

Services account for an important proportion of GDP and have shown steady growth. In fact, the growth of 1.2 per cent in GDP in 1991-92 when both agriculture and industry showed negative growth was entirely accounted for by the growth in services. And this growth in services was real. Apart from the normal growth in services owing to the Government sector, there was a real increase in the output of important measurable services in 1991-92. This growth in road and rail transport, telephone connections, cargo handled and air passengers continues in 1992-93.

An important feature of the economic situation in the second half of 1992-93 has been the revival of investment activity. The total term loans sanctioned by the term lending institutions in the first quarter of 1992-93 had shown very little growth, but the position improved dramatically thereafter. For the period April-December 1992 the term loans sanctioned by the all India Financial Institutions show a growth of 70 per cent while disbursements shown a growth of 47 per cent.

Balance Of Payments

The balance of payments position, which had reached a point of near collapse in June 1991, slowly stabilised during the course of 1991-92. Although new policies to deal with the situation were quickly formulated by the new Government and implemented within a few months the external payments situation took time to stabilise primarily because it had been allowed to deteriorate to a state of near bankruptcy in June 1991. Foreign currency reserves had declined to $ 1.1 billion despite heavy borrowing from the IMF in 1990-91 and a substantial part of this was held in illiquid deposits which could not have been easily mobilised if needed.

TABLE 1

Key Indicators

	1988-89	1989-90	1990-91	1991-92 (P)	1992-93 (P)	1988-89	1989-90	1990-91 (P)	1991-92 (P)	1992-93 (P)
	Absolute Values					**Per cent Change over Previous Year**				
Gross national product @ @ (Rs. thousand crore)										
At current prices	349.0	400.1	465.8	535.1 @	610.0 *	19.4	14.6	16.4	14.9 @	14.0 *
At 1980-81 prices	185.7	196.1	206.3	209.3 @	218.2 $	10.5	5.6	5.2	1.4 @	4.2 $
Gross domestic product (Rs. thousand crore)										
At currennt prices	396.6	454.0	530.9	609.5	694.8 *	19.0	14.5	16.9	14.8	14.0 *
At 1980-81 prices @ @	188.9	199.5	209.8	212.3 @	221.2 $	10.9	5.6	5.2	1.2 @	4.2 $
Agricultural production (1)	183.2 (P)	187.0 (P)	192.0 (P)	186.6 (P)	195.9 *	21.0	2.1	2.7	–2.8	5.0 *
Foodgrain production (million tonnes)	169.9	171.0	176.4	167.1	176.7 *	21.0	0.6	3.2	–5.3	5.7 *
Industrial production (2)	180.9	196.4	212.6	212.4	208.3 (3)	8.7	8.6	8.3	–0.1	3.8 (3)
Electricity generated (TWH)	221.4	245.4	264.6	286.7	221.3 (8)	9.5	10.8	7.8	8.4	4.6 (8)
Wholesale price index (4)	156.9	171.1	191.8	217.8	231.0 (5)	5.7	9.1	12.1	13.6	7.8 (5)
Consumer price index for industrial workers (6)	166.0	177.0	201.0	229.0	244.0 (7)	8.5	6.6	13.6	13.9	8.4 (7)
Money supply (M3) (Rs. thousand crore)	193.5	231.0	265.8	315.1	350.2 (8)	17.8	19.4	15.1	18.5	11.2 (8)
Imports at current prices										
(Rs. crore)	28235	35416	43193	47851	47480 (8)	26.9	25.4	22.0	10.8	38.7 (8)
(US $ million)	19497	21272	24072	19411	16630 (8)	13.6	9.1	13.2	–19.4	16.5 (8)
Exports at current prices										
(Rs. crore)	20232	27681	32553	44042	37329 (8)	29.1	36.8	17.6	35.3	23.1 (8)
(US $ million)	13970	16626	18142	17866	13075 (8)	15.6	19.0	9.1	–1.5	3.4 (8)
Foreign currency assets										
(Rs. crore)	6605	5787	4388	14578	13688 (9)	–9.4	–12.4	–24.2	232.2	40.2 (9)
(US $ million)	4226	3368	2236	5631	5237 (9)	–24.8	–20.3	–33.6	151.8	38.8 (9)
Exchange rate (Rs/US$) +	14.5	16.6	17.9	24.5	25.9 (10)	10.5	13.0	7.2	26.7	6.8 (10)
Market rate (Rs/US$) # +					30.4 (10)					20.3 (10)

* Anticipated (P) Provisional @ Quick Estimates @ @ At factor cost. $ Advance Estimates

\+ Per cent change indicates the rate of depreciation of the Rupee.

\# Indicative exchange rate as announced by FEDAI

1. Index of agricultural production with base Triennium ending 1969-70 = 100.
2. Index of industrial production 1980-81 = 100.
3. April - October 1992.
4. Index with 1981-82 = 100.
5. As in end December, 1992.
6. Index with 1982 = 100.
7. As in November 1992.
8. April - December, 1992.
9. As on January 31, 1993 for 1992-93 and at the end of March for previous years.
10. April - January, 1993.

International confidence had all but collapsed, commercial borrowings had dried up and even letters of credit opened by Indian banks were being generally rejected unless accompanied by confirmation by foreign banks.

Accordingly the Government negotiated a standby arrangement with the IMF in October 1991 for $ 2.3 billion over a 20-month period, a Structural Adjustment Loan with the World Bank of $ 500 million and a Hydrocarbon Sector Loan with the ADB for $ 250 million. Parallel with the effort to draw on multilateral sources, the Government also launched the India Development Bonds aimed at mobilising NRI sources of funds.

With the asssurance of external support through these efforts there was a gradual stabilisation of the balance of payments position in the course of 1991-92. Foreign exchange reserves were restored to more normal levels increasing from $ 1.1 billion in June 1991 to $ 5.6 billion at the end of March 1992. The entire amount of drawals from the IMF in 1991-92 ($1.24 billion) plus the accretion from India Development Bonds ($ 1.63 billion) together amounted to an inflow of $ 2.87 billion. This was less than the increase in reserves of $ 4.51 billion from June 1991 to end March 1992. In effect, the exceptional financing mobilised in 1991-92 was used primarily to build up reserves.

The year 1992-93 saw a revival of imports to more normal levels. The total value of imports in US dollars in the period April-December 1992 increased by 16.5 per cent over the level in the corresponding period of 1991-92. The increase appears large only in comparison with a highly depressed level prevailing in 1991-92. In fact the level of imports in 1992-93 as a whole is expected to be around $ 25 billion which is somewhat lower than the level in 1990-91.

Exports in 1992-93 performed far better than in 1991-92. Total export growth in the period April-December was 3.4 per cent in dollar terms compared with an observed decline of 1.5 per cent in 1991-92. The performance of total exports is depressed by the decline of more than 60 per cent in exports to Russia and other States of the former Soviet Union in 1992-93. The growth of exports to the general currency area in the period April-December was 11.4 per ent. The average growth rate in April-December 1992 has been adversely affected by a decline in exports of 12.5 per cent in December, reflecting the disturbed conditions prevailing in that month. Figures for January are also likely to be depressed by the riots in Bombay. Total exports in 1992-92 may not exceed US $ 19 billion. But it is hoped that the export performance in subsequent months will return to the high growth rates of 15-16 per cent observed during September-November.

However, there are important uncertainties in the balance of payments. The full impact of the disturbances in December 1992 and January 1993 on export and imports is difficult to asssess at this stage. Clearly, the receipts on account of tourism would be less than anticipated. The inflow of NRI deposits has in any case been small this year. The inflow of external assistance is also subject to some uncertainties consequent upon constraints that affect the rate of utilisation. A step-up in commercial borrowing was, in any case, not envisaged. Finally, there is the uncertainty arising from leads and lags. Interest rates and exchange rate expectations do affect the timing of receipt of export proceeds and payment of import costs. However, while these uncertainties justify a measure of caution in assessing prospects, the balance of payments in 1992-93 has performed more or less as expected.

Inflation Control

Inflation was by far the most pressing problem for the common man and woman in 1991-92, especially as the rate of inflation for food articles was much higher than for all commodities. The situation improved considerably in 1992-93 with a gradual decline in the annual rate of inflation in the course of the year. The annual rate of inflation as measured by the wholesale price index declined from 13.6 per cent at the end of 1991-92 to 6.9 per cent on 30 January 1993. The decline in inflationary pressure was especially marked in primary articles including food grain. The anual rate of inflation in food grain was 3 per cent on 30 January 1993 compared with 24.3 per cent at the same time in the previous year. The decleration in inflation is a major achievement of economic management in the past year.

The moderation in inflationary pressure in 1992-93 has been partly due to the good performance of agriculture but it is in large part also due to the reduction in the Central Government's fiscal deficit, which has been a key element in the strategy for macro-economic management and control of inflation. The progress achieved in reducing the fiscal deficit in the past two years has been substantial. The Central Government's gross fiscal deficit was reduced from 8.4 per cent of GDP in 1990-91 to 6.2 per cent in 1991-92 and the 1992-93 budget envisaged a further fall to 4.9 per cent. Thus the Centre's draft on domestic savings is scheduled to come down by 3.5 percentage points of GDP in two years. This massive fiscal correction has been a major disinflationary influence in the period.

Exchange Rate Policy

Reform of trade and exchange rate policy is a critical element in structural reform and a great deal has been done in this area. The exchange rate adjustments in July 1991, and the trade policy announced subsequently, had considerably reduced the reliance upon licensing control of imports and created a more favourable exchange rate for exports, especially when account was taken of the premium on Eximscrips. The introduction of the Liberalised Exchange Rate Management System (LERMS) moved further in the direction of eliminating licensing control and allowing the exchange rate to reflect the scarcity of foreign exchange. The system has worked fairly well during 1992-93. Despite virtually complete removal of import licensing on all raw materials, components, intermediates and capital goods, the trade account has been managed fairly effectively without any undue pressure on the exchange rate. The difference between the free market rate and the illegal or *hawala* rate is fairly small, around eight per cent or so which is an important factor modernating the diversion of foreign exchange into illegal channels.

Parallel with these developments, the rigours of exchange control have been mitigated. The Foreign Exchange Regulation Act was amended by Ordinance in January 1993 to remove a number of constraints on foreign exchange dealings and various restrictions on firms with foreign equity holdings. Legislation in this regard will be introduced in the Budget session.

Industrial Policy

The delicensing of industries in July 1991 has worked well. Competition has been intensified, and a certain dynamism has been imparted to Indian industry. The success of the experiment favours further progress in the same direction.

Several initiatives have been taken to promote foreign investment such as automatic permission for foreign equity holdings up to 51 per cent in Appendix III industries, expeditious clearing of other foreign investment proposals by the Foreign Investment Promotion Board (FIPB), facilities for portfolio investment by foreign investment institutions, and permission to reputed Indian companies to float equity abroad. These constitute an important beginning. The total volume of foreign investment approvals at Rs. 42.9 billion granted under the automatic and non-automatic route during August 1991 to December 1992 is more than three times the Rs. 12.7 billion of foreign investment approved in the last decade. There is no doubt that there is a considerable increase in interest on the part of foreign investors including in some of our important priority areas such as power or petroleum refining.

National Renewal Fund

Our labour legislation, which was originally designed to provide workers with maximum security in terms of employment and wages, is now seen to present some problems. If an enterprise turns sick or closes down, it is difficult to secure to the workers rights which only healthy entrprises can afford to give. The economy faces various hazards—hazards of drought, payments crises, shortages etc. which have to be shared by the people. In addition there are risks faced by workers in any firm that are incident upon the industry or the firm. What security has been given has been available to a small number of organized workers; and the security has proved increasingly illusory with spreading sickness. In a competitive world, the fortunes of firms are inextricably linked with their performance and it is difficcult to envisage a system which insulates workers from the misfortunes of the firms in which they work. This is why it is essential to ensure that credible social safety nets are developed so that the costs of adjustment as we transit to a more competitive and hopefully more dynamic economy are not borne exclusively by workers. The National Renewal Fund which was operationalised in 1992-93 is an important beginning in this direction. It provides a mechanism for compensating workers of public sector enterprises subjected to restructuring while also helping to restructure and modernise the enterprises. However, other mechanisms also deserve serious consideration. Some consideration of unemployment insurance and income stabilization arrangements may be necessary if workers' incomes are to be protected without reducing the flexibility of employment practices.

Agricultural Policy

With one third of the GDP and two-thirds of the population still dependent on agriculture we cannot achieve our objective of accelerating overall growth in the economy, or improving the standard of living of our people, without a substantial acceleration in agricultural growth. The trend growth rate in Indian agriculture at present is a little over 2.2 per cent per annum. It needs to be raised to around three per cent if GDP growth is to be accelerated significantly in future. This acceleration in agriculture requires action on several fronts including raising the levels of investment, resolving problems of land tenure, increasing availability of credit, ensuring appropriate pricing policies and developing new technologies to increase productivity.

Institutional constraints relating to land tenure, including especially the lack of progress in consolidation of holdings, continue to hold back productivity in many areas. Consolidation of land holdings is important if we are to produce a viable small farmer economy and programmes in this regard need to be vigorously pursued in the States.

The pricing policies towards agriculture must ensure that the farmer gets a remunerative price for his product and substantial increases have been announced in procurement prices in 1992-93 to ensure that price incentives are maintained. There are limits to the extent to which we can follow a policy of subsidising inputs, which could put open-ended burdens on the Budgets, Some subsidies are justifiable but in general we should ensure that farmers are charged reasonable prices for their inputs and that these costs are appropriately reflected in the support prices announced by Government. In this context it is relevant to mention that agriculture will be a major beneficiary of the policy of reducing the high level of protection earlier given to industry. High protection to industry has typically meant that our industrial prices are much above world prices whereas our agricultural prices are much more in line with world prices and in many cases actually lower. We need to redress this imbalance by reducing industrial protection and simultaneously allowing, and indeed encouraging, agricultural exports. The scope for agricultural production for exports, including high-value products with some processing, is very substantial. This should be fully exploited, not only in the interest of the farmer but also in the interest of strengthening the balance of payments. Finally, the logic of liberalisation implies that agricultural products must be allowed to move freely within the country in response to market demand. We must move away from the use of administrative measures to retrict movement in agricultural products as has sometimes happened in the past.

Poverty Alleviation

The Government has built up a large number of programmes to alleviate poverty. But our coutnry is large, and the poor are numerous. The reach of poverty alleviation programmes has thus been limited. The poor are entirely dependent on their own labour; hence it is important to ensure that national output and employment grow as rapidly as possible. But in the meanwhile, there will continue to be a need for preventing distress, addressing special hardships, and creating opportunities for the disadvantages. Funds for programmes to serve these needs have been constrained in recent years because of severe pressure on budgetary resources. One consequence of restoration of fiscal balance would be that the Government would be able to devote large resources to poverty alleviation programmes. It is the intention of the Government to begin this process of restoration straight away.

However, the effectiveness of poverty alleviation programmes will depend on how well the money is spent. It will be necessary to integrate these programmes into the overall stragegy of decentralised rural development, sensitive to local needs and resources, and with greater emphasis on creation of durable social and economic assets. It will be necessary to use the immense potential of Panchayati Raj institutions to make a success of these programmess.

H.R.D.

Over the year, our educational system has expanded considerably. But our performance in this area needs further improvement. Our literacy level is still low in comparison to developing countries similar to us. The quality of primary education is poor; this has often been a major contributory factor to the high drop-out rate amongst the pupils. However, non-formal approaches to this problem have been a remarkably successful supplement to the formal schooling system, and some districts have reached or are on the point of reaching 100 per cent literacy. Universalisation of primary education has to be major national objective in the 1990s. Literacy should be promoted as an useful input in life and work. Once the grown-ups become literate, their children are much more likely to acquire learning. Educated mothers are likely to invest more into the education of their children and hence to have fewer children. Adult female education is perhaps the single-most effective instrument for population control.

As with education, the aim of the health care system should be to enhance the capacity of people for a productive and happy life. Our infant mortality is unacceptably high; this is only one obvious indicator of the room for improvement in health care. The emphasis should be on preventive health care-on the provision of safe drinking water, the prevention of waterborne diseases, and on the promotion of healthier ways of living. Health programmes need to be integrated with those for family welfare, and local communities need to be more closely involved in both.

Energy Policy

Under any conceivable development strategy, the demand for commercial energy is bound to go up. Since this happens to be a very capital intensive industry, the challenge ahead is to create an environment in which requisite resources, internal and external, can be mobilised. Government has taken major decisions to open up the hydro-carbon and power sectors to private enterprises so as to supplement the effort of public sector. However, the magnitude of response will depend crucially on the reform of pricing and distribution arrangements.

In the power sector, the problem of low rate of return and persistent organisational deficiencies in the functioning of State Electricity Boards (as evident from sub-optimal plant load factor and heavy transmission and distribution losses) will need to be squarely faced. It is also clear that private sector power generation companies will be attracted to invest only if the State Electricity Boards are in a sound financial position to ensure prompt payment for electricity bought by them. Alternatively, a fresh look will have to be taken at distribution systems, with the private power generating companies being able to sell their power to some bulk consumers. Energy planning in the future will also have to pay greater attention to environmental concerns. Maximum possible emphasis has to be laid on energy conservation to save on capital costs as well as to minimise the environmental hazards.

Self-improvement is driven by human endeavour, but conditioned by the social, economic and politicial environment, for this environment determines the incentive patterns which drive endeavour. It is this environment that our structural reforms aim to change. They seeks to create an environment of opporutnity and challenge, freedom and excitement. The Government must continue to protect the weak and help the poor, to ensure peace and prevent mischief. But beyond this, our people should have the chance to exercise initiative and ingenuity, for in their endeavour lies the promise for the country. It is surely possible for even a poor country to become a better place with its own efforts. Towards this goal decisive steps have been taken in the past year and a half. They set a direction in which hope lies. □

Gains Of The Last 20 Months

- Annual rate of inflation reduced from 17% in August 1991 to below 7%.
- Restoration of a measure of normalcy to our external payments.
- Fiscal deficit reduced from 4% of GDP (Gross Domestic Product) in 1990-91 to about 5% in 1992-93.
- Agriculture performed well and industrial production recovering.
- Economic growth which had declined to 1.2% in 1991-92 expected to be around 4% in 1992-93.
- Despite virtual removal of import licensing, total imports lower in 1992-93.
- Market exchange rate of rupee relatively stable.
- Investment climate improved ; corporate capital issues in April—October 1992, 67 per cent higher than in the same period of 1991.
- Foreign investors showing active interest. Between August 1991 and end of january 1993 approvals given for foreign equity investment amount to $ 2.3 billion.
- Programmes for the poor and the disadvantaged not affected by new policy initiatives.

(Courtesy : D.A.V.P.)

Towards A Uniform Standardisation

Madhulika Prakash

THE technological, industrial and political developments all over the world have created a greater interdependence among nations and the natural boundaries and trade barriers are diminishing. This has led to effective utilization of world resources and rapid growth in competitive international trade. These developments have resulted in a demand for a common denominator for evaluating and judging quality needs in the world market and necessitated development of international standards to guide world trade. These standards are fast becoming an indispensable language in trade and commerce and greater pressures are being brought to bear on standards organizations to develop such standards in time, more so in fast moving technology areas.

The role of standards to support economic development, facilitating trade, improving the quality of life such as encapsulating new technologies in useable tools for the industry is being widely recognized. These benefits have been further reinforced by reference to standards in contracts, legislation, public purchasing and by using them as a basis for certification of both product and quality systems. Thus standards have gained an enviable position as instruments of commercial transactions and building competitiveness in the market place.

The beginning of the twentieth century witnessed the emergence of standards movement in the world. The first national standards body (NSB), the British Standards Institution was set up in 1901. Soon after World War I, a number of NSB's both in the developed and developing world were established to guide war raven economy on the drails of process. As demand for globally standardized products increased, a need was felt to establish closer cooperation among the NSB's to develop global consensus.

The emphasis however shifted to international standards when products and services started crossing the boundaries of the nation. International Electrotechnical Commission (IEC), first of its kind, was established in 1906 for evolving international standards in electrotechnology. The real transformation in international standardization took place soon after the World War II when the International Organization for Standardization (ISO) was set up in 1946. The ISO together with IEC today forms the international system of standardization.

The ISO and IEC play a pivotal role in bringing out international standards which facilitate the international exchange of goods and services.

The shift towards international standardization was further triggered when the GATT Agreement on Technical Barriers to Trade reinforced the importance of international standards by stipulating "where technical regulations or standards are required and relevant International Standards exist or their completion is imminent, parties shall use them or relevant parts of them as basis for the technical regulation or standard".

As a first step towards co-ordinated International Standardization the IEC and the ISO started harmonization of their procedures for standards formulation and voting an ISO/IEC System for International Standardization. The harmonized system provided by ISO & IEC is flexible and responsive to the market, rapidly adaptable to the needs of emerging technologies, capable of producing documents directly applicable to trade, and essential to the efficient working of international commerce. IEC/ISO voluntary standardization, carried out on the basis of world-wide consensus, enables technology to be applied in a coherent way at every stage of its development, and contributes to the general welfare of all economic and social partners.

Challenge Ahead

A greater challenge is ahead of international standardization bodies. The traditional procedurs for developing standards which took long time has become irrelevant especially in fast moving technology areas. Though steps have been taken by both ISO and IEC to produce standards through fast track, this needs a concerted effort.

International standards have become the basis for conformity certification to facilitate trade and technology transfer through enhanced :

— Product quality and reliability at reasonable price,

— user safety, environmental protection and reduction of waste,

— compatibility and interoperability of goods and services,

— simplification for improved usability,

— reduction in the number of models, extension of production series, and thus reduction in costs,

— distribution efficiency, and ease of maintenance.

Certification of conformity to standards, which is necessarily associated with standardization, enables qualified products and services to be offered in the world market without the need for further testing and inspection.

The IEC already has an experience of this approach in operation of two international systems of certification namely system of quality assessment of electronic components (IECQ) and system of conformity testing to standards for safety of electrical equipment (IECEE).

Regional standards are becoming precursor to international standardization. The European Communities (EC) is the best example today in understanding the importance of standardization (both national and international) and its contribution towards economic development of the Single European Market (SEM). The EC has defined a new role vis-a-vis international standards institutions.

The Commission of the European Communities issued a green paper which proposed a Europen Standardization System. The paper enunciates European standards through the three bodies, namely, the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC) and the European Telecommunications Standards Institute (ETSI). For guiding certification and conformity assessment, the European Community (EC) has created a European Organization for Testing and Certification (EOTC). This is designed to develop common certification and testing policies and to develop mutual recognition agreements with foreign jurisdictions. The EOTC is now operational to a limited extent and would be fully operated in 1993. Efforts are afoot within the community to provide for the recognition of each other's accreditations of certification or testing organizations and eventually develop European Accreditation Council.

The other parts of the world are also fast moving towards economic regional groupings to develop better bargaining power in the world trade. A free trade regional agreement—the North America Free Trade Agreement (NAFTA) has been recently established. Similar other groupings have come up such as the Australia New-Zealand Agreement for Closer Economic Relations (CER) and ASEAN Free Trade Area (AFTA) using the Common Effective Preferential Tariff (CEPT). Since international standards would be more acceptable in international market, all groups work towards harmonization of their regional standards to international standards. The main reason for this approach is to further international trade and remove trade barriers to promote impartial and transparent international system of standardization.

The ISO 9000 series of standards revolutionized the world and more than 60 countries have adopted them. But the need which is becoming more apparent is for a world-wide system for conformity assessement of companies to these standards. Independent accreditation of certification bodies to provide mutual recognition of different systems and acceptance of legal liability is an inescapable need for harmonization of accreditation policies and procedures which are acceptable world-wide. Even through ISO Council Committee on Conformity Assessment (CASCO) has brought out guidelines for operation of certification bodies which could become the basis for mutual recognition, there is a need to establish an international system for accreditation. To try and resolve this problem the ISO/CASCO has recently been given the task to recommend some suitable and acceptable international mechanism for accreditation of certification bodies especially of quality management systems.

Globalization—standardization—international trade; such linkages have seldom been so important than they are today. Events are unfolding so rapidly that probably by the turn of the century all countries will relate to the same standard. One needs a score sheet to keep up with what the future holds for international standardization with current trends in the modernisation process and the monumental changes taking place in technology and trade today. □

The author is Jt. Director, Bureau of Indian Standards, New Delhi.

Multiple Cropping Holds Prospect In North Eastern Region

Dr. A.N. Sarkar

THE concept of sub-regionalisation of agricultural planning based on Agro-climatic zones was introduced by the Planning Commission in mid-eighties, as a key to future agricultural development of the Country. Based on certain important parameters such as soil, climate, rainfall, humidity, temperature, sunshine, topography, surface and ground water regime and other agro-meteorological characteristics, the country has been divided into 15 agro-climatic zones. Under the classification, the NE Region falls in the Eastern Himalayan Zones, and considered to be the most diverse, complex and resourceful region of the country. The Eastern Himalayan Region has been further sub-divided into following five microsub-regions on the basis of dominant agro-climatic parameters such as topography, rainfall, temperature, soil types, cropping system, geographical continuity / proximity.

Sub-region I : Himalayan Hills comprising Sikkim and Darjeeling District of West Bengal.

Sub-region II : NE Hills comprising Arunachal Pradesh, Meghalaya, Nagaland, Assam Hills (*i.e.* Karbi Anlong, NC Hills).

Sub-region III : Southern Hills and Valleys comprising Manipur, Tripura and Mizoram.

Sub-region IV : Central and Lower Brahmaputra Valley comprising Nowgong, Darrang, Kamrup and Goalpara District of Assam.

Sub-region V : A. Upper Brahmaputra Valley comprising Lakhimpur, Dibrugarh, Sibsagar.

B. Barak Valley (Old Cachar District).

This paper among other things, attempts to highlight the salient features concerning planning for agricultural development of NE Region with emphasis on multiple cropping based on agro-climatic sub-classification.

The NE Region, broadly divided into 5 district agro-climatic sub-zones, interspersed with hilly terrains and plains, offers immense potential for growing a large variety of crops like cereals, pulses, oilseeds, millets, jute, mesta, sugarcane, cotton etc. However, against the projected demand of 7.80 million tonnes of food grain by 2000 AD, the current level of production of NE Region is merely 4.20 million tonnes from 3.90 million ha. This leaves a wide gap in terms of end food availability. The additional requirement of food grain to the tune of 2.00 million tonnes, is being imported from outside the region through diversion of funds that could otherwise be spent on developmental activities. In addition to food grain, it is observed that the overall production and productivity of the region in terms of horticultural produce, milk, meat, pork, egg etc are also abysmally low compared to the national average necessitating also import of these items to meet the domestic needs.

Constraints

Though the NE Region is agro-climatically suitable for growing wide varieties of field crops, vegetables, horticultural crops, plantation crops, spices, tea, rubber, coffee etc. a large number of factors come in the way of achieving higher productivity. The dominant factors that had so far affected overall growth and development of Agriculture include : eratic distribution and long spell of rain followed by alterate cycles of flood and drought, extensive jhum cultivation, traditional agro-techniques, low land -man ratio, lack of mechanisation, lack of availability and improper delivery system of critical agricultural inputs like seeds, fertilizers, plant protection chemicals etc. This apart, inefficient soil and water conservation, lack of extension support, agro-services and inadequate training and skilled manpower also affect agricultural productivity.

Although a large number of Intensive Agricultural Developmental Programmes have been implemented over the Plan period, a systematic evaluation of the results would indicate that these had constantly suffered from certain inherent short-comings primarily linked with improper crop planning, inefficient land, water and resource management and last but not least, improper co-ordination amongst the implementing agencies. Equally, it is a matter of concern that some of the Natioal Programmes such as Special Food Production Programme, National Pulses Development Programme, National Oilseed Development Programme, Small & Marginal Farmers Development Programme etc. have not been extended to all the NE States. This had clearly left the NE States with the option of developing its own agricultural system entirely based on local experiences, expertise and optimal utilisation of natural resources.

Whereas it is not so difficult to step up productivity of the plain areas of the North East through intensive and modern method of cultivation, but for any major thrust in over-all agricultural activities in the Hill States such as Arunachal Pradesh, Meghalaya, Mizoram and Nagaland it needs more careful consideration on mode of utilisation of resources and choice of technology, as we all know, these States are generally affected by jhum cultivation, characterised by mono-cropped system, low productivity and fast depletion of soil fertility. Because of varying topographical features, physical remoteness, diverse agro-climatic potentialities, different socio-economic millieu etc. the farming systems in the hilly areas need, by far, differential treatment and priorities, compared to those practised in the plains. A reflection on the comparative requirements for two agricultural systems prevailing in the North East would suggest the areas of priorities and thrust to achieve higher productivity through multiple cropping and diversified farming approaches.

Strategies

Out of 4.00 million Ha cropped area, nearly 3.10 million Ha falls in the plain areas, mainly in the States of Assam, Manipur and Tripura and foothills and valleys of other NE States. These areas should also represent zone of concentration for intensive agricultural activities involving cultivation of high yielding varieties of rice, wheat, maize etc covering nearly 1.20 million Ha. Out of this a gross irrigation area of 8 million Ha, with assured irrigation facilities provides opportunities for multiple cropping for achieving higher productivity through higher cropping intensity. Contrary to this, the non-irrigated areas suffer from such serious constraints as inadequate supplemental irrigation during Rabi and Kharif seasons, restrictive use of animal drought power, power tillers and light agricultural implements etc. rendering the farmers incapacitated to cultivate the second or the third crop in succession after the first kharif crop.

The flood affected areas on the other hand, have the problem of repeated crop failures because of lack of seedlings as a result of repeated interruptions by inundating flood water.

With a view to overcoming these problems faced in the plain areas as also to streamline measures for enhancing agricultural productivity through multiple cropping, certain strategies are suggested for adoption. These are :

(i) Firstly, to explore and exploit additional potential ground water resources for expansion and optimisation of minor irrigation facilities to areas that are hitherto not covered by traditional irrigation network.

(ii) Development of short-duration, high yielding, fertilizer responsive and non-lodging rice cultivars is suitable for inundated and flood affected areas during the first monsoon period. These cultivars should be photo-insensitive so as to allow planting both in pre-flood and post-flood situation ensuring moderate yield and minimum crop failures. For late transplanting, the suitable rice cultivars are IR-50, Pusa 2-21, CR-2371. In the low lying areas that are either waterlogged or have perennial irrigation source, Boro paddy vareities such as Boro 2, Kalinga 2, C-10, C-13 etc. may be suitably grown.

(iii) The irrigated areas may even be brought under triple cropping system by way of providing high doses of fertilizers, manures and required quantities of irrigation water at the critical growth phases of crops. The cropping sequence in this case should be the generally recommended pattern such as kharif rice, followed by pulses and oilseeds in the rabi and boro paddy and/or vegetables as well as certain other crops in the summer season.

(iv) For non-irrigated areas light and repeated tillage operations in post-harvest kharif season, using mould-board plough or light power tillers, followed by organic amendments or green manuring would help maintain better fertility and residual moisture regime so that a second crop or a crop mix may be practised to achieve higher productivity.

Cropping Pattern

The agricultural practices in the region are broadly divided into two distinct types namely settled farming practised in the plains, valleys, foothills and terraced slopes and that of shifting cultivation practised in the hill slopes. It is a natural corollary of the physiographic and cultural background of the region that by far the higher proportion of 72.16% of the area under settled agriculture is in the plains of sub-regions IV and V. Considering about 1.80% of the cropped area in the hilly sub-regions of I, II & III categories that are to be added to sub-region IV & V, the settled agriculture, effectively accounts for 74% of the total cropped area ; while shifting cultivation covers about 26% of the total cultivated area of the region.

The existing cropping pattern of the region is dominated by rice-based cropping system. The relative distribution between the food crops and non-food crops are 81% and 19% respectively for the region as a whole. This indicates subsistance nature of agriculture with least diversification. Statistically speaking, sub-region III has the highest percentage (92.37%) of cropped area under food crops followed by sub-region II (89.24%). Any major effort to intensify agriculture through Multiple Cropping Systems should attach pointed priority for development of these sub-regions.

Within each of the sub-zones in the plain areas of NE region one come across a variety of land situations characterised by variable and fluctuating moisture availability regime, which in turn, determines the cropping pattern strategy. Based on this principle, cropping pattern of the plains in the NE region should appropriately follow the sub-zonal characteristics which are broadly differentiated into 6 categories, namely (i) Upland (Flood free) situation, (ii) Medium land (flood free) situation, (iii) Low land (flood free) situation, (iv) Low land (flood prone situation), (v) Deep water (flooded situation) & (vi) Very deep water (land-submergence situation).

The following are some of the illustrative pattern of multiple cropping for the plain areas in terms of choice of crops, cropping sequence and the seasonability of crops for the land capability and moisture regime based farming situations : Multiple Cropping Systems described herein range from upland—rainfed farming to low-land wet farming.

(i) Upland (flood free)

(a) Summar Vegetables (mixed or inter cropped) followed by one or more of rabi crops (viz wheat, rapeseed, lentil, pea, green gram, black grain, potato).

(b) Ahu rice followed by one or more of the rabi crops (viz.pulses).

(c) Ahu rice followed by winter vegetables (e.g. tomato, brinjal, carrot, french beans, onions, garlic, radish, spinach).

(d) Soybean followed by wheat.

(e) Summer moong followed by maize/rapeseed/potatoes.

(f) Summar moong/summer vegetables followed by winter vegetables.

(g) Ahu rice followed by grains/ blackgram followed by oats as fodder.

(ii) Medium land (flood free)

(a) Direct seeded ahu rice followed by sali (winter) rice.

(b) Ahu rice followed by wheat, rapeseed, potato etc.

(c) Winter rice followed by fodder oats, peas etc.

(d) Winter rice followed by winter vegetables.

(iii) Medium land (flood prone)

(a) Ahu rice followed by late transplanted winter rice.

(b) Ahu rice followed by wheat/ rapeseed/potato/fodder oats.

(iv) Low land (flood free)

(a) Direct seeded Ahu rice (April-July) followed by normal sali rice (July to Nov./Dec).

(b) Trasplanted Ahu rice (June to November)—late sali (Mid September to late December).

(v) Low land (flood prone)

(a) Moderate deep water situation :

(i) Rice (asro bao) mixed with ahu followed by boro rice.

(ii) Jute followed by boro rice.

(b) Very ~~deep water situation~~ :

(i) Deep water rice followed by boro rice.

Since the multi-cropping strategy for the plain areas is dominantly rice-based there is a clear need for development and propagation of short-duration early maturing, non-photo sensitive high-yielding rice cultivars particularly suited to medium to low land flood prone areas of North East. Some of the short duration rice cultivars suitable for planting in the pre-flood and post-flood situation developed/screened by Assam Agricultural University and those recommended under All India Rice Improvement Co-ordinated Projects of ICAR need special emphasis for wider field testing, co-ordinated trials and mass scale adoption by the farmers if a major break-through in agricultural productivity through rice based multiple cropping system is contemplated for the region in the last decade of this century.

The hill areas of the North East traditionally suffer from the serious setback of deforestation and intensive jhum cultivation affecting nearly 4.6 lakh Ha of area and about 4.30 lakh jhumia families. On account of limited avilability of cultivable land, potential flat land and that of a complex land tenural system prevalent in the hill region, the tendency of the poor tribals have been to resort to shifting cultivation in an age-old manner for survival and sustenance. This practice with progressively shortened cycle together with a large scale deforestation has resulted in a massive destruction of biotic covers and consequent erosion of soils, water resources and fast depletion of plant nutrients. Apart from the obvious menaces of jhum cultivation, the other basic problems that had perennially affected productivity of hilly areas are those associated with inadequate road transport and communication system, restricted availability and high price of agricultural inputs, lack of basic infrastructure, non-existent or very limited market avenues for the produce, improper extenstion and training support and less access to information on modern methods of cultivation. This has virtually forced a large proportion of the tribal hill population to continue with the traditional method of cultivation characterised by mono-cropping systems, use of locally available agricultural inputs etc. with low capability for production.

In the light of inherent constraints faced in hilly areas of North East, following strategies are suggested for attainment of higher agriculture, horticulture and livestock based farm productivity.

1. "Adoption of Model land use pattern" as recommended by the ICAR for jhum lands, involving terracing, contour bunding, half-moon terracing etc in conjunction with appropriate soil and water conservation measures and judicious application of proven quality seeds, fertilizers, plant protection chemicals etc.

2. Replacement of vintage local cultivars with high yielding varieties developed by the ICAR, Agriculture Universities etc. and those recommended by the All India varietal release committee.

3. Wherever feasible, intensive wetland rice cultivation, adopting a package of improved scientific practices. This may be combined with pisciculture, duckery, piggery in a composite manner.

4. Replacement of mono-cropping and mix-cropping in a single season by multiple cropping and suitable inter-cropping systems spread over two seasons. In case of inter-cropping, this could be done as 'alternate row planting' in the bench terraces with suitable assortment of cereals, pulses, oilseeds, fruit trees, legume fodder, legume grasses, fuel wood plants etc. Alternatively, some of the cash crops such as spices, fruit trees, medicinal and aromatic plants and plantation crops may also be grown as possible mix of perennial crops for better economic returns and sustained productivity.

5. Stress should also be given for adopting diversified farming practices with suitable components such as agriculture, horticulture, apiculture, sericulture, handloom and handicraft for long term economic benefits of the hill population. These should, however, be adopted keeping in view local availability of resources, skill, technical know-how, availability of extension support and accessibility to ready market for sale of agri-horticultural and livestock based produces at remunerative prices.

For Hill Areas

Pineering Research works done by the ICAR Research Complex for NEH region have helped develop a large number of crop cultivars for their cultivation in suitable agro-climatic belts in the hills of NE region. The cultivars with high yield potentials, wider adaptability, multiple resistance and bettar compatibility to grow with diverse cropping sequences would contribute to higher aggregated yield resulting in better productivity for the hilly region. Based on multi-locational trials conducted by the ICAR, some of the multiple cropping systems that have been found to be effective for hilly region may be mentioned as follows :

Intercropping of maize and soybean or urad/arhar (1 : 1 ratio) is recommended for Meghalaya and Arunachal Pradesh. For all the NE States, intercropping of rice and soybean or groundnut in two or three rows of soybean/groundnut (2 : 1/3 : 1) or arhar (4 : 1) should be adopted for kharif. In rabi season, pea/wheat/linseed is recommended after harvesting of rice/maize/soybean.

Maize intercropped with green grain (Pusa Baisakhi) —paddy— wheat sequence is recommended under rainfed conditions in the lower terraces of hillocks in the mild altitude areas of Nagaland. Pulse oriented combination like green-gram and sesamum-Bengal gram is recommended under rainfed conditions in upper terraces of mild altitude hillocks in Nagaland.

Rice or soybean or maize followed by sweet potato or groundnut or cowpea followed by toria are recommended for hillocks of Tripura.

Cropping system recommended for the valley lands of Tripura, Meghalaya and Manipur are as follows :

State	Early kharif	Main kharif	Rabi
Tripura (Irrigated)	Jute	rice	Potato/wheat
Tripura (rainfed)	rice	rice	mustard/wheat/
peas	—	—	—
Manipur	rice	rice	wheat/mustard
Meghalaya	—	rice	wheat/maize

Situation	State	Rice Varieties	Duration	Yield Q/Ha	Remarks
Low Altitude	Manipur	Punsi, Prasad, RCPL-3-5	MD	45-50	Lowland
		RCPL-3-7, RCPL-3-5	SD	40-45	Lowland
	Mizoram	IR 36, Jaya Salect	MD	45-50	Lowland
		KRISHNA	MD	35-40	- do -
		VI-8, VI-206	MD	25-30	- do -
	Nagaland	Uday, Ratna, IR 36, Pankaj	MD	25-30	- do -
	Tripura	Rasi	MD	25-30	- do -
		TRC-246-C-10	MD	50-60	Boro and Cold Tolrance.
Mid Altitude	Meghalaya	IRAT 140, IRAT 141	MD	25-30	Upland
		IRAT-109			
High Altitude	Meghalaya	RCPL-1-iC, RCPL-1-2C	LD	35-40	- do -
		RCPL-1-6C	LD	- do -	- do -

SD : Short duration; MD: Medium duration; LD : Long duration.

ICAR Research Complex for NEH Region has developed and recommended certain short and medium duration high yielding rice varieties suitable for cultivation in the hilly region. Specific varieties have also been developed for cold tolerance and disease resistance to be grown in high altitudes. The recommended rice cultivars suitable for cultivation in low, medium and high altitude conditions of NE hill States are as given above.

NEH region, ranging from tropical, semi-tropical to temperate agro-climatic conditions, is congenial for growing a number of fruits and vegetables. They can be grown in alterate rows as mix crops or as perenial cropping system for long term economic benefits in conjunction with other diversified agricultural systems. Some of the promising varieties of horticultural crops recommended by the ICAR for their cultivation in the high hills (2000 m), mid-hills (800 m & above) and low hills (300-800 m) of NE region are given below.

Promising Varieties of various horticultural crops recommended for N.E. Hills Region

Altitude above msl	Vegetables	Period of cultivation	Promising varieties	Yield q/ha
1	2	3	4	5
1. High hills (2000 m)	Tomato	March-June	Pant-1	66
	Pea	March-June	Arkel	24.60
	Radish	May-December	Meghalaya Selection	678.2
			Pusa Reshmi	600
			Japanese White	594
	Cauliflower	May-December	Sel-5	243
			Sel-7	221
			Megh. Sel	203
2. Mid-hills (800m & above)	Bea	March-June	(a) Bush types	
			UPF-191	152
			UPF-204	140
			Premier	133
			(b) Pole types	
			Kn-13	138
			Phenomenal	125
			Long podded	
			Kentucky Wonder	130
3. Low hills (300-800m)	Tomato	April-July	SW - 72	280
			HT-8	240
		January-April	HS-101	224
			Pusa Ruby	146
			Angurlata	187
	Brinjal	June-September	Azad Kranti	162
			PPC	210
			PPL	150
	Radish	August-Nov.	Japanese White	469
	Bhindi	April-July	Pusa Sawani	112
	Bittergourd		CO-1	40

To sum up, the agricultural practices for the North East will continue to follow rice-based multiple cropping system. Areas with assured irrigation and medium land with flood free situation should go in for triple cropping and these should constantly be facilitated through high seedlings replacements, high intake of fertilisers and scientifically designed crop rotations. Conjunctive use of surface and ground water in upland and medium lands in extended areas would substantially aid to increased cropping intensity. Adoption of recommended cropping strategies for pre-flood and post-flood situations followed by winter tillage and application of suitable dry farming technologies would ensure double cropping in the rainfed farming belts in sub-regions II & III. Model land use pattern recommended by the ICAR, combined with diversified farming approach involving agriculture, horticulture, animal husbandry, fishery etc., would give not only higher yields but also higher income, better stability and sustainability to those who have to continue with hill farming for generations to come. □

The author is Adviser, Agriculture, North Eastern Council, Shillong.

Integrated Rural Energy Planning

THE Integrated Rural Energy Planning (IREP) programme has been a major effort in planning for energy for rural development.

The IREP programme was developed as a plan scheme in the Seventh Plan on the basis of the experience of a pilot rural energy planning exercise taken up by the Planning Commission in the Sixth Plan. Under this, pilot projects were set up in a few selected blocks in different parts of the country for developing the methodology for decentralised integrated rural energy planning and for developing institutional arrangements for preparing and implementing integrated rural energy plans and projects. On the basis of the experience of this exercise, the programme was prepared and taken up as a regular Plan scheme in the Seventh Plan. During the Seventh Plan and subsequent two annual Plans in 1990-91 and 91-92, around 250 blocks have been covered under the IREP programme.

Despite the problems and constraints, a sound base for the implementation of the programme has now been created. The demonstration and extension efforts have resulted in awareness at all levels in the Government and non-governmental set-up about the widespread interest which has been generated among the rural people especially in IREP blocks on various alternative and existing energy sources and their efficient utilisation for meeting their needs. With these positive achievements the IREP after some reorientation and modification, has become a major operational programme in the Eighth Plan.

In keeping with the broad objectives of the Eighth Plan, the Integrated Rural Energy Programme will focus on the following two major areas :

(a) Provision of energy for meeting the basic needs of cooking, heating and lighting, specially for the weaker section, by utilising locally available energy resources to the extent possible ;

(b) Provision of energy as the critical input in the economic development of the rural areas which would result in the creation of employment, increasing productivity and income and accelerating the process of decentralised development. In this category will be included energy for sustainable agricultural production, as well as promoting sustainable rural development activities.

The programme has now sufficient experience in micro-level energy planning for meeting subsistance and production needs. But the extension and intensification of the programme has to be carried out by effective linkage of the programme and its implementation, with the State and District planning set up on the one hand and with the agricultural and rural development programmes on the other hand. The IREP in the Eighth Plan will also ensure sustainability of energy supply to the rural areas in view of the growing gap between energy demand and supply and the grave damage that is being done to the eco-system because of steady depletion of the biomass cover. The environmental aspect will, therefore, be suitably incorporated in the micro and macro level rural energy planning framework.

The expansion of the programme, however, would be taken up in a phased manner so that its growth is in step with the development of local capabilities, awareness building, readiness of the community to actively participate in the programme and the avilability of institutional mechanisms to provide for the regular flow of energy resources and technologies, including their installation and maintenance for the sustainable agricultural and rural development.

The IREP in the Eighth Plan will have the following major features :

(a) Extension of the programme to cover at least 100 blocks per year ;

(b) Provision of minimum energy needs of cooking, heating and lighting in each IREP block, so as to ensure 100% coverage for the economically weaker sections;

(c) Provision of the most cost-effective mix of various energy sources and options for meeting, to the extent possible, the requirements for sustainable agriculture and rural development by giving due weightage to the environmental considerations;

(d) Ensuring large scale people's participation in the planning and the implementation of the programme by direct involvement of panchayats, voluntary and non-official bodies and institutions and the establishment of self-managed organisations and other appropriate people-oriented arrangements wherever feasible at the micro-level for the implementation of the IREP projects.

(e) Setting up and strengthening of the mechanisms and coordiantion arrangements that would effectively link micro-level planning for rural energy with national and State level planning and programme for energy and economic development so as to ensure regular and planned flow of energy inputs and espcially of the commercial energy sources for meeting to the extent possible the requirement of various end uses in the IREP projects. □

CSIR—Synchronising Research With Results

Dr. S.K. Joshi

THE demands of increasing competitiveness to carve out a better share in the world trade depend heavily on the know-how application. Close link of the national research base with industries and markets gains significance in this context. The Council for Scientific and Industrial Research (CSIR) has now geared up its activities to be of more value to Indian industry by taking up and arranging research and development programmes.

The major function of this apex body under the state auspices include promotion, guidance and coordination of scientific and industrial research. The CSIR has a well-knit result oriented network of 40 laboratories and 80 field and extention centres spread throughout the country. Today, CSIR reflects the entire gamut of R & D fields from micro electronics to medicinal plants : molecular to material sciences; oceanography to space and chemical to construction engineering.

The cumulative annual production based on CSIR technologies is of the order of Rs. 12,000 crore whereas the savings to the economy due to the productivity improvement comes to about Rs. 2,500 crore. These technologies contribute to an annual industrial production of Rs. 1600 crore.

Pioneer Work

Over the fifty years the CSIR has performed its assigned role in consonance with the national needs and priorities. In the initial period when the indigenous industry was at a nascent stage of growth, the CSIR provided useful back up in meterology, standardisation, testing and analysis,and the supply of trained scientific manpower. Now when the industry has reached maturity, the CSIR has tailored its research and development activities to provide 'state-of-the-art' and cost effective technologies.

Researches started bearing results a long time back. Not many people are aware that the first wholly indigenous tractor was based on the CSIR know-how. Council's contributions to petrochemicals, pesticides and pharmaceuticals industries are now increasingly being recognised nationally and internationally. The pioneering work has been done by CSIR in the exploitation and utilisation of coal, mineral and other natural resources.

For rural development through science and technologies, the CSIR has started a unit that utilises local resources and skills, cut down drudgery particularly for rural women, generate income and employment, improve life styles by improving living environment, promote health and family welfare, improve agro-horticulture post harvest and food preservation practices.

The Council has also helped in upgrading the skills of rural artisans and draftsmen by improving their tools and products. The project in Bankura district of West Bengal and Mewat region in Haryana through the demonstration-cum-training programmes have familiarised the people with the CSIR technologies suited to local skills and needs.

Common Usage

Fabrication and low cost building materials and techniques, cultivation of medicinal and aromatic plants etc. have found wide acceptance and usage with the large number of people. The CSIR is introducing vigyan kendras in several cities in the country to give further impetus to the transfer of science based knowledge to the users and service sectors.

Over the years, CSIR has developed and disseminated technologies eminently suited for the poor sections of the society with low formal vocational training or limited skills the technique of low cost pottery and leaf cup plate making machines . The CSIR technologies for drinking water like chlorine tablet, iron removal deflouridation techniques, water filter candle, low cost-latrines, toilet blocks for village schools are popular among the target groups.

Hi-Tech Areas

In petroleum and petrochemicals too, CSIR has made inroads into some high-tech areas hitherto dominated by multinational companies. The annual industrial production in this sector based on CSIR technologies is estimated to be of Rs. 700 crore.

Precocious flowering of bamboo through tissue culture for the first time in the world, micropropagation of tissue cultured economic trees and crops like teak, sugarcane, eucalyptus, cardamom and turmeric, food production from algae, industrial alcohol production through improved yeast strains by genetic manipulation and DNA fingerprinting, the second feat of its kind in the world, are some of the achievements in the Bioscience sphere.

Cost Effective

In drugs and phramaceuticals, the council has played a pivotal role in making India not only self reliant but also a net exporter. The CSIR has two pronged strategy; developing alternative and cost effective routes for known drugs like ibuprofen and flurbiprofen (anti-inflammatory), Norfloxacin and Ciprofloxacin (anti-bacterial), S-Timolol (anti-glaucoma) AZT (anti-aids), Etoposide (anti-cancer) and Vitamin B-6.

The Council has played a decisive role in the development of leather industry in India, converting it from an exporter of raw hides and skins to an exporter of finished leather and leather goods. The CSIR maintains the world's largest specialised leather research organisation, Central Leather Research Institute. The latest achievements in this sector have been the development of environment friendly enzyme based hair depilant which is the first of its kind in the world. Automation of wet tannery operations have greatly improved quality and productivity of the sector.

The closer interactions with the user industries are being cultivated from the initial stages of R&D projects so that CSIR can develop technology packages including turn-key offers where necessary. Centres have also been established to be operated and managed jointly with industry for a more meaningful and durable partnership. The international collaboration in R&D and technology marketing is being intensified.

Forex Earnings

At present the CSIR has Science and Technology cooperation with 18 organisations of developed and developing countries. It aims at exchanging the mutually beneficial R&D activities, scientific information and facilities alongwith the exchange of scientists for working jointly on selected R&D programmes.

The CSIR, working as a flexible vibrant organisation has always provided solution to the S&T problems of the nation without isolating itself from the global developments. Its aim is to develop technologies that are globally competitive and apt for exploitation of local resources and capable of indigenising imported raw materials and components.

One of the most significant events has been its entry into the area of export of technologies and services. It has been able to export the technologies for few drugs and provide consultancy services. With these a return of one million US dollars annually in foreign exchange can be expected. Lower charges of the CSIR in technology dissemination will help in averting import of technology. It is estimated that import of technology averted would be between 2 to 5 crore per annum. □

Essay Competition

To commemorate the Centenary of Swami Vivekananda's Bharat Parikrama and his Address at the Parliament of Religion at Chicago, Yojana (English) is organising an essay competition open to its subscribers only. The theme of the essay is : Swamiji's Bharat Parikrama, the Chicago Address and the message of Unity and Amity. The essay should be of about 1500-1600 words. The participants should mention their subscription number prominently. They should write on the top of the envelop "Essay Competition". There will be three prizes viz, First Prize : Rs. 1000/-, Second Prize : Rs. 800/- and Third Prize : Rs. 600/-. There will also be two consolation prizes of Rs. 400/- each. The prize winning essays will be published in September 1993 issue.

The last date for receipt of the entries is 31-7-1993.

ISO : 9000

Problems Confronting The Indian Firms

Dr. P.S. Tripathi

SUCCESS of any organisation depends on offering quality products at competitive prices. The economic reforms and easing out of FERA restrictions in our country have made the competition global in character. In order to withdstand the pressure of competition, both from within and outside the country, the Indian firms have to pursue vigorously, the programmes for upgradation of quality, productivity and technology. The ever increasing need to augment our exports to generate additional foreign exchange resources and the growing tendency of the buyers, the world over, to shift from prices consciousness to quality consciousness make quality upgradation an urgent necessity. In fact, this is the main reason for the European market to stipulate ISO 9000 certification as a pre condition for exporters for supplying their products and services to ECM zone countries.

ISO 9000 series offer a guideline to monitor the quality management systems in such a way that uniform quality of products/services can be expected. Earlier, in the absence of any uniformly accepted standards, each country followed its own quality standards. Thus, there was a long felt need for uniformally accepted standards. To fulfil this need the International Organisation for Standards was established with its headquarters at Geneva.

The basic function of this organisation is to establish universally acceptable standards. These specifications benefit the member countries and facilitate the export-import dealings among them.

The present series of ISO 9000 (ISO 9001 to ISO 9004) embodies a rationalisation of standardisation approaches of various countries. ISO 9001—ISO 9003 series is a reference for external quality assurance and ISO 9004 is for internal quality management. Thus, ISO 9000 is a comprehensive system aimed at achieving total quality management.

Slow Progress

No doubt ISO 9000 accreditation will offer a bright prospect to the Indian exporters, facilitating their entry into the ECM and other world markets. But the process of getting ISO certification is rigorous and time consuming. By the end of the year 1992 only 24 Indian firms were able to obtain ISO 9000 stamp. The reasons for this slow progress are not far to seek. The size of the domestic market and its readiness to consume anything of any quality act as a big disincentive for the urge to become world class in quality.

The second problem confronting the firms is the complexity of the whole process coupled with high costs. Since no Indian organisation has so far been accredited as a certifying agency and members of the professional bodies like CII and FICCI, who have been trained by the foreign quality experts to act as quality counsellors or lead assessors, are only of limited help, it is expected that the whole process will consume a longer time. The problem is further confounded in case of industries like automobile where a large number of parts/components are purchased from small scale manufacturers. In such cases there is a clear need to bring these firms also under the programme of intensive quality upgradation— which will make the whole process still slower. Thus, the compounded effect of all these factors will be a slow progress of Indian firms in the sphere of quality upgradation in the near future. We have a long way to go to become world class in quality.

The author is lecturer,
Faculty of Management Studies,
Banaras Hindu University.

Review Article

Environment And Sustainable Development

ENVIRONMENT PLANNING : POLICY AND PROGRAMMES IN INDIA
By K.D. Saksena; Shipra Publishing House, Delhi, 1993; PP 296, Price : Rs. 320.

PEOPLE are now becoming aware of environment and ecology. Everyone is talking about the "grave environmental crisis towards which India and the world are heading. " Keshava Dayal Saksena in his book on Environmental Planning, Policy and Programmes in India defined environment as "Whatever environs or encompasses, especially one's surroundings collectively", which affect the life and development of an organism. In simpler terms, "our environment is our surroundings", including both living (germs, plant, animals, and people) and non-living (land, water and air) components of it. These components of the environment constitute the environmental assets or resources. Hence, every environmental planning should imply planned exploitation, utilization, conservation and sustainable development of these assets or resources to achieve certain short-term and long-term objectives. The short-term objectives may include meeting the immediate needs for food, fodder and fuel, as well as the need for communications and shelter of a growing human and animal population in a sustainable manner, which causes minimum possible depletion in and damage to our environmental resource base. The basic long-term objective should be to conserve, protect and develop the environmental resource base so that the genetic diversity is preserved and the regeneration of renewable resources keep pace with their inevitable loss or degradation inherent in the process of their exploitation and use to fulfil the needs of the society.

The concept of "environment" is relatively of a recent idea to the world, if not to India. It is said that it was only in 1970 when a Dutch journalist was alarmed and protested at the discharge of poisonous fluid in North Sea which killed thousands of marine life. In June 1972, within two years this protest prompted one hundred twentyfive countries to meet in Stockholm for a dialogue to find a way out from the impending destruction of environment and wildlife all over the world. However, the concept of environment has been in vogue in the Indian collective psyche from the Vedic period. In his novel "Rajarshi", Rabindranath Tagore expressed anguish over sacrifice of living animals. While delivering an inaugural speech on July 14, 1928 on the occasion of "Vrksa Ropana" (Tree planting) and "Halakarsana" (ploughing), the poet unequivocally condemned the ruthless destruction of forests and its effect on human society. He did warn that the deleterious effect of deforestation, industrialization, and mass destruction of living species would engulf the entire human race one day. In 1950, after about twenty two years later, we started observing the "Vanamahotsava" in India at the initiative of K.M. Munshi, the then Minister of Agriculture. Throughout the history, many powerful voices like this sounded the dangers of environmental degradation as it made vast stretches of land and forest waste, and left these lands drought and famine prone. In course of time prosperous societies vanished. For example, the magnificent civilization of Knossos declined due to the erosion of forest cover and it could never regain its golden Age. The erosion of top soil on deforested hills caused a sharp fall in agricultural production in the great Mycenean kingdoms of bronze age Greece. This led to impoverishment and depopulation.

Given this background, if we look at the Indian scenario now, we will be bewildered to find that in the present century this country lost millions of hectares of forest, a host of animals and millions of species due to human interference. The mining operations in different parts of country stripped off trees as well as rich top soil which is not conducive to further growth of living species. Thus we lose nearly 6000 millions tonnes of sub-soil through erosion resulting in the increase of flood affected areas from 20 to 40 hectares and other natural disasters every year. Thus, the devastation of land, destruction of forests and sub-soils are carried out in a systematic way in the name of resource utilization, supplying fuel and fodder to the weaker section and their rehabilitation. Every year about 31,500 hectares of forests are being destroyed for fuel. As a result animal species of these areas are forced to die or leave the area due to non-availability of food and shelter. The human interference gradually led to deforestation and desertification of 100 to 150 million hectares of land is a fact.

About twentytwo years later, the Earth Summiteer assembled at Rio in June, 1992. They created a unique public awareness. In fact Rio has strengthened the undeniable links between environment and development. What India needs to define with regard to environment is the pathway of sustainable development for itself. But our entire approach to development has always been imitative of the west. We cannot have sustainable development by neglecting vast sections of our population, land and forests. We need to give highest priority to human development and environmental conservation. Mere lip service in this regard will not suffice. The ministry of environment and forests is not meant to deal with small problems like pollution. It must deal with the basic issues and causes of environmental degradation. This calls for a shift in its approach from regulative function to promotive functions like system analysis, policy formulation, awareness creation and promotion of new technology. For example, there is a greater need for a transport policy with emphasis on public rather than private transport. We need an energy policy that immediately make the maximum use of natural gas and gives priority to non-conventional energy sources. We need an industrial policy that provides for value-added and decentralised production. Water resources cannot be regarded the way we are dealing with it today. We don't have a clear cut water policy for the country of vast water resources. On the whole we can say that India does not seem to have any proper perspective for environment in the Five Year Plans.

Sustainable development requires a holistic policy of more effective use of resources and a more severe accountability for the environmental and socio-economic impact of their use. There is also a need to provide necessary incentive to change and transform rather than relying more on regulatory measures, which lead us nowhere. We must recognise the fundamental issue that the development model that has produced the lifestyles of the industrialised countries and that is imitated by a "privileged few" in our country, is simply not sustainable. While the west is creating its own image and crisis situation through over-consumption and exploitation, the Indian civilization which once based on balanced environmental conservation is trying to follow the former to usher in a doom's day. Hence without a clear cut holistic policy of environment and sustainable development, the country stands on the brink of disaster. At the conceptual level it is important to appreciate that our country has extremely diverse ecosystems. Within the same country, for instance, there is the hot desert of Rajasthan, the cold desert of Ladakh, and some of the highest rainfall region in the world. The same kind of land-use, and the same kind of bio-mass production is not feasible in all these ecosystems on a sustainable basis.

We need to respect the respective ecosystems all over the country and not the wanton destruction. For this what we require is a unified approach towards the total environmental resources of the country. Today, control of almost half of our land is fragmented amongst multitudes of Central and State Government departments. The result is chaos and a free-for-all on the ground, ecological destruction and declining productivity. The revenue lands are controlled by the revenue departments; forest lands are controlled by the forest departments, waste lands are controlled by the wasteland departments, etc. Each department has its own set of complex rules and regulations which are easily defeated and flaunted. The coordination between various departments are a sine quo non. But planning today is sectoral and fragmented. For instance, the wastelands department is interested in trees only and not water, and the department interested in water is not interested in tree. Moreover, the irony of plethora of bureaucratic rules and control is such that if a poor villager plants trees on revenue lands, he/she could be fined for trespassing. And the villager who planted trees on forest land could even be fined under existing laws. Thus afforestation needs appropriate institutional mechanisms. Trees have to be planted and protected by the people but for this to happen, the Government must overhaul the present institutional structures to make these participatory. It is increasingly becoming clear to everybody that India's vast environmental resources cannot be managed by centralized bureaucratic departments who tried to do everything from building factories and roads to planting trees and shrubs. The need of the hour is revival of democratic village level institutional structures that can control their own natural resources based on sustainable development.

Keshava Dayal Saksena is an Adviser, Planning Commission and a scholar in his own right. His book is an outcome of an assignment he had with the Food and Agriculture Organisation of the United Nations in June 1991. He is quite right when he says that India never had any perspectives on environmental Planning for more than two decades after Independence. The environment issues were explicitly recognised only in the Fourth Five Year Plan (1963-73). This Plan document recognised the "inter-dependence of living things and their relationship with land, air and water", and the need for harmonious development which is possible only on the basis of comprehensive appraisal of environmental issues, particularly economic and ecological. It was felt necessary "to introduce the environmental aspect into our planning and development". The "Sixth Five Year Plan 1980-85—A Framework" for the first time devoted one full section to "Ecology and Environment". The document recognised the "imperative need to carefully husband our renewable resources of soil, water, plant, and animal life to sustain our economic development". It also expressed concern on the wide scale depletion of natural resources and the deterioration it has caused in the quality of life of the people. The document concluded that "'the situation calls for a bold new approach to development which will be based on techno-environmental and socio-economic evaluation of each development project". Hence, since the period of Sixth Five Year Plan, environmental issues were taken care of. But planning has been somewhat piece-meal, fragmented and scattered. The issue of environment has not yet been able to carve out a separate niche for itself in all the State Plans.

The author analyses in his book comprehensively the process and problems of environmental planning, including the State Planning, and the constitutional, legal, institutional and policy structures created for such planning in India. The study deals with environmental problems related to land mass and land use, pollution and other hazardous substances at length. He identifies the various programmes so far implemented to tackle for wasteland development, forest conservation, wild life protection, pollution control, management of poisonous substances, environmental education and information dissemination, environmental research and training including the forestry training. These are very methodical and systematic. The work contains a special analysis of the environmental problems and programmes related to hill areas, islands, agroclimatic zones, bio-sphere reserves, wet lands, mangroves, and coral reefs, urban regions and coastal areas. He also highlighted the concepts and procedures involved in Environmental Impact Assessment.

Dr. M.C. Paul

Contd.... from page 8

No doubt there will be widspread disappointment among the fixed income groups of people who had virtually persuaded themselves to believe that the Finance Minister would come up with a handsome reduction in personal income tax. The corporate sector also had hoped for considerable tax relief in terms of the Chelliah Committee recommendations which, in principle, the government has accepted.

Except for a marginal gesture of raising the standard deduction limit from Rs. 12,000 to Rs. 15,000, the Finance Minister has made no changes in the tax structure. His inability to do so seems due in large measure to the constraints of resource limitation.

However, not to be unkind to Dr. Singh, it must be pointed out that his budget takes some care, though a wide range of reduced customs and excise duties, to ensure that if tax payers have been denied a larger carry-home pay packet, at least the housewife should find herself spending no increased prices (perhaps a lower price) for a variety of consumer goods.

It is best to assess Dr. Singh's budget by keeping in mind that the principal thrust of his exercise is to boost growth, and avoid being populist. If in the midst of a corrective phase, the people at large do not benefit from the budget, it should be more than compensated by the benefits that would accrue in the long run. Viewed in this perspective,. the Finance Minister's proposals make eminent sense.

Dr. Singh's third budget in a row is a part of structural adjustment he embarked on a year and a half ago. The strides are not spectacular, but his confidence remains unshaken. There have been some disappointments in his budget, such as the one for income tax payers and those who wanted to save for a rainy day. These, perhaps, would be evercome if the high hopes raised are fulfilled in the coming years. □

Book Review

JAPANESE MANAGEMENT AND THE INDIAN EXPERIENCE : By Bhaskar Chatterjee; Sterling Publisher Pvt. Ltd., L-10, Green Park Extn., New Delhi; pp 112; Price Rs. 50.

Much has been said about Japanese Management in the recent years, especially after the exceptional success of the Japanese in the realm of trade and commerce through technological competence and there is no dearth of literature on the subject. In fact, everyone has got something to say about "The Japanese Management Technique".

A considerable amount of research had gone into the making of this book. A complete chapter has been devoted to the study of the evolution of the Japanese Management system over the years. The impress of the politico-social and socio-economic successions on the Japanese social fabric and the value systems that have trickled down the layers of time and laybrinths of collective Japanese psyche and decanted into the "Management Ethos" of the Japanese over the years is described in detail.

The democratic bottom-up approach, corporate discipline, employee security, and open communication channels are singled out as cornerstones on which the edifice of japanese organisational culture stands. The reader is then taken on a detailed detour to Maruti Udyog Ltd. and one gets a feeling of being transported to the shop floor or assembly line of Maruti Udyog. One gets a feeling of actually "being there".

The operation of successful absorbtion of the Japanese practices in the Indian corporate mileu, the problems, the constraints, the agonies and the ecstasies, the blendability or otherwise of the oriental practices in an accidentally dervied Indian corporate culture have been dealt with. It has something of interest for administrators as well.

T. Vijaya Kumar

RURAL DEVELOPMENT : PROBLEMS AND PROSPECTS : By E.D. Setty, Inter-India Publications, D-17, Raja Garden, New Delhi; pp 212; Price : Rs. 195.

One of the most widely discussed topics in the literature on development is that of rural development. The book under review is a timely contribution in the sense that recently the authorities in India have also started giving priority to rural development.

The book is a collection of 14 essays, written by the author from time to time starting from 1980 to the present time. Out of these as many as 9 have already been published in both India and abroad.

Essays 1, 2 and 3 present characteristics of rural communities and implications for development. Essay No. 4 gives a very lucid analysis of field approach to integrated rural development. The next three essays (5, 6 and 8) are devoted to extension services being conducted at various Asian Universities and how extension education is of help in agricultural marketing. The 7th essay relates to rural sanitation and emphasises the need for a perspective plan in the field of sanitation. Essays 9 and 10 can be characterised for presenting certain specific features of village community. The author has very scientifically analysed the consequences of technological change and emphasises the fact that more and more effort should be directed to rural sociological research which should probe the consequences of technological change rather than the antecedents of innovation. The author has very ably analysed the various aspects of rural industrialisation and entrepreneur-ship, particularly among women. The next three essays deal with various facets of entrepreneurship with reference to rural areas. The concluding essay presents some lessons.

The author has rightly concluded that political will, clearcut policies, realistic objectives, effective organisational and institutional linkages, a blending of planning from above and below, enlightened involvement of the client systems, building up and strengthening of local institutions, training, implementing programmes with seriousness and continuous evaluation of the programmes would facilitate meaningful and sustained rural development. Rural development includes agricultural development and there is some truth in the widely held belief that agricultural development is a precondition for our overall development.

If we are really interested in rural development we must recognise the role of agricultural universities and extension services in supporting farmers. Technology, training and trade are areas where there is need for considerable fine tuning of approaches to suit specific socio-economic and agro-ecological conditions. Dr. Setty has highlighted the need for developing entrepreneurship among women. Each essay in the volume could be read as an independent and exclusive unit; however, all the fourteen essays taken together form the themes, approaches, methods, issues, problems and programmes, germane to rural development. The book will be of particular use to the policy makers, planners, administrators, extension agents who are involved in the task of improving the conditions in rural areas. □

Dr. Sharawan Kumar Singh

Development Diary

Contd. from Cover II

* Outlay for Telecommunications stepped up to Rs. 6,321 crore from Rs. 4,928 crore. ......11 lakh new telephone connections to be provided ; 67,500 lines of trunk automatic exchange capacity to be added.

* Provision for Agriculture and Allied Activities go up from Rs. 1,879 crore to Rs. 2,436 crore.

* Allocation for Education increased from Rs. 952 crore to Rs. 1,310 crore. ......Focus on primary education and total literacy campaign.

* For Health, provision enhanced from Rs. 302 crore in 1992-93 to Rs. 483 crore in 1993-94.

* Outlay for Family Welfare fixed at Rs. 1,270 crore. ......6.02 million sterilisation and 7.48 million IUD insertions to be performed to bring down the birth rate to 21 per thousand and death rate to 9 per thousand by turn of the century.

* Allocation for Women and Child Development Rs. 566 crore against Rs. 450 crore in 1992-93. ......Of this Rs. 474 crore is for Integrated Child Development Services.

* Provision for Welfare increased from Rs. 530 crore to Rs. 630 crore. ......Includes Rs. 73 crore for liberation and rehabilitation of safai karamcharies ; and Rs. 247 crore for central assistance for Scheduled Castes Component Plan.

* Plan provision for Science & Technology and Environment up from Rs. 935 crore to Rs. 1,251 crore. ......Allocation for INSAT-2 satellites, including launch services, increased from Rs. 78 crore to Rs. 209 crore.

(Courtesy : D.A.V.P.)

Regd. No. RN 949/
Licensed U (D)-52 to post without pre-payment at NDPSO, New Delhi (Delhi Post) P & T Regd. DL/12037/

Yojana : 33 Years Ago

Milestones

The oil deposits discovered in Cambay (which will be in the Gujarat State soon to be formed) will be commercially workable. The Union Minister for Oil and Mines has announced that the Government will be setting up a medium-sized refinery in the region. Work on it will begin this year.

* * * * *

The coal production target for the Third Plan has been fixed at 95 million tons (the production was 32 million tons before the First Plan started).

* * * * *

The country is now completely self-sufficient in pig iron. In fact, small quantities of pig iron are even being exported.

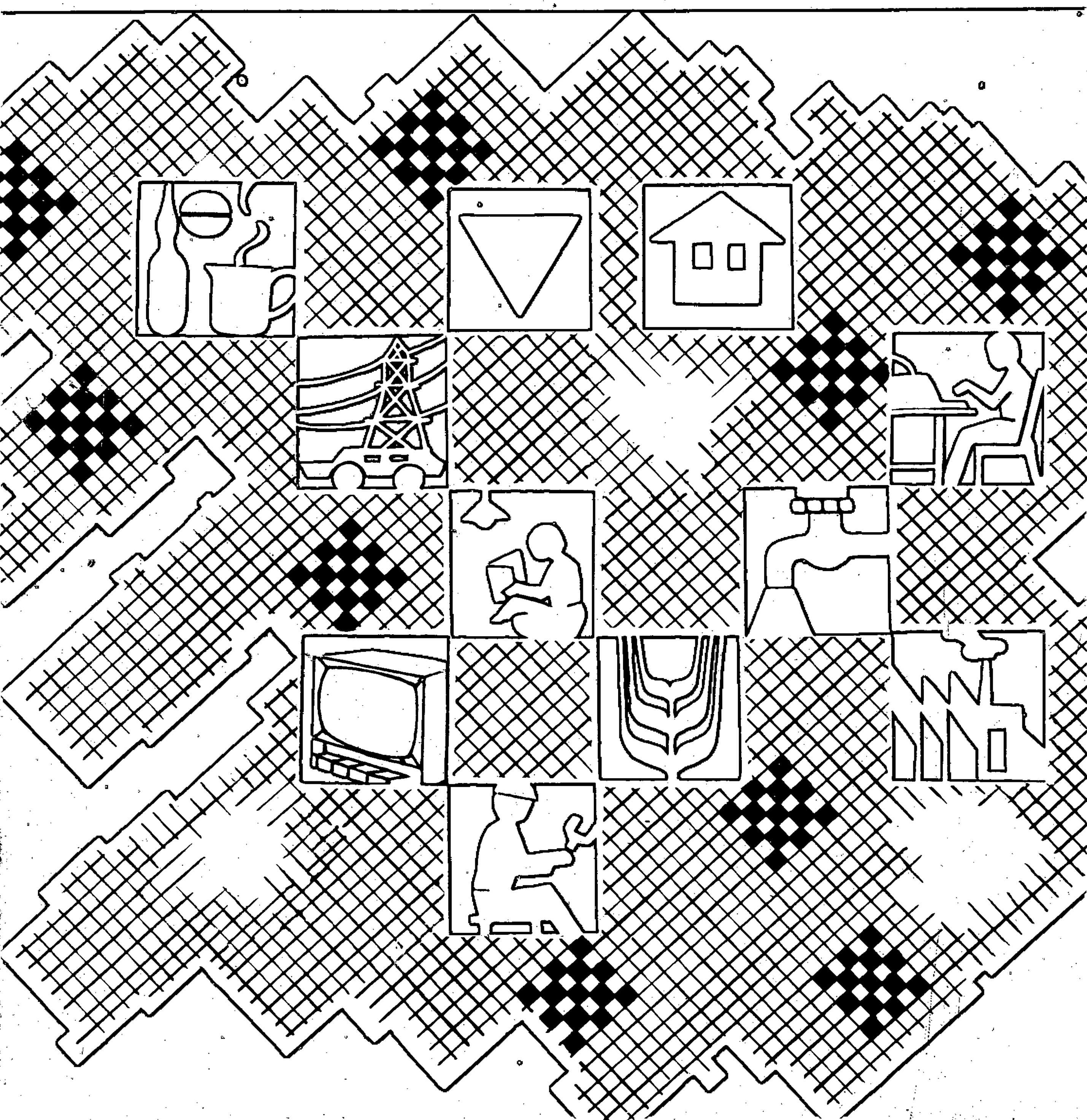
* * * * *

The Central Fuel Research Institute, Jealgora, has announced that the low grade iron ore available in Salem district of Madras and the lignite in South Arcot district can be used, as a result of studies conducted at the Institute, for making iron. The process consists of mixing crushed iron ore and lignite in suitable proportions and preparing briquettes using a hydraulic press. On feeding the briquettes into a low-shaft furnace, 64 per cent of the ore in the briquettes is reduced to iron. By adding 10 per cent coking coal to the briquettes, the concentration of iron ore can be increased to 30 per cent without affecting the compressive strength of the briquettes.

PUBLISHED BY DR.S.S. SHASHI, DIRECTOR, PUBLICATIONS DIVISION, PATIALA HOUSE, NEW DELHI-110001 AND PRINTED BY THE NAV SHAKTI PRINTERS, J-36, UDYOG NAGAR NEW DELHI-110041. Phone : 5471806, 5472548

yojana

Vol. 37 : No. 7 | April 30, 1993 | Rs. 3



Development Diary

New Scheme

The insurance scheme announced by the Railways to cover incidents of death/injuries to bonafide passengers from terrorist attacks, dacoities, bomb blasts is likely to come into effect from October this year. The annual premium to cover claim on the above account is estimated to be approximately Rs. 8 crore. This amount will be provided in the year 1993-94 at the Revised Estimates stage, according to Railway Ministry.

NRI Investment

The Government has approved proposals involving a total NRI Investment of Rs. 5121.3 million till 31st January, 1993 for setting up industries in various fields since the announcement of a New Industrial Policy in July 1991. The areas cover Engineering, Automobilies, Chemicals and Electricals.

Collaboration

During 1992, 1520 foreign collaboration approvals were made. Of these, 828 were for foreign technical collaboration agreements only and 692 for foreign financial collaboration with or without technology transfer agreements.

Progress In Defence

"PRITHVI" and "TRISHUL" missiles are likely to be inducted in the Armed Forces during 1993-94. Development work for "AKASH" and "NAG" is expected to be completed by 1995 after which both the missiles are likely to enter the Services. "PRITHVI" is a surface-to-surface missile of 150 km range which can be extended to 250 km for certain types of warhead. "TRISHUL" is a short range surface-to-air missile with 9km range. "AKASH" is a medium range surface-to-air missile with a range of 25 km. "NAG" is a third generation anti-tank missile with a range of 4 km.

yojana

Vol. 37 : No. 7
April 30, 1993
Vaisakha 10, 1915

Chief Editor
D.K. Bharadwaj

Editor
Mahadev Pakrasi

Assistant Editors
S.P. Malik
Madhu. R. Sekhar

Sub-Editor
D.K. Chaliya

Production Officer : S.M. Chahal
Advertisement Manager : Baij Nath Rajbhar
Business Manager (Hqrs) : Jaswant Singh
Cover Design : M.M. Parmar

Senior Correspondents :
Bangalore : B.N. Gurumurthy
Calcutta : B.K. Chakravarty
Guwahati : B.K. Saikia
Hyderabad : C.G.K. Murthy
Madras : K. Ganesan
Trivandrum : K.L. Sreekrishna Das

YOJANA seeks to carry the message of the Plan to all sections of the people and promote a more earnest discussion on problems of social and economic development. Although published by the Ministry of Information and Broadcasting, YOJANA is not restricted to expressing the official point of view. YOJANA is published in Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Marathi, Punjabi, Tamil, Telugu and Urdu.

Editorial Office : Yojana Bhavan, Sansad Marg, New Delhi-110001. Telephone : 3710473, 3717910, 3715481 (extensions 2644, 2643, 2402, 2319). Telegram : Yojana.
For new subscriptions, renewals, enquiries please contact : The Business Manager, Publications Division, Patiala House, New Delhi-110001. Tel. 387983.

Subscription : One year Rs. 60, Two years Rs. 108, Three years Rs. 144.

Essay Competition

To commemorate the Centenary of Swami Vivekananda's Bharat Parikrama and his address at the Parliament of Religion at Chicago, Yojana (English) is organising an essay competition open to its subscribers only. The theme of the eassay is : Swamiji's Bharat Parikrama, the Chicago address and the message of Unity and Amity. The essay should be of about 1500-1600 words. The participants should mention their subscription number prominently. They should write on the top of the envelop "Essay Competition". There will be three prizes viz, First Prize : Rs. 1000/-, Second Prize : Rs. 800/- and Third Prize : Re 600/-. There will also be two consolation prizes of Rs. 400/- each. The prize winning essays will be published in September 1993 issue.

The last date for receipt of the entries is 31.7.1993.

A Landmark Budget

Dr Nitish Sengupta

IN many respects India's 1993 budget can be called a water-shed in the history of India's budgets. Not only have both budget deficit and fiscal deficit been substantially reduced, but for the first time the deficit is projected to be met not from new tax proposals but from better efficiency in the collection of the existing taxes, Also by reiterating India's commitment to the irreversible path of reform and economic adjustment, this budget has given a clear signal to the nation and to the world, a signal that many thought would not be forthcoming in the context of the possibility of a populist budget on the basis of the further possibility of yet another mid-term election. Then again, through the attempt at industrial regeneration and revival through substantial relief being granted in the excise levies on wide spectrum of industries including consumer goods, this budget has set altogether a new trend, missing from conventional budget making for a long time.

The biggest plus point of the 1993 budget is that it reaffirms our nation's commitment to economic recovery, structural readjustment and reform, and also gives a very big push in that direction. Nothing in the long run is more important for the common man than the assurance of continuing stability, certainty, accelerated growth and prospects for a glorious tomorrow. The budget gives such an assurance and does it, in a way, few budgets have done in the past. Those with a traditional mind-set may feel disappointed that there has been no change in the corporate taxation structure and only very marginal change in the personal income tax structure. Surely, the budget has not significantly reduced common man's direct tax burden except raising, in the case of salaried persons, the standard deduction on earned income by Rs 3000. The promised removal of the surcharge has not come. But once we get away from the stereotyped mind-set, it is easy to see how the very substantial, often spectacular, reduction of the central excise levies on a very wide variety of consumer durables starting with essential articles of every day use like tea, coffee, biscuits and vanaspati and ending with so-called luxuries like air-conditioners and refrigerators, will directly and indirectly benefit the common man in a way no budget has done after Independence. Name any of the consumer durables of everyday use and you will see it is there in the list. Tea and coffee have been completely exempted. On vanaspati, duties have been reduced from Rs 1900 to Rs 1500 per tonne, on electric fans from 17.25 to 10%, on coolers from 23 to 10%, on specified domestic electric appliances from 23 to 15%, on radio sets from 23 to 10%, on plastic moulded luggage from 34 to 25%, on mattresses and bedding articles of cellular rubber from 69 to 30%, on colour T.V. sets by Rs 1250 to Rs 2200 per set. A natural question will be whether the producers and the sellers will pass on this benefit to the consumers. It is the moral obligation of businessmen to ensure that this is done in the long-term interest of business itself. But, unlike in the past, they will no longer operate in a monopolistic sellers' market. People will have the choice of buying similar products cheaper from other competitors, no longer prohibited by a pernicious industrial licensing system. Also, there could be imported goods which could flow freely encouraged by the substantial import duty reduction.

Domestic industry should therefore be careful that it in fact makes these goods cheaper by passing on duty relief to the customers. This wide-ranging duty reduction aggregating to a revenue loss of Rs 4522 crore, will greatly, stimulate demand and accelerate industrial recovery which, in its turn, will step up the growth of GDP and employment. One of the pressing concerns in recent times has been the pervasive demand recession in most industries. This budget rightly makes a frontal assault on it. The significance of revival of demand in industries such as automobile, tractors and two-wheelers, electronics and petro-chemicals etc is obvious. Another significant step is the excise relief given to cosmetics, toilet products and health care articles, for the first time after Charan Singh's 1979 budget imposed savage excise levies on them and, for practical purposes, took them out of common man's reach. The 1993 budget will not only return these within common man's reach but will also stimulate growth in these industries.

A substantial reduction of customs duties on a wide range of articles, along with full convertibility of rupee on trading account will also be welcomed by common people who, for a whole generation, had no access to some of these imported articles and will no longer be tied down to the tyranny of sub-standard domestically produced articles which were protected in a sheltered economy. Competition will no doubt make for efficiency, cost control, better design, quality assurance and after-sales service. The advent of full convertibility of the rupee on the trading account is a much needed timely step which will sweep away a whole set of distortions and aberrations-cobwebs to which a whole generation has become accustomed. The experience of partial convertibility introduced last year has shown that, by and large, rupee maintained its strength in relation to all major world currencies. Surely, full convertibility will carry this process to its logical conclusion. Rupee will be eventually strengthened through better export and higher foreign funds flow into the country. The Finance Minister has no doubt taken a big gamble by placing his trust on India's potential for a breakthrough in export. This is the main thrust of the macro-economic policies. It is for Indian industry to justify this trust. In the long run, nothing is more important for making the rupee strong than building up an efficient industry and export capability. Surely, this budget has tried to create conditions for that. A floating rupee will bring out true accountability and efficiency and, to that extent, higher exports and GDP growth in the long run. There may be some problems for the common people in the immediate future on account of higher prices of petroleum products which full convertibility may impose. But this will disappear in the long run. Higher prices will also impose better and more realistic consumption discipline. Happily, the world crude price is currently on a downward trend. Going by the example of Thailand which removed exchange control and permitted full convertibility of its currency only a few years ago, there is no ground for pessimism. Thailand has never regretted its decision. Her economy has become many times stronger since then. Pakistan's example also supports this.

Good Conditions

Full convertibility should enhance inflow of capital into India, first by getting non-resident Indians to send their remittances through official channels which will now give them the true value of their remittances, rather than through the underground *hawala* route, and, secondly, by encouraging a higher inflow of foreign direct investment through the confidence that this budget will create abroad that India will continue to be a good business destination where their investment will be safe and will promise a good return. Much depends on the prospects of the owners of the huge unaccounted-for funds kept abroad, bringing those funds back as legitimate foreign exchange into the country. The new budget has surely created good conditions for such repatriation. The substantial reduction of tariff on capital goods and machinery should also help industry to cut down on the cost of production and make their goods internationally competitive. While there has been a substantial lowering of tariff on capital goods, the Indian capital goods manufacturers have been compensated by a rationalisation of the duty structure and downward reduction of the duty on components and other essential inputs like non-ferrous metals. The lowering of the interest rate by 1% and on export credit by another 1% will also be a big boost to industry.

Along with providing relief to the middle and lower classes through wide-range relief in excise duties, the substantial increase of 32% in the annual plan investment is a welcome step. In the Indian context reduced Plan outlay necessarily means reduced Government expenditure which again means shrinking order books for companies and demand recession, retrenchment, lay-offs and unemployment of working people. These tendencies, somewhat evident in the context of the current years's reduced plan outlay, will be check-mated to the extent the annual Plan outlay is being stepped up by 32% implying a rise in the level of Government purchases. Along with this rise in the Plan outlay, the Finance Minister has susbstantially raised the outlay on rural development, employment, generation programmes, and also social sectors like health and education. These will also bring multiple benefits to common people. He has therefore answered the criticism that the structural adjustment programme lacks human face. Increased Government spending on infrastructure, rural development, health, education, agriculture, rural industrialisation and food processing will no doubt substantially help the common people, specially those in the rural areas.

Thanks to the appearance of a near balance between total receipts and total expenditure in the revised 1992-93 figures, the 1993-94 budget estimates envisage a budgetary gap on only Rs. 4314 crore (as against Rs. 7202 crore in the previous year) and the substantially reduced fiscal deficit at around 4% of the GDP. Unlike in the past, he has not attempted to make up the budget deficit through new tax proposals but has promised to close this gap by ensuring better tax administration more effective compliance and recovery and expanding the tax net to cover newer sections of the people. This is another aspect where the budget has departed from the traditional mind-set. Indeed, much can be done in these areas. It is time the vast army of income tax personnel divert their time and energy from harassing the existing taxpayers to identifying and covering new class of tax payers, whether in the urban areas or in the rural areas.

Incentives Needed

Last year the presumptive tax was imposed on shopkeepers. One would like to know how effective this proposal has been in its implementation. An effective drive to bring in more people in the direct tax net and unearth black money will not only wipe out the uncovered deficit in the budget, but might lead to revenue surplus. The percentage of direct taxes in the Central Government revenue collection has been steadily declining over the years and is negligible now. It is time this tendency is reversed. It is hoped that serious attempts will now be made towards a drastic reform of the direct taxes system providing for lower rates, reduction of exemptions and more extensive coverage. While on the subject, one would request the Finance Minister to consider giving some thought to providing some more tax relief to the salaried sections severely hit by the phenomenal price rise in recent years. Incidentally, something that one misses in the entire budget is any proposal for encouraging savings. One is afraid that, in the context of the revealed figures on public savings in the Asian Pacific countries, including close to 40% by the Chinese people, we in India can no longer take comfort from our savings rate which has reached a plateau. True that an investment oriented budget should normally lead to savings, but savings devices and instruments are also needed. Finance Minister might consider giving some more incentives in order to accelerate saving habits by our people.

Also missing is any clear direction as to how substantial redution in Government's burgeoning consumption expenditure is to be brought about. The economic survey promised some steps in this direction. The budget has belied those promises. The least that the budget could have done in this direction was to accept some of the proposals of the N.D.C. Sub-Committee on austerity headed by Shri Biju Patnaik.

Taken together, after balancing both the pluses and minuses, one should congratulate Dr. Manmohan Singh on bringing out a refreshsing budget which departs from many of the traditional approaches in our budget making practices in the past and breaks a number of new grounds. For the first time, it seeks to give a clear push to the growth of industry and investment and, by that very fact, spur economic activities and growth impulses. These will surely help the common people in their struggle for improved standard of living and better quality of life. In the last analysis it is over-all growth higher than the budget projections which alone can lift the nation by bootstraps from poverty. This budget is surely an exercise in that direction.

No doubt the absence of any substantial direct tax relif has disappointed conventional budget watchers. These include operators of stockmarket who were expecting a lot of taxation reliefs and had raised high expectations. But once we can grow out of this conventional mind-set and view the budget in its entirety, no serious observer will fail to notice the unconventional but imaginative attempt to stimulate and regenerate industrial and economic activity by increasing demand. In the long run it is this high level of economic growth at a rate much higher than the budgetary figures which alone can lift up India's economy. The budget is investors-friendly and industry-friendly but perhaps operators-unfriendly ! □

The author is former Secretary, Planning Commission and presently D.G., International Management Institute, New Delhi.

BUDGET ANALYSIS

Some Plus Points, Some Minus Ones

Dr Malcolm Adiseshaiah

ACCORDING to the statement introducing the budget the basis of the budget is two fold. The first is : the achievement during the last 12 months of the Government. The achievements include the control of inflation which was above 17 per cent in July 1991 brought down to the low 7 per cent at present (but this is not evident); the improvement in our external position (which is again not very visible), the restoring of international confidence (which is not yet evident as not one international commercial loan has been obtained), the growth of the economy from a very low 1.2 per cent in 1991-92 to an expected 4 per cent in 92-93 (which we all hope will be realised).

The other basis on which the budget rests is with regard to the priorities set forth in the budget statement. These priorities range over a wide area, covering stimulating agriculture, slowing down inflation, further promoting export growth so that there would be a large inflow of export income which will make the BOP more manageable, the using of resources released in this budget through reduction of taxes and using the released resources to give a fillip to development expenditure in 1993-94, and to make further progress in tax reform, making the tax system simpler and more transparent. On this basis, the budget presented has many plus as well as minus points.

The major plus point of the budget is that it is quite clear in what it proposes and what it disposes. This has not always been so in the past budgets which had tendency to fudge the important issues. This is not so in the budget for 1993-94.

The other plus point is that at long last there is some real provision for agriculture which has been completely neglected in the new economic reform programme and the structural adjustment policies of the last two years. Now agriculture is given a fillip through many proposals on prices to farmers, credit through NABARD etc., though the major emphasis of these provisions is at large and medium farmers and not the small and marginal farmers who are the majority.

A related plus point is the new emphasis on rural development which receives an increased allocation of over Rs. 5000 crore, which is a sharp step up of over 60 per cent over the provision made for it last year. As a result, it is expected that there will be more employment generation and higher capital formation in the rural areas.

The increased provisions made for the social sector is another plus point. The social sector covers health, nutrition, education, rural drinking water supply, child and women's welfare, science and technology. There is an attempt made in this budget to compensate these vital areas for the squeeze they suffered in structural reform programme for the last two years. This is essential and should result in improved human resource development.

Another plus point to be welcomed is the strengthening of SEBI which will result in the protection of all investors, particularly the small investors, and which will make the share and stock market more orderly, more transparent and make it a little more difficult for future scams to be unidentified for a long time.

Neutral Issues

The Rs. 5200 odd crore of tax reduction in customs and excise is in the neutral category, being neither in the plus nor minus category because of the following issues. First of all when the reductions were announced, the common man thought that this meant lowering of prices of the commodities. People did not realise that what was reduced is the customs and excise and that we have a long way to go before this is translated onto reduced prices. From this point of view, it is a good thing to learn about the lowering of the prices of cars by the Automobile Association and it is hoped that this will be extended right through to all prices benefitting from the reductions.

Now the Rs. 5240 crore which has been given away by the Government, which incidentally is the first time the Union Budget has not given birth to the newspaper headlines that so many thousand crore rupees have been gathered additionally through further increase in taxes, this time there has been no increase in taxes. This give away Rs. 5200 odd crore raises the question, to whom it been given away ? Has it been given to the wholesalers who will increase their margin ? Or has it been given to the producers so that they can increase their profit and increases the scale of their production ? Or it been given to the consumers ? This is still to be worked out. The Government has stated that if the benefits from lower taxes are not passed on to the consumers, it will take very drastic measures. It is not clear what measures the Government has at its disposal to enforce this threat.

Another neutral issue category is the full convertibility of the rupee. Incidentally, the question arises in my mind as to what were the factors which led the Government to change its stand set forth in the introductory chapter of the Economic Survey, where the flat out statement is made that the convertibility of the rupee has to wait for some two to three years. Some three weeks later the budget statement begins with the announcement on full convertibility of the rupee on trade account as from 1. 03.93. This change could not have been due to the surge of exports and a large inflow or export incomes which enables the Government to introduce the full convertibility. This has not happened in the intervening three weeks between the finalising of the Economic Survey and the budgetary statement. All the arguments used in the budget statement for the full convertibility of the rupee were present also three weeks earlier when the introductory chapter of the Economic Survey was written.

Turning to full convertibility, the major question is whether it will push up the import cost of crude petroleum products and fertilisers, which will now have to be paid for with foreign exchange obtained at the full market rate. The Government has stated that there will be no rise in prices of crude and petroleum products and other bulk imports because of the surplus in the Oil Coordination Account which will be used to dampen any rise in prices and because the international prices of crude oil are ruling soft. These two factors are true but they are certainly short term factors and should not be relied on for any long term benefits. I think we should be prepared this year for a rise in the prices of the bulk imports and to that extent to see pressure on prices and resumption of some increase of inflation.

Minus Points

One minus point to the high revenue deficit in the budget caused by increases of or non reduction in non plan, non-development expenditures. I have, for over a year now, repeatedly suggested that for atleast the coming year all vacancies in the Central Government should be frozen and not filled. This would bring down the revenue deficit sharply by some Rs. 2500-3000 crore, and to that extent reduce the pressure on prices and on Government resources.

There are other minus points which need attention. There is a discrepancy between the receipts set forth in the budget 1993-94 which in terms of revenue receipts are shown at 31,000 crore and the figure in the budget at a glance at Rs. 27,727 crore. This should be rectified and clarified because it is important in relation to the calculation of the money available to the Government for reductions and resource allocations.

Further the central plan is increased by 32 per cent in the case of the 1993-94 budget, while in the revised budget it is 28-29 per cent increase and this also should be reconciled.

Another small issue is that the promises made in the budget need to be followed up and implemented. Already in the two budgets that have been presented, there are atleast 8 promises which are still unfulfilled. I will just take two examples. The small farmers agri-consortium is still a nonstarter. Again the presumptive tax on which so much reliance has been placed, has only provided Rs. 600 crore in 1992-93, and despite the failure of this instrument, the 1993-94 budget has extended it to small transport operators. Hence, the means for the implementation of the promises made must be set forth quickly.

Another minus point. The repeated emphasis on globalisation of the Indian economy, on making our economy a part of the global economy, seems to me to be somewhat irrelevant. It is irrelevant in the context of our not attaining even a minimum of self reliance in our industry, in our services, in our economy. In our employment generation we are lagging very badly and we still have over 400 million according to my studies, over 250 million according to the Government, going to bed hungry every night. It is thus employment generation, poverty alleviation which are our priority, not making the Indian economy part of the global economy.

Finally, it is regretted that the budget continues the bad practice of disinvesting public sector equity, which is being done again in 1993-94 to the extent of Rs. 3500 crore. This is bad, because it is eating into our capital which should be avoided, unless we are faced with complete indigence in the economy, which we are not. □

The author is Chairman, Madras Institute of Development Studies.

BUDGET ANALYSIS

Focus On Growth, Exports And HRD

S. Sethuraman

THE Union Budget for 1993-94 marks a bold, unparalleled fiscal exercise with its massive tax relief to move the economy out of stagnation and a substantial step-up in development expenditure focussed on agriculture, rural employment and vital social services like education and health. The Finance Minister, Dr. Manmohan Singh, has boldly responded to the crying needs of the economy even if the process of fiscal correction and macro-economic stabilisation has to continue in the third year of India's structural adjustment and reforms programme.

There can be no adjustment without pain, he had said in 1991 adding that his effort would be to minimise the burden on the poor and give the adjustment a "human face". Fiscal restraint of the last two years has certainly helped to improve the resource position so that, somewhat sooner than expected, Dr Manmohan Singh has been able to give greater attention to anti-poverty and social sector programmes.

Inflation was the major concern in 1991-92, because it hurts the poor the most but adjustment policies, involving cuts in public expenditure so far, have paid off in terms of halving the annual rate of inflation from over 16 per cent to around 7 per cent and keeping external payments at a manageable level. The GDP growth which declined to 1.2 per cent in 1991-92, the year of squeeze on imports and credit dictated by the need to restore some balance, has picked up to around 4 per cent in 1992-93. The economy would have bounced back to stronger recovery but for two severe setbacks—the security scandal affecting investments and the gory aftermath of the Ayodhya episode—hitting production and export.

Unique

The 1993-94 Budget, unique in many ways, seeks to put economic and social development firmly back on the national agenda so as to move away from, as the Finance Minister puts it, "obscurantist preoccupations and sectarian divisions." There is broad consensus in the country that India cannot remain marginalised in a rapidly integrating global economy. What India needs is both strong and sustained growth in output of goods and services as well as steady uplift of millions of the poor and underprivileged.

The priorities underlying the Budget are to bring down fiscal deficit further to 4.5 per cent of GDP from a little over 5 per cent in 1992-93; to promote a strong industrial revival; to move toward a simpler tax system, with moderate rates and much greater focus on compliance; to give full support to agriculture and agro-processing industries for increasing employment and incomes in rural areas and strengthen social services like education and health; and to achieve a rapid growth in exports in order to be able to manage the balance of payments without prolonged dependence on exceptional financing from abroad.

The deep cuts in import tariffs, as part of trade policy liberalisation, coupled with unexpectedly large excise duty reliefs, should give a major boost for industrial revival and make Indian goods more competitive. Having given away over Rs. 4500 crore of revenue to help speedy economic recovery, the Finance Minister has had to put off corporate tax reforms till next year. The plan outlay stepped up by 32 per cent, would have been at risk if he had attempted restructuring of both direct and indirect taxes in a single budget. He considered the indirect tax area to be more critical for stimulating the economy at this stage and expects the substantial revenue loss to be made up by larger receipts from both customs and excise. Additionally, he has lowered the minimum lending rate for producers. Reduced excise and interest rates should help to bring down costs for the industry and prices for the consumers.

Dr. Manmohan Singh has accepted the broad thrust of the recommendations of the Tax Reforms Committee headed by Dr. Raja Chelliah for a regime of moderate rates though he has not moved toward the pattern of simplification proposed by the Committee in this budget. He needs time to consult the States before moving to a Value Added Tax System (VAT). The enthusiastic welcome given to the Budget by trade and industry is qualified by a sense of disappointment that the corporate tax has not been lowered at least to 45 per cent. The Finance Minister is conscious that more needs to be done to promote investment-related savings and, for the present, he has only raised the standard reduction from salary income from Rs. 12,000 to Rs. 15,000.

The Finance Minister has certainly taken a plunge with his decision to allow 100 per cent convertibility of foreign exchange earnings at the market rate as a big incentive for exporters. Banks have been asked to reduce the interest rate on rupee export credit and in turn the interest tax payable by them would be waived in the case of export credit which would go upto 10 per cent of their total advances. The unified exchange rate, in place of the dual rate introduced last year, would secure larger flows of foreign exchange into official channels but a floating rupee would have its implications on stability of the exchange rate, balance of payments and domestic prices.

Production and exports apart, the Budget provides a strong fillip to development expenditure both for infrastructure, programmes of poverty alleviation and rural development as well as the social services. It is here that one would have to see how far the Government has gone in insulating the poor and unorganised sections of labour and other weaker sections of people from the harsh burdens of adjustment. Certainly there has been no significant scale of retrenchment with all the radical changes in industrial policy.

The Government has not arbitrarily forced any 'exit policy' down the throats of workers but has instituted mechanisms including the National Renewal Fund as a social safety net to ensure that workers displaced in totally uneconomic units facing closure are given adequate compensation and that they are also given retraining and redeployed wherever possible. The NRF is also to be utilised in job creation schemes because what this country needs is more and more employment and at the same time greater productivity from the existing work force, which is all the time conscious of its rights and privileges. There has been no large scale privatisation leading to mass unemployment as was assumed by some politically articulate sections.

Protection

Far from being reduced the food subsidy has been increased since 1991-92 and the public distribution system has been strengthened though the Government has to do a lot more to see that the benefits go only to the vulnerable sections of people. The farmers have been adequately compensated for the rise in fertiliser prices.

Above all, the sharp down swing in inflation, especially in prices of food grain and edible oils, should benefit all sections of the people. It is true that fiscal contractions leading to a reduction in public expenditure tend to slow down growth and employment, especially in the public sector. In the light of experience of developing countries going through similar adjustments Dr. Manmohan Singh has acted in time to ensure that the programmes of direct intervention, designed to help the poor, are strengthened.

Budgetary resources determine the pace of progress in rural development and in social sector such as elementary education, primary health care, safe drinking water and sanitation at affordable price. While the State Government has a special responsibility in these areas, the Budget sends out strong signals to the States that structural transformation of India's economy must penetrate to the rural areas.

It is also Government's policy to free agriculture, while assuring farmers of remunerative prices for crops, from movement and other restrictions and ensuring adequate credit and enabling it to enter the global market, as much as industry, to reap the gains from a competitive environment.

The Budget also maintains the pace of reforms both in regard to financial sector where the State Bank of India and other leading nationalised banks are being enabled to have access to capital market to strengthen their capital base, without Government giving up its majority control, and in regard to foreign investments, which are badly needed in the development of capital-intensive energy sector, so that the country's onward march is not thwarted by infrastructural bottlenecks when China and other East and South-East Asian nations are forging ahead. □

Yojana Your Forum

Yojana invites topical write-ups on economic and social themes. These may be on the present scene of employment and the potential areas of diversification, consumer protection, communication, transport and such economic issues. Social themes may include women, youth and children, welfare work, works of voluntary agencies, profiles of people and organisations engaged in various jobs. Your reactions on articles brought out in the journal on topical issues are welcome. So are your suggestions. Books on planning and economic topics are accepted for review.

BUDGET ANALYSIS

Stress On Reform Of Tax Structure

Dr. B.B. Bhattacharya

THE Union Budget for 1993-94 has many distinctive features. The Budget reduces customs and union excise duties by Rs. 4,522 crore, which is perhaps the biggest tax cut in India's fiscal history. The budgetary deficit target of Rs. 4,314 crore, if realised, would be one of the lowest as a ration to GDP in the last two decades. The dual exchange rate is abolished. All foreign trade—both exports and imports, including Government imports—will be now transacted in market exchange rate. Gross fiscal deficit as a proportion to GDP will be further lowered from about 5 per cent in 1992-93 to about 4.8 per cent in 1993-94. Plan expenditure is stepped up significantly, with increasing share in allocation for agriculture, rural development and physical and social infrastructure. Non-plan expenditure, other than interest payments, is projected to fall by 6 per cent in nominal value and 14 per cent in real value. Interest rates on bank deposits and advances are lowered by one percentage point. Five year tax holiday is announced for private investment in power plant and all investments in hilly and other industrially backward States. Provision is made to augment capital base of nationalised commercial banks. Finally, export is given further incentives. However, contrary to general expectations, the Budget has not reduced direct tax rates.

When the stabilisation and the structural reform programme was initiated in July 1991 the economy was in a bad shape. The inflation rate on a point to point basis climbed to 17 per cent. The balance of payments situation was precarious. The foreign exchange reserve was down to about $ 1 billion, which was worth about 2 weeks' of imports. There was a serious problem of servicing external debt. Internal debt was also a serious problem. Gross fiscal deficit of the Centre as a ratio to GDP was more than 8 per cent, both revenue and monetised deficit rates above 3 per cent. Compared to that the current situation is somewhat better. Inflation rate, on a point to point basis, has now decelerated to 7 per cent. Foreign exchange reserve has risen to above $ 5 billion. Centres' gross fiscal deficit rate has come down to 5 per cent.

However, contrary to the optimistic view expressed in the Budget Speech of the Finance Minister and in Economic Survey, the situation is far from normal. The average inflation rate in 1992-93 fiscal year is still above 10 per cent against 14 per cent in 1991-92. What is more disturbing is that despite five consecutive normal/good harvest, a very tight monetary and fiscal policy and a comfortable foreign exchange reserve the inflation rate has not come down substantially. In the past under similar circumstances the inflation rate came down to 4/5 per cent. The present inflation rate is almost twice of that, which means that the inflationary expectations are not yet subdued.

The foreign exchange reserve has not increased due to an improvement in trade balance. Despite a steep devaluation and a squieeze on imports dollar exports growth rate is well below dollar imports growth rate. The recent increase in foreign exchange reserve is almost wholly contributed by fresh external borrowings and foreign exchange remittances scheme, which cannot be repeated every year. Total external debt has now climbed to almost $ 80 billion and debt servicing has risen to $ 8 billion a year. The improvement in balance of payments situation ought to be regarded as temporary rather than permanent.

GDP growth rate in 1991-92 fell to only about 1.2 per cent. Agriculture and industry recorded negative growth rates. The official projection for GDP growth rate in 1992-93 is about 4 per cent. While agricultural prospect appears to be good, the industrial situation as of now is not bright. Both public and private investment rates in 1991-92 were lower than in 1990-91. The fall in real public expenditure, especially plan expenditure, in both 1991-92 and 1992-93 has adversely affected employment. The recent deceleration in inflation rate is a reflection of the fall in purchasing power of poor people. Net capital inflow from abroad might have increased in the last two years. But as of now there is no perceptible change in productivity and technology. In short, there is no clear sign of improvement in the growth scenario in the last two years.

Plan Outlay

One of the positive features of this Budget is that it has stepped up plan outlay. 1991-92 and 1992-93 Budgets reduced gross fiscal deficit rate mainly by cutting plan outlay. Central plan outlay in 1991-92 was 10 per cent lower than 1990-91 in real terms. 1992-93 Budget increased Central Plan outlay, but in real terms, it would be more or less the same as in 1990-91. 1993-94 Budget allocates Rs. 63,936 crore for Central Plan, which is 29 per cent more than the revised estimates for 1992-93. Central Plan outlay for agriculture and rural development is increased by 28 per cent, energy 33 per cent, transport and communication 30 per cent, industry and minerals 20 per cent and social services 24 per cent.

Out of Rs. 63,936 crore, the Government will mobilise Rs. 23,241 crore through budgetary measures. The remaining Rs. 40,695 crore is expected to be mobilised through internal and extra budgetary resources of public enterprises, which is more than the Rs. 30,085 crore in revised estimates for 1992-93. The real burden of resource mobilisation would, therefore, shift from taxation and Government borrowings to administered pricing and market borrowings of public enterprises. This may lead to two problems. First, administered price hikes will increase cost structure. Second, while some public enterprises may be able to borrow adequate amount from the market, many others may not. The actual Central Plan outlay, therefore, may be less than the budget estimates.

In the past actual deficits were invariably more than the budget estimates. Gross fiscal deficit in 1993-94 is budgeted to be Rs. 36,959 crore, which is almost the same as revised estimates for 1992-93 i.e. Rs. 36,722 crore. In real terms, therefore, gross fiscal deficit in 1993-94 is expected to be less than in 1992-93. Unlike the last two budgets, this Budget aims to cut gross fiscal deficit by reducing non-plan rather than plan expenditure. Non-plan expenditure, other than interest payments, in1993-94 is budgeted to be Rs. 52,072 crore, against Rs. 55,253 crore in revised estimates for 1992-93. Even if we assume a modest inflation rate of 7 per cent, non-plan expenditure, other than interest payments, in 1993-94 is expected to be 13 per cent less than 1992-93 in real terms, which appears to be a stiff target. It may be noted that despite a strict watch on expenditure, revised estimates of non-plan expenditure, other than interest payments in 1992-93 is almost Rs. 3,000 crore more than budget estimates. The control of Government expenditure in 1993-94 would be even more difficult because the Government import will henceforth have to be paid for at the market exchange rate, which is presently about 25 per cent higher than the official exchange rate.

It is interesting to note that while Centre's non-plan expenditure on general services is stipulated to increase by Rs. 293 crore, Centre's non-plan grants and loans to States and Union Territory Governments would decline by Rs. 450 crore and Rs. 440 crore respectively. Centre's budget may, therefore, improve at the expense of States' budgets. Central assistance for State and Union Territory plans would however increase by Rs. 671 crore.

Tax Concessions

The budget reduces customs on a wide range of commodities. Customs on most capital goods would now range between 10 and 35 per cent. The average effective import duty in 1993-94 may come down to less than 50 per cent. The fall in the customs duties would be partially compensated by rise in market exchange rate. Excise duties are reduced on a number of consumer goods, particularly consumer durables, which are suffering from recession. The direct tax structure is virtually untouched. Prices of some manufactured goods would be cheaper this year. But the impact of this on overall price index would be negligible.

The stock market is however disappointed because the Budget has not reduced either personal or corporate income tax. But the stock market is not always a good indicator of industrial behaviour. Last year when industry suffered from recession, the stock market went to dizzy height to eventually collapse after the exposure of scam.

The first two budgets of Prof. Manmohan Singh gave greater priotrity to stabilisation. This budget appears to give greater importance to reform of the tax structure. The increased plan outlay would also promote public and private investments, and in this respect it is a growth oriented budget. But the overall economic outlook continues to be depressing.

In the first two years of structural reform the growth rate of GDP, especially industrial GDP, has decelerated well below the long-run trend. Public and private investment rates have declined. Inflation rate has come down but inflationary expectations continue. Fiscal deficit has come down, but the trade balance continues to be adverse. The revival of the economy in 1992-93 is contributed more by the agricultural sector than by the industrial sector. There is need for cautious optimissim. □

The author is Professor, Institute of Economic Growth, New Delhi.

BUDGET ANALYSIS

Pragmatic And Growth Oriented

Paranjoy Guha Thakurta

THE most significant aspect of the Union Budget for 1993-94 is the decision to make the rupee fully convertible on the trade account. Also important are the sharp reductions in customs and excise duties.

In a major gesture towards liberalisation of the agricultural sector, the Finance Minister, Dr. Manmohan Singh has said that the Government's policy is to remove "administrative restrictions on movements of agricultural products within the country" to provide farmers "the full benefit" of prevailing open marker prices.

Moreover, the Finance Minister has assured farmers of larger flows of credit through the National Bank for Agriculture and Rural Development, which would also set up a venture capital fund and a cooperative development fund. According to the Finance Minister special attention will be paid to revitalise the agricultural credit system in 1993-94.

Industry has been given some relief by providing one per cent cut in interest rates. The Finance Minister has also sought to answer criticism that he has been pro-rich and pro-business by proposing to step up the outlay on poverty alleviation programmes and by increasing allocations for health and education. There has also been a significant increase in Plan outlay, especially for the infrastructure sector. Investment in the power sector has been sought to be given a special boost.

The Budget has proposed sharp cuts in import tariffs leading to a revenue loss of Rs. 3,273 crore. The reduction in excise duties would also lead to a revenue loss of Rs. 2,249 crore, but the Finance Minister expects the loss to be offset to the extent of Rs. 1,000 crore on account of higher production.

In another significant proposal, nationalised banks have been given the green signal to raise capital from the market to enhance their equity bases to meet international capital adequacy norms.

Certain reliefs have been given to income tax payers. The standard deduction limit for salaried persons was raised from Rs. 12,000 to Rs. 15,000 and for working women with incomes up to Rs. 75,000 a year from Rs. 15,000 to Rs. 18,000. Concessions have also been given to senior citizens and handicapped persons. However, the 12 per cent surcharge on personal incomes above Rs. one lakh has not been removed because of severe resource constraints.

Full Convertibility

Full convertibility is expected to make exports relatively cheaper and do away with the implicit tax on exports under the system of partial convertibility introduced a year ago. While petroleum product prices are not expected to go up immediately for two reasons—international oil prices are currently sluggish and domestic prices were increased substantially in September—fertiliser prices could go up again not only on account of the higher rupee cost of imports but also because of the reduction in subsidies.

Seeking to allay fears of a sharp devaluation, Dr. Singh said that the experience of the past year gives ground for confidence that we can unify the exchange rate and still manage the balance of payments with a reasonable degree of stability in the exchange rate.

In an attempt to pull segments of industry out of recession, the Finance Minister has proposed a reduction in excise duties on a range of consumer durables like cars, colour television sets, refrigerators and air conditioners.

Excise duties have also been reduced to help the domestic capital goods industry and assist industries hit by recession. Duties on coffee, tea and instant tea have been removed completely and duties on vanaspati and footwear made by khadi and village units reduced. Excise duties have also been reduced on evaporative coolers, electric fans and other domestic appliances, dry cell batteries, inks, radios, noodles, biscuits, plastic moulded luggage and mattress.

In addition, excise duties have been brought down on a range of capital goods and instruments, the reduction being steepest in the case of power equipment. The excise duties on three wheelers, vehicles used for public transportation and body building on chassis of such vehicles have also been reduced. It seems likely that industries hit by demand recession would be more willing to pass on these benefits to consumers.

While not changing the income tax structure on corporations, the Finance Minister has sought to provide a stimulus to industry by proposing a five year tax holiday for new industrial undertakings located in the North Eastern States, Jammu and Kashmir, Himachal Pradesh, Sikkim, Goa and the Union Territories of Andaman and Nicobar Islands, Dadra and Nagar Haveli, Daman and Diu, Lakshdweep and Pondicherry. This will go a long way in the development of these areas.

A five-year tax holiday has been declared for new industrial undertakings set up anywhere in the country for power generation or distribution. The five-year tax holiday available to units in free trade zones has been extended to software and electronic hardware technology parks.

Tax Exemptions

The income tax deduction given to contributions to approved universities, institutions of technology and management etc. has been doubled to encourage industry to contribute to these bodies and make them less dependent on Government funds. Tax concessions have also been given to the incomes of research organisations.

Income tax exemption has been given to donations made to the National Foundation for communal harmony. The textile sector has received its share of tax concessions with the excise duties on polyester and nylon filament yarn being reduced. Import duties on specified bulk drugs have been reduced and indigenous manufacturers of medical equipment encouraged.

Import tariffs on projects, capital goods, metals etc. have been brought down. However, the Finance Minister has made it clear that every effort has been made to protect the legitimate interests of domestic capital goods manufacturers. Customs duties on chemicals and petrochemical products, intermediates and raw materials have been reduced and rationalised. Tariffs have also come down in the case of imported electronic components, capital goods used in export industries like textiles, leather, marine products and gems and jewellery for food processing and for the ship breaking industry. Duties have been reduced in the cases of agricultural equipment, outboard motors, certain pesticides, poultry stock and particular kinds of tractors.

The general duty rate on baggage has been reduced from 255 per cent to 150 per cent as a measure of simplification. The maximum duty rate on all such goods, barring alcoholic beverages, has come down from 100 per cent to 85 per cent.

In the financial sector, where the banks would require an infusion of Rs. 10,000 crore to achieve international capital adequacy norms, the Finance Minister has made a provision for Rs. 5,700 crore in 1993-94. This would be in the form of Government bonds and though there would be no immediate outgo from the exchequer, the interest and ultimate redemption of the bonds will be a real burden on the budget in the future.

The Government has also decided to amend the Securities Exchange Board of India (SEBI) Act to give it more power to carry forward the capital market reforms. A high powered committee is being set up to go into reforms of the insurance sector. □

Creditable Achievements In Many Areas

Arabinda Ghose

THE Railway Budget is a keenly awaited annual event not only for the millions of railway passengers and the lakhs of persons booking freight every day, but for almost every body. Most people become apprehensive about the steep increase in passenger fares and freight rates. This year also, as usual, there were hikes. However, the blow has been rather mild—only 10 per cent in fares and 10 to 12 per cent in freight.

Even this mild dose of taxation will give the Railways Rs. 2,195 crore of "excess of income over expenditure". This is a record figure by all standards because the maximum surplus or excess that the Railways have ever achieved is in this year (1992-93) itself when according to revised estimate, the excess will be of the order of Rs. 756.68 crore.

Remarkable

Before going into further details, it may be mentioned here that as a result of this large "excess" the operating ratio (relation between gross traffic receipts and total working expenses) for 1993-94 has been projected at 83.1 per cent. This is a remarkable feat by any standards because even during the Seventh Five Year Plan, when the performance of the Railways had been singularly notworthy, the operating ratio had never come down below 90 per cent. A fall out of the generation of this large surplus will be the increase in the ratio of the Net Revenue to the Capital-at-charge (the total amount received from the general revenues for building and procuring capital assets) and increase in investment from Capital Fund to an estimated 15.3 per cent—far higher than the 10 per cent recommended way back in the early eighties by the Paranjpe Committee on Rail Tariffs.

Innovative

Obviously, a great deal of innovation has been resorted to for projecting this sort of budget. One of them is the introduction of the "Sleeper Class" for rail travel by specifically classifying one class of passenger vehicles as such. This may in the long run, prove to be an advantage to the general public who take to second class three tier sleeper class travel for overnight journeys.

The 25 per cent increase in fares for this class over and above the normal fares—both by ordinary slow trains and the mail/express trains—will net in as much as Rs. 494 crore more from second class mail and express passengers in 1993-94. In any case, the passenger services on the whole will give the Railways Rs. 5,110 crore in 1993-94 out of Rs. 19,021 crore of gross traffic receipts the Railway Minister has estimated for the year.

The most outstanding feature of this year's budget is the ability of the Minister to stick to the Plan size of Rs. 6,500 crore and not let the target of gauge conversion being watered down at all.

This level of investment in the Plan will enable the Railways to provide Rs. 815.3 crore for gauge conversion covering a total of 1600 kilometres in 1993-94 against Rs. 559.41 crore (revised estimate) in 1992-93 for 1200 kilometre.

Similarly, doubling of tracks have also been allocated a larger outlay in 1993-94, and for rolling stock, the allocation has gone up from the revised estimate of Rs. 1,455.98 crore in 1992-93 to Rs. 1,924.63 crore in 1993-94. Railway electrification too will be provided higher allocation—Rs. 280 crore in place of Rs. 235.45 crore during 1992-93 (Revised Estimate).

In the gauge conversion programme, the Railways have taken up a really ambitious scheme of covering the entire Lumding-Dibrugarh route along with all the linked branch lines, totalling 769 kms from metre gauge to broad gauge.

Another significant allocation under the Plan head is for workshop including production units which will mean increasing the capacity of the coach and locomotive factories. The allocation has gone up from Rs. 222.51 crore to Rs. 260.48 crore. The bulk of this increase of course will go to the Chittaranjan Locomotive Works where the capacity of building electric locomotives is being increased from 120 to 150 a year.

Growth Oriented

Although the budget can be described as growth oriented, the economic situation of the country as a whole has affected the railways too. While during 1992-93, the Railways proposed to mobilise Rs. 1,500 crore from market borrowing in order to finance the Plan schemes, there was very poor response to the 10.5 per cent tax free bonds. The same fate befell the Konkan Railway Project too. It is for this reason it appears, that the Railways have decided to set up what they call a capital fund from this year allocating Rs. 370.12 crore out of the excess. For 1993-94, the allocation is a whopping Rs. 1,960 crore.

It is significant that this Rs. 1,960 crore is proposed to be spent on Plan schemes only and as much as Rs. 193.92 crore out of this fund will go for railway electrification for which the total allocation is Rs. 280 crore. A large chunk of Rs. 624.51 crore have been earmarked for the Railway Board which means that this amount will go mainly towards procurement of rolling stock.

This step is also indicative of the Railways' resolve to severe its financial links with the general revenues at a future date as pointed out by the Railway Minister in his speech. The Railways themselves will finance the annual plan of Rs. 6,500 crore to the extent of Rs. 4,640 crore and will take only Rs. 960 crore from the general revenues. The remaining Rs. 900 crore is proposed to be raised from issue of tax free bonds.

One must mention here that from the end of 1992-93, the Railways will have no outstanding amounts to be paid to the general revenues. In technical terms, this will be known as total freedom of the Railways from indebtedness to the general revenues. This is a very creditable achievement.

Initially it was feared that the Railways will not be able to pay to the general revenues the "dividend" due to them on account of the capital loans. But it has not been so. The Railway Minister has allocated Rs. 1,253 crore for dividends to general revenues during 1993-94, almost Rs. 100 crore more than last year.

Consolidation

The 1993-94 Railway Budget also shows that the step towards consolidation for the gains achieved during the Seventh Plan and subsequent years will be the principal aim of the Railways. Therefore, not many new line projects have been included in the budget. However there are three new lines. The first is the broad guage line between Narkhed and Amaravati (138 kms) in the backward Vidharbha region of Maharashtra. The second one is the 177-km long Peddapalli-Karimnagar-Nizamabad line in the backward Telengana region of Andhra Pradesh. The third is also a line in a backward region, this time in Orissa between Lanjigarh Road and Junagarh (54 kms).

In the field of gauge conversion, the inclusion of the Rewari-Bathinda (300 kms), Jodhpur-Jaisalmer (297 kms), Neemuch-Ratlam (135 kms), Phulera-Marwar-Ahmedabad (572 kms) and Luni-Marwar (72 kms) are very encouraging because most of Western India will as a result, be provided with broad guage lines, replacing the century old largely metre guage system. The day is not far when one can travel without changing trains from Dibrugarh to Jaisalmer integrating the country more strongly by bonds of steel that no forces can snap. □

Konkan Railway Corporation : A Model

The first phase of the Konkan railway linking Mangalore and Udipi stretching 68 Kms has been opened. The Prime Minister who inaugurated this, also flagged off the broad gauge train on this line. The Prime Minister appreciated the speedy completion of work and hoped that the entire project would be completed on schedule. He described the Konkan Railway Corporation ltd. as a model institution. The target date for completion is October this year.

Out of the 760 Kms. of the Konkan Railway line, 382 kms. lie in Maharashtra, 105 Kms. in Goa and 273 kms. in Karnataka. The progress in Maharashtra is 40 per cent, Karnataka 55 per cent and Goa 25 per cent. 115 kms of the total project have already been completed.

The cost of the project is Rs. 1,400 crore at 1991-92 price. The expenditure incurred so far is Rs. 710 crore.

With the completion of the Konkan Railway Project, the distance between Bombay-Mangalore will be reduced by 1127 kilometres from 2014 kms. to 914 kms., with a saving of 26 hours in travel time ; between Bombay-Cochin by 513 from 1849 kms. to 1336 kms., saving 12 hours in journey time and between Bombay-Goa by 190 kms., from 770 kms to 580 kms., saving 10 hours.

The Railway line will serve several industries such as 2400 MW thermal plant at Mangalore, the Kaiga Nuclear plant near Karwar, a 1000 MW thermal station at Dabhol port on the mouth of the Chiplun creek, the Petroleum Refinery at Mangalore and the gas cracking plant at Patalganga between Roha and Dasgaon. Besides, the availability of minerals like iron ore, bauxite, chromite, manganese and silica sand in the hinterland of Knonkan Railway line will spur a large number of activities to generate multiple opportunities. It will also boost tourism industry along the West Coast with its picturesque tourists spots. Several pilgrim centres along this line will be served.

The Konkan Railway Corporation was set up on July 19, 1990 under the Companies Act to construct Konkan Railway project, on Build, Operate and Transfer (BOT) basis.

Ensuring Quality Of Goods

Dr. Ashok Kumar Singh

ENDOWED with a bountiful nature, India produces in abundance a variety of crops ranging from the temperate to the tropical varieties. Thanks to its rich animal wealth, India also produces a range of live stock products. Thus, India's agricultural and live stock production comprises a variety of cereals, pulses, oilseeds, beverages, fruits, vegetables, plant fibres, spices, condiments, animal fibres and other industrial raw materials. There is a considerable volume of inter-state and intra-state trade in these items. Also, agricultural and allied products, both in the raw and processed form, figure prominently in India's export trade.

Unlike manufactured goods, agricultural products exhibit considerable variation in their quality characteristics on account of the inherent varietal differences as also differences in the soil and climatic conditions under which they are produced. Therefore, grading of agricultural products on the basis of recognised standards assisted the growers, local traders and exporters in their commercial dealing. Besides, it renders the measurement of quality easy. It also enables easy market communications and restrains the flow of unsatisfactory or sub-standard produce into the active market or trade operations.

Grading

One of the major functions of the Directorate of Marketing and Inspection (DMI) is grading and standardisation. The insignia of "AGMARK" is widely known within and outside the country as a hallmark of quality and purity for agricultural products. Grading of agricultural commodities has three main purposes. Firstly, it protects the producer from exploitation. By knowing the quality and grade of his produce, he is in a better bargaining position against the trader; secondly, it serves as a means of describing the quality of commodities to be purchased or sold by the buyers and sellers all over the country and abroad. This established a common trade language and avoids the need for physical checking and handling at many points. Thirdly, it protects the consumer by ensuring the quality of products he purchases. Trading on the basis of accepted quality standards makes pricing more precise and equitable thereby making the price-reporting mechanism more meaningful.

The Agricultural produce (Grading and Marking) 1937 as amended in 1988 gives statutory powers to the Central Government to enact rules for prescribing grade standards for agricultural and livestock products, defining quality, prescribing methods of marking, packing, sealing and laying down conditions for issue of "certificate of authorisation" for carrying out the grading. The specifications are popularly known as 'AGMARK' standards. The word "AGMARK' which signifies agricultural marketing and stands for a statutory seal ensuring quality and purity, is now familiar to all quality conscious consumers in India and abroad.

Under the provisions of the Act, the DMI has formulated grade standards for various agricultural commodities trade in the country. So far grade standards for 142 agricultural and allied commodities have been formulated and notified. During 1991-92, the work of formulation of grade standards for Assam and Shimoga ginger, Alleppy turmeric-split and bulbs, blended oil, sunflower oil, soyabean oil, refined mustard oil, Jammu basmati rice, soyabean seeds and cocoa beans, mixed masala powder and cocoa powder are likely to be completed. Besides, the grade standard for 18 important commodities would be reviewed and revised. Besides, general grading and marking rules, separate rules have been framed for 101 commodities. Grading marking under the Act is voluntary.

Internal Trading

Grading of agricultural commodities for internal trade is voluntary and is carried out at the request of sellers under the Agricultural Produce (Grading and Marking) Act, 1937. The commodities graded under "AGMARK" for internal trade are classified into two groups, viz. centralised commodities and decentralised commodities.

(a) Centralised Commodities

Grading of centralised commodities which include ghee, butter, vegetable oils, oilcakes, powdered spices, honey etc. requires more elaborate testing arrangements and hence is directly handled by the D.M.I.

(b) Decentralised Commodities

Decentralised commodities include wheat atta, rice, pulses etc. the grading of which is relatively simple. This is being looked into by the marketing departments of the concerned State Government under the overall supervision and guidance of the department of marketing and inspection.

The value of commodities graded for internal consumption during 1990-91 was Rs. 1,338 crore (Table I).

Grading under "AGMARK" at trader's level is mainly a consumer-oriented measure and hence has a limited utility to the farmers. Therefore, for securing adequate return to the producer seller, a programme of grading at the level of farmers was introduced in 1963-64 through State Marketing Departments. The idea is to subject the produce before it is offered for sale, to simple tests of quality which influence its market value. This should help the producer to get price commensurate with the quality of his produce.

In order to secure an adequate return to the producer or seller for his produce, a programme of establishment of grading units in regulated markets and marketing cooperatives is being implemented by State/UTs. About 50 commodities are graded before sale in 1051 grading units set up in different States and UTs.

For Export

Compulsory quality control and preshipment inspection of agricultural commodities for export was introduced in 1942 when the export of sann hemp fibre was prohibited unless it was graded and marked in accordance with the specifications prescribed under the Agricultural Produce (Grading and Marking) Act, 1937. As this Act is voluntary in nature, compulsory quality control was enforced under the Indian Sea Customs Act, 1978.

The Planning Commission recommended in the First Plan the introduction of compulsory quality control under "AGMARK" in respect of important commodities. The Export (Quality Control and Inspection) Act was enacted in 1963 and the Export Inspection Council was set up to enforce compulsory quality control on commodities meant for export. The Directorate of Marketing and Inspection is presently acting as an export inspection agency on behalf of Export Inspection Council.

More and more commodities gradually came to be included under the purview of the quality control under "Agmark" before export. At present, 41 agricultural commodities are being graded compulsorily before export. During 1990-91 commodities valued at Rs. 950 crore were graded for export.

The insignia of "AGMARK" is the symbol of quality and an instrument of protection to the importers. Due to "AGMARK" grades standards undergo revision as dictated by current demand abroad and are adjusted to the foreign consumer's requirements. "AGMARK" helps in bringing together the exporters in India and importers abroad. Thus, the insignia of "AGMARK" is a guarantee of good quality and purity for agriculrural products. □

The author is Sr. Lecturer at D.D. College, Ballia.

Mauritian School Renamed After Rajiv Gandhi

The Riche Mare Primary Government School in Mauritius has been renamed as Rajiv Gandhi Government School. The Prime Minister of the island nation in the Arabian Sea, Sir Anerood Jugnauth, unveiled the marble plaque during the renaming ceremony. This school is situated in Flacque area of Mauritius which is predominantly populated by Indo-Mauritians.

The distinguished guests present on the occasion paid rich tribute to Rajiv Gandhi. They recalled his visit to Mauritius, his close association with the people of the nation and his contribution to world peace. They spoke warmly of the close Indian relations existing between India and Mauritius. The Indian High Commissioner Shri Shyam Saran presented a set of books and a portrait of Rajiv Gandhi to the school.

New Possibilities From Sugar Industry

J.K. Gehlawat

INDIA is an energy deficient country. The linkage between the energy availability and economic development is a well-known phenomenon. The GDP in developing countries grew by 3.5 per cent to 5.5 per cent between 1970 to 1980 while energy consumption increased by over 7 per cent a year. Currently, the energy consumption (in the form of electricity) is increasing at the rate of about 11 per cent per year in India. Further, the per capita energy comsumption in India is 25% of the global average. Therefore, increased exploitation of energy resources is the only answer to economic survival, especially in a competitive free economy to which India is getting exposed to now.

The energy needs of various sectors are increasing rapidly. The conventional sources of energy are hydel, thermal and to a small extent nuclear energy. The conventional fuels such as oil, gas and coal cannot meet the increasing demand for ever. The enormous amount of depletion of foreign exchange for procuring crude oil etc. virtually unsettles the delicate economic balance of our country. According to one estimate about 1,200 billion rupees have to be invested during the VIII Plan to sustain the present economic growth. However, due to a severe resource crunch, the Planning Commission could not allocate more than 600 billion rupees which would mean a shortfall of about 13,000 MW of power. Further, it may be noted that, in addition to requirements of huge funds, the implementation of various projects to generate more electricity through the conventional means may have serious problems due to their adverse impact on environment. Hence, of late there has been a greater emphasis on exploring the alternate sources of non-conventional energy, such as solar energy, wind energy, biogas etc. Not many may be aware that sugar industry could become the single largest source of non-conventional energy in India. It could contribute about 10 per cent (5,000 MW) of the total power production at the lowest cost. In this context, the proposal to generate surplus power through co-generation from sugar industry has merits over other options. It is indeed a unique scheme since sugar mills are widely spread all over the country. Power will be generated at locations where it is needed the most to boost agricultural and rural development. It does not require inputs of any external fuel. So it is going to be the cheapest source for power generation, due to low investment in plant, machinery and infrastructure and virtually at no fuel cost.

Co-Generation

Co-generation means simultaneous generation of power and steam. Most process industries consume energy in two forms—viz steam and electricity. The concept of co-generation can rightly be introduced at the design stage of all such units which require large inputs of steam and power. The steam must be generated in high pressure boilers and then expanded in a steam turbine to generate electric power. The low pressure steam may be used for process heating.

In sugar industry, bagasse, its by-product, is used as fuel to generate steam as well as power. No external fuel is required. Hence, sugar mills are ideally suited to adopt co-generation. Bagasse is a clean fuel. Consequently, co-generation from sugar mills would produce less emissions of carbon dioxide, other gases and particulate matter, making it environmental friendly. Further, sugar mills are located in rural areas and are widely distributed throughout the country. The surplus power thus produced by sugar mills in rural environment should prove a boon for the country-side which has remained neglected so far.

Co-generation is not a new concept since sugar mills in India have been generating electricity for many years for their captive requirements. Small countries like Hawaii and Mauritius meet over 50 per cent of their needs from sugar industries through the technique of co-generation. The overall efficiency of some co-generation systems, according to one estimate, can be in excess of 80 per cent as compared to the typical 35 per cent of a power utility based on conventional means. So far, the sugar mills have not considered generating surplus power (at a fraction of the investment cost of new power plants) and selling it to the grid. According to one estimate the potential of co-generation in the country by sugar and other industries, through the use of biomass, bio-gas, bagasse and diesel fired systems, is about 10,000 MW. About 50 per cent, that is, 5,000 MW could be provided by sugar industry alone.

Unlike other sources of non-conventional energy which are still at developmental stages, the co-generation method is a proven and mature technology. Capital equipment, like high pressure boilers, may have to be imported for co-generation. There are positive indications that such boilers may be manufactured in India soon. The incentives like reduction in customs duty, excise duty, 100 per cent depreciation, sales tax, finance at concessional rates and single window clearance will help to promote this new development.

It will be in the larger social interest to promote setting up of co-generation facilities in all new sugar mills and at those mills which are to undergo substantial expansion and modernisation. Adequate incentives including low cost funds should be provided to the industry for this purpose. Sugar Development Fund could be one such source by levying a cess on consumers of electricity from such co-generation units. The Power Finance Corporation could assist the mills by investing in co-generation plants. Recently, while commending co-generation as an efficient and economic source of additional energy, the World Bank has indicated its willingness to provide credit for any project that may be recommended by the State or Central Government. Hence, funds are unlikely to be a constraint in promoting this wonderful concept for power generation in India.

Energy Crop

Photosynthesis is one of the most efficient natural processes for the conversion of abundant solar energy into biomass. In this respect, sugarcane plant holds a unique position. This is the only crop which is endowed with the highest solar energy conversion efficiency for biomass and can be rightly named a vast store-house of fibre, food, fuel, fertilizer and chemicals. One hectare of land can annually produce about 10 tonnes of food products including sugar, a litre of alcohol and 2 tonnes of fertilizers, provided this raw material is processed in a more efficient manner. It is estimated that a medium sized sugar mill of 2,500 TPD cane crushing capacity could generate about 8-10 MW surplus power which may be supplied to other consumers in the neighbourhood. Presently, there are 400 sugar mills in operation in India. Another 70 are under installation. Thus, in addition to meeting its own requirements of about 2,000 MW, the sugar industry can add over 5,000 MW surplus power to the national grid by using modern boilers based on bagasse which operate at pressure of 50 bars and above.

The by-products of sugarcane bagasse and molasses are very valuable. Good quality paper can be produced from bagasse. Molasses is used for the production of alcohol. Alcohol has been used as a substitute for petrol in automobiles. India is a world leader in sugar production and tops the world in the production of chemicals from alcohol. World's only plant for the production of synthetic rubber from alcohol is located in India at Bareilly in U.P. Thus, sugarcane is a wonderful crop which harvests the solar energy to the maximum extent and provides the mankind with a variety of food and chemical products including electricity.

Clear policies should be laid down for supplying surplus power from sugar mills to the consumers in the command areas of respective sugar mills through the existing state/ central transmission systems. This will ensure uninterrupted power supply to the consumers in the command area of a sugar mill. It will promote speedy development of agricultural and rural industries. Such a development would change the rural scenario for the better. Hence, top priority may be given to all proposals for modernisation and expansion programmes of sugar mills with co-generation facilities. It is also suggested that setting up of integrated sugar complexes, including a distillery and a paper mill may be promoted. □

The author is Professor of Chemical Engineering, Indian Institute of Technology, Kanpur.

Forensic Analysis Of Wild Flora And Fauna

The Central Forensic Science Laboratory (CFSL) has started work on forensic analysis of wild flora and fauna. The nucleus on forensic analysis build up in the Laboratory will help Wildlife and Custom authorities to book illicit traffickers. Illicit trafficking of endangered species of wildlife has been on the rise in recent times. Poaching of wild animals birds, reptiles and others of the tribe, for their valuable body parts has been going on for sometime. Imitation of these by synthetic materials confuses the authorities to quest on the smugglers.

New techniques are being developed to help the investigating officers in respect of explosives and narcotics. Already, Wound Ballistics studies have commenced in the CFSL Calcutta. The Laboratory is organising Workshops on the subject and plans to start a national facility in the field in India.

Bureau of Police Research and Development under the Ministry of Home Affairs is coordinating development of various facilities to help the police forces in the country to meet various challenges in the field.

How Sweet Are The Prospects ?

B.N. Biswal

THE modern sugar industry made its beginning in the country during the first decade of the century when two sugar mills were established —one each in Bihar and Uttar Pradesh. The industry received a great boost after the fiscal protection in 1931. It is India's second largest organized industry next to cotton textiles. India is now the leading producer of cane sugar in the world. During 1975-76 the sugar industry emerged as India's largest single foreign exchange earner contributing nearly 13 per cent of the total export earnings. But the glory gradually declined after 1984. Now we are more or less self sufficient in sugar production. In 1991 we exported 2,00,000 tonnes of sugar and molasses which secured us foreign exchange worth Rs. 37 crore. It is a mere 0.8 per cent of the total export of agricultural products.

Industrial sickness, out-dated machinery, low yield of sugar cane, unfair pricing, higher excise and other duties are the major problems faced by the industry.

Sugar cane is the most important raw material for the industry and it constitutes nearly 60 per cent of the total cost of production. Therefore, the industry is naturally conditioned by the sugar cane production in the country.

Unfortunately, sugar cane production in the country is in a state of stagnation for the last thirteen years. The area under sugar cane cultivation increased from 3.15 million hectares in 1977-78 to 3.7 million hectares in 1990-91. Production increased from 176 million tonnes in 1977-78 to 240 million tonnes in 1990-91, where the growth rate is less than one per cent per year. Cane production is not likely to keep pace with the requirements by the sugar mills and the crisis on the sugar front may deepen in future. The main factors responsible for this are poor varieties of cane, obsolete methods of cultivation, small and scattered nature of holdings, lack of proper fertilizers and pesticides etc.

The percentage recovery of sucrose is the second factor which determines the production of sugar. Cane is a highly weight losing commodity and so it is to be processed within a short time after harvest.

Another burden to the industry is the increasing number of sick units. The Guddu Rao Committee observed that most of the Indian sugar mills are running with old and out-dated machinery. This leads to fall in production and sickness. The Sen Enquiry Commission also supported this view. Ten years back the Indian Sugar Mills Association estimated that the industry needs Rs. 115 crore to modernize the existing units.

Remedies

Development of early maturing cane varieties and mechanization of cultivation and harvesting are necessary to boost sugar cane production. Popularization of crop production technologies, particularly on water, nutrient and ratoon management should be done both in the factory and non-factory zones. In 1991 we spent Rs. 443.56 lakhs towards research projects in the sugar industry.

The sick units can be improved in many ways. If the sickness is due to outdated machinery, it can be modernize with availability of extra funds, technical and managerial guidance. Mergers, amalgamations and bringing them under co-operative sector are also suggested.

State Sugar Directives should be established in the States to look after the problems of the units. They help a lot in the field of managerial expertise, institutional finance etc.

The Sugar Development Fund which was set up ten years ago recommended that inventory carrying costs, including storage and interest charges, are to be borne by the Government. According to its norms, Rs. 14 will be collected as cess on per quintal sugar production. Out of this Rs. 9 will be used to create the buffer stock and the balance Rs. 5 will be used for cane development. If this is done, it will help a lot to the units.

We are now more or less self sufficient in the production of sugar. Under the present circumstances if we take necessary precautionary steps the standards of production and export of the sugar industry can be improved and the sugar industry will regain its past glory. □

The author is Head, Deptt. of Commerce, Nowrangpur College, Orissa.

Mineral Industry In India

INDIA is endowed with significant mineral resources. These include 101 billion tonnes of limestone, 17 billion tonnes of iron ore, 3 billion tonnes of bauxite, etc. Resources of mica, chromite ilmenite, barytes, soapstone and granular sillimanite are also abundant. Presently, around 60 minerals/ores are being mined in India consisting of fuel, metallic and non-metallic (industrial) minerals. India continues to be the world's No.1 producer of sheet mica. With the recent spurt in world demand for chromite, the country stepped up its production to become the 3rd chromite producer in the world. India ranks 4th in production of barytes, Kyanite and sillimanite. 5th in talc/ steatite and bauxite and 6th in coal, lignite and iron ore. The country is self-sufficient in about 40 minerals, constituting the primary raw materials for the core sector such as thermal power generation, iron & steel, alloy steels, ferro-alloys, aluminium, cement, refractories and chemicals.

The value of mineral production in the country was around Rs. 17,500 crores in 1991-92 which is about 4 per cent of the gross national production (GNP). Exports of minerals accounted for Rs. 7,860 crores or 18 per cent of the total exports of Rs. 43,800 crores during 1991-92. The principal items of exports are iton ore, alumina and aluminium, granite, mica, chromite, magganese ore barytes, etc. Presently minerals are mostly exported in raw form without much value addition. Increasing attention will have to be paid to maximise export of value added items. Export of jems and jewellery is dependent on imported roughs which would necessitate more intensive prospecting for diamonds in the country if the impor intensify in this sector is to be brought down.

India's resources of several minerals/ores are, however, inadequate; in some cases their gardes are low. The country has therefore, to depend on imports of minerals and metals such as petroleum, sulphur, potash, asbestos, rock phosphate, copper, lead, tungsten, tin nickel and molybdenum. The value of imports of minerals during 1991-92 was around Rs.15,000 crore which is about double the value of our mineral exports. The trade deficit on this account is a matter of continuing concern to the Government. In this context it is imperative that available mineral resources are out to optimal use through scientific mining, appropriate benefication and economic utilisation. Our twin objective, therefore, is to step up indigenous production as well to improve recoveric of minerals and metals which are in short supply and increase exports of minerals which are in abundance and where domestic surpluses are available.

In the last few years, there have been significant mineral discoveries in the country such as Rampura-Aguche lead-zinc deposit and LD grade limestone deposit in Rajasthan, the Malanjkhand copper reserves in Madhya Pradesh, the East-coast Bauxite belt in Orissa and Andhra Pradesh, Mangampet barytes deposit in Andhra Pradesh and the molybdenum deposit in Tamil Nadu, to name a few. However, exploration for locating new deposites needs to be given much greater thrust.

The priority areas in the field of exploration, exploitation and export of minerals, during Eighth Plan period, have been carefully identified keeping in mind factors like scarcity of the mineral/metaL in the country like copper, lead, zinc; potential for export as in case of iron ore, barytes, bauxite and dolomite; strategic importance like in tungsten, tin, molybdenum, cobalt and nickel; fertilizer minerals such as rock phosphate/phosphorite and potash, precious minerals and metals of the platinum group, gold, diamond and gem stones; and high-tech minerals like crystalline silica, selenium, lithium, beryllium and zircon.

Significant Contribution

Mineral-based industries contribute significantly to the overall industrial growth of the country. Prominent among these are iron and steel, cement, ferro-alloys, non-ferrous metals, petro-chemicals, fertilizers, refractories and glass and chemical industries. During 1991-92, about 13 million tonnes of ingot steel, 45 million tonnes of cement and more than 5 lakh tonnes of aluminium metal were produced. While the production of copper, lead and several other metals countinues to be inadequate, the indigenous availability of aluminium and zinc has considerably increased with setting up of the aluminium plant of National Aluminium Company at Angul in Orissa and lead zinc plant of Hindustan zinc Ltd. at Chanderiya in Rajasthan. However, the overall metal scenario on the country underscores the need for exploring other options, like setting up of metal smelters based on imported concentrates, creation of secondary capacity based on metal scraps, and the like.

As a sequal to the new Industrial Policy announced in July, 1991, Government has initiated a number of structural reforms, foremost amongst them is the decision to welcome inflow of foreign investment and technology, liberalisation of the economy and de-regulation of industry with a view to integrate with the global economy. Joint ventures for mining and smelting in other countries for the purpose of importing minerals and concentrates of metals that we are deficit in, appear attractive propositions. Areas for possible joint ventures could be in rock phosphate, LD grade limestone, coking coal, to name a few.

Private domestic as well as foreign investment can play a vital role in accelerating development of mineral production and processing and metallurgical industry in the country giving, at the same time, the much desired push to our mineral exports in value added form. For this purpose. Joint ventures within the country would be welcome in selected minerals. Equity participation or funding in some other mutually acceptable frm in new mining ventures such as Bahabudan and Chiria iron ore, expansion of existing mines such as Panchpatmali, working exhausting mines such as Kolar or development of new areas such as gold placers in Kerala, could be considered for cooperation. Other areas for such participation and collaboration could be underground mining of chromite under weak wall-rock conditions, development of heap leaching in respect of copper and gold, extraction of metallic values from multimetal ores, as also imporved byproduct recoveries.

There is considereable scope for participation in the field of exploration and exploitation of minerals and manufacture of value added mineral based products. The Government is reviewing the existing mineral regulatory framework to create more conducive conditions for such participation. For this purpose and in the wake of the Statement on Industrial Policy, 1991, the Government is also considering amendment to the Mines and Minerals (Regulation & Development) Act, 1957 taking into account the suggestions received from various State Governments/ Union Territories, Federation of Mining Associations and the mining Industry. □

Top Priority For Exports In Budget

- All exporters and other foreign exchange earners to be allowed to convert 100% of their earnings at market rate instead of only 60% as at present.
- Commerce Ministry to review and remove unnecessary restrictions on exports.
- Excise duty slashed on capital goods.
- Lower excise rate for power sector.
- To revive automobile, television, refrigeration and air-conditioning industries, excise duty in these sectors reduced.
- Excise duty on bulk plastic resins such as low and high density polyethylene, polyvinyl chloride, polystyrene reduced.
- Duty on plywood reduced.
- Excise levy on cosmetics and toilet preparations lowered.
- A package of excise duty concessions given to the textile sector.
- To encourage the film industry which is facing competition from the electronic media, duty reduced on unexposed cinematographic films.
- For development of non-conventional energy sources, import duty reduced on certain items needed for tapping solar and wind energy.

REVIEW ARTICLE

The Deprived Women

WIDOWS IN INDIA

By T.N. Kitchlu, Ashish Publishing House, New Delhi, (1993) ; Pages 341; Rs 500.

THE status of widows in the Hindu society is indeed an enigma. The oxford dictionary defines 'Sati' as "Hindu widow who immolates herself on her husband's funeral pyre; the custom requiring such immolation." Of Sanskrit origin, 'Sati' means 'virtuous wife'. One wonders whether, in earlier days the status of the women losing her husband was so inauspicious and unacceptable that the Hindu society preferred to sactifice her to her husband's pyre. Was it not an indication that given the facts of life then it was impossible for a widow to lead a normal life. In any case. it is still a pointer of the hazards that a widow may have to face in conducting herself creditably in the endeavours to bring up her children and herself face the challenges of time. The times have changed, the attitudes have softened; 'Sati' is a legal offence and widow marriage is acceptable.

The publication in a simple and matter of fact manner brings out in detail the problems which that section of widowed mothers face and seek to solve both as the head of the family and as the sole parent. The pathetic condition of widows in our society belonging to all the three major religious groups, i.e., Hinduism, Islam and Christianity has been vividly rendered by the author. The women who have lost their husbands and not married again could broadly be classified into three categories (*i*) those who have lost their men in defence of the country, i.e. war widows (*ii*) those unfortunate women whose husbands were fatal victims of communal militancy or large scale violence i.e. widows by calamity and (*iii*) widows who have lost their husbands by natural causes i.e. usual widows. The present publication largely deals with the problems of the third category of widows based on the survey conducted in Delhi, both urban and rural areas. The book has seven chapters, dealing with specific aspects related to and based on the aforesaid survey (i). Status and Position of Widows-Retrospect and Prospect, (*ii*) Widows and their Families, (*iii*) Widowhood and its Consequences ; (*iv*) Economic Condition of Widows, (*v*) Problems Faced after Widowhood, (*vi*) Social Security and Rehabilitation and (*vii*) Summary, Conclusions and Recommendations.

The field study has thrown up copious data/information evident in 87 Tables and 14 Appendices apart from a fairly exhaustive bibiliography and index. In addition, the ten case studies given in a very lucid truthful manner are the abridged biography of ten unfortunate women. Contrary to general belief, the book reveals that "the widow still finds herself today lifted from the pyre but left in the cremation ground." It is stated that "in spite of social changes taking place in the country an overwhelming majority of widows are against re-marriage". Further, "the widow who said, she found it hard to make friends because women were too wary of a widow and the men generally avoided her" was stating the obvious.

The suggestions and recommendations are relevant and deserve attention of all concerned authorities. Though one may not entirely agree with all the recommendations, such as 2% reservation in Government jobs for widows (we have too many reservations and the Government job is not a panacea for all economic ills or a poverty alleviation programme). Any project to tackle the problems of widow should essentially contain inter alia; measures to generate awareness amongst concerned agencies on the need and rationale to launch efforts to bring widows in the mainstream of society and, (*b*) raising socio-economic status and dependents through programmes especially designed to build their innate strength for example, education, training and skill. There are not many studies on the specific subject of widows. The present work fulfils partially this vacuum. The book deserves attention of administrators, social workers, social reformers and researchers.

□

Dr. P.S.K. Menon

BOOKS

(1) SELF-RELIANCE—THE INDIAN PERSPECTIVE;

FOSET Publication, 6/1 Suddar Street, Calcutta-70017 ;

June, 1991 ; pp 86 ; Price Rs. 15.

(2) ON CERTAIN TECHNO-ECONOMIC ISSUES-A (Review);

FOSET publication, December 1990 ; pp 38 ; price Rs. 3.

The effort to establish a link between Science and Technology and the development of indigenous production system was a part of Indian National Movement and it was precisely those efforts which the British Government systematically sabotaged. As a result, the scientific institutions established during the period, got aloof from any productive activities. Hence these gradually became isolated from the society and the researchers. On the other hand, the Government administrative personnel who were trained at Government level, were compelled to restrict their acquired knowledge in the Government files. Indeed, the first impetus of Government in agriculture, to be more precise, the setting up of Agricultural Committee in 1869, was in response to the demand raised by the Cotton Supply Association of Manchester. The Committee was entrusted with the duty to enhance the scope for agricultural research. The inferences of these research were spread over in India. In this way, the Government provided an extended scope to promote scientific and technological knowledge as the other inferences of the European Industrial Revolution were found not only advantageous but indispensable for the advancement of a nation. But the link of Science and Technology with agriculture did take place pronouncedly because there was no proper way of exploitation of human resources. As a result, British Government never tried to make her colony, India self-reliant in Science and Technology.

Noticing the Indian situation concerning S&T, some eminent scientists, engineers, technologists have been expressing some alternative ideas for making the country self-reliant in this sphere. The two publications of FOSET (Forum of Scientists, Engineers and Technologists), a Calcutta based non-governmental organisation, focused on self-reliance. The organisation has played a significant role by bringing out these two useful anthologies at this juncture.

A. Ray

INDIAN ECONOMY By Karnati Lingaiah and T. Satyanarayana; Sterling Publishers Ltd; (1990) ; pages 219 ; Price Rs. 150.

The book has attempted to meet the felt need of students at the undergradate level studying in the Osmania and Kakatiya University areas and the authors have kept before themselves the syllabi of these two Universities in preparing the various chapters of the book. There are 13 Chapters in the book including the one specially devoted to a brief outline of the Economy of Andhra Pradesh. The other Chapters deal with economic development in general, with the various aspects of the Indian Economy such as National Income, population growth, occupational structure, poverty, planning, agricultural and industrial development, foreign trade and balance of payments and regional development. There is a good treatment of the definitions of economic development, characteristics of underdevelopment, about the factors which need to be tackled for initiating and speeding the process of development, role of the State etc. Some of the areas of relevance to our country such as the population problem, incidence of proverty and poverty alleviation, concentration of economic power, role of small scale industries, industrial sickness, role of financial institutions etc. and landmarks in the course of our development like the Green revolution, changes in the Industrial policy have been dealt with.

The various Chapters pertaining to the Indian economy are informative and should be helpful to students. The position of the Indian economy prior to Independence has also been dealt with, which gives an idea about how our economy was placed in those times and helps to know how it has changed since Independence. The Chapter on Andhra Pradesh gives a useful idea of the State's economic characteristics in the agricultural and industrial sectors. However, there is no treatment in the book about the country's public financial system, its important infrastuctural sectors like engry, transport. The book being dated 1990, naturally, has not dealt with the recent changes in the Indian ecomic policies such as the emphasis on economic reforms, liberalisation and enlarged private sector role ect, which may find place should there be a revised edition of the book. A good bibliography is available at different places in the book which should be useful to intersted students to probe the various subject areas in depth.

T.V. Gopalaswami

PLANNING EMPLOYMENT FOR EDUCATED YOUTH BY B.B. Patel ; Oxford & IBH Publishing Co. (P) Ltd. pp. 92. Price Rs. 125.

Though the percentage of educated manpower of the total labour force in India is nominal, yet being the most volatile section of the society, the high incidence of unemployment among this section poses a serious challenge to the policy makers and the society as a whole.

The problem has been engaging the attention of the policy planners and the educationists since the beginning of the planning era and many a study paper on this burning topic have been published. Unfortunately the end of the tunnel is still no where in sight.

The book under review is a sample study conducted by the author covering the post-graduate registrants of the University Employment Information Bureaux located at Ahmedabad, Vadodara and Surat. The study has established that the role of employment exchanges in providing employment or even positive information about job opportunities is very limited. Most of the job seekers registered with the employment exchanges ultimately secure jobs on their own at a low wage mostly in the unorganised sector.

To tackle this major problem the author has suggested promotion of self-employment particularly for those with engineering or other technical qualification, changes in the working schedule of the employement exchanges like decentralisation of registration of job seekers, de-registering the names of the candidates after 3 years, etc. etc.

Though the author has treaded on an already beaten path yet this competent and neat study with an impressive bibliography is a welcome reminder to this topic which poses a grave threate to the society.

P. Ghosh Dastidar

AGEING AND WELFARE OF THE ELDERLY IN INDIA EDITED BY T. KRISHNAN NAIR & K.V. RAMANA; Madras Institute on Ageing ; pages 127.

Demographers predict that population ageing will grow faster and by the year 2100, two and a half billion people of the world will be 60 + i.e., a fourth of the world's population will be elderly. Even in India there would be 257 million in this age-group, a massive increase from the 1981 level of 45 millions. Thus, there is a growing demand to create awareness about this group, examine and assess their needs and to plan for their welfare.

The Centre for the Welfare of the Aged (CEWA) organised a national workshop on 'Ageing and Care of the Elderly in India" in December, 1985. The participants of the workshop included social and behavioural scientists, scoial workers, representatives of organisations working in the field of welfare of the elderly, specialists in geriatric medicine and social welfare administrators. The proceedings of the workshop are presented in the volume, in the form of 8 papers, introductory remarks and a Plan of Action.

Rao, in his paper on demographic aspects has pointed out that decline in fertility has been the decisive factor in the ageing of the population in India as in the other industrialised countries. Halbar studies the joint family system of the Lamani tribes and their custom which dictates that the youngest son sould care for the parents. Nair refers to results of two surveys conducted in Tamil Nadu on the working status of the elderly and criticises the mandatory retirement age of 60 years in organised sector. Patil in his paper on retirement argues on the same lines that all employees do not age at the same rate and therefore a realistic and flexible retirement policy should be formulated. Soodan wants the Government to accept major reponsibility in the care of the elderly. Varadharajan citing different studies, concludes that the joint family system is being replaced by nuclear families and Vijayalakshmi and Ramana suggests a policy for the care of the aged by strengthening the family units. Kurup, howerver, refers to legal proceedings and Criminal Procedure Code, under which parents have to be maintained.

The Plan of Action for the Welfare of the elderly, suggests policies for overall welfare of this group, socially, economically, psychologically and physically. Considering the problems faced today and the burden that is inevitable in the future years, it is appropriate that implementation starts now at all levels—Government, society and voluntary organisational levels.

Studies and discussions relating to the elderly, though forms an important sector in policy and plan formulation exercises of developed countries have not gained much ground in India. Some sporadic studies and localised sample survery results give us a starting point. The 42nd Round of the National Sample Survey Organisation (1986-87) conducted a survey of the aged population and published results in Report No. 367, 'Socio-Econimic Profile of the Aged Persons'.

Workshops of such nature as arranged by the CEWA help to review the existing programmes, assess the situation and prepare plans for future course of actions. A documented version of the proceeding and the views expressed by the participants gives ample scope for future enrichment and thought. The editing is also appropriate as the problems and the remedies have been precisely capsuled. □

S. Dhar

BOOKS FOR COMPETITIVE EXAMINATIONS

1.	Children's Literature in Indian Languages *by Dr. (Miss). K. A. Jamuna*	18.00
2.	5000 Years of Indian Architecture	22.00
3.	Festivals of India	16.00
4.	India: Through the Ages *by Madan Gopal*	110.00
5.	Indo-Islamic Architecture *by Dr. Ziyaud-Din A. Desai*	26.50
6.	Gandhi : His life and Thought *by J. B. Kriplani*	68.00
7.	Mahatma Gandhi-A great Life in Brief *by Vincent Sheean*	23.00
8.	Romain Rolland and Gandhi Correspondence (Lib. Edition)	87.00
9.	B. R. Ambedkar *by W. N. Kuber*	37.00
10.	Rabindranath Tagore *by Hiranmay Banarjee*	26.000
11.	Jawaharlal Nehru *by M. Chalapathi Rau*	62.00
12.	Ambedkar and Social Justice Vol. I	145.00
13.	................do...........Vol. II	145.00
14.	Subramania Bharati *by S. Vijaya Bharati*	13.00
15.	India's Foreign Policy: Selected Speeches of Jawaharlal Nehru (Sept. 1946 to 1961)	70.00
16.	Occasional Speeches & writings (Oct. 1952-Feb. 1959) *by D. Radhakrishnan*	125.00
17.	Occasional Speeches & Writings (Third Series) (July 1959-May 1962) *by Sarvapalli Radhakrishnan*	90.00
18.	President Radhakrishnan's speeches & writings (May 1962-1964)	105.00
19.	P. V. Narasimha Rao (Selected Speeches 1991-92) Vol. I	300.00
20.	Integral Education (Sardar Patel Memorial Lectures—1988) *by Karan Singh*	10.00
21.	Patel Memorial Lectures (Combined) 1955-85	185.00
22.	Ocean-The Future Hope of Mankind (Sardar Patel Memorial Lecture-1989) *by S. Z. Qasim*	13.00
23.	Perspectives on Tourism in India (Sardar Patel Memorial Lectures 1981) *by Som N. Chib.*	7.00
24.	The Basic of Indian Constitution (Sardar Patel Memorial Lectures 1987) *by Y. V. Chandra Chud*	7.00
25.	History of Freedom Movement in India—Vol. I *by Dr. Tara Chand*	75.00
26.	.................do................. Vol. II	120.00
27.	.................do................. Vol. III	100.00
28.	.................do.................Vol. IV	110.00
29.	India's Struggle-Quarter of a Century Vol. I	75.00
30.	................do................ Vol. II	75.00
31.	Inventions that Made History *by Dilip M. Salwi*	16.00
32.	Trial of Tilak	80.00
33.	The Economic History of India Vol. I *by Romesh Dutt (C.I.E.)*	50.00
34.	...............do..................... Vol. II	72.00
35.	2500 Year of Buddhism *by prof. P. V. Bapat*	52.00
36.	Great Men & Women of India	26.00
37.	Women of India Chief Editor : Tara Ali Baig	45.00
38.	Energy: Today & Tomorrow *by Maheshwar Dayal*	16.00
39.	Gazetteer of India-Vol. I	40.00
40.	................do...........Vol. II	170.00
41.	................do...........Vol. III	185.00
42.	................do............Vol. IV	90.00
43.	India : Art & Architecture in Ancient & Medieval Periods	17.00
44.	India : Early History	15.00
45.	India : Government & Economic life in ancient and medieval periods	18.00
46.	India : Medieval History (A. D. 1206-1761)	18.00

47. India : Society, Religion and Literature 24.00
48. INDIA 1992 (JUST RELEASE) 130.00
49. India : Yours & Mine by Kamala S. Dongerkery 24.00
50. Our National Songs 5.00
51. Our Flag 9.00
52. Our National Flag *by Lt. Cdr. K. V. Singh* 50.00
53. Islands of India *by Sarit Kumar Mukerji* 85.00
54. Communication media, Yesterday, Today and Tomorrow *by P. N. Malhan* 32.00
55. Some Eminent Indian Scientists *by Jagjit Singh* 40.00
56. Aestheticians 19.00
57. Composers 17.00
58. Devotional Poets & Mystics-Part-I 19.00
59. ....do.................. Part—II 20.00
60. Founders of Philosophy (Kapila, Patanjali, Kanada, Gautama, Jaimini, Badarayana) 16.00
61. Scientists Dhanvantari * Caraka * Susruta Varahamihira * Aryabhata Bhaskaracarya 17.00
62. Valmiki & Vyasa 11.00

OUR JOURNALS FOR COMPETITIVE EXAMS

1. YOJANA : (English & Hindi) published fortnightly on the problems and achievements of India's Planning and Development. Annual Subscription Rs. 60/-.

   (N. P.—Yojana is also published in Tamil, Teluge, Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Pubjabi and Urdu).

2. KURUKSHETRA: (Published Monthly in English and Hindi) On rural industrialisation, farm revolution and co-operative progress and problems of district and village administrations.—Annual Subscription : Rs. 30/-

3. AJKAL : (Published Monthly in Hindi & Urdu) A cultural magazine on social cultural and educational problems-Annual Subscription : Rs. 30/-

Books worth Rs. 10..00 or more will be sent by Registered Post/V.P.P. Books worth less than Rs. 100.00 postal Registeration charges Rs. 6.00 will be extra. Subscribers of Division's Journals are entitled to 10% discount on purchase of books worth Rs. 25/- or more at a time.

For Supply please write to :

The Business Manager,
Publications Division,
Patiala House,
New Delhi—110001
Phone : 387983

Or any of our following emporia :

Bombay-400 038
Commerce House,
Currimbhoy Road,
Ballard Pier
Phone : 2610081

Hyderabad-500004
State Archaeological
Museum Building
Public Garden
Phone : 236393

Madras-600002
LLA
Auditorium
736, Anna Salai
Phone : 867643

Patna-800004
Bihar State Co-operative
Bank Building
Ashoka Rajpath.
Phone : 653823

New Delhi-110001
Super Bazar,
Connaught Circus,
Phone : 3313308

Thiruvananthapuram-695001
Near Govt. Press,
Press Road
Phone : 68650

Calcutta-700069
8, Esplanada East.
Phone : 286696

Lucknow-226019
10-B Station Road,
Phone : 245785

Self-Sufficiency In Oilseeds Production

Sunil Gatade

WITH the oilseeds production estimated to be a record one this year, India has come a long way in attaining the goal of self-sufficiency in the edible oil sector. The achievement is significant in view of the fact that the country has been facing for the last twenty years problems of shortage and rise in the prices of edible oils and has to resort to imports by spending precious foreign exchange. The imports had touched a peak of eighteen lakh tonnes in 1987-88, the year of the severe drought. Then, the country had to spend about eleven hundred crore rupees for the imports.

The breakthrough in production has become possible due to the greater thrust given for oilseeds production since the launching of the technology mission on oilseeds in 1986. The mission was set up to counter the situation caused by the mounting import bills of edible oil in the mid-eighites. According to some experts, the rise in the demand for edible oil was not only due to growing population, but also due to a growing urban middle class and changed lifestyles and eating habits.

Oilseeds production this year is likely to cross the twenty million tonne mark. This rise is in the backdrop of merely a 10.6 million tonnes production in 1975-76. The production till 1987-88 could reach a peak of thirteen million tonnes. The feat has been achieved this year due to adequate and timely rains and efforts of some seven million oilseeds farmers in the country, backed by an integrated policy framework developed by the technology mission. This year, the kharif oilseeds production would touch 10.8 million tonnes, five lakh tonnes more than the target. A good crop is expected in the ensuing rabi soason due to adequate soil moisture.

The record production has prompted the Agriculture Minister, Mr. Balram Jakhar, to favour a ban on the import of edible oils, a measure, which would benefit the oilseeds farmers.

The major constraint in the production of oilseeds, which is characterised by wide fluctuations, is that majority of the oilseeds area is subjected to the vagaries of monsoon as the crop is being grown under rainfed conditions. Coupled with this, is the fact that a large part of this rainfed area is constituted by marginal and submarginal lands.

Limiting Factor

Another limiting factor for greater oilseed production so far was the long neglect of genetic improvement as the importance of the crop was felt only in the last decade. In fact, the overall national production of oilseeds was quite comfortable upto the early sixties despite low average yields, and oilseeds account for about seven per cent of the foreign exchange earner during 1963-64. In order to make concerted efforts for increasing the productivity and production of oilseeds, research centres have been set up including the Directorate ol oilseeds Research at Hyderabad and the National Research Center for Groundnut at Junagarh.

Due to the dependence of the crop on monsoon, questions are being raised whether the country would be able to mainatin the tempo in production. But Krishi Bhawan officials are confident that the Eighth Plan target of 23 million tonnes of production would be surpassed.

In this regard, they point out that crops like rapeseed and mustard have low water requirement.

Another major factor is the cultivation of oilpalm in a very big way in Andhra Pradesh, Kerala, orissa, parts of Maharashtra as also the Andaman and Nicobar islands. Experts point out that oil palm cultivation is the best source for attaining self-sufficiency. This is because the oil yield of oil palm per hectars is the highest at around three to five tonnes as against 200 Kg. of oil per hectare under groundnut.

Besides, the country could harness the untapped oil resources from rice bran, cotton seed and minor oilseeds.

The significant increase in the oilseeds production is also due to incentive prices to the farmers in recent years, which changed the earlier scene in which the buyer and the processor benefited the most than the grower. Added to this was the system of market intervention to guard against seasonal price fluctuations. The mission has also succeded in developing forty new high yielding varieties with varying degrees of resistance to drought pests & other stresses. Besides, through the National Dairy Development Board, NDDB, it initiated oilseed growers cooperative federation in various States. A buffer stock is also being built by the NDDB. Private sector companies are also coming in a big way in boosting the oilseeds production. The record production showed that the country is for an oilseed revolution. Gone are the days when oilseeds had become the sick segment of Indian agricuture. □

(Courtesy-AIR)

ONGC Strides Ahead In Western Region

S.K. Panigrahy

The Western Region of Oil & Natural Gas Commission which is spread over Ankleswar, Ahmedabad, Mehsana and Cambay, is poised to acquire new distinction in the VIII Five Year Plan period. The oil production from the region which was over the six million tonnes during 1991-92 is expected to increase to over 8 million tonnes by the end of VIII Five Year Plan. Since most of the fields in Gujarat are old, ONGC is facing the problems of oil pressure maintenance and maintenance of reservoir energy for getting maximum possible recovery of oil and gas. The organisation has adopted a number of new technologies and try them in various fields in order to increase the level of output.

One such method is water injection scheme which is given top priority in operation at Kalol, Sanand and Navagam fields of Ahmedabad. The scheme is already being implemented in Pansar, Vasna and in Navagam. In South Gujarat, it is being carried out in Ankleswar and Gandhar fields.

Four such enhanced oil recovery pilot projects have been commissioned at Sanand, Jalora and Balol fields of North Gujarat. Another 4 projects, viz., pilot insitu combustion at Lanva, Micellar Polymer Pilot Project at Ankleswar, Steam Flood Pilot at Balol and carbondioxide injection at Kalol are also planned to be implemented. Efforts are on to reduce to number of six wells.

Prospective Area

In the field of gas, ONGC is doing well. About 3.6 million c.m. gas per day is being supplied to about 60 units. These units are located at Baroda, Ahmedabad, Kadi, Mehsana, Ankleswar, Bharuch and Cambay. Availability of gas has helped in the development of ancillary units. This has added to availability of goods and services and generation of employment of hundreds of people.

The gas supply, in addition to feeding the power plants, fertilizer units, dairies etc. has proved a boom to lakhs of housewives at Ankleswar, Bharuch and Baroda. The distribution of gas has recently been transferred to the Gas Authority of India Ltd. (GAIL) which handles all the agreements with future customers.

Reduction of flaring of gas is another area for which all efforts are being made. At present only low pressure gas which cannot flow on its own is being flared. Efforts are made to reduce the flaring to the minimum level by implementation of various zero flaring schemes. It is expected that except for technical reasons there will be no gas flaring in north Gujarat from February 1993 and in south Gujarat from March next year.

Since inception, ONGC has made investment of more than about Rs. 3,600 crore in this region. It has paid nearly Rs. 1,440 crore so far as royalty and over Rs. 587 crore as sales tax to the Government of Gujarat which is a significant contribution. Besides, a cess of Rs. 3,048 crore has been paid to the Central Government.

Yojana : 33 Years Ago

The Great Ganesh Library

Forty years ago, a young student of Poona, Shri Hari Balchandra Deshpande was more or less ejected from a library when he was reading a copy of "Dynanprakash". He smarted at this insult but turned his sense of injury into something constructive. Then and there he resolved to have a library of his own in which every one would be allowed to read or consult a book free of cost. He went home and consulted his schoolmates about this project. It was not easy to convince them that a library could be run by school boys and particularly a 'Free Library'.

Nevertheless, the small group of students ignored doubts and opposition and got on with their efforts. They went from house to house to collect books and within a day or two they collected not less than 250 books. Various sources were tapped and money was collected to obtain other books, newspapers and periodicals.

As the years went by, they held charity shows in aid of the library. Several drama companies gladly held benefit shows. Soon the library began to enjoy the support and patronage of eminent men of Maharashtra like Prof. Kale. Prof, Podar, Dr. Paranjpe, Prof. N.S. Phadke and many others.

Shri Deshpande did not collect money only through these charity shows. His efforts were varied. He ran exhibitions, arranged receptions for public leaders and took part in the national struggle both in political and social fields. The result was that people began inviting Shri Deshpande to accept valuable books for his library. There were several Parsi ladies like Miss Wadia, Miss Rustomjee and Miss Abbot who donated books. Baroda Universtiy and the Anand Karyalaya also contributed. Wherever Shri Deshpande thought he should get books, he walked or bicycled his way.

Thus this tireless social worker has aroused public interest in his objectives and his library has become the city's pride. It is not surprising that once a letter from London addressed merely to "Ganesh Library, India" was delivered to the library safely and without delay.

During the forty years of its existence the library has changed seventeen addresses with its founder Shri Deshpande who as a municipal worker was subject to frequent transfers within the city. Yet this moblity instead of harming it, has only strengthened the library.

India needs more men like Shri Deshpande and more libraries like the great Ganesh Library of Poona.

—T. Mohan Kumar

Licensed U (D)-52 to post without pre-payment at NDPSO, New Delhi (Delhi Post)

Regd. No. RN 949/57
P & T Regd. DL/12037/93

पढ़िये

प्रतियोगी परीक्षाओं हेतु सर्वाधिक बिकने वाली सर्वश्रेष्ठ पुस्तकें

संघ लोक सेवा आयोग द्वारा आयोजित सिविल सर्विसेज प्रारम्भिक परीक्षा एवं बिहार, मध्य प्रदेश, राजस्थान तथा उत्तर प्रदेश की सिविल सर्विसेज प्रतियोगी परीक्षाओं (प्रारम्भिक एवं मुख्य) के सम्पूर्ण पाठ्यक्रमानुसार नवीनतम् आंकड़ों के साथ प्रकाशित महत्त्वपूर्ण प्रकाशन

○ लोक प्रशासन	डॉ. बी. एल. फड़िया	Rs. 100/-
○ भारत में लोक प्रशासन	डॉ. बी. एल फड़िया	Rs. 90/-
○ समाजशास्त्र	डॉ. गुप्ता एवं शर्मा	Rs. 100/-
○ भारतीय ग्रामीण समाजशास्त्र	डॉ. गुप्ता एवं शर्मा	Rs. 60/-
○ सामाजिक मानवशास्त्र	डॉ. गुप्ता एवं शर्मा	Rs. 80/-
○ भारतीय इतिहास	डॉ. ए. के मित्तल	Rs. 100/-
○ INDIAN GOVT. & POLITICS	Dr. B.L. Phadia	Rs. 120/-
○ राजनीति विज्ञान	डॉ. बी. एल. फड़िया	Rs. 100/-
○ भारतीय राष्ट्रीय आन्दोलन एवं भारतीय संविधान	डॉ. पुखराज जैन	Rs. 60/-
○ भारतीय शासन एवं राजनीति	डॉ. जैन एवं फड़िया	Rs. 120/-
○ अर्थशास्त्र	डॉ. जे. सी. पन्त	Rs. 100/-
○ भारत में आर्थिक नियोजन एवं विकास	डॉ. चतुर्भुज मामोरिया	Rs. 70/-
○ राजस्थान की अर्थव्यवस्था	डॉ. मोहन सिंघल	Rs. 50/-
○ भारत का वृहद् भूगोल	डॉ. चतुर्भुज मामोरिया	Rs. 150/-
○ मानव भूगोल	डॉ. चतुर्भुज मामोरिया	Rs. 120/-
○ बिहार का भूगोल	डॉ. मामोरिया एवं जैन	Rs. 45/-
○ एडवांस्ड एकाउन्ट्स	डॉ. एस. एम. शुक्ल	Rs. 160/-

सभी प्रमुख पुस्तक विक्रेताओं से प्राप्य अथवा 30/- रु. का मनीऑर्डर भेजकर हमसे सीधे प्राप्त करें।

साहित्य भवन

हॉस्पीटल रोड, आगरा-282003

दूरभाष : 360399, 67000, 76830, 72849

PUBLISHED BY DR.S.S. SHASHI, DIRECTOR, PUBLICATIONS DIVISION, PATIALA HOUSE,
NEW DELHI-110001 AND PRINTED BY THE NAV SHAKTI PRINTERS, J-36, UDYOG NAGAR