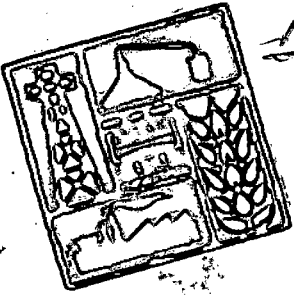


Room No. 54B



Why should
states overdraw ?

VOL. 29 NO. 16

Yojana

SEPTEMBER 1-15, 1985, RUPEES 1.50



Focus on youth
problems

NEXT ISSUE

Focus on plan
implementation

More women enrol for adult education !

AN APPRAISAL of the implementation of the Adult Education Programme during the Sixth Plan has indicated considerable progress. By the end of December 1984, 1,86,510 centres were functioning in 31 States and Union Territories with an enrolment of 55,34,763 adult learners. In 1980-81 there were 92,105 centres with an enrolment of 2.59 million adult learners.

Since two-thirds of the adult learners in the age group 15—35 are women, priority has been given to open new centres for women. The enrolment of women has steadily increased during the Sixth Plan period. As on December 31, 1984, out of the total learners, 52.26 per cent were women. In 1980 out of the total learners, only 38.58 per cent were women.

A comprehensive strategy to make adult education a mass programme has been proposed for the Seventh Five-Year Plan. Special emphasis will be laid on areas which require more attention. □

YOJANA

Volume 29|Number 16

September 1—15, 1985|Bhadra 10—24, 1907

✓ G. KARUNAKARAN PILLAI	4	Why should states overdraw ?
X G. SRINIVASAN	8	Yes, this abolition was overdue !
X MOHAN DHARIA	10	Reducing population growth to zero by AD 2000 !
✓ CHANDRA PAL SINGH	14	What's wrong with rural family welfare ?
✓ DR. V. R. M. DESAI	16	Meeting aspirations of youth !
✓ (MISS) N. V. RAJESWARI AND M. HARI	20	And solving their problems !
X T. V. SATYANARAYANAN	24	Crop insurance, a need fulfilled !
✓ P. BHATTACHARYYA.	26	Harnessing tidal energy !
✓ BHUSHAN	29	Effective administration, a myth !
✓ RAGHU SHERGIL	31	Controlling guinea-worm disease

Chief Editor—R. Thukral ; Editor—B. K. Dhusia ; Assistant Editor—Kamlesh Mackrell ; Correspondent—M. Yunus Siddiqui ; Sub-Editor—Mangal Sen, Senior Correspondent, Ahmedabad ; Bombay : Smt. V. M. Joshi, Calcutta : B. K. Chakravarty, Hyderabad : S. V. Sripati Rao, Madras : D. Janaki, Trivandrum B. N. Kesavan Nair, Gauhati : Biraj Das ; Business Manager ; L. R. Batra.

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 issued every fortnight in Assamese, Bengali, English, Gujarati, Hindi, Malayalam, Marathi, Tamil, Telugu and Urdu.

Editorial Office : Yojana Bhavan Parliament Street, New Delhi-110001, Telegraphic Address : Yojana New Delhi. Telephone : 383655, 387910, 385481 (extension 402 and 373).

For new subscriptions, renewals, enquiries please contact : The Business Manager, Publications Division, Patiala House, New Delhi-110001.

Our Contributors:

Dr. G. Karunakaran Pillai.—Reader in Economics, University of Kerala, Kariavattom, Trivendrum; **G. Srinivasan.**—Economic Division, P.T.I., New Delhi; **Mohan Dharia.**—former Union Minister of State for Planning, Pune; **Chandra Pal Singh.**—Department of Statistics and Demography, National Institute of Health and Family Welfare, New Delhi; **Dr. V.R.M. Desai.**—Chief Manager, Economic Intelligence Department, Bank of India, Bombay; **(Miss) N. V. Rajeshwari and M. Hari.**—Senior Research Fellows, Department of Population Studies, S. V. University, Tirupati; **T. V. Satyanarayanan.**—Special Correspondent, UNI, New Delhi; **P. Bhattacharyya.**—Freelance Journalist, New Delhi; **Bhushan.**—Freelance Journalist, New Delhi; and **Raghu Shergil.**—Freelance Journalist, Delhi.

Subscription : Inland : One year Rs. 30 ; Two years Rs. 53 ; Three years Rs. 75.

2,900 words
Luo Talle
Rs. 150/-

Why should states overdraw ?

G. Karunakaran Pillai

A peak level of Rs. 1808 crore overdrafts by the States in January 1985 forced the Centre to do away with such facility on July 5, 1985. Unauthorised overdrafts are a sign of financial indiscipline. States spend without regard to the availability of resources. Such practice is unhealthy in a federal structure which negates planning process. This also breeds financial imbalance between the Centre and States. As an alternative, the author suggests, vigorous tax collection drive and efficient management of public enterprises by the States to generate surplus to take care of the overdrafts.

THE OVERDRAFTS OF the State governments on the Reserve Bank of India which were unusually high at Rs. 1808 crores on January 28, 1985 have been the subject of serious discussion in recent months between the Centre and the States in India. At the end of May 1985 the Union Finance Minister fixed the maximum ceiling of States' overdrafts at Rs. 1628 crores for the year 1985-86 and warned that States which drew in excess of the ceiling would bring down the overdraft to the stipulated limit in 7 days failing which they would face suspension of overdraft facility. Then, all the State governments agreed to reduce overdrafts and assured the Centre of a better financial management in the coming years. After having a round of discussion with the Chief Ministers the Union Finance Minister announced on July 4, 1985 the decision of the Centre to do away with the overdraft facility to the state governments. Overdrafts were

converted into medium-term loans and would be repayable by States in four years ending 1989-90, with a moratorium of one year. The cut-off point for determining conversion of overdrafts into medium term loans, has been taken, on 28th January, 1985, when these stood at Rs. 1808 crores. But the actual amount would be Rs. 1628 crores as 10 per cent adjustment against loans would be made within this financial year. The rate of interest charged on medium term loans would be 8 per cent compared to 13 per cent paid to RBI for overdrafts. There will be no change in ways and means limit for individual states, at least for the time being.

The decision to scrap overdraft altogether is presumably due to the fact that Central assistance for plan schemes has been stepped up substantially in the current year and states will also be allowed a large share of the market borrowings of the Centre. The Chief Ministers urged the centre to introduce the consignment tax, mentioned a year ago in the union budget 1984-85, to provide additional resources to the States which would take care of the States' overdraft problem.

In this paper an attempt has been made to examine the reasons for the growth of unauthorized overdrafts and its menacing nature. Also it would examine the alternative to take care of the overdraft problem of the state governments.

Genesis of overdrafts

The states have been mainly dependent upon the Centre for loan requirements. They do not rely upon market borrowings. Article 293 of the Constitution of India empowers the Central government to grant loans to the state and/or guarantee loans by the state within the country. The Centre has been providing short-term loans in the form of ways and means advances and medium and long-term loans mainly from

the Consolidated Fund of India and in some cases from the Special Development Fund (built with the funds received in the form of foreign aid). Since 1969, under the Gadgil formula, the loan component of the plan assistance was fixed at 70 per cent of the assistance for states (the remaining 30 per cent by grants) excepting Jammu and Kashmir, Assam, Meghalaya and Nagaland (for these states only 10 per cent of the plan assistance is provided in the form of Central loans).

States are also provided loan assistance at the discretion of the Ministry of Finance which consists of conditional and unconditional loans. Bulk of the assistance is provided to non-development programmes and non-plan programmes of developmental and non-developmental nature. Moreover loan assistance was given for non-plan revenue expenditure. Non-plan needs on revenue account are taken into account by the Finance Commission through shared taxes and grants and the deficit is covered by grants-in-aid under Article 275 of the Constitution. On some occasions loans are given to clear off unauthorized overdrafts from RBI. Thus Central loans have been advanced to the States both in the form of plan and non-plan assistance intended for developmental and non-developmental purposes.

Under section 21-A of the Reserve Bank of India Act, all states except Jammu and Kashmir, have entered into agreement with RBI that, RBI handles the monetary transaction of these states by acting as their banker. The Act also empowers the RBI to provide advances to the States repayable within three months of the date of advance. Accordingly, RBI provides two types of advances : (1) normal ways and means advances for which no cover is necessary. These advances are called clean advances. They are fixed as a certain multiple of minimum cash balances held by each state with RBI. (2) Special advances against Central government securities. They are called secured advances and RBI has been sanctioning *ad hoc* limits to these advances. The states may run into unauthorized overdrafts and the problem of overdraft arises in two situations : (a) if the limit agreed to between RBI and states are exceeded, and (b) the overdrafts are not repaid at the end of the financial year.

Since 1967 the problem of overdrafts has been disturbing the financial balance between the Centre and states *inter se*. Since then the system of persistent unauthorized overdrafts became a menace. Because of the menacing nature of overdraft the Centre was forced to make it as one of the terms of reference to the Fifth Finance Commission in February 1968. The Fifth Finance Commission in its interim report devoted a chapter of 17 pages for dealing with this problem. The Commission in its interim report (1969) referred specifically to "a serious lacuna in the present arrangements for fiscal assistance to the states", viz., regarding

non-plan capital deficit, but it did not devote any further attention to this problem in the final report.

The 5th Finance Commission recommended that the Centre should clear off unauthorized overdrafts of the concerned states out of the plan assistance to these states and in case that is insufficient it should make *ad hoc* loans to those states for clearing the unauthorized overdrafts and adjust future plan assistance for such *ad hoc* loans to those states. However, Centre could not implement the material recommendations in this regard, immediately in spite of granting special loan assistance to states on deficit principle. Perhaps Centre thought that, as politically risky. Although belatedly, the Centre cancelled all outstanding states overdrafts with RBI by issuing to them Rs. 421 crores of net ways and means of assistance at the end of April 1972.

The Centre made encouragement for repayment for certain stipulated percentages of outstanding overdraft in 1972-73 and in 1973-74, the Centre took over the overdraft through special medium term loans to states. The loans thus advanced to the states were repayable in 6 years beginning from 1973-74. This arrangement was expected to minimize the problem of States' unauthorized overdraft. Even after these measures States ran to unauthorized overdrafts and RBI was forced to decline to honour the cheques of some States in 1974. Then the Centre came to their rescue by advancing medium-term loans. Thus overdrafts emerged in the shape of medium term loans and it was successively extended to clear old medium term loans, inspite of the announcement by the Ministry of Planning that no such overdrafts will be allowed after the end of the year 1973-74.

The indebtedness of the States to the Centre is only a reflection of the assistance provided by the Centre to the States year after year for not only financing their plan outlay but also for meeting non-plan requirements. The Sixth Finance Commission estimated the non-plan capital gap of the States on a uniform and comparable basis for the 5-year period ending with 1978-79 and found that 19 states would have non-plan capital gap of Rs. 1994.64 crore. The Commission recommended : (1) Consolidation of some loans into uniform types, (2) extension of the period of repayment of some loans, (3) moratorium on the payment of some loans and (4) writing-off some loans. It also recommended that loans advanced by Centre to States for clearing their unauthorized overdrafts from RBI may be made repayable in 15 years instead of 6 years. The Commission recommended a debt relief to the States to the extent of Rs. 1969.62 crores. This provided relief to the states from mounting debts. The 7th Finance Commission (1978) also recommended a debt relief to the States to the extent of Rs. 2155.14 crores.

Notwithstanding these substantial provisions of debt relief, the problem of overdrafts has continued to

disturb the financial balance between the Centre and States. In a statement made by the Union Finance Minister in the Parliament in July 1982, a package of measures was announced to tackle the problem of the mounting overdrafts. In order to start 1982-83 with a clean slate medium term loans amounting Rs. 1748 crore were advanced to 18 States to clear overdrafts taken from RBI at the end of 1981-82. RBI doubled the ways and means limit of the states so that they would have a large cushion against temporary imbalances between receipts and expenditures.

15 However, the problem of overdrafts persisted even after the advance of medium term totalling Rs. 400 crore in 1982-83. Although the outstanding overdrafts at the end of June 1983 were cleared by the States with the advance release of Central assistance, the phenomena emerged immediately after, even in July 1983. Since then the resort to overdraft has been substantial and persistent. The Centre once again discussed the problem with the states and those states whose overdrafts with RBI were very high were agreed to take necessary measures to improve their financial position and reduce their recourse to overdrafts. 16 Despite these agreement, 8 states had overdrafts totalling Rs. 257.56 crore as on March 31, 1984 as against Rs. 56.93 crore by 3 states on March 31, 1983. The Centre advanced medium-term loans of Rs. 499.12 crore to 11 states to clear their overdrafts of 1983-84. Despite these assistance the States continued to resort to overdrafts. As on June 28, 1984, 9 states had overdrafts totalling Rs. 517.60 crore. The overdrafts were once again cleared by states with advance assistance of Rs. 570.02 crore released by the Centre to states on June 29, 1984. However, overdrafts re-appeared in July, 1984 and their position deteriorated 17 subsequently in regard to the magnitude of overdrafts. Overdrafts reached to the peak level of Rs. 1808 crore in June 1985 which forced the Centre to do away with overdraft facility on July 4, 1985 and to announce that no overdraft will be allowed any more under any circumstances.

The pernicious problem of overdrafts

18 The system of persistent unauthorized overdraft is the most obvious symbol of a complete negation of any rationale in Centre—State financial relations. The states take assistance without any pretext of permission. They decide their own needs and draw accordingly on RBI funds in excess of the limit of credit facilities allowed to them by agreement. Even though they are in the nature of ways and means advances have to be paid back in a period of 3 months, surprisingly enough, there is not the remotest likelihood of them being repaid at all except through future Central assistance. The money obtained in this manner was a sort of forced loans taken stealthily and then regularized. The procedure underlying overdraft was in strange contrast to that which states had to follow either before the Planning Commission or Finance

Commission or directly with the Centre. If the system of unauthorized overdrafts persists unchecked, there is an implicit danger that no state will like to tread the long and weary alternative roads to Central aid. The recalcitrant states will be placed in an advantageous position and disciplined state penalised.

It thus follows that unauthorized overdrafts are a sign of financial indiscipline in that the concerned states overspend without any regard to the availability of resources. The practice to run overdraft is unhealthy in a federal structure. It is a negation of planning process and should not be allowed under any circumstances.

States case for overdrafts

The states' case for resorting to overdrafts appears to be as follows: (1) overdraft is like deficit financing of the Centre; (2) states are left with few and inelastic sources of revenue; (3) phenomenal growth of states borrowing from Centre; (4) states deficits are widening plan after plan; and (5) widening non-plan capital gap.

Let us consider these arguments one by one. The memorandum submitted to the Eighth Finance Commission by Karnataka Government in 1983, gives an insight into the states approach to overdrafts and justification of resort to them. In the memorandum it is stated that "deficit financing by states is termed as overdrafts". Both unauthorized overdrafts and deficit financing owe their existence to combined revenue and capital receipts falling short of revenue and capital expenditures. However, there is substantial difference between the two. Deficit financing is permitted to the Centre, customary in India in each plan. Unauthorized overdrafts is illegal and inexcusable on the part of the states. There are deep social and economic reasons underlying deficit financing by Centre. In a country having unified currency and credit system only one authority has the right to decide the extent of deficit financing.

States generally complain that more elastic and more buoyant taxes are assigned to the Centre and states are left with few sources of Revenue and state taxes have the element of uncertainty. This complaint is not justifiable in the sense that the states get the share from the most elastic Central taxes, viz., income tax (85 per cent) and union excise taxes, (45 per cent). Further, sales tax, the principal state tax, is highly elastic with reference to economic activities, and is in fact a good source of state revenue. However, the problem is that the states are not tapping their potential tax sources. It cannot be said that states manage finance efficiently with prudence.

Union loans to the States have loomed larger in the total Central transfers in India. Hence, the states heavily indebted to the Centre. Debt owed to Centre by states stood at Rs. 44 crore on August 15, 1947

and by March 31, 1956 it reached Rs. 900 crore, and had a steep rise since then to Rs. 2014 crore on March 31, 1971 to Rs. 27059 crore on March 31, 1984. Thus states' indebtedness to the Centre has been accumulating year after year. It appears to be rather curious. The percentage share of Central loans to total transfers (tax shares and grants through Finance Commission, Planning Commission and Ministry of Finance) has been declining sharply. As is evident from Table 1, loans constituted 56 per cent of the total transfers to the states during First Five Year Plan period, declined to 32 per cent during the 6th Plan period. Since the proportion of loans to Central transfers are lower since the 4th Plan, it is untenable to suppose that states' indebtedness to Centre has been accumulating year after year. In the union finance, we can see that one-third of aggregate budgetary receipt of the Centre is in the nature of capital receipts, excluding deficit financing. The Centre is also confronted with the same problem of debt burden and it has also to provide for debt services.

cause of the substantial debt rescheduling and relief recommended by the Sixth, Seventh and Eighth Finance Commissions. These Commissions assessed the non-plan capital gaps of the states on a uniform and comparable basis for the respective Plan periods. The Sixth Finance Commission wiped out the whole capital gap. The Seventh Finance Commission provided a debt relief to the extent of Rs. 2155.14 crores. The Eighth Finance Commission calculated the non-plan capital gap of states at Rs. 6806 crores. Omitting the obligations arising from unauthorised overdrafts and repayment of small saving loans, the gap was estimated at Rs. 3853 crore, out of which debt relief of Rs. 2285 crore including a write off of Rs. 405 crore has been recommended. The problem is then what sort of attitude to debt this rescheduling of servicing charges by union loans provided as relief every five years breed among the states and where will it lead us to ?

Overdraft like drug is addictive. The more you draw, the more you need to draw. Instead of cutting

TABLE 1
Composition of transfer of resources from Centre to States

	PLAN PERIODS						
	I	II	III	AP	IV	V	VI
Percentage share of tax transfers to total transfer	24.1	23.3	21.4	24.0	30.2	33.0	34.6
Percentage share of grants to total	20.1	27.5	23.2	26.0	25.4	32.2	27.4
Percentage share of loans to total transfers	55.8	49.2	55.4	50.0	44.4	34.8	32.0

Source : K.K. George and L.S. Gulati, Centre-State Resource Transfers, 1951-84— An appraisal.

States often complain that their deficit is widening plan after plan. If we compare the overall deficit as a proportion of total expenditure of both Centre and states, it is clear that the proportion of states' deficits to their total disbursements had been lower than the Centre's deficit of its total expenditure throughout the Plan Period (see Table 2).

down unproductive expenditure and intensifying the drive to mobilise additional resources, the states have been addicted to overdrafts—a practice which unequivocally declares the extent of states' inability in mobilising resources. Instead of resorting to a purposeful decision on the part of the states to run up deficit, they should restrain Non-plan non-deve-

TABLE 2
Overall deficit of Centre and States

	PLAN PERIODS						
	I	II	III	AP	IV	V	VI
Centre's overall deficit as a percentage of total disbursement	12.5	11.2	4.4	4.6	4.9	4.4	6.1
State's deficit as a Percentage of total disbursement	0.8	1.1	0.4	1.4	0.6	+1.5 (surplus)	2.7

(Source : same as for table 1).

The argument that states find themselves caught into 'debt trap' is fallacious. During the Fifth Plan Period debt servicing payment on Central loan accounted for more than two-thirds of new Central loans. In subsequent period, this ratio was falling be-

development expenditures, resort to vigorous tax collections drive and run the public undertakings efficiently so as to generate a surplus. This is the right solution to the problem of overdraft. □

Yes, this abolition was overdue!

G. Srinivasan

The Centre's decision to convert the overdrafts by the States into loans to lessen Centre-State fiscal strains and also to provide relief to the debtor states is a welcome sign despite the dissipation of scarce resources and diversion of funds for poverty alleviation programmes to uses which have benefited non-poor, says the author. The ban on overdrafts for states is also due to the fact that Central assistance for plan schemes has been stepped up sizeably in 1985-86 and the states have been allowed a larger share of market borrowing. This is because the need for greater fiscal prudence at the level of states is a desirable desideratum for maintaining the momentum of the planned growth.

THE ENORMOUS OVERDRAFTS of the State Governments which were unusually high at 1808 crores rupees on January 28 this year have been the crucial issue of discussion in recent months between the Centre and the states. In fact, the staggering overdrafts incurred by the various states and union territories in the past had often evoked swift resentment from the Centre as it viewed them disapprovingly and deemed them as a draft on developmental finance. In the Centre's view, overdrafts tend to throw out of gear its well-laid calculations concerning the application and control of inflationary forces. In short, the problem of mounting state overdrafts has always been a bone of contention in the Centre-State fiscal relations.

Despite periodic protest raised by the Centre to discipline them financially, the states have gone about drawing overdrafts from the Reserve Bank of India and as on January 28 their outstanding on this aggregated to the tune of an awesome figure of 1808 crore. As the need for financial discipline among states seems all the more crucial in view of the burgeoning growth of overdrafts, the Union Finance Minister, Mr. V. P. Singh convened a two-day conference of the State Chief Ministers in New Delhi during July to find an amicable solution for ending this unhealthy practice.

Drawal of overdrafts unabated

At the conclusion of this meeting, Mr. V. P. Singh said that the Government has resolved to do away with the overdraft facility to the states once for all. The excess drawals of Rs. 1628 crore, after allowing for a reduction of 10 per cent from the peak level of 1808 crores, would be converted into special loans repayable in five years with a moratorium of one year. The interest rate will be eight per cent and there will not be any change in the ways and means limits for individual states, at least for the time being. The procedure adopted now is thus not very different from the earlier arrangements when excess overdrafts were converted into special loans.

Implementing the decision

Under the latest arrangement, the states will derive some additional gain as they will in effect be getting a new loan of 696 crore rupees from the Centre which would also be taking over the outstanding amount of 932 crore rupees as on June 26 on its own account with the Reserve Bank. Since the states were called upon earlier by the Union Finance Ministry to cut down the overdrafts within a short period, many of them made strenuous efforts to

bring down the excess drawals, even if that meant a diversion of funds from other sources or a slowing down of expenditure on some plan schemes. As a funding operation on the basis of the outstanding amount as on June 26 would have entailed hardship to those which had complied with the Finance Ministry decree and reduced the overdrafts, the special loans for 1628 crore rupees are to be granted on the basis of the position on January 28. Thus the Finance Minister has softened the blow and at the same time rewarded the endeavour of the states that made efforts to reduce overdrafts by converting not the overdrafts outstanding on June 26 but that of January 28 into a loan.

But whether the Centre will be able to enforce the ban on overdrafts is something that remains to be tested. Restrospectively speaking, some three years ago the then Union Finance Minister, Mr. Pranab Mukherjee did away with the mechanism of overdrafts even while converting the combined overdrafts of states amounting to about 2086 crore rupees into medium and long term loan. But this did not dissuade the states from piling up another overdraft mountain of almost 2000 crore by January this year.

While the decision to do away with overdrafts may be a blessing for the states, the probability of states erring on the same side in the near future cannot altogether be discounted if past experience is any guide. In fact, to vindicate their growing overdrafts the states have often protested that they were unjustly treated by the Centre in the overall devolution of financial flows. States contend that the taxes assigned to them under the Constitution are far less elastic than those held by the Centre and therefore their yields have grown more slowly over time. Whatever may be the merit in this criticism, independent observers of public finance opine that it is incorrect to infer that the State's total revenue have grown more slowly than those of the Centre.

Devolution as equalisation of fiscal imbalances

Besides, there is also no conclusive evidence that planned investment by the states is being blocked for want of funds. In point of fact, 51 per cent of the planned investment in the country during the Sixth Plan was to have been made by the states. The inescapable conclusion is that the states do not relish the way in which they are obtaining funds from the divisible pool and also do not like the way these funds are apportioned to them by the Centre. But constitutionally, the Centre has got certain obligations to fork out funds for deficit states by drawing from the surplus ones and regional equalisation of fiscal imbalances is a paramount function of the Centre under a federal set up like ours.

The states have scant reason to make grouse that the Centre arrogates to itself all revenue-generating tools and techniques. The transfer of resources to

the states, has to simultaneously reduce fiscal imbalances among the states and enable the financially weaker states to come nearer to the standards of the stronger states. As such, a large degree of centralisation of revenue resources is indispensable not only for economic and administrative reasons but also to fulfil the objective of regional equalisation.

Why not improve efficiency of public enterprises?

Fiscal experts contend that if only the states improve the efficiency of investment in the state-run enterprises, a lot more could be achieved. But sadly the departmentally-run undertakings of the states and union territories, other than forests and mines and minerals, continue to pile up colossal losses. These aggregated 790 crore rupees in 1984-85 compared with 720 crore rupees in 1983-84. According to the pre-budget economic survey, performance of the two major non-departmental undertakings of the states, namely the state electricity boards and the state road transport corporations remained and continue to remain unsatisfactory as their commercial losses were estimated at 982 crore and 127 crore rupees respectively in 1984-85. If only the states obtained the returns prescribed by the Finance Commission, they would definitely have enormous surpluses in place of today's whopping deficits.

The Venkataraman Committee had suggested an eleven per cent return on power projects and the Rajadhyaksha Committee 15 per cent. But if instead of showing improvement in operational efficiency of state-run enterprises they incur losses, the blame needs to be squarely laid on the states alone which squander scarce resources in the reckless pursuit of populist and often non-developmental ventures.

Despite the dissipation of scarce resources and diversion of funds meant for poverty alleviation programmes to uses which have benefited the non-poor and the misuse of plan funds, the Centre had come forward to convert the overdrafts into loans to lesson Centre-State fiscal strains and also provide relief to the debtor states.

Decision on consignment tax

At the recent meeting, it was pointed out to the states that the Centre would also take a decision soon on consignment tax. The states had agreed to pool the collections from this proposal of tax. While 50 per cent of the collection would be pooled for distribution among various states, the remaining amount would be retained by each state. Moreover, there will be a bigger devolution of central tax revenues with the implementation of the recommendations of the Eighth Finance Commission. The impediments in resources rose mainly on account of the ever-growing non-plan expenditure and it was possible to maintain the outlay on the state plan schemes in the 1980-85 period

(continued on page 13)

Reducing population growth to zero by A.D. 2000

No. 1
X
Mohan Dharia

Our food consumption is too low. All developed and most of the developing countries consume far more. The USSR needs more than 250 million tonnes to feed their population of 25 crores, while our foodgrains production of 150 million tonnes seems surplus for 75 crores of our people! It is because of our abject poverty and lowest purchasing power. Just imagine, what will happen to our country and our people if we do not halt our growth of population. It will never be possible to feed the growing millions and to abolish poverty which are the most serious challenges of the year 2000 and the next century, says the former Union Minister for Planning, Shri Dharia.

THE APPROACH PAPER to the 7th Five Year Plan (1985—90) envisages growth rate of population of 1.8 per cent per annum. It is estimated that the population of India in the terminal year of the 7th Plan will be around 803 million. This rate of growth is of the same order as was adopted in the exercises preceding the formulation of the 6th Plan. At the time of the preparation of the 6th Five Year Plan the Working Group on Population Policy set up by the Planning Commission had recommended the adoption of the long-term demographic goal of reducing the net reproduction rate (NRR) to 1 per cent by the year 1995 for the country as a whole, and by 2000

in all the States, from the present level of 1.67 per cent. For achieving the same it was presumed that—

1. The average size of the family would be reduced from 4.2 children to 2.3 children in the year 2000.
2. The birth-rate per thousand population would be reduced from the level of 33 in 1978 to 21, in the year 2000.
3. The death-rate per thousand population would be reduced from about 14 in 1978 to 9, and the infant mortality rate would be reduced from 129 to 60 per thousand, or less.
4. As against 22 per cent of the eligible couples protected with family planning at present, 60 per cent would be protected, by the year 2000.
5. The population of India will be around 900 million by the turn of the century and will stabilise at 1200 million by the year A.D. 2050.

Basic causes behind poor performance

Lack of public enthusiasm and community participation, inadequacy of infrastructure for implementation, shortage of manpower, and failure of the Family Planning staff in generating motivation, have been shown as the main reasons for poor performance in the 6th Five Year Plan Document. The reasons, though valid, fail to analyse the basic causes of the failure. The death-rate, which was expected to come down to 10 per 1000 by 1975, still stands at 14 per 1000 by 1981. In a country, where 114 children out of every 1000 die immediately after birth, it is difficult to motivate either the people or the

staff, in effectively implementing the Family Planning Programme.

Religious customs and traditions

The poverty-stricken people feel that, additional hands may add to their incomes in due course, and they are reluctant to have Family Planning, which itself is a major reason of poverty. Religious customs and traditions are not prepared to accept the new change, as the birth of a child is treated as a gift of god, and to do anything against the natural course, is to displease god. Due to old concept of superiority of male over female, tubectomies or female sterilisations, though difficult compared to vasectomies, are being preferred, and 4/5th of the one million sterilisations performed during 1979-80 were tubectomies or female sterilisations. To educate the people in Family Planning is yet treated as something obscene, and effort is made to keep the youngsters miles away from this important vital knowledge. Early marriages, even contravening the Sharada Act, are being performed with all fanfare, and no action is taken as the officers coming from the same strata of society, do not feel anything about it. Even after 38 years of Independence, openly flouting the Sharada Act, more than 15,000 child-marriages are solemnised on one auspicious day of Vaisakhi in States like Rajasthan. When ministers and officers are themselves a party to such illegal acts, who could take any action—or prevent the illegal actions being performed on a massive scale?

Fight on a war-footing

It is primarily essential to generate social and economic conditions, so that the people opt for fewer children. This calls for proper integration of Health, Nutrition, Family Planning, and massive programme of educating the masses. Forgetting this aspect, though outlays for Family Planning have gone up, they are considerably low for general Health and Nutrition. Unless the people are assured of good health and long life, particularly to the newly born ones, it will not be possible to motivate them to opt for Family Planning. Ignorance, poverty, religious customs and traditions and lack of proper health care, nutrition and also of national determination are the most important and vital reasons for the poor performance of Family Planning in the country. It is high time to involve the whole of the country by inculcating a fervour of patriotism against the menace of huge population, and to fight against it on a war-footing.

Fatal blow to programme of family planning

With huge population of over 75 crores, and uncontrolled growth-rate, it is impossible to render social and economic justice particularly to the weaker and poorer sections of the society. Family Planning had started picking up in the country. However, excesses during emergency, and the complacent approach after

emergency have done greatest harm to the movement. Insistence by some of us in the Janata Government to continue 'Family Planning' programmes without excesses was not only disapproved, but the false populist urge went to the extent of dropping the concept of 'Family Planning' and was substituted by 'Family Welfare'. This greed for securing votes in power-oriented politics has given a fatal blow to this national programme of vital importance.

Compulsory family planning unacceptable!

No political party is prepared to speak today of certain compulsions for Family Planning, as it may antagonise or displease Hindus, Muslims, Christians, and perhaps all sections of voters. They are therefore, cautiously harping on voluntary measures. Unless the Family Planning Programme is lifted above the petty-political and party considerations, there are rare chances of controlling the population-growth. Due to religious and social customs, orthodox minds, ineffective machinery, non-committal bureaucracy and public lethargy, it has become difficult to check the ever-increasing population. I personally believe that in the interest of the our country, compulsory Family Planning after two issues for people of all castes, creeds and religions is inescapable and inevitable. It is likely that some fanatics and selfish elements may not accept compulsory Family Planning. However, time has come when compulsory Family Planning after two issues must be made statutory and obligatory without any fear or favour. Here, I would like to clarify that when I plead for Compulsory Family Planning, I want Compulsory Family Planning through legislation enacted by the elected representatives of the people, in a democratic way, I do distinguish between coercive methods and compulsory Family Planning having parliamentary sanctions. While T. R. Malthus propagated for controlled population by preventive checks, Malthusians emphasise usage of artificial methods of birth control. Those, who insist for Compulsory Family Planning like myself, are these days branded as Neo-Malthusians. Let us not enter into that controversy. The issues confronting the country are very clear. I am aware that, my emphasis on Compulsory Family Planning, though valid and sound, is not acceptable to the political and social leadership of the country for obvious reasons.

It is clear that the programmes of Family Planning through voluntary methods will never be able to reach the targets, if left to the voluntary choice of the people. Under the circumstances the only course left is to introduce such economic sanctions, that will deter the people from having more than two issues. Economic sanctions approved by Parliament coupled with lucrative incentives may be able to strike a neat balance in between the Compulsory and Voluntary Family Planning. In this regard I would like to suggest the following Economic Sanctions and Incentives, through suitable enactments, to be applied to all

the citizens irrespective of their castes, creeds, and religions :—

Economic sanctions

1. One who seeks service in Public, Private, Government, semi-Government sectors, must give an undertaking that, he/she will not have more than two issues, and if that couple gets a third issue, the service will stand automatically terminated.
2. Those who are actually in service, and have more than two issues, must either get operated or should take adequate care, so that they do not have additional issues. Otherwise services of such officers or employees in any sector will automatically stand terminated.
3. Every person seeking loans from Nationalised, Commercial, Co-operative Banks, or even from private money lenders, for industrial, agricultural, commercial or private purpose will have to accept similar conditions, and the lending bodies or persons will be responsible for getting them implemented.
4. Those who want to enjoy facilities like ration-cards for subsidised foodgrains, edible oils, sugar, cloth, kerosene, etc. or subsidised fertilisers, pesticides, seeds, milk etc. should be under an obligation to fulfil similar conditions.
5. Those who seek protection of Rent Act or accommodation in Government, co-operative, or private housing, will have to accept similar conditions.
6. Parents seeking admission for their children in schools, colleges and other public or private educational institutions should be under an obligation to fulfil similar conditions.
7. Those who want to avail of the medical facilities from hospitals or medical centres belonging to government, semi-government or public trusts will have to accept similar conditions.
8. Those who want licences under the Shop Act, Factory Act, Vehicles Act, Industrial Act, etc. must accept similar conditions and obligations.
9. Those who seek water, electricity, telephone, gas connections for household, industrial and agricultural purposes, must accept similar conditions.
10. Those who seek elections to Parliament, State Legislatures, Municipal Bodies, Zilla Parishads, Panchayat Samities, Gram Panchayats, or to Educational, Cultural or Co-operative

Bodies, must accept similar conditions. Failure of which should be treated as a disqualification, and the posts, to which such persons are elected should stand automatically vacated.

Necessary enactments be passed for the implementation of the above referred economic sanctions, and heavy penalties and punishments be imposed on those, who do not abide by them. Along with them, the persons, or officers, or bodies in charge of the establishment, industries or offices should also be held responsible and should be made liable for penalties or punishments.

Incentives

Coupled with the Economic Sanctions, I may suggest the following Incentives :

1. All couples getting sterilised after one or two issues, should be given a cash reward of Rs. 2,000/-.
2. All couples getting sterilised after two issues should be entitled to have free education for their children right from pre-primary to S.S.C. examination.
3. Any couple undertaking to have not more than one issue should be given topmost priority in services, government housing, entrance for their child in schools, or while issuing telephones, electricity, gas and similar other facilities. The child should be entitled to get free education from pre-primary to graduation.
4. To popularise 'one Couple-one Child' programme, a couple undertaking to have only one issue should be freely insured for Rs. 10,000 after getting operated and the amount with bonus should be fully paid to the couple, or their assignee, after a period of twenty years.
5. A couple getting married, after 25 years of age in case of male, and 21 years in case of female, willing to undertake that they will not have more than two issues be given priority in employment and accommodation in government or co-operative housing.
6. Schools and educational institutions having 50 per cent or more girl-students, should be given 25 per cent additional grant over and above existing grants given by the Government or Governments. Similarly, educational institutions showing 10 per cent addition of girl-students every year should also be encouraged on similar basis.
7. Such State Governments, Zilla Parishads, Panchayat Samities, Municipal Corporations,

Municipalities, and Gram Panchayats, that bring down the birth rate by 1.5 per thousand, per year, so as to reach the target to zero growth rate by the year 2000, should be given sumptuous direct central assistance, by modifying the present formula of assistance.

8. All Governments, Local Self Governments, educational institutions voluntary organisations, Trade Unions, artists and their troupes and the political parties should be involved in a massive campaign for Family Planning. Radio, T.V., Press, Cinema houses should be asked to join this campaign as a national movement. Necessary equipment and literature should be made available for the purpose.
9. Income-tax relief of 33 per cent should be given to those, who donate for this national cause.
10. Private medical practitioners, performing sterilisation operations should be given due incentives on the basis of the operations carried out every year.

While providing above referred incentives, proper penalties may be imposed against those, who abuse the same.

Our resolve zero NRR by 2000

The present long term demographic goal of reducing the NRR to 1 by 1995, and to reach Zero NRR by 2050, when the population of the country will be stabilised at 120 crores, as approved by the Planning Commission and the Government deserves immediate reconsideration and must be changed. The country must resolve to achieve Zero NRR by the year 2000 and should modify the plan programmes accordingly. It has been projected that, India will be a country having the largest population in the world, if the present growth of population is not effectively brought down. Without entering into any comparison with countries like China all political parties and social organisations must treat the programme of Family Planning, as a national programme of highest importance and come together to fight this aggression.

Failure will never be forgiven

The destiny of the country has been greatly endangered by the explosive growth of population. To meet this unprecedented challenge; there is no other option but to adopt and rigorously implement unorthodox, imaginative and farsighted measures with all strength at our command. Here is an occasion, when this vital programme must be lifted high above political considerations without any delay. The Prime Minister and the Central Government should come forward, to provide the required historical lead and irrespective of any differences, all opposition parties should respond

Yojana, September 1—15, 1985

with the same spirit. It is possible to evolve a national consensus on the ways, means and targets and to prepare a suitable national programme of action, by involving the whole of the country. Any failure on the part of our political and social leadership, in providing the required dynamic initiative in effectively controlling the population at this crucial hour, will never be forgiven by the coming generations! □

Export targets in 1985-86

EXPORT TARGET FOR the year 1985-86 is fixed at Rs. 11736 crore. The commodity groups whose exports are expected to be higher during 1985-86 as compared to 1984-85 are: coffee, cereals, tobacco unmanufactured, spices, cashew kernels oil meals, shellac, processed foods, marine products, iron ore, manganese ore, leather & leather goods, sports goods, gems and jewellery, chemicals and allied products, engineering goods, textiles including coir and jute manufactures, handicrafts including woollen manufactures and raw cotton. India's export basket is sufficiently diversified. The new products continuously emerge from within these broad commodity groups.

Cheaper cloth production up

IN CONSONANCE WITH the Textile Policy 1985, the Government has decided to raise the target of controlled cloth and Janata cloth production from 650 million sq. metres to 700 million sq. metres during the current financial year.

This additional 50 million sq. metres will be allocated to the production of Janata Cloth in the handloom sector. This measure will go a long way in giving increased employment to handloom weavers all over country and in providing a larger quantum of cloth at affordable prices to the poorer sections of the population.

(Continued from page 9)

at a satisfactory level only with liberal doses of Central assistance and the use of luxurious overdrafts. However, the current approach is that the plan effort should be on the basis of resources available and there would even be a monitoring of expenditure on schemes in the core sector with a view to ensuring that Central assistance is not diverted for other purposes.

In sum, the decision to ban overdrafts for states is exactly due to the fact that Central assistance for plan schemes have been stepped up sizeably in the current financial year and the states also will be allowed a larger share of market borrowing. Though it remains to be seen whether the new dispensation will work smoothly, the fact cannot be concealed that the need for greater fiscal prudence at the level of states is a desirable desideratum for maintaining the momentum of the planned growth of the country in the coming years. □

(Courtesy : All India Radio)

Ra. 75/-

Family welfare programme has to become a faith with people if we want to improve their physical and social quality of life, says the author. Its focus should be rural areas where it is yet to claim a breakthrough. For this, adequate medical personnel have to be made available to serve in the remotest corners of the country. The author laments that medical personnel think it a matter of dishonour to serve in rural areas. High Central and state officials should try to change this attitude by setting an example themselves.

THE PROBLEM OF rapid population growth is felt most severely in India. This has created problems of unemployment, land fragmentation, increasing disparities of income, unplanned urban growth, ill health, malnutrition, etc. India covers only 2.4 per cent of the world's land area, approximately 15 per cent of the world's population and only 1.5 per cent of world's income. Population growth in India is not only due to an increase in the birth rate but it is due to the decline in the death rate in general and infant mortality in particular. Advancement in preventive and curative medicines controlled the epidemics and other infectious diseases. A steep growth of population is taking place in our country. This is a very serious and burning problem before us. In our country, population control or family planning programme had unfortunately been treated as a politically sensitive matter. At the time of inauguration of 22nd National Conference of Parliamentarians on population and development, our Prime Minister, Mr. Rajiv Gandhi, emphasised that the family planning programme should

What's wrong with rural family welfare?

Chandra Pal Singh

not be politicised and reduced to a parochial level. The family planning programme in India has come a long way since it was introduced in 1951. It is gradually progressing from promotion of simple contraceptive devices to the integration with the strategy of national development. The family is a basic unit of development and family welfare should be considered as an essential input in it. Family welfare programme is not an isolated programme for birth control, but now it aims at achieving the higher goal of improving the physical and social quality of life of the countrymen, through the expansion of maternal and child health services. In fact, it is trying to improve the health base of the community. Mainly, our planners are trying for allround socio-economic development of the society.

Focus on rural areas

A major question before us is how to attain our goal. Our country is dominated by approximately 80 per cent rural population. Most of the rural population is still illiterate and careless towards health and health services provided by government in rural areas. Medical officers posted in primary health centres located in rural settings should provide their services to the villagers. Primary Health Centres staff should try for creating adequate motivation among the rural people on consideration of family welfare and providing all the necessary services and devices. Large scale mass education and media campaigns should be launched through television, All India Radio, newspapers, posters, wall paintings, pamphlets, bus-train boards, postal stationeries and other cards, etc. for educating and motivating the target couples in rural as well as urban areas. But actually field scene is different. Medical personnel are not yet available in adequate number and skill in the rural areas. Most of the medical personnel try to exploit the villagers in many ways. There are so many medical and paramedical

staff but only a few have service attitude towards villagers. Some medical personnel think that it is a matter of dishonour to serve in rural areas; but this is the reality what I have observed during my field work in three districts each in U.P. and M.P. in connection with a W.H.O.-funded project conducted by the National Institute of Health and Family Welfare, New Delhi. Only the P.H.C. staff is not responsible for this, but a deep-rooted economic corruption at various stages from top to bottom in health organisation support the above activities. We should avoid all the monetary give-and-take at various stages. If our higher officials, i.e., district and state level official have concern for this and can present an ideal before subordinates, only then we can achieve our goal.

Health education, a must

Health education is of crucial importance in promoting family welfare services in the country. There should be awareness and consciousness about health in every individual. Only then our programmes will be fruitful for them. If the individual is not conscious about health and does not himself make the necessary efforts to be healthy, no other agency can provide him proper health. We know that an individual is not the object but the subject of health. Health personnel should give emphasis on health education. Information related to health should reach rural people. Health functionaries should try to teach certain skills to the rural people in health care. Later on it will be part of villagers life. For communicating information and teaching skills, they can use so many audio-visual aids provided by the government. It will make their activities more effective. A lot of health education material, i.e., boards, charts, posters, booklets, pamphlets, etc. are being sent to all the field workers and sub centres but only a few medical officers take care in displaying them in time. Most often the stuff remains lying in one corner of the storeroom.

Health education starts from very beginning in the lap of mother. In childhood, the responsibility of health education falls on mothers. So we should try to educate mothers more and more in health care. At different stages of general education, there should be curriculum for health education. Health education should be a part of adult and continuing education programme also. After all, we can say that we can't think of health and family welfare without proper health education and health-consciousness.

Why small families ?

Family planning programme is based on the acceptance of the small family norm by the people. First we should tell them—Why small family? And later on tell them—How small family? Mainly in rural areas, certain religious and fundamental beliefs are encouraging and giving sanction for large family norm and are supported by politico-social conditions. With the help of extension and motivation approaches, we

should encourage the people against these beliefs. Another major problem in poor families is that the children are economic assets. We should think how this situation can be changed. Most of the parents, even highly-educated one also, have desire for two sons, in some cases one son. This often results in large family.

Government is expanding family welfare programme more and more but the villagers feel that this is not their programme. It indicates that we are failing in communicating the real purpose and philosophy of the programme among villagers. When we succeed in generating enthusiasm and belief among the rural poor only then we can say that family planning must become a movement of the people, by the people, for the people as our late Prime Minister Mrs. Indira Gandhi said many a time.

According to the 1981 census the country's population reached approximately 685 millions. Thirty years ago it was approximately 361 million. It is estimated that it will rise further to 950 million by the end of this century. Birth rate which was around 42 per thousand in 1951 came down to about 33 per thousand in 1981. Our goal is to attain a birth rate of 21 and a death rate of 9 per thousand by A.D. 2000. It will result in annual growth rate of 1.2 per cent which is considered essential to stabilise the population of India in the coming fifty years. Couple protection level reached 22.7 per cent in 1980-81, 23.7 per cent in 1981-82, 25.9 per cent in 1982-83, and 29.0 per cent in 1983-84. Target for couple protection is 60 per cent by 2000 A.D. It is estimated that since the inception of the family planning programme in India a total of 55 millions births have been averted.

Health for all

The government has pledged full support for the implementation of the health and family welfare programme to ensure "Health for All" by the end of this century. The new government reiterated its intent to implement the family welfare programme, giving emphasis on the slogan 'Stop with Two'. In a booklet published by the Union Ministry of Health and Family Welfare, the following points are emphasised for serious thinking to countrymen :

Around 70 per cent of families live in one room tenements. The area of land for cultivation in the villages and the open land in the cities are getting reduced every year for building bricks, houses, roads, etc. Our forests are disappearing at the rate of a million hectares per year. In 1951 the per capita consumption of pulses (protein) was about 64 grams. It has come down to about 35 grams. We have to import edible oils valued at Rs. 1,000 crores every year. Half of the children presently in the age group of 11—14, do not attend any school yet; the schools are overcrowded and the teaching standards are not satisfactory. The present very high growth in our population is almost

(Continued on page 19)

Res/20/0

International Youth Year

The Year 1985 has been declared as the 'International Year of the Youth.' The United Nations has drawn the world's attention to the growing and serious crisis that confront millions of youth and children in the world. This apart, it recognises the importance of direct participation of youth in sharing the future of humanity and the necessity of meeting the needs and aspirations of youth. The author here feels that efforts are needed at various levels to acknowledge the conditions that confront youth realistically and with determination, to ensure that the year proves a success.

YOUTH IS A YOUNG MAN in heart, vibrating with zeal, drive, innovation and active at all times. But, by and large, it is defined in terms of age. The youth-year has been defined by the United Nations as the period between 15 and 25 years. But looking at the phases of transition, it is too restrictive and does not cover fully. For the purpose of our study, we have widened the scope and taken youths who are within the age range of 15 to 35 years.

The world's youth population was 915 million in 1985 and by A.D. 2000 it will be 1200 million—an increase of 31.1 per cent. The youth population of three major regions of the world—Asia, Africa and Latin America—will almost double by A.D. 2000. It is estimated that about 300-400 million young people

Meeting aspirations of youth !

Dr. V. R. M. Desai

would be in search of jobs in developing countries alone, a majority of whom are poor and under-privileged and have little chance of education and rewarding jobs.

More than 300 million youth—"the world's best resource"—are unable to find jobs. Lack of access to education and high rates of school drop-outs result in widespread illiteracy, particularly among girls. Violence, drugs, crime, prostitution and suicides trap more young and poor people than ever before. A recent study revealed that the key words in the experience of young people in the present decade are probably 'scarcity', 'unemployment', 'underemployment', 'ill-employment', 'anxiety', 'defensiveness', 'subsistence' and even 'survival', itself.

The potential untapped !

Particular categories of youth, such as women, rural youth, urban youth in marginal groups, disabled youth and young refugees are especially vulnerable to the current social problems which are compounded by rapid economic and technological change. The picture that emerges is of youthful energy thwarted and rejected—of youthful potential wasted—back-firing on the very society that time and again, neglects to provide youth with the understanding support, guidance and opportunity so crucial to them and in the long run, to all of society.

According to the 1981 Census, there were 21.45 crores of youth in India, comprising 12.13 crores in the age group of 15 and 24 and 9.32 crores in the age group of 25 and 34. Again, 15.68 crores or 73.1 per cent of youths lived in rural areas and 5.77 crores—26.9 per cent in urban areas. Youths accounted for 31.3 per cent of the total population. What is more, 59.2 per cent (12.70 crores) of the youths were

illiterate. Illiteracy was highest among the women and in rural areas. On the present reckoning the youth population in India is expected to increase to 312.8 million by A.D. 2000 accounting for 26 per cent of total world youth population.

Adequacy of educational training policies is often questioned because of rising rates of unemployment, migration, etc. The problem of women is still serious. Incidence of early school leaving among females is high. Existing curricula provide female students with relatively little opportunity to participate in development.

Rural youth

Rural youth with limited opportunities represent large and restless elements. These youth can respond positively to agricultural employment if it provides them adequate remunerative income, but social and cultural pressures against such employment operate strongly. Young people in rural, semi-urban and shanty town areas do not have necessary knowledge to assume responsibility for their own health and well-being. Because of their position as new entrants into major areas of life, youth are often affected by infringements on self-determination.

The main concern thus would be to concentrate on problems encountered in integrating youth in the overall life of society. The situation of youth is intimately linked to development process and any long term economic downtrend may have adverse effects. Emphasis needs to be placed on increasing quality and quantity of opportunities for youth for meaningful participation in development. Youth participation should be considered as an integral part of the development process. If not, their social disfunction becomes a norm and not an exception.

Theme of the IYY

The theme of the year is participation, development and peace. Participation implies that a person is recognised as potentially able to judge and decide on matters which concern him, is aware of this opportunity, has access to means necessary for taking advantage of information, guidance, structure, etc., and feels satisfied that one's contributions are recognised especially in the decision making process. Concept of development as it relates to youth refers to growth of total personality of an individual on the one hand and total entity of local and national development on the other. It refers to a dynamic process of improving the quality of life at the grassroots level. Peace is an essential pre-requisite of life and could be promoted if conditions are created to enhance international understanding and co-operation and individual rights and national sovereignty are respected. It is hoped that the year will stimulate and raise young people's aspirations and ability to participate in all aspects of life—economic, political, social and cultural.

Plan of action

Youth are the pillars of the nation, the strength on which the country can take off. It is, therefore, necessary to increase the strength and the vitality of the youths in the country. Youth play a very important role in all kinds of economic activity—from agriculture and rural development to the defence of the country. The plan of action contains specific proposals in the areas of legislation, education and training, employment and economic activities, health, population, social services, environment and housing. The objective is to make everybody aware of the importance of nurturing this human resource, and to sensitize public opinion towards solving the problems of youth, and promoting their participation in social and economic development.

We cannot address the problems that confront today's youth, appraise their situation, promote policies and define actions, without taking a look at the all-embracing nature of their development, their care and upbringing before and through adolescence. The organisation sees IYY as a powerful means of saving and improving millions of child-lives by mobilising the vigour, imagination and steadfastness of young people in the following ways:

1. By making use of youth in cooperation with national governments as instruments of social change—particularly in rural areas—to benefit children and mothers. Youth leaders may be encouraged to play a significant role in mobilising the support of the community.
2. By actively enlisting the help and co-operation of youth organisations and youth leaders in the planning and implementation of all programmes relating to youths.
3. Encouraging and initiating programmes to improve the physical and mental capabilities of girls and young women constituting one half of the youth population.

Whether individually or collectively through youth organisations, youth can be very effective in mobilising community-based action.

Role of education

Education and technological use are linked up with each other. In the present day world of knowledge boom and scientific and technological explosion, the contribution of education to the total development process can hardly be underestimated. In fact education of youth is a prerequisite for any technological use by them for reshaping and transforming the rural communities from the state of deprivation to prosperity and from prolonged stagnation to sustained development. Education, knowledge and skill add to one's earning capacity and youth education in the developing countries is likely to have a significant effect on pro-

moting development and quality of life on following counts :

- (i) Today education constitutes the basic input for the acquisition of skills and training, attainment of information about work opportunities and job openings. Thus education will help in promoting participation of youth in economic activities and add to their productivity.
- 13
(ii) Education will also help youth organise themselves for their rights and thus enable them to have an easy access to the technology that they can make use of.
- (iii) Youth's education encourages small family norms as education per se delays marriage thus reducing fertility and strengthening family planning. This will indirectly help women have more time away from the household job and devote it to the learning of skills.
- (iv) Youth's education itself is a sort of training in the use of technology if education is vocationalised. Education and technology thus go together. In developing countries, 14 youth predominate in the agricultural sector and are moving into non-agricultural activities and service sector as well. In a relatively developed country like India, there is a more marked shift towards the industrial and services sectors. But, by and large, youth in developing countries remain concentrated in a limited number of traditional and non-traditional occupations which require few qualifications and are of low productivity. The employment pattern for youth is changing, owing to economic expansion, but many youth do not yet know how to take advantage of the new employment opportunities because of the lack of training, proper vocational guidance and general information. 15 There is an urgent need to help rural youth to overcome the many problems they face, such as social isolation, lack of opportunities for economic and social advancement. In addition, training given to rural youth is not adapted to the needs and realities of rural life. For instance, white-collar education tends to militate against youths working in rural environment and fails to inculcate in them a sense of dignity of labour of all kinds. As such, one of the most important objectives should be that of changing the youths attitudes and the training of the skills so that they can increase their own capacities to be effective economic agents. 16 Projects should be initiated that impart to the women the economic benefits. They provide them with a sense of independence as well as the

satisfaction of contributing to the resources of the family.

Youth and the Sixth Plan

Youth in the country constitutes a vast human resource which is characterised by idealism and zeal, active habits, positive attitude towards service to others, an urge to be self-reliant and a willingness to explore newer and non-conformist approaches to societal problems. If properly harnessed and utilised, the youth could therefore be a powerful instrument of social, cultural and economic change. There are four major aspects of youth to be considered in a co-ordinated manner, viz., development, mobilisation, organisation and utilisation, to promote their involvement and participation in the nation-building activities. The general approach to, and details of, an integrated strategy for youth programmes need to be considered in a wider perspective than the educational system because the problems of youth relate to more profound and broader issues like personality development, transition from childhood into adulthood, gainful employment, suitable development of their spirit for adventure and opportunities for community service.

National youth policy

The guiding principles of the National Youth Policy aimed at the integrated development of the youth. The salient features of the Policy are : (a) to provide greater equality of opportunity to all among the youth, (b) to liberate their talent which is now lost to the society, (c) to ensure a higher average level of relevant basic skills and education through work and service, (d) to enable a smooth transition of the youth from childhood through adolescence to adulthood, as well from schools to the world of work and service, and (e) to channelise their energies, idealism and healthy aspirations towards developmental tasks, projects and programmes.

Institutional network

Institutions like the Nehru Yuvak Kendras, Yuvak Mandals and similar bodies linked to the Gram Sabhas would be utilised as the base of operations at the district level and provided with professional inputs and support for the tasks to be done. They would also have an inbuilt mechanism for feed back assimilation of new concepts and ideas and to extend activities in keeping with the changing areas development perspectives. The National Service Scheme for the student youth would be reviewed in order to make provision for real participation of students in development programmes, availing of the proposed non-formal manning structures envisaged in the Sixth Plan. These would also be coalesced with programmes monitored with reference to specific benefits and targets pertaining to the participating youth. There is also a need to decentralise the efforts and to set them in the context of local environmental conditions and needs as perceived by,

and acceptable to the community in general and the youth in particular.

Approach in the Seventh Plan

One of the primary tasks of the Seventh Plan must be the harnessing of the country's abundant youth resources and improving their capabilities for development with equity. This is how the programmes for alleviation of poverty, reduction of economic and social inequalities and improving productivity can be integrated with development. The strategies and programmes for education, communication, training and organisation should be such as to release the latent power of women and youth as also economically weaker population groups, so that they can make an increasing contribution to the socio-economic development of the country. An important aspect of human youth resource development is to match manpower planning with educational planning to avoid imbalances between the supply and demand in regard to trained and educated manpower. Existing training programmes would thus need to be reviewed. The traditional skills of rural artisans require upgradation in tune with the changing village culture and to improve their competitiveness. Training facilities will have to be organised for categories of manpower where critical shortages have been identified and in the formation of new skills which are emerging. Training in intermediate skills need to be undertaken on a large scale for the provision of various services, including primary health services. Policies to attract and develop the required manpower for the hill and tribal areas will have to be pursued with vigour.

The harnessing of the youth energy for productive purpose will go a long way in maximisation of productive employment, alleviation of poverty and reduction in inter-class, inter-regional and rural-urban disparities, increase in food production, revolution in industrial production, higher level of social consumption, particularly in education, health, nutrition, sanitation and housing, adoption of a small family ecological and environmental conservation and eradication of social evils like dowry, untouchability, etc. Youth is going to play a catalytic role in the integrated and harmonious growth of the society and usher into the 21st century. 2,400 words

(Continued from page 15)

nullifying all our efforts to improve our lives. In fact, the standards in many spheres have come down, resulting in unhappiness, tension and conflicts.

The above points should be a matter of concern for all—planners, executives, politicians and the people. But one thing is quite clear that for a balanced and faster development of all regions—urban, rural and tribal—there has to be a balanced growth of population. For this family welfare norms *has to become* a faith with the people rather than a mere official programme. 1,500 words

Yojana, September 1—15, 1985

Younger couples with fewer children limit family

A SURVEY UNDERTAKEN by the Ministry of Health and Family Welfare has revealed that more and more younger couples with lesser number of children are coming forward to accept one or the other method of family planning technique.

The Department of Family Welfare has been carrying out on an annual analysis of family planning acceptors by number of living children since 1977-78. The present study gives an analysis of the number of living children of acceptors of vasectomy, tubectomy, and I.D.U. during the year 1982-83.

The mean number of living children to vasectomy and tubectomy acceptors has declined from 3.5 and 3.7 in 1979-80 to 3.4 and 3.6 respectively in 1983-84.

The percentage of acceptors with 3 or less living children has increased from 59.5 per cent in 1979-80 to 62 per cent in 1983-84 in case of vasectomy and from 52.3 per cent to 54.5 per cent in case of tubectomy.

The mean number of living children IUD acceptors at the time of acceptance has declined significantly from 2.7 in 1979-80 to 2.3 in 1983-84. The percentage of IUD acceptors with 2 or less living children registered a significant increase from 50.7 per cent in 1979-80 to 63.4 per cent in 1983-84.

During 1982-83 the proportion of vasectomy acceptors with 3 or less living children was highest in Kerala (80 per cent) followed by Assam (75 per cent) and Andhra Pradesh (72 per cent).

In 1982-83 the proportion of tubectomy acceptors with three or less living children was highest in Kerala (77.0 per cent) followed by Andhra Pradesh (69 per cent) and Tamil Nadu (65 per cent).

During 1982-83, the proportion of IUD acceptors with two or less living children was highest in Maharashtra (78 per cent). Next in order were Kerala (74 per cent) Himachal Pradesh (68 per cent) and Gujarat (67 per cent).

The Department of Family Welfare collects data on various socio-demographic characteristics of family planning acceptors. The number of living children of family planning acceptors is an important parameter which determines the ultimate demographic impact of family planning programme. In general, acceptance by couples with less number of living children would imply higher demographic impact in terms of births averted. Further, the data helps in knowing the trends in the size of the family of family planning acceptors.

37200 C-25/CPK
Rs. 160/-

International Youth Year

Rs. 80/2000

Youth has been from time immemorial a topic of angered, anguished and inconclusive discussion. More recently it has moved into place of primacy in conversation, news media and publications. Youth are the growth points of a society, and as has been said, they are the leaders of tomorrow. They are the best resource in national development. All the aspirations of the people, inhabiting the country, rest on the latent potentialities of our youth. The authors say that if the youth are properly educated, trained and inspired, their vitality and creativity could be aptly utilized for national reconstruction more effectively and efficiently.

THE POTENTIAL OF YOUTH, if it is to be properly tapped, requires understanding and support. Youth is a very special time with special challenges and is a period during which the body, personality, intellect and social attitudes are developing erratically usually independently of one another and frequently explosively. It is a time of life that is full of potential and problems. It is an age characterized by impatience as well as curiosity and by a strong desire to leave childhood behind and play an independent role. It, therefore, becomes imperative that youth are brought up in an environment which is stimulating and sufficiently challenging for them to be able to explore their potentialities and build up a satisfying future.

And solving their problems !

(Miss) N.V. Rajeswari and
M. Hari

The adolescents differ physiologically and psychologically from children and adults. As such, youth is suffering from loss of identity. Thomas Forstenzer points out that very little has been done in the world to try to understand, let alone do something about, the problems of youth. It is, therefore, necessary to go into the needs and problems of our young people with a view to seeking solutions to these problems and of guiding the youth so that they may make smooth adjustments to change which they are encountering within their own growing self as well as in the environment around them.

Definition

There are many parts of the world where 'youth' is almost an unknown concept. Many children are abruptly and harshly catapulted into adulthood at a very early age. Youth is a twentieth century phenomenon in one sense atleast in the Asian world and more especially in India. Ideally the youth years are vital transition from childhood to adulthood. United Nations identifies the people in the 15—24 age group as 'youth' and it constitutes a substantial and growing proportion of population.

Situation of youth

In 1975 there were approximately 738 million people between 15 and 24 by the year 2000, when today's children will have become youth, it is estimated that there will be 1,180 million, an increase of 60 per cent worldwide. While youth population of the more developed regions will increase only 5 per cent in that period, the same age group in the less developed regions will increase by 80 per cent. Thus the challenge is greatest in developing countries. In 1985 there were approximately 170 million, 627 million and 105 million young people and it will increase to 341 mil-

4 lion 679 million and 129 million by the year 2000 A.D. in Africa, Asia and Latin America respectively. The increasing numbers and demands of the world's youth pose some very serious problems that require special attention. Demographically, they are going to be a very significant next generation. Because they are just beginning their sexual and child bearing life, they hold the key to the future demographic patterns and the resultant quality of life.

Problems

5 The increase of the youth population is likely to have adverse effects on economic growth and social progress, aggravating most of the problems young people are facing today. In other words, the problems facing this age group are increasing as fast as its numbers. More than 300 million youths are unable to find jobs; lack of access to education and high rates of school drop outs result in widespread illiteracy, particularly among girls. Health care is inadequate, especially among rural youth. Drug and alcohol addiction, violence, scarcity, misplacement, anxiety, defensiveness, pragmatism, subsistence, crime and suicides involve more young people than ever before. In short, the majority of youth in the world are rural and poor and already parents, lacking sufficient food, safe water, proper housing, health care, basic education and access to employment. They are growing upon the edge of survival without any hope for a decent life, and nothing to enable them to contribute to the development of their community and country. Hence, the young people have lots of problems physical, emotional, social and ethical. This is a result of unsatisfied need response, complexes and consequences of copied western style of life, development, rural/urban drift lack of job opportunities and the world economic situation. All this seems to indicate that society is often failing to provide youth with sufficient guidance and opportunity.

Lack of educational facilities

7 The educational system is one of the various serious problems concerning youth. If we analyse the types of youth, we will find mainly two categories—one the student youth, the school goers and the other is non student youth including school drop outs. We have a problem of educational opportunities especially for the youth in rural areas, because most universities are located in the cities. The youth, if they are poor, cannot go to these centres of education. There are no proper facilities for their education in rural areas and in slums. Youth services are lacking for all. Hence they claim that they have no opportunities for education. The youth are given mainly a general education and professional education, no priority for vocational training not only at the high school level but at the university level. With large numbers of young people from rural and urban areas clamouring for higher education, there has been a woeful deterioration of

academic standards. In Western countries every school and college has counselling bureaus. In our country, this facility is woefully lacking. The education provided in schools and colleges is not job-oriented. Thus youth are facing problems of lack of education and training opportunities, the irrelevance of education of their future production participation in the development of their society. Many students are lost through education after primary years (and only a small percentage of the secondary school students enrol in higher education) as there are not enough schools, or due to their low economic status and to some extent to irrelevance of education for the kind of life they live. Teenage pregnancies leading to a large number of school dropouts or wastage of education among girls. Our educational system does not provide social learning in any organized manner. 9

Unemployment and under-employment

Youth unemployment, that most crippling road block on the bridge from childhood to adulthood, has reached unprecedented proportions in many industrial and developing countries, particularly in urban areas. And it has struck without discrimination at the educated, uneducated alike. Another important problem is the economic institution increasingly demands a high level of education attainment for participation in the labour force. An adolescent who lacks the basic educational qualifications, greatly disadvantages himself for participation in the labour force. This can be evident from the finding that the unemployed in many parts of the world include a very high percentage of young people—many of them illiterate, most of them unskilled and inexperienced. The dice are already heavily loaded against them. Underemployment is very high in developing countries. 10

Health problems

The youth everywhere and in developing countries like ours in particular are facing manifold problems in relation to health care opportunities. The health problems of youth consist of, in addition to purely medical problems, problems of medico-social nature like emotional problems, psychosexual problems, delinquent behaviour, addictions, etc. The following medical problems may be considered peculiar to this age group: 12
(i) disorders related to reproductive functions particularly in girls, (ii) communicable diseases especially sexually transmitted diseases, (iii) accidents and certain psychological disorders.

The age period 15—24 years is a period of sexual maturation and transition from childhood to adulthood and youth are further under great emotional, academic and vocational pressures. Hence, maladjustment resulting in psychological disorders, drug addiction, smoking and alcoholism are common in youth. The drug and alcohol taking among youths leading to vandalism and disrespect for elders and authority. 13

Drug addictions

14 During the last decade we have seen a marked increase in the use of psychoactive or mind altering drugs in our society. Drug abuse and dependence may occur at any age, but seem to be most common during adolescence and young adulthood. Drug use by youth may serve a number of special motivations. There may be simple urge to rebel against adult constraints by using disapproved drugs, or simple curiosity, due to lack of love and attention of parents or emotional disturbances of varying degrees of severity and an inability to cope with the demands of living or to find a meaningful personal identity.

Smoking

15 Unwise life styles pose the biggest threats to young people's health. Innovative judgements, a tendency to show off, or the desire to keep up with their fellows—all these incline them towards risk taking behaviour. In many cases, the cigarette is the very first contact young people have with the life styles of adulthood. The percentage of teenage boys and girls smoking is 16 and 19 per cent in United States, 26 and 13 per cent in Papua New Guinea; 14 and 10 per cent in Nigeria; 9 and 6 per cent in India respectively and 46 per cent both for boys and girls in Uruguay.

Drinking (alcoholism)

Drinking in general has increased during the last 20 years, and this increase has been somewhat steeper among young people. In the urban areas it is usually the high school, college and university students who take to drink because it is fashionable. Road accidents, many of which are related to alcohol, are one of the major killers and producers of disability in young people. The young also may become violent due to this alcoholism.

Juvenile delinquency

16 Juvenile delinquency is one aspect of the maladjustment problems, chiefly due to lack of proper family support and educational and recreational facilities, youth turn to gang behaviour and juvenile crime particularly in urban areas. In other words broken homes, parental rejection and faulty discipline and unusual stresses, are mainly responsible for juvenile delinquency.

Crisis of identity

The major task facing youth today is a search for meaningful identity. The search for identity by an adolescent causes a great deal of stress on parents. The problem is further complicated by the constant testing of limits by the adolescents.

Attitude of the adults towards the youth

Most behaviour problems in adolescents are manifestations of an on-going conflict between adolescent

and family. The parental rejection is the major problem facing the youth today. Parental criticism of appearance, habits, dress and manners, parental strictness on spending habits and eating habits, parental teasing about friendships, parental comparison with sisters or brothers and with other children are some of the points that bother adolescents most about their parents. The most lacking communication in society is constant dialogue between the old and young. In nuclear families, often working parents have little time to spend with their growing children. The youth is compelled to turn to outside groups for understanding and advice. Radio, TV, movies, cheap literature and other media of communication retard his moral growth.

Poor housing facilities

Many youths live in housing which is both overcrowded and hazardous to their health. About 54 per cent, 43 per cent and 63 per cent of the youth live in housing with 3 or more persons per room in Pakistan, Guatemala and El Salvador respectively. Many youth live in housing without access to safe water. The percentage of this in rural and urban areas respectively is 28 per cent and 80 per cent in Pakistan, 11 per cent and 79 per cent in Guatemala; 31 per cent and 90 per cent in Bolivia, 23 per cent and 69 per cent in India, 4 per cent and 87 per cent in Uruguay and 28 per cent and 67 per cent in Ghana.

More responsibility at an early age

For many youths, particularly females, the responsibilities of adulthood come early. The average age of marriage for females is 13 years in Bangladesh, 16 years in Senegal, Pakistan and Nepal; 17 years in Indonesia; 18 years in Kenya and Jordan; and 19 years in Dominican Republic. The early age of marriage is a serious problem for girls leading young girls into adult responsibility without preparation. Added to this, dowry system is affecting young girls especially in India.

Sexuality and fertility

17 In many societies there are reports of increased premarital sexual activities among ever-younger people, declining ages of first coitus, greater numbers of adolescent pregnancies, induced abortion, and sexually transmitted diseases and an increasing incidence of child birth among teenage mothers. In Jamaica, the problem of adolescent pregnancy is more acute, one in three births are to teenage mothers.

The solution

The major challenges of adolescence are completing the transition from childhood to adulthood, attaining mature attitudes in regard to sex, choosing a vocation and planning further education, searching for the meaning and purpose of life, and finding one's self.

21 We have not provided our youth with the services which they should have. We need to understand our young people. Youth have more amenities, more choices and greater opportunities but there is more competition, more tensions and more emotional problems. We have to have new insights about the needs of young person, better understanding of the dynamic nature of his personality and the problems of adjustments he faces in order to help him in his growth in self-realisation, in civic responsibility and in vocational and economic efficiency. Youth cannot be seen in isolation, many of the problems facing them are closely linked to their childhood. We cannot address the 22 problems that confront today's youth, appraise their situation, promote policies and define actions relating to them without taking a look at the all-embracing nature of their development, their care and upbringing before and through adolescence.

23 Despite increasing attention to youth research and programme development the record is far from consistent. So, we have to do more for them than it has and make a special effort to understand their problems. We have to tackle some of the common problems of youth such as youth unemployment, under-employment, issues of regional and international peace and security, issues of education and training, issues of family and community life, problems of equality for young women, health, housing and environment issues; crimes and problems resulting from migration.

The primary focus should be on activities at the national and local levels to "address and deal with specific needs and aspirations of youth".

A new education policy !

24 At present a new system of education is needed. So there should be strong educational reforms. For this we need a proper guidance system in our schools and colleges. High priority should be given to the education and to technical and vocational training. By extending the availability of education for all and compulsory education for children, we can improve the educational status of youth. Counselling and guidance services should find high priority in our educational planning. Special programmes for removal of illiteracy among non-student youth are to be taken up urgently.

Other Do's and Don'ts

It is important to take into account the less fortunate youths who are out of school. They could be reached in youth gatherings or homes and helped to gain back their confidence through, for example, adult literacy programmes or vocational training.

25 The employment opportunities should be increased and there should not be job discrimination against young workers. It is urgent that our young people are given guidance in choice of profession. The young people, and particularly the girls, need to be given an

opportunity to contribute to the manpower and economic resources that are so vital to their national development, and should not be burdened down with sexual and parental responsibilities before their appointed time.

Youth whether student or non-student youth require health education regarding nutrition, exercise, personal hygiene, disease prevention, etc., family life education and counselling services. Parents, teachers and social leaders have to play important part in these activities. 26

Promotion of sports and recreational services for youth in general are to be taken up. The co-operative effort of government and voluntary agencies is required for this purpose.

27 There should have to be more strict legislation reducing the availability of alcohol, especially for young people below certain ages, and it should be implemented more effectively. If age is characterized by caution, youth is characterized by a love or risk taking such impulses can be guided to take positive forms—sports, outdoor adventure, social experiments rather than towards the negative habits of cigarette smoking, abuse of alcohol or dependence on other drugs.

The youthful energy and drive can easily be misdirected into resentment or revolt, if parents and adults, in general do not find ways and means of communicating with teenagers and building up a constructive partnership. Well planned camps and youth services bring youth and adults close in a natural wholesome way. Through these are built bridges of understanding over which not only youth guidance can move along with ease, but friendships develop between the young and older adults.

28 There is a mounting need for imparting home and family life education to our young adults. Youth services should include sex and health education. The young people need accurate scientific information, professional counselling and social services as well as medical and health programmes specially designed to deal with their need for sexual expression. There is a need for better trained, adolescent-oriented service personnel who can relate to their young client's perceptions, fears, attitudes, and aspirations.

29 Marriage counselling is another neglected area of youth education. Education at college level should include an elective course on "The Home, Family and Responsible Parenthood" to help youth in this most important area of life.

Youth needs guidance for leisure time. Our youth have the utmost leisure and they have the most wasteful of time. Parents and educators should recognise this as an important guidance service that we need to provide for our youth to save them from wasting their time and talent.

(Continued on page 30)

Crop insurance, a need fulfilled !

No. 8. T. V. Satyanarayanan X

The author here says that with the introduction of crop insurance scheme from the Kharif this year, the country has entered the second phase of green revolution. It will not only provide a measure of financial support to the poor farmers, especially those cultivating dry lands, in the event of a crop failure, but also restore their credit worthiness.

THE NEWLY INTRODUCED comprehensive Crop Insurance Scheme should instil a greater sense of confidence into the farmer who faces innumerable risks and uncertainties from the time of sowing to that of harvest. Despite the growing strength of Indian agriculture, weather still plays a crucial role in the production of foodgrains. Drought, floods, cyclones and hailstorms take a heavy toll of crop, life year after year.

In the last financial year, for instance, 32 million hectares of cropped land in eight States was affected by drought. In the two previous years, the extent of damage done to crops by drought was even greater. In addition, floods, which are a regular visitor immediately after the rains, left a trail of death and devastation. It is estimated that 40 million hectares of land in the country are flood-prone. In the last three years, the fury of the swollen rivers caused extensive damage in cropped areas ranging from six to seven million hectares.

In all these natural calamities, the hardest hit are the small and marginal farmers, who, being economically weak, do not have the necessary risk-bearing capacity. The insurance scheme, which will be implemented from the current kharif season, is designed to

help particularly these weaker sections of the farming communities.

The scheme in all pervasive

The scheme is for farmers cultivating not only the principal crops of rice and wheat, but also millets, which are mainly dry-land crops and pulses and oilseeds, whose production needs a big boost. It will cover all farmers who are getting crop loans from cooperative credit institutions, commercial banks, and regional rural banks. The insurance coverage, in fact, is built into the crop loan. The General Insurance Corporation or G.I.C. will operate the scheme in collaboration with the State Governments.

According to the details worked out, the sum insured for each farmer will be 150 per cent of the loan disbursed to him during the insured season. Estimates show that the cost of cultivation of the five crops is nearly 150 per cent of the present scale of financing. It does not take into account the amount paid by the farmer as land revenue, interest on fixed assets, consumption loan required till the next harvest and the cost of his own labour. If all these costs and an element of consumption loan are included, the cost of cultivation would come to more than 200 per cent of the scale of financing.

The insurance premium will be two per cent of the sum insured for rice, wheat and millets, and one per cent of the sum insured for pulses and oilseeds. The insurance charge for payment to the GIC is to be deducted at the time of disbursement of loans. For small and marginal farmers, 50 per cent of the insurance charge will be subsidised by the Central Government and the State Governments concerned, both sharing the burden equally.

A separate fund for insurance

The GIC will set up a separate fund known as the Central Crop Insurance Fund. Its main functions

would be to receive crop insurance premiums from the financial institutions and issue policies, settle claims promptly, and collect and analyse statistical data received from states.

The states will set up a State Crop Insurance Fund, each with an initial capital of one to two crore rupees to be contributed equally by the State Government concerned and the Central Government. The size of the fund for each state would be worked out in consultation with the State Government, the Ministry of Finance, and the Ministry of Agriculture.

The states will set up a State Crop Insurance Fund, of 33-1/3 per cent. One of its functions would be to administer the inflow by way of premium and outflow by way of claims. Besides, it would ensure proper and adequate number of crop cutting experiments and send the yield data for each crop and each defined area to the G.I.C.

G.I.C., the leading insurer, will establish crop insurance cells at the state capitals, and maintain close liaison with the state governments, Reserve Bank of India, the National Bank of Agriculture and Rural Development, State Co-operative Banks, commercial banks and the regional rural banks.

Procedure for implementation

For this scheme, which is area-based, an elaborate procedure has been laid down for determination and payment of claims. On the basis of crop cutting experiments, if the actual average yield per hectare falls short of the guaranteed yield, all the insured farmers growing that crop in that area would be considered as having suffered yield losses. They would therefore be compensated. Within a month after crop cutting experiments of each insured crop, the State Government would be required to provide to GIC the data of yields for the defined area, together with the causes of the loss.

On receipt of yield data from the State Government, GIC will identify the defined areas and crops for which claims become payable. It will then determine the amount of claim payable to each bank in each defined area. GIC will then pay to the banks, and the designated nodal points of the commercial banks, its share of the claim directly. Simultaneously, it will provide full details and advise the State Crop Insurance Fund to enable it to settle its share of the claim. On getting the claim remittance from GIC and the State Crop Insurance Fund, the bank will credit the claim amount to the account of the loanee farmer.

Insurance against multiple risks

The scheme covers all risks which the farmer normally faces, barring war and nuclear hazards. The Central Government's liability on account of the subsidy to small and marginal farmers during 1985-86 is estimated at 4.50 crore rupees. An equal amount would be borne by the State Governments.

The Union Agriculture Ministry will periodically review the scheme, while the GIC will undertake a mid-term assessment of the financial results during the Seventh Plan. The scheme is expected to be extended to other major crops later after the review.

The scheme, in fact, is not entirely a new one. A pilot crop insurance scheme was first taken up in the country by GIC in collaboration with the State Governments six years ago. The present scheme is an improvement on the pilot scheme, which has now been withdrawn.

The scheme has come at an appropriate time as the country has entered the second phase of the Green Revolution, when greater emphasis is being laid on increasing production and productivity in the hitherto agriculturally backward areas. The risks and uncertainties for the farmer are much greater in these areas, which are mostly dry-lands. The scheme will not only provide a measure of financial support to the poor farmers cultivating these lands in the event of a crop failure, but also restore their credit-worthiness.

Need to accelerate tempo of production

No doubt, the latest technological advances in agriculture have considerably reduced the farmer's risks and imparted some stability to production. But much more needs to be done to accelerate the tempo of agricultural progress. New policy thrusts and bold initiatives are necessary for continuous improvement of our performance on the farm front. One of our major challenges is to raise the productivity of rainfed areas, whose production potential is very vast. Equally important is the task of raising the yields of pulses and oilseeds, since the output of both the crops is subject to large variations. Sustained improvements in yields and production of these crops should receive high priority.

Research and extension hold the key to raising the yield levels of various crops. The spread of technology at present is not uniform all over the country. As an expert group has recently noted, only better endowed areas have been able to adopt the technology. In other areas, it is necessary to propagate more location-specific and relevant technology, taking into account the environments in which the farmer takes decisions, particularly the risk factor. All this means a strong extension network and greater linkage between research and extension. In the coming years, we need a stronger and vigorous extension machinery for faster spread of research and popularising among the farming community beneficial schemes like crop insurance. □

B-3/26-c, Gata Housing Complex,
Pachmi Vihar,
New Delhi 110063.

2,000 words
Rs. 100/-

Harnessing tidal energy !

P. Bhattacharyya

Tidal energy, which has a vast potential in meeting the energy needs of the people living along the sea, remains to be tapped in the country. The author here highlights the efforts made by some countries, particularly, the Soviet Union, in harnessing this vast energy source. He feels, in India, to begin with, tidal power can be developed in the gulfs of Kutch and Cambay.

THE OCEAN COAST is washed twice every 24 hours and 50 minutes by the tides. At places its height reaches 16 m. The energy potential of the tides is estimated at 1.5-2 million MW and its part that can be harnessed, at 350,000 MW, resulting in 1,000,000 MWh of electricity a year. True, tidal energy cannot play a decisive role in the world energy scene as it can meet up to only 12 per cent of the present power consumption in the world. Yet its potential is not negligible either. Besides, high-capacity tidal power plants (TPP) can save many million tons of fuel and will not pollute nature.

The main problem, however, has been to find out the estuary of the river Rance in 1961—1967. It phenomenon, which remains unchanged over the passage of time.

First TPP in the world

The first TPP of the world was built in France on the estuary of the river Rance in 1961—1967. It produces only 240 MW of electricity. But its completion and operation proved in practice the very possibility of the commercial utilisation of tidal energy. But the TPP at Rance failed to become economically viable as the electricity generated there cost 2.5 times more than that produced at a comparable river power plants.

One of the main reasons of such high cost of the electricity produced at Rance TPP lay in its method of construction itself. Building a coffer-dam and pumping out the water from the site of the Rance plant cost much time and money.

The Kisalaya TPP

A TPP completed in 1963 (a year after that on the Rance) in the Bay of Kisalaya, the Barents Sea (the Soviet Union) was the second in the world. But the TPP in the Soviet Union considerably differed from the Rance TPP. It was erected using a floating construction method. This not only saved the huge cost, which the Rance TPP incurred on account of building a coffer-dam and pumping out the water but also made it possible to shift the construction work from the difficult terrain conditions of the coast to a nearby maritime industrial centre.

Floating method

The floating method is not something entirely new. It has been used in constructing underwater tunnels, piers, floating docks and in recent times in putting up oil platforms. However, it has never been used in building any hydropower projects. The reason is obvious. The power houses, exposed to heavy hydrostatic pressure, have been constructed from massive ferro-concrete blocks. In contrast, under the floating method, the power house has to be light enough to be floated.

The Kisalaya TPP, 36 by 18 by 15 cubic metres, was constructed from thin-walled ferro-concrete in a building dock near Murmansk, Kola Peninsula. After a 400 KW hydroelectric unit was installed, the power house was towed into the Bay of Kisalaya (100 km of Murmansk). There the Kingston valves were opened and the power house was placed on a foundation.

During the past 17 years of functioning the Kisalaya TPP has proved the correctness and reliability of its engineering practices. Today, the small TPP forms the basis for projects of big TPPS across the world.

A similar structure has been designed for large TPPs in the Bay of Fundy in Canada. It also forms the basis for a TPP project on the Severn in Britain. The floating method of building TPPs has come to be known abroad as the Soviet method.

Single-pool TPP

Soviet contribution to the TPP construction is not limited only to the floating method. As is known, in the earlier projects steady functioning of a TPP (tidal variation and the difference between the low and peak demand periods of consumption) had to be assured with expensive multi-pool system.

6 — But according to the Soviet concept, guaranteed but intermittent energy fluxes should be made part of complexes which would combine TPPs, river hydro-power station with large storage lakes and high-power thermal (atomic and coal-based) electric stations. This would make possible for the reversible generating units of a TPP to absorb the surplus night energy of thermal power stations by pumping water to the TPP storage pool and restore it to the system in day time when energy consumption increases. This makes the expensive multi-pool system unnecessary. The TPP, which contributes its energy to the sum total generated by the complex, can operate with one pool formed by blocking a large sea-gulf.

7 — The concept of single-pool TPPs forming part of interconnected power system has also gained world acceptance. Such is the design principle of the Canadian TPP projects at Cumberland (1.2 million kilowatts) and Cobequid (for million kilowatts). Construction of these TPPs has been found to be economically feasible:

Planning big TPP

The Soviet Union is planning to go for the TPPs in a big way. Surveys conducted by the Soviet specialists have demonstrated the possibility of building TPP in the White Sea and the Sea of Okhotsk where the tidal range is 9 and 13.5 m respectively. Pre-design developments and cadastral evaluations proved the possibility of erecting a TPP in the Mezen Bay of the White Sea. Its 92.7 km dam, crossing the bay between the capes of Abramov and Mikhailov mainly in shallows, will close off a water area of 2,3300 km². Two hundred floating four-set power generating units are to be installed in the deepest place of the dam, thus dispensing with the expensive underwater earth-removing operations. The dam will be formed by directed explosion of underground charges. The Mezen TPP is estimated to produce 15,000 MW or 50,000,000 MWh a year. A 8,000 MW TPP planned for the Gulf of Tugur, the sea of Okhotsk, will annually generate 24,000,000 MWh of electricity. The Tugur TPP barrage, 37-km-long, will close off a water area of 1,800 km. This sea's other gulf, Penzhina, is still more promising. With a 95-km-dam built here between the capes of Povorotnyi and Dalniy, a 100,000

MW TPP can be erected in the gulf, producing 300 million MWh. As an alternative to the above TPP, a 35,000 MW plant is conceived to be built here on the site between the capes of Sredniy and Vodopadnyi, with an annual output of 100 million MWh. 10

The sea is usually rough here with waves being 5-7 metres high. It is so bitterly cold in winter that the temperature often falls to 50°C below zero. For 200-odd days a year the sea is covered by ice-fields, about 2 m thick. The Penzhina power house will have the sloping ceiling reducing the impact of ice floes.

The Gidroyekt Institute together with the Pacific Oceanology Institute of the Far Eastern Research Centre, the USSR Academy of Sciences, explore the sites for TPP and develop their designs and construction technologies.

New use of energy

The Penzhina Plant's huge capacity of 100,000 MW poses a problem whose solution is vitally important to the plant itself. The point is that its planned vast power supply cannot be entirely consumed by the local traditional users even in the foreseeable future. Hence new energy-intensive users are to be found, for example, electricity can be used to thaw permafrost. This, in turn, can greatly contribute to the better mining in the area. The idea has also been conceived of using its power for hydrogen production. 11

The construction of the Mezen and Penzhina TPPs necessitates handling a number of integrated problems since plants of such high capacity have never been built in the world. The first of them relates to power-generating sets, the heart of any TPP. High power can be produced by TPP at low head only by installing hundreds or even thousands of sets. Economically this is not viable, and their number should be reduced by enlarging as much as possible the diameter of a turbine wheel. The problem of installing a high-power generator in a streamlined capsule is now being solved by the Leningrad Metal Works, Gidroyekt Institute and the All-Union Research Institute of Electric Engineering which are developing a unique set whose turbine's wheel will be 10 m in diameter. 12

A large amount of sets needed for TPPs (800 for the Mezen and 4,000 for the Penzhina) necessitates creating special capacities for producing them. 13

No, easier is the task of putting into batch production gigantic floating units whose prototype is the units of floating drilling rigs and dams now being built to safeguard Leningrad floods. It will also be equally difficult to build underwater foundations and install the units.

Field trial

The Kola pilot TPP is planned to be built for verifying in field conditions novel design features. The engineering and economic estimates for its construc- 14

tion were completed in 1983. The design of this plant, seen as an intermediate one between the Kislaya Guba and the Mezen, provides for the dam, made by direct explosion, to close off a water area of 5 km.² Two 19 MW capsule sets (prototypes of the Mezen TPP sets) will be installed in the plant. A two-set unit will be assembled in dock near Murmansk, then towed to its site and submerged there. It will produce some 50,000 MWh a year. The Kola TPP will pave the way to the Mezen high-capacity TPP. The research necessary for designing the latter is being carried out simultaneously with that on the Penzhina plant, which will in the near future determine its basic parameters, design and construction technology.

Relevance for India

The impressive Soviet progress in the construction technology of TPP has important relevance also for India at the present juncture when it is concentrating on the exploration of renewable energy sources.

According to Government of India sources the possible areas where the tidal energy is fairly high and where tidal power can be developed are in the gulfs of Kutch and Cambay in the West coast and in the Sundarban areas along east coast.

15 A proposal to complete investigations and studies to establish the feasibility of power generation from tidal waves in the Gulf of Kutch at an estimated cost of Rs. 218 lakhs has been approved. The investigation formally inaugurated in January 1982 will be spread over a period of 5 years. It will include short time field investigations consisting of deep sea and shallow water tidal observations, hydrographic and pond survey as also laboratory studies including mathematical modelling studies, physical modelling studies, physical modelling, closure studies, energy compensation and integrated system operation studies.

16 The investigation will also embrace long-term field investigations covering foundation investigations, collection of long-term data on tides, current, silt charges and waves of selected localities, survey of suitable construction materials and ecological studies.

17 All this makes it very clear that building of TPP involves not only huge cost but also very sophisticated feasibility studies. The Government of India thus may skip many of the time and labour consuming intermediate stages by availing of the Soviet expertise in the field. This will also free it from the sole dependence on the concern Electric de France (Paris) connected with the TPP for consultancy services.

18 It is needless to say that as in many other fields there is great possibility of Indo-Soviet cooperation in this yet untapped area also. The Indian peninsula flanked by the Arabian Sea and the Bay of Bengal in the west and the east and buffeted by their tides no doubt holds great prospects for utilising tidal energy through TPPs.

Modern technology for steel plants

THE COST EFFECTIVE proven technology of direct Reduction Electric Furnace Route (DR-EAF) of steel making using sponge iron will be adopted for the proposed steel plants at Vijayanagar in Karnataka and Daitari in Orissa. This process of steel making can utilise non-cooking coal. The suitability of this technology to raw materials available in the country has already been established.

Metallurgical and Engineering Consultants (MECON), who were appointed the consultants for both the projects have submitted the report for implementation of the first phase of the Vijayanagar Plant with a capacity of 1.5 lakh tonnes of sponge iron and 2.1 lakh tonnes of finished steel. The feasibility report for the first phase of the Daitari steel plant has also been submitted to the project authorities.

The Steel Authority of India Ltd. (SAIL) is considering setting up of a pilot plant for judging the suitability of KR technology of steel making in the country. The plans for renovation and technological upgradation for steel plants at Durgapur, Rourkela and Burnpur (IISCO), already prepared, are under various stages of consideration. The schemes envisaged restoration of their rated capacity by adoption of appropriate and cost effective technologies. Time frame of their completion would be worked out and necessary investment decisions made after the finalisation of the Seventh Plan allocation for the steel sector. □ 2,000 crore

Towards eradication of illiteracy

THE PROGRAMME of adult literacy has to acquire dimensions of a mass campaign if the goal of eradication of illiteracy by 1990 has to be achieved.

In view of the national commitment to the eradication of illiteracy, the active support and involvement of individuals and institutions is of prime importance. The spirit of national movement is being rekindled for this national task.

For making the programme of adult education popular among the masses, India needs to create a strong demand for it. This aspect should be treated as a very important part of the campaign.

Universities and colleges are being involved in a big way in the task of eradication of illiteracy as one of their regular co-curricular activities. Efforts are on to bring about a clear-cut, concrete and viable strategy of total coverage of illiterates in the 15-35 age group under the Adult Education Programme in the Seventh Five Year Plan. □

Effective administration, a myth !

Bhushan

The author, in a humorous style, tries to expose inherent weaknesses and lacunae in administration in general which often create a wide gap between theory and practice. Policy decisions taken at a higher level are not only bypassed but constant effort is made to locate loopholes to frustrate the objectives of a particular scheme or programme.

"THE POST OF DIRECTOR is lying vacant for such a long time. Why don't you fill it up by ad hoc appointment of Mr. 'A'?" the boss asks Mr. 'X'.

"Sir, the recruitment rules for the post have been referred to the U.P.S.C. I thought the proposal for appointment should be put up only after the recruitment rules are finalised", explains Mr. 'X'.

"Oh, no, Mr. 'X'. The problem with secretariat officers is that they are so rule-bound. They don't want to see the problem in a wider perspective, in the overall interest of the organisation", grumbles the boss.

"O.K. Sir, I will put up the proposal immediately". Mr. 'X', with full reverence to the authority, sends the file up, suggesting appointment of Mr. 'A' as Director on ad hoc basis, pending finalisation of recruitment rules. The proposal is readily okayed at all the levels of the secretariat hierarchy.

Precedent, a basis

Mr. 'X' asks his staff to review the position for all the categories of employees and to put up proposals for ad hoc promotion, pending finalisation of recruitment rules.

Next goes the proposal to appoint Mr. 'B' as Investigator on ad hoc basis.

The boss sends back the file with marginal remarks, "Please speak".

So Mr. 'X' goes to the boss, fully prepared to listen.

"Mr. 'X', what is the great hurry to fill up the post of Investigator? Let the recruitment rules be finalised at least", says the boss.

"Sir, only a week ago you had asked for a similar proposal for Mr. 'A'. The proposal has since been approved. So I thought, similar action should be taken for others too. And Sir, in the instant case, Mr. 'B' has been stagnating in the lower position for 20 years. If we can give him a little benefit without going out of way, what is wrong?"

"Oh Mr. 'X', I don't know, how to explain things to you! You are incorrigible! You want to equate horses with asses? Take this file back. Do as I say. Don't waste my time now". The bitter pill of plain truth was unpalatable to the boss.

Mr. 'X' comes back. He has not only lost the battle, he has also lost sense of direction. He doesn't know how to function in future. The spirit of young enthusiast and idealist has been shattered.

To do or not to do !

"You may compromise with inefficiency at times, but don't ever compromise with lack of integrity. Be honest in your dealings and enforce honesty on others too", Mr. 'Y' sermonises his subordinates.

Mr. 'Z', one of the disciples of Mr. 'Y' remembers the sermon by heart and tries to practise it in his day-to-day life. A daily wager, appointed for a period of three months, manifests dishonesty in his work. The lack of integrity is well-proved and, therefore, Mr. 'Z'

terminates the services of the daily wagger in the second month of employment. The desperate daily wagger approaches the honourable representative of people, the Minister, in search of "Justice". The Minister's spokesman, his P. S. rings up Mr. 'Y', and recommends the case of the poor daily wagger.

Mr. 'Y' calls for the file, orders reinstatement of the daily wagger and also, in his zeal to please the Minister, condemns the action taken by Mr. 'Z'.

Mr. 'Z' feels cheated. He doesn't know whether to uphold the cause of honesty or dishonesty. He has lost the moral courage to take decisions. A few more incidents of this type are enough to convert a staunch, upright, honest and well meaning man like Mr. 'Z' into a spineless, indecisive and weakling bureaucrat.

Experience that counts !

Mr. 'C', on return to his parent office, from deputation represents that in view of his experience and expertise, he may be appointed to the higher post. The senior boss vaguely expresses his inclination to help Mr. 'C'.

Mr. 'D', who is the middle level officer, dealing with the case, feels that it is just not possible to accede to the request of Mr. 'C', because there are 20 persons above him in the seniority list, whose rightful claims cannot be ignored. He does not want to lose administrative propriety and go against his better judgment. He, therefore, quotes all the rules and regulations in support of his view and expresses his inability to accede to the request of Mr. 'C'.

The blood of the senior boss boils to see the file. He orders that Mr. 'C' be promoted immediately, giving some lame, unconvincing reasons. He also orders the transfer of Mr. 'D' to some God-forsaken place as a reward for listening to the dictate of conscience and sticking to rules.

Policy versus practice

To give a different example, an ambitious programme is launched by the Government for the proper development of a vast region. The objectives are defined in a High-level Meeting where all concerned are present. For pursuing the programme in the right direction, the officers are supposed to keep the objectives of the programme in mind and see whether the schemes proposed to be undertaken conform to the objectives.

The implementing authorities of the constituent States theoretically agree to abide by the objectives but there is a wide gap between the theory and the practice. They try to introduce schemes which do not have even a remote relevance to the objectives of the programme. When the officers of the Central Government try to put their foot down, to make sure that the objectives of the programme are not lost sight of,

the State Governments raise the level and the schemes which could not be approved at the official level, are accepted at the political level.

The zeal of the officers, dealing with the programme, gets dampened. They will not exert in future to the extent they did in the above case, to uphold the objectives of the programme. No wonder, the programme when implemented, will be absolutely different from the one conceived.

Given above are a few glimpses from the realm of Government offices. They are not imaginary fabrications, they are part of the daily routine. All Government servants go through similar experiences in their day-to-day work-atmosphere.

Any administration, which passes through the vitiated atmosphere, quoted above, is bound to be vitiated. The healthy spirit, which appreciates honest, objective, result-oriented approach has vanished from our offices; it has been replaced by the spirit of cut-throat competitions for seeking undue favours for material advancement at the expense of the cherished values of honesty, integrity and objectivity.

In the prevailing demoralising atmosphere, any talk of effective administration is nothing but wishful thinking; it is nothing but "the desire of the moth for the star of the night for the morrow."

Administration is a part of the social system. It is a mirror of our society. It is, therefore, not possible to overhaul Administration in isolation. Administration, as it is on date, is reflecting the chaos of values in the social system. The social values will never move in the desired direction as a process of evolution. The Administration will not, therefore, evolve itself into an effective organ by gradual process of development. What is required is a revolutionary change where the old, rotten, devalued order of the day yields way to a new one with the right sense of values. □ 1, 200 words

(Continued from page 23)

Conclusion

With our awareness now of the multiple problems that the adolescent faces, we are in real danger of being pessimistic about them. Adolescents are going to struggle through their adolescence and a large percentage of them are going to reach maturity and as a result of that they will make the world better than the one they entered. Youth can only motivate the youth. The Nation's prosperity thus depends to a considerable extent upon how the youth are organised, mobilised, trained and guided. The present adolescents are not only questioning and protesting and challenging but are potential agents of social change.

There are no clear-cut answers and solutions that would be applicable to all situations; each country and community must decide and act for itself. But act it must, for any further delay would only hurt our adolescents in the long run. □ 2, 100 words

9,00 000000.
No. 457

Controlling guinea-worm disease!

Raghu Shergil

Water contamination is the source of the spread of guinea-worm disease. The country will be able to wipeout this festering disease if we could provide clean drinking water to all the problem villages. The national programme for eradication of this disease launched four years ago is showing encouraging results, says the author.

SINCE 1980, almost silently, the National Guinea-worm Eradication Programme has been going on in 87 districts in seven states of India covering 13,000 villages in 568 block and a population of nearly 14 million. The states involved are, Rajasthan, Madhya Pradesh, Andhra Pradesh, Gujarat, Tamil Nadu, West Bengal.

What is guinea-worm disease? How does it affect human beings? And what does it mean in social and economic terms to the country as a whole?

Guinea-worm is a festering disease caused by a tape worm which attacks the lower legs causing acute pain and wounds, disabling the victim for nearly six weeks. In between he suffers acute pain till the worm comes out. Repeated attacks can disable a person for months together rendering him unfit for any physical activity. Since the disease attacks human beings in the months of April, May and June, it means a loss of precious productive days during peak harvesting season in the villages. An idea of the social and economic cost of guinea-worm disease can be had from the fact that the annual loss of production is nearly seven million mandays. In financial terms, it means an annual loss of nearly Rs. 110 million in production.

The programme is being implemented by the Union Health Ministry through the National Institute of Communicable Diseases (NICD) and is being financed by the Centre and States on 50 : 50 basis. The remarkable thing about the programme has been that it is being implemented through the existing primary health care machinery of the states. No extra staff or organisation has been created for the purpose, as is the usual practice.

The main plank of the programme is the interruption of the transmission cycle of the virus through uninterrupted supply of clean drinking water. Where it is not possible to provide alternative clean drinking water source in place of the existing ones, chemical treatment of the existing ponds and other water heads is provided. Besides, people are educated on the precautions to be taken to prevent further transmission. It is pertinent to note here that the infected person is often tempted to keep his legs immersed in water, thus infecting the water. 3

In the first stage of the programme, para-medical staff was asked to make house to house surveys during their routine visits to the villages. Where in a village even a single case was reported during the year, it was listed as an affected village. Thus on the basis of field reports by the para-medical staff of the PHC, a list of 13,000 villages was prepared for intervention. 4

Water contamination, it may be mentioned, is the only source of the spread of the disease. There is, according to NICD scientists, no known human reservoir of the disease which has been reported from 21 countries of the world, including India, Pakistan, Bangladesh, Saudi Arabia, USSR which has packets of disease succeeded in eradicating it over 30 years ago.

Once eradicated, the disease does not reappear in the same area. It has not so far reappeared in 5

(Continued on page 34)

BOOKS

Human rights

Politics of Human Rights and Civil Liberties : A Global Survey By Attar Chand, UDH Publishers, Delhi, 1985, Rs. 250, pp. 378.

"IF PEOPLE ARE ALLOWED to starve and die of hunger this is a violation of human rights, the right to food. The arms race particularly the manufacture and stockpiling of nuclear weapons, is a violation of another human right—the right to life", says Paul Lusaka, President of the United Nations General Assembly in his foreword to this learned volume written by an eminent political commentator, social scientist and above all, an author par excellence. The history of Human Rights goes back to social organisation in ancient societies. Ultimately it was always the question of human equations and acceptable standards of justice. It is the same today, but the weight of public opinion and human consciousness provides a climate for more conducive position to human right and civil liberties than ever before.

Dr. L. M. Singhvi, a well-known authority on Constitutional and International Law, writes in his comments that "Human rights bibliographies open the panoramic vista of human experience. Mr. Attar Chand's book spans the most significant centuries, beginning from the Magna Carta signed in 1215 A.D." Indeed, the concept of Human Rights is based on the principle that man must not only have the right to live, but live in freedom. To protect his freedom he should be assured of certain basic rights like the right to equality without any discrimination on grounds of race, colour, sex, language, religion, political or other opinion, property, birth or other status. Similarly, he should be assured of the right to life, liberty and security of person, freedom from arbitrary arrest, the right to a fair trial and the right to be presumed innocent until the contrary is proved.

This excellent book marks the reception in global thinking of the doctrine that economic and social rights are at least as important as the civil and political rights of Henkin's 'International Bill of Rights'. Because of the thrust of the human rights argument is to reverse the norm of non-intervention in the domestic affairs of states, the book under review poses some interesting questions.

It has to be admitted that human rights has intellectual and political weaknesses. This weakness may be expressed by relating its ends to its means. The size of the task is daunting.

Besides these civil and political rights, citizens need to be assured of some economic rights like the right

to work, to education and so on. Perhaps, the developing countries of the world are still in a dilemma to provide these rights and to accept them as fundamental for the simple reason that the wherewithals to provide the same are not measuring the demands. The author has made a global survey which is unique for the documentation he has provided. He has painstakingly given the text of selected documents also including the Magna Carta, Bill of Rights, International Covenant on Civil and Political rights, New International Economic Order and so on. These have certainly added to the utility of the book for researchers to delve deep in their analysis.

Mr. Attar Chand has traced the historical background of the development of the concept of human rights. In his words, "One of the outstanding accomplishments of the United Nations has been the coming into force in 1976 of legally binding international agreements for the protection and promotion of human rights. These are the Covenant on Economic, Social and Cultural Rights, the Covenant on Civil and political Rights and the Optional Protocol thereto". While applauding the role of United Nations and Other bodies, the author has a caveat to make. "All honest people on earth must call on the governments which have so far failed to ratify the international covenants and UN conventions on human rights to do so immediately and to assume the appropriate obligations, and to stop avoiding international cooperation in this field". Ever since the Universal Declaration of Human Rights was passed in 1948, there seems to have been no hesitation in flouting them despite several subsequent covenants and what have you. The author, in this context, poses a pertinent question : "Have these rights been realised anywhere ?"

Navin Chandra Joshi

Rural Development

Village Development in India—a sociological approach—by G.R. Madan and Tara Madan, Allied Publishers, New Delhi, Rs. 90, pp. 390.

Agricultural Mechanisation and Social Change in India—A study of Chambal region—by Rita Khanna, Uppal Publishing House, New Delhi, Rs. 125, pp. 201

VILLAGES ARE HEART and soul of India. Systematic development and overall progress of the rural society depends upon numerous inputs. Since the early 1950s, government's multi-faceted schemes have though brought in kaleidoscopic transformations among villages, yet a lot remains to be achieved. Six five-year economic plans and a plethora of programmes are still on anvil for village uplift but we have miles to go to make a dent on the economic, social and educational development in the Indian countryside.

To study exhaustively the entire development process in the villages in any situation, by and large the following factors will have to be taken a serious notice of : Agriculture—land, soil, water management, transportation, storage and marketing, social forestry. Industries—cottage, small-scale and medium which form the main occupation of the artisans and population engaged, other than agriculture. Education and training—primary, secondary, non-formal, adult, and other variants of learning which have to permeate through all activities and cater to all age-groups. Housing roads engineering and energy. And Health, family welfare, hygiene and medical care.

In the Village Development in India, the authors have presented a composite, well structured and scientifically planned analysis of the problem. It is a comparative study of the total development of two U.P. villages with a population of about 500 each. One village is designed as a "progressive" and the other "backward", or less developed.

The Indian rural situation has become fairly complicated, and change is visible with the introduction of modern technological methods in farm operations, new means of communication, villagers increasing interest and desire to go in for education and availability of social services to improve quality of life. Consequently, a distinct revolution in attitudes of the rural masses and keenness to adopt better ways of life, willingly accept innovations and new leadership patterns have emerged. The investigations for data collection were conducted in 1965-66. The results were rechecked in 1979-80, with a view to interpreting the changes occurring in between and their impact on the people at various levels.

The study found that the people are more favourably disposed to need for adult education, family planning and modern methods of medical treatment, and the eradication of such social customs as the dowry system. In short, they are "oriented towards change and development." And almost identical results were found in case of development of agriculture, provision of credit, input supplies and marketing the farm output. However, it was discouraging to learn that though a number of social changes were taking place, some of the deep-rooted customs and beliefs still prevailed. These were : dowry (over 60 per cent in favour), more in favour of education of boys than for girls, yearning for a male child in the family, undue importance to caste feeling and the values they hold about prestige in community.

The block development officer recognised that the development works in villages have progressed mostly due to people's own efforts. It was also asserted in no uncertain terms that "delayed sanctions and untimely supplies have been largely responsible for the retardation of progress in the villages," increased paper work has adversely affected the progress of

work in the fields, that officials have been less zealous for work than they were a few years ago and that they don't care about the common man.

The study makes two paradoxical revelations : the community development programmes have made the villagers too much dependent on outside agencies, and in this way stifled their initiatives, and secondly, that everyone, poor or rich, can benefit from this programme and also that high hopes and aspiration instilled by the community development programme in the minds of the people have remained unrealized to a large extent, creating frustration in their minds.

The study conducted some two decades ago has not fully presented a comparative portrait of the infrastructure before 1965 and after 1980; whatever has been stated is too sketchy, and does not lead to firm conclusions. Although the authors have adequately reflected on the failings of the development network, they have not offered concrete suggestions how these could be remedied. Besides, the levels achieved in village development have not been fully evaluated in terms of gains trickling down to the lowest rung of the ladder. In any case, the project results should be widely disseminated so that wrongs are corrected and loop holes plugged in the interest of majority of people who are below the poverty line.

It should not be forgotten by the authors that rapid population growth in the villages under study also made a perceptible difference and in fact negated the benefits of the several welfare programmes. The results of the Madans' research on the development in villages should be made a compulsory reading for those involved in the formulation and implementation of rural areas. Some of the statements are too generalised and complicated further by statistical tables.

Ms. Rita Khanna's study on the social change brought about by agricultural mechanisation in the Chambal region had a very small sample to be able to arrive at firm and concrete conclusion. Only 100 respondents from five selected villages of Madhya Pradesh's Morena district may not reflect a true picture in a variegated and diversified area under study. The figures and statistical representations don't tell the whole story of the backwardness and will not adequately reflect the social change effected in the Chambal region.

This study also reveals that though people in the region remain traditional and not much affected by increase in the incomes by mechanised agriculture, there are clear indications that things are changing in certain sector. For example, villages, attitude towards education is favourable, status of family showed positive changes for the better freedom of women was seen to have increased substantially since the advent of agricultural mechanization.

However, trends of social systems such as dowry, purdah, caste, belief in rituals and untouchability have remained "unaffected" and continue to reign supreme in rural areas. It is also disheartening to learn that increase in agricultural output and consequent prosperity has made little dent in broadening the horizons of villagers in the area.

The efforts are therefore futile and conclusions haphazard. Moreover, the literature scarce is too brief and sketchy and also not properly elucidated. The author has not cared to ensure correctness of language also (the word "intention" has been spelled

as "intension"). In chapter 4 also, there are numerous errors.

It seems the author has rushed her script for publication without sufficiently revising it. The explanations of results and conclusions are too sparse and lack depth in analyses and presentation. One is emboldened to say that an enlightened readers or researchers will be sorely disappointed if they look for an erudite material or a sound academic analysis of an important economic issue. The author has not risen to the task undertaken by her.

M. R. Dua

(Continued from page 31)

the USSR ever since it was eradicated some 30 years ago.

The involvement of the PHC has been secured through special oneday courses meant to educate the doctors and the para-medical staff on the life cycle of the virus and the transmission of the disease. Special care is taken to equip them with the knowledge about the precautions to be taken to prevent transmission from those already infected.

Prof. V. Ramalingaswami, Director General, Indian Council of Medical Research, observed in the course of a lecture recently, "the disease can be and must be eradicated before we know enough about it. In fact, guinea-worm is one disease which, after smallpox, is an ideal candidate for eradication in the country. Prevention, in this case, is the best method to get rid of it," he said.

There are already encouraging reports. Tamil Nadu has already eradicated the disease. Gujarat is expected to be free of the disease by next year. The count-down has begun. About 4,050 villages have reported no cases for the last three successive years. The NICD authorities are planning to have

an independent evaluation of the programme conducted next year.

Not that there are no problems. Although different ministries and departments have been coordinating admirably, the programmes often get bogged down by bottlenecks; one of the weakest links in the chain has been the frequent breakdown of the water supply system. Data from eight districts collected by the NICD reveals that on any given day, one out of every three water sources could be out of order. Slow as the state machineries are, it takes ten days to three months to attend to a breakdown. Quite often, the states have been found lacking in maintenance facilities. The NICD is trying to have the breakdown in the water sources attended to promptly through their own sources.

But should the state governments let a scorge linger for want of an essential component which they are even otherwise committed to provide to all the problem villages? "If anything, guinea-worm disease is the single most reason why India must reach clean drinking water to all the problem villages. The sooner this is done, the better," says Prof. Ramalingaswami. 9,00 words

Inland Waterways Authority

An Inland Waterways Authority is proposed to be set up by the Ministry of Shipping and Transport. The proposed Authority will be entrusted with the responsibility of development, maintenance and operation of National Waterways in the country. Ten Waterways, namely (i) the Ganga-Bhagirathi-Hooghly river system, (ii) the Brahmaputra, (iii) the Mandevu, the Zuari and the Cumberjua Canal in Goa, (iv) the Mahanadi, (v) the Godavari, (vi) the Narmada, (vii) Sunderbans Area, (viii) the Krishna,

(ix) the Tapti, and (x) the West Coast Canal, in Kerala, have been identified for consideration for being declared as National Waterways.

Already the Allahabad-Haldia stretch of the Ganga-Bhagirathi-Hooghly river has been given the status of a National Waterways by enactment of a Central Legislation. The proposed Authority will also act as a Research and Advisory Agency for shipping and navigation on inland waterways in the country.

Doubling leather goods production in Seventh Plan !

The Working Group for leather and leather goods industries for the Seventh Five Year Plan has suggested the doubling of leather goods production from Rs. 120 crore to Rs. 240 crore and increasing the present production of footwear of 300 million pairs to 440 million pairs. The emphasis will be on the production of value added items for exports. The Seventh Plan export target has been fixed at Rs. 1000 crore.

The total exports of leather and leather goods which were valued at Rs. 186 crore during 1972-73 have increased to Rs. 584 crore during 1984-85. The share of semi-finished leather to the total exports has come down from 82 per cent in 1972-73 to 12 per cent in 1983-84. There has been corresponding increase in the export of finished leather and leather goods. The Seventh Plan export target of Rs. 1000 crore could be achieved only by setting up modern sophisticated production units with latest technology and high productivity.

It is proposed to set up an institute for footwear technology as an apex body to undertake sector-oriented research. Sporadic and uncoordinated efforts done on research and development by a few institutions are not adequate.

Besides being labour intensive, the most significant part covers the artisans, craftsmen and workers belonging to weaker sections employed in the industry. A balanced development of the industry must ensure that the economic benefits percolate down to the lowest level.

Various measures taken by the Government to encourage the leather industry include common facilities centres set up for leather finishing to assist smaller units. Eight such centres are in operation in different parts of the country assisting more than 400 small scale units. Common facilities services are also provided by small Industries Service Institutes and the National Small Industries Corporation.

In addition, a large number of machinery items for manufacture of leather and leather products have been placed on O.G.L. and import duty reduced to 35 per cent. A number of other concessions like exemption of duty on import of raw hides and skins, wet blue, chrome-tanned leather, crust leather and finished leather from hides are also given by the Government. Also a package of incentives is being provided for increasing export of value added products. □

Bharat petroleum makes giant strides !

BHARAT PETROLEUM CORPORATION (BPC) has completed the expansion of its refinery in Bombay at a cost of Rs. 139 crore. It will increase its crude distillation capacity from the present 46 lakh tonnes to 6 million tonnes a year.

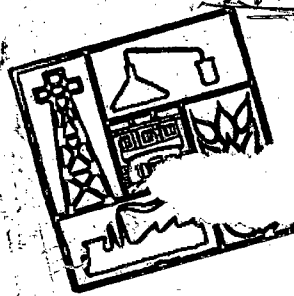
The scheme also provides additional secondary processing facilities to upgrade low value residues to high value products such as diesel, kerosene, naphtha and LPG. The additional quantity of such high value products will be 7,30,000 tonnes of diesel, 45,000 tonnes of kerosene, 4,44,000 tonnes of naphtha which would provide the necessary feed stock for other industries. LPG would provide clean and efficient domestic fuel to an additional 8 lakh households. Diesel and kerosene would help reduce dependence on imports. These products will effect a foreign exchange saving of up to Rs. 70 crore per annum.

The BPC has now become one of the very few refineries, equipped with a microprocessor based digital process control system. This system provides instantaneous feed back and control of the many processes. Its operational flexibility is considerably increased. At the same time the safety of the units is enhanced.

In the expanded unit, crude processing facilities and the high vacuum unit are designed indigenously. They help maximise conservation of energy and pollution control. About 80 per cent of the total value of items used in the project were manufactured indigenously.

Today, BPC refinery is the only refinery processing Bombay High crude upto 100 per cent of its capacity. Besides generating high value petroleum products, the refinery's expanded programme creates additional indirect employment in various sectors including LPG and other distribution networks. □

Room No. 542



Focus on plan
implementation

VOL. 29 NO. 17

Wojana

SEPTEMBER 16-30, 1985 RUPEES 1.50

Dumping hazards
on the weak !

NEXT ISSUE

Spotlight on IRDP

Boosting handloom production !

VARIOUS STEPS have been taken by the Government to strengthen the handloom sector in the country. For the protection of the handloom sector a separate legislation entitled "Handlooms (Reservation of Articles for Production) Act, 1985" has already been enacted. Besides, welfare measures for the handloom weavers like Thrift Fund and Workshed-cum-Housing Schemes have been announced. The production of janata cloth in the handloom sector has been augmented by providing additional target of 50 million square metres for the year 1985-86.

In the new Textile Policy announced in June, 1985 greater emphasis has been laid on the modernisation of looms and adequate arrangements for ensuring swift and smooth transfer of technology from the research institutions. Special efforts would also be made to ensure adequate availability of raw materials at reasonable prices to the handloom weavers through the operations of National Handloom Development Corporation.

The National Handloom Development Corporation has already opened yarn depots at Guwahati and Bihar-Sharif. The Corporation is also supplying yarn directly to the State handloom agencies in the States of Kerala, Rajasthan, Madhya Pradesh and the Union Territory of Pondicherry. The Corporation is working out a scheme to supply yarn to handloom weavers at reasonable prices. □

YOJANA

Volume 29|Number 17

September 16—30, 1985|Bhadra 25—Asvina 8, 1907

X	RAJENDRA PRABHU	4	Dhruva, another milestone in self-reliance
	P. K. DORAISWAMY	6	This implementation game !
	DR. RAM KRISHAN	9	What lacks in block level planning !
	S. K. BHATTACHARYYA	13	Do our plans need structural changes ?
	MOHD. TALHA	16	Indian agriculture needs toning up !
	D. K. PAHALWAN AND R. S. TRIPATHI	20	Integrated agricultural development
	SUBHASH J. RELE	23	Dumping hazards on the Weak !
	YOJANA CORRESPONDENT	28	Importance of electronic data processing
	IQBAL MOHIUDDIN	29	Continuing education for adults !
	M. M. ANSARI	32	Economic policy and planning

Chief Editor—R. Thukral : Editor—B. K. Dhusia · Assistant Editor—Kamlesh Mackrell : Correspondent—M. Yunus Siddiqui : Sub-Editor—Mangal Sen, Senior Correspondent Ahmedabad : Bombay : Smt. V. M. Joshi, Calcutta B. K. Chakravarty, Hyderabad : S. V. Sripati Rao, Madras : D. Janki, Trivandrum B. N. Kesavan Nair, Gauhati : Biraj Das; Business Manager; L. R. Batra.

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 issued every fortnight in Assamese, Bengali, English, Gujarati, Hindi, Kanada, Malayalam, Marathi, Punjabi, Tamil, Telugu and Urdu.

Editorial Office : Yojana Bhavan Parliament Street, New Delhi-110001, Telegraphic Address : Yojana New Delhi. Telephone : 383655, 387910, 385481 (extension 402 and 373).

For new subscriptions, renewals, enquiries please contact : The Business Manager, Publications Division, Patiala House, New Delhi-110001.

Our contributors

Rajendra Prabhu, Special Correspondent, Hindustan Times, New Delhi; **P. K. Doraiswamy**, IAS, Commissioner of Land Revenue, Hyderabad (AP); **Dr. Ram Krishan**, Director of Agriculture & Executive Director, Mangalam, Lucknow (U.P.); **S. K. Bhattacharyya**, Economic Writer, Calcutta; **Mohd. Talha**, Research Scholar, Faculty of Commerce, AMU, Aligarh, **D. K. Pahalwan** and **R. S. Tripathi**, Deptt. of Agricultural Engineering, IIT, Kharagpur (WB); **Subhash J. Rele**, Freelance journalist, Bombay; **Iqbal Mohiuddin**, Freelance writer; and **M. M. Ansari**, Project Fellow, National Institute of Educational Planning and Administration, New Delhi.

Subscription : Inland : One year Rs. 30 ; Two years Rs. 53 ; Three years Rs. 75.

Dhruva, another milestone in self-reliance

—Rajendra Prabhu

Dhruva, the sixth and the largest research reactor at Bhaba Atomic Research Centre, Bombay, became critical on August 8, 1985. One of the world's largest reactors of its kind, Dhruva was entirely designed by the scientists of BARC. It is a 100 MW reactor which will not generate electricity, but will only help our scientists to build better nuclear power reactors in future. Mr. Prabhu gives an interesting account of how the reactor came into being and what it seeks to achieve.

ALFRED NOBEL, the inventor of dynamite, is known to have died an unhappy man. He saw his wonderful invention being used not in the service of man as he wanted it to be. Dynamite was being used for purposes of war. The power of the atom today replaces dynamite in this respect. It has all the potential to destroy the world twice or thrice over. It has all the power to make this world a better place to live in. It is our choice what we make of it.

How it will work?

What the atom can do for a better future for us tomorrow, has been demonstrated to us time and again right in our own country. We have nuclear power stations that use a few tonnes of uranium to generate enormous power that would have needed million tonnes of coal. Take the Madras Atomic Power Project at Kalpakkam in Tamil Nadu. Its two reactors will together generate heat enough to produce 470 MW of power. As against some 40 tonnes of fuel needed to run these reactors, a coal-fired power station of this

magnitude would have required several thousand tonnes of coal to be hauled all the way from Bihar or Andhra over thousand and odd kilometres day after day. From the used uranium in this reactor we can separate plutonium. A mixture of this plutonium and spent uranium could again be used in what is called a fast breeder reactor as a fuel. And that is not the end either. Because this type of breeder reactors would produce more of plutonium than is put in, we have the phenomenon of a power house which generates more fuel than it uses. From there, a third stage could also be seen. In this third stage India's rich deposits of thorium could be used in the fast breeder to produce yet another uranium based fuel for use in the third generation reactor. In this way all that we would need for taking care of our future electricity needs would be a few thousand tonnes of uranium and thorium. This would suffice, theoretically at least, for the next 100 years or more.

Sometimes what appear as simple propositions are the most difficult to be put into practice. Learning to generate power from the atom is one such. The temperatures you encounter are very high. The risk to human life and environment are also high so that most stringent safety measures are needed. The atom, like many other things in life, is a good slave but a bad master. To tame it would require a whole lot of skills in new materials, design, engineering, running of plants, disposal of waste, maintenance and so on. Research reactors are therefore set up to learn the skills and continually update them. The first research reactor, Cyrus was set up 25 years ago. It provided the country's nuclear scientists with the necessary tool for studying the atom and also obtain several byproducts like nuclear isotopes which have numerous uses that we will discuss later.

For future expertise

The latest in this series of nuclear research reactors, went critical on August 8, 1985. The scientists of the

Bhabha Atomic Research Centre at Trombay in Bombay, where the reactor is situated, rightly named it "Dhruva" the lodestar. It is the sixth and the largest research reactor at BARC. For many years to come, this research reactor would provide us the guidance in our peaceful nuclear programme to harness the power of the atom in the service of man. The scientists of the BARC told me with a lot of pride: "We are excited about it". What is all this excitement about? Because, here is a new research tool for them that will help them build better nuclear power reactors in future, learn more about how the atom behaves when it splits generating heat and radiation and incidentally provide a whole new range of radioactive isotopes for use in various areas of human benefit. Many of these isotopes like iodine-125 are imported. Now these would be locally made.

Tremendous research value !

Dhruva is a 100MW reactor. It is one of the world's largest research reactors entirely designed by the scientists of the Bhabha Atomic Research Centre. The work on it started in 1973. Compared to Cyrus, Dhruva is two and a half times in size. But the comparison should end there. Dhruva is more versatile than Cyrus. Its high neutron flux which is twice that of Cyrus would enable several studies in neutron action, in the way a fissile atom behaves when bombarded by a shower of neutrons and so on. Dhruva would also enable the BARC scientists to carry out experiments that would give them a greater insight into nuclear physics. This is an insight that they need as the nuclear energy programme proceeds from the standard 235 MW reactor to 500 MW reactors and from there to fast breeder reactors and also as it begins to use new fuels. Dhruva has also yet another facility. That is, it could experiment with different materials meant to go in nuclear reactors. Scientists could, by using these materials within the Dhruva reactor, find out how they behave under conditions of radioactive pressure and heat. This intimate knowledge of behaviour of materials that go into reactor body and equipment is necessary to improve designs, make reactors more efficient and much more safe than they are today. It is necessary to recall here that we, in this country, can be proud of the fact that our scientists and engineers today can design, fabricate the entire range of equipment, instal and run 235 MW reactors, a capacity very few countries in the world have. By developing this capacity the hard way we have released ourselves from any need to surrender to international lobbies and pressure groups which dictate their terms for the supply of the know-how or materials or equipment for nuclear reactors. For this the country is indebted to the vision of Nehru and Bhabha. Dhruva would be yet another big step taken in improving and broadening that self-reliance.

The ultimate benefits

It would necessarily be many years and many steps before we perfect the science and art of coaxing the

atom to yield all its secrets for human welfare. But already there is a body of knowledge and competence which has begun to affect our lives. We have already looked at the power scenario and what the atom could do in giving modern day version of "akshyapatra" of fuel to run the reactors. Nuclear isotopes are slowly but surely changing the medical science. Several types of scanning devices are able to tell more accurately and with greater speed what is wrong with our body and our metabolism. These devices use minute quantity of nuclear isotopes which are carefully made to measure in the research reactors like Dhruva. Nuclear isotopes are also having increasing application in agriculture. They help to select the right mutant for our high yielding seeds programmes. They help to give us a better insight into how plant nutrients work and thereby help us to know what fertiliser to use and when and how much. In post harvest technology, nuclear isotopes play an important role. For instance, you have the phenomenon of potato glut every season. It is simply not possible to keep them in the cold storage for months. Nuclear irradiation by preventing the biological decay or transformation of the potato protects the potato harvest and enables the potato farmer to wait till he gets a better price. True, all these techniques have not yet been accepted internationally but slowly prejudices and fears about them are giving way to facts that are incontrovertible. They will thus become more widely acceptable. Let us hope in future, the farmer would not have to fear that his grain and vegetable would be destroyed by moisture and worms. The atom is thus coming more and more into our daily lives in farms, in factories where it will tell how structures behave under stress, in medicine by helping to tell what is wrong with our system and so on. Behind all this will be the unseen hands and sweat of our nuclear scientists with their new and versatile research tools like the new reactor called Dhruva. □

(Courtesy : All India Radio)

Shifting of industries to improve environment

IT IS THE endeavour of Government to shift as many industries from residential areas of big cities to industrial areas for better environmental aspects and in order to give clean atmosphere.

To encourage industries to shift from urban areas and as a measure of decongesting the overcrowded cities and for reducing pollution, capital gains arising from transfer of buildings or lands used for the purpose of business are exempt from tax if these are used for acquiring lands for constructing buildings for the purpose of business at the new place. From the financial year 1983-84 this exemption has been further extended to capital gains arising from transfer of machinery and plant also. □



This implementation game!

P. K. Doraiswamy

Planning is easy but implementation is not so. The author explains that every government project goes through five different stages : initial euphoria, disillusion, panic, search for scapegoats and praise for those who raised objections initially. He suggests the way out of this vicious circle.

“WAR”, said Napoleon, “is not difficult. It is the waging of it that is difficult.” It is all right to say, in true Bhagavat Gita style, that a sincere effort is a success in itself and that the fruits of one’s action lie with the Lord. But one cannot feed people or clothe them with mere sincerity. Every product or service we consume is the result of organised effort, the result of implementation of some plan or project. Similarly planning is not difficult, difficulties start with implementation.

Though implementation is a recognised weak-spot in administration, particularly public administration, the available literature and so called project management concentrates mostly on the application of formal techniques of quantitative monitoring of physical resources such as PERT (Project Evaluation and review Techniques), CPM (Critical Path Method), RAMPS (Resource Allocation and Multi-project Scheduling), SPAR (Scheduling Programme for Allocating Resources), LOB (Line of Balance), PPB (Planning, Programming, Budgeting), etc. It is almost as if people believe that, once a blue-print is prepared, resources required are calculated and allotted, the whole monitoring put on a computer and a contract awarded, the blue-print is bound to transform itself into a three-dimensional reality within a reasonable time. Apart

from some reference to matrix, cell-type and link-pin types of organisations, the traditional literature hardly does justice to the complex human dynamics involved in implementation which, in practice, is really something of a ‘game’ in a psychological sense. A game implies not only an overall frame-work of rules within which it is played but also, within this framework, a certain amount of manoeuvring, rivalry, bargaining and compromising among the players. This article proposes to comment on some of these aspects of the ‘implementation game’. In other words, this article examines not project management so much as project behaviour, particularly government projects.

Hidden hand

The first aspect is what may be called the need for an Inspiring Myth about the benefits of large, new projects in a developing country. In an under-developed country not accustomed to taking up new, complicated projects involving technological and economic risks and uncertainties, the initial inertia and aversion to risk-taking can be overcome only by generating a general, non-specific belief on the efficacy of starting new projects. This is usually done by administrators and technologists joining together and making it appear that :

- (i) most projects/technologies found in developed countries are easily transferable
- (ii) the benefits easily exceed the costs
- (iii) the time needed for completion has to be short.

While it is easy to criticise this approach as shoddy at best and dishonest at worst, many scholars of development economics feel that initially such a myth is essential to get things started and that, after gaining sufficient momentum and understanding, such appraisal

sals can always be made more rigorous. This gimmick has been used in a variety of projects right from the days of Sri Arthur Cotton's Godavary Barrage (which, in retrospect, is considered a boon to the area) up to the days of the British-French collaboration on the Concorde (which is now generally accepted as a classic planning disaster). The Invisible Hand of private enterprise apparently has its counterpart in the Hiding Hand of public enterprise !

Populist decisions

The above Inspiring Myth gets re-reinforced by the preference of all politicians for new projects over the completion of old, on-going projects. (In addition to the traditional expressions such as site-bound projects and foot-loose projects, a new term in vogue is a "Minister-bound" project.) Democratic Governments do not get as much political mileage out of completing expedited projects sanctioned by their predecessors as in sanctioning new projects. There may even be a vested political interest in delaying on-going projects to show their choice to be wrong.

While a political government is thus ever eager and totally committed to announce new projects, paradoxically, its commitment to any single project is never total. A government's concern, however genuine, keeps flitting from one new project to another or from one old project to another depending on where the greater crisis is. Many an administrator makes the mistake of naively assuming that merely because a Chief Minister has personally suggested or announced a project, the project would automatically receive adequate and continuous support from all wings of the government. He is somewhat unprepared for the subsequent problems of integration and coordination which sometimes seem to take more of his time than actual project construction.

Lack of clarity

Most governments overestimate their resources and capability (due to ignorance, inexperience or expediency) and are often faced with the problem of rationing out available resources to the various projects under implementation. Given the realities of inflation, the government has to optimise the over-all economic and political consequences of inflation by expediting some projects and deliberately going slow with others. This would create implementation problems for individual project managers all of whom generally try to speed up their respective projects and do not know how their own projects fit into the government's overall scheme of things. Usually, project managers are never kept informed in time of this overall picture and are caught unprepared for making the necessary adjustments.

Governments are notorious for the lack of clarity in their goals. While this criticism makes much managerial sense, politically any government which de-

fines its goals too precisely is a hostage in the hands of the Opposition. In one of the States, a PERT chart was introduced for the first time in a major irrigation project and unfortunately, for various reasons, this project turned out to be one of the most delayed projects in the country. At every session of the Legislature and meetings of various non-officials, there was always a reference to the original PERT chart and comments on the government's inability to adhere to the time-schedule. The Chief Minister, normally a sober and confident person, remarked in sheer exasperation, "We have built so many projects in the past without any PERT chart. Why did you officers have to introduce it now ?". A certain vagueness in the goals is part of the strategy of political survival as it not only prevents the Opposition from pinning you down when shortfalls occur but also gives scope for modifying the goals mid-way through implementation if political imperatives so dictate.

We are all familiar with mid-stream changes in the major parameters of projects like basic production capacity, technology to be used, target groups to be benefited, etc. In addition to all these, no government generally likes to make it totally clear whether a particular project is entirely site-bound or foot-loose lest every region should claim the project. The implementation problems which project administrators face as a consequence can easily be imagined.

We now come to some aspects of the dynamics of actual project implementation.

Once implementation starts, government, which hitherto appeared to be a single organisation with a single will, suddenly turns out to be several sub-organisations with different sub-wills. The project administrator, important and much sought-after immediately after the announcement of the project, suddenly finds himself hopelessly dependent for implementation on many others over whom he has little direct control. (Apart from his own official colleagues in other departments with whom he is supposed to 'coordinate', this also happens with a contractor who is at his mercy till the contract is awarded and gains the upper hand once the work is started). He realises that

- (i) the initial non-specific, enthusiastic consensus among various government agencies on the project soon dissolves into specific, often violent, disagreements on details of implementation and the authority of one department vis-a-vis another ;
- (ii) each participant agency has a different time and priority orientation towards the project in the context of its other commitments ;
- (iii) the success/failure of the project does not have the same, or equally important, consequences for other agencies as it has for the project administrator himself ;

(iv) because of (iii) above, collective action learning never takes place and each failure of coordination only further reinforces the departmental bias of each agency towards the others (e.g. one failure of coordination between two departments, instead of making them realise and avoid this in future, only makes them more hostile to each other).

14 (v) no one knows what "coordination" means : whether it means bargaining, coercing, over-ruling, saving faces, compromising or achieving consensus, with the result that everyone clamours for coordination—on his own terms !

(vi) in his own interest, "coordinating" with other agencies is necessary as every additional signature on file represents one more hostage against retribution if anything goes wrong;

(vii) in between two major decision points in project implementation, there are diversion points which can cause delay (example : strike by labour, legal disputes with contractors, routine objections from Statutory authorities, etc.).

15 (viii) as long as a very large number of agencies and decision points are involved in implementation, even a minimal or "reasonable" delay at each point would cumulatively add up to a significant delay in implementation. (In fact, it can be worked out mathematically that if there are 70 sequential decision points in a project, minimal|minor|moderate delays represent 1 week|3 weeks| 6 weeks respectively and these 3 types of delays are equally distributed over the 70 decision points, the total delay would still be 233 1/3 weeks or 4 1/2 years ! Similarly, even if the probability of all the concerned agencies agreeing on each decision point is as high as 0.95, the cumulative probability 16 after just 14 decision points becomes less than 0.5, i.e. as good as tossing a coin!).

(ix) though all commitments|contracts are neatly tied up on paper, in practice, government can never act quickly enough to "capture" the essence of such commitments|contracts and enforce them on the parties.

17 The above analysis shows the complexity of collective action in implementing any project, particularly those politically controlled. While, in theory, a project organisation is supposed to be a "fighting formation" (to borrow a military expression) and "coordination" is supposed to provide unified leadership, in actual practice implementation consists of assembling diverse programme elements most of whom are largely independent of each other and a lot of energy goes

into avoiding responsibility, scrutiny and blame. In other words, the implementation game is predominantly "defensive" in character. Obviously, there can be no "formula solution" to such a problem nor will graphic, quantitative or computerised techniques alone suffice. Certain non-conventional approaches, often bordering on manipulation, have been used effectively. For example, in order to avoid a political controversy (and consequential delay) on the location of a major project, a foot-loose project may sometimes be presented as site-bound or technologically too sophisticated to be explained in detail. Similarly, to force the agencies involved to submit to coordination, the beneficiaries of a project have been deliberately organised and encouraged to bring political pressure for the early completion of a project. An open, political commitment to inaugurate a project on a date which has a great symbolic, emotional significance often compels bureaucracy to work together more effectively. Of course, such unorthodox steps for the early completion of projects have sometimes led to the substitution of quantity for quality or a subtle, covert modification in the scope of the project. There are also cases of incomplete projects having been inaugurated and completed later by "installing balancing equipment". To the purist administrator, these may appear to be cheap, crude or even below-the-belt methods but in real-world management—these are perhaps required for supplementing text-book techniques.

Suggestions

In addition to the above, some other steps that could be considered to improve implementation efficiency are :—

- (i) possible implementation problems may be considered by the policy-makers themselves instead of these being considered a hindrance to quick policy-making and being left to be sorted out by lower levels of administration after implementation starts;
- (ii) wherever possible, the project formulating agency may be made responsible for implementation also (example : In irrigation projects, the investigation divisions often give a wrong soil profile based on which designs are prepared only to be drastically modified during execution by the implementing divisions);
- (iii) the number of independent participating agencies and sequential decision points may be minimised so that the total cumulative delay may be minimised;
- (iv) a "fixer" could be identified who 'knows', 'cares' and 'can'; i.e. who has the knowledge, energy and resources to remove bottlenecks when normal coordination fails. (This could be anyone from a local MLA, a Minister's PA or the Chief Minister himself.)

(Continued on page 12)

R. 110/-



What lacks in block level planning !

Dr. Ram Krishan

Why the objectives of the planning remain unfulfilled with unemployment, poverty and imbalances continuing unabated? Is it because of lacunae in the planning process? Or is it due to non-involvement of masses, bureaucratic way of planning and the influence of the vested interests to prevent any serious attempt at radical transformation of the poor? The author feels that a sound planning is needed to secure proper implementation of schemes for specific areas and blocks.

handful of powerful rural holders having comparatively large holdings.

The desire for involving the masses in the process of planning has also remained largely unfulfilled because of our bureaucratic way of planning and the influence of the vested interests which lay in maintaining the status quo and preventing any serious attempt at radical transformation of the weak and the poor.

In the successive Five-year Plans in the past, the aim of planning has always been to focus on the following main objectives : (1) Reducing or removal of unemployment, (2) A significant rise in the standard of living of the people specially those below the poverty line through increase in per capita income, and (3) Reducing socio-economic imbalances among various areas and people and ensuring distributive justice. The idea was to move the society progressively towards equality and social justice.

THE PLANNING PROCESS thoughtfully initiated in the early years of Independence. has done perceptible good in the direction of economic development of the country but it could not be denied that the basic goal of planning still remains distant. This could be attributed to a number of factors like various conceptual gaps in formulating programme proposals and failures in implementation in various spheres of economic and other activities, especially those meant to raise the social-economic level of the weakest sections who form the bulk of our population.

Even in the Seventh Five-year Plan, the main objectives are almost the same. It would, therefore, be proper to find out as to why the objectives are not being fulfilled and unemployment, poverty and imbalances still continue. In the present article, an attempt has been made to point out and discuss the lacunae in the past planning process so that foundation of sound planning in future be properly laid to ensure fulfilment of the main objectives specially in respect of planning for specific areas and blocks.

There is no denying the fact that most of the Schemes launched by Government for the benefit of the poor have failed to reach the targeted category of people. The result is, widening of the wedge between the poor and the rich and increase in the number of persons below the poverty line. The green revolution is a striking example of the anomaly wherein the increase achieved in production was cornered by a

Lacunae

There are several lacunae in block level planning. Major ones are : absence of spatial planning, rigid budget pattern, remote and delayed decisions, stress on staff schemes, employment of unsuitable and unwilling staff, non-synchronization of plan objectives with programmes, absence of land-use planning neglect of basic problems of the people areas and of

5 cottage industries, absence of professional surveys, absence of healthy institutions, state policies not commensurate with peoples' needs and aspirations, lack of proper reviews, unchecked population growth and rampant corruption. Of these, the first one has been described in the first part of this article and the remaining ones in the second part of the article.

Spatial planning

Spatial planning for infrastructural development is essential for a balanced growth of people and areas. In absence of this, the growth processes do not take roots.

6 Spatial planning, according to the report of the working group on block level planning set up by the Planning Commission (1978) implies systematic efforts to locate facilities (roads, schools, factories, housing, etc.) in relation to human settlements where all people can use them to maximum advantage. If this is not done conscientiously, infrastructural investments of sectoral programmes would be made in haphazard locations and they may not converge in desirable combinations at the most optimal locations. Such convergence can affect large economies in movements of men and materials and better utilisation of facilities. The advantage of such a convergence is that farmers can get all their things done at one location. If locational planning is not intersectorally integrated and not done with social justice in view, there would be unequal growth of areas and viability of projects in many cases would decrease.

7 Spatial planning is a comprehensive exercise which deals with all spatial manifestations and resultant outcome of all human activities. It is, therefore, concerned with all types of activities of people which are relevant for planning the levels of economic and social activities in a particular region. Spatial planning must therefore: (1) guide the process of social development through a locational blue print, (2) ensure that the objective of distributive justice is realised through an access to consumption and production facilities for all sections specially the weaker sections of society, and (3) it must initiate a process of participatory planning through an integrated Institutional framework reducing progressively the urban-rural dichotomy.

8 Foremost requirements in spatial planning is to decide upon the lowest unit of viable administration.

The administrative tiers in each State of the country are more or less the same but with different names. Planning for institutions and infrastructure to be created will be different for all levels. For some items like fertilizer factories, steel plants, manufacture of heavy machines and defence equipment, construction of big irrigation dams, inter-State and intracountry works, etc. planning has to be finalised at national level, taking regional needs and suitabilities into consi-

deration. At the State level, overall needs of the State, such as for cement, textiles, sugar, paper, etc. would be the consideration. At the district level, the district needs would get priority and so on. More down below, namely the blocks, Nayaya Panchayats and the villages it has to be a more specific area as well as people-oriented. For the poor, it is generally the development of last two tiers in which they are most interested, because those would benefit them the most, both individually as well as collectively. As the tiers rise up, their direct interest becomes less and less as the poor in the villages are more interested in raising their income, they need a relevant socio-economic structure close to them.

Locational decision

The activities which would require locational decisions in the rural areas of the country are suggested in Annexure 'A'.

The list of activities in this annexure is tentative and will differ from area to area. Systematic planning for deciding upon the locations, would require determining the norms for populations threshold, and distant standards and existing facilities on the basis of which plan would have to be prepared for each area. For spatial planning, a cluster of eight to ten villages should be the lowest unit followed by the block, district, region, State and country. It would be in the interest of organised planning if a central village out of the cluster of eight or ten villages (in U.P. it would be Nyaya Panchayat headquarters) is selected, for developing as a Rural Growth Centre, which it would be better to call a Kisan Nagar. The infrastructure needs of this Kisan Nagar have to be finalised on the basis of requirements of the area. Similarly, for the block, district and State levels for having a rural growth centre, a land area of about four to six hectares would be needed. It may have to be acquired or donated by the village. If consolidation of holding operations have not been completed, the required land may be set apart from the village pool. These rural growth centres should also have enough land for housing colonies. In these colonies, preference for allotment of plots would be given to only those having kachha houses or no house. Only persons residing in the cluster of eight or ten villages should be allotted land in this colony. The step is being suggested so that rich persons of the area may not get a large number of plots allotted to them. If it is required to allot plots to rich persons of the area, they may be charged a higher price.

Before planning for location of Kisan Nagar, an inventory of all the existing infrastructure|facilities|institutions|services would have to be prepared. These then would be mapped and their spatial reach to the village settlement identified. On the basis of realistic norms, thereafter, spatial gaps should then

be identified and suitable plan drawn up for execution.

Viability of Kisan Nagar

Each Kisan Nagar should be connected by a road to block, tehsil and district headquarters. Buses should ply from here to take passengers to the above headquarters in the morning and bring them back in the evening.

Weekly and bi-weekly markets should be organised in each Kisan Nagar wherein farmers bring their produce for sale and go back with their requirements of consumable commodities. They could also do their banking on these days. The Kisan Nagar may itself serve as a centralised marketing centre for a cluster of villages.

A cattle market should also be organised in each Kisan Nagar and if it is uneconomical to organise a cattle market in each Kisan Nagar, it may be organised for two, three or more Kisan Nagars. The above Kisan Nagars should first be established in backward and far off inaccessible areas as well as the districts with big industrially developed towns like Kanpur, Jaipur, Bhopal, Varanasi with a view to checking rural exodus to these industrial cities.

Location of Kisan Nagar should not be decided on political grounds but on actual situation and requirements of the area. As users of facilities, people should be consulted about the location, nature and quality of infrastructural facilities and social services as they are in the best position to know their requirements and their logistic convenience. In consultation with the people the planner has, however, to differentiate between vested interests of some people and real needs.

As various institutions would belong to different departments and organisations, it would be advisable for the Area Development Departments of the State Governments to decide upon the norms for threshold population and distance standards through a collective decision of the concerned departments and organisations.

It should be better if regional Corporations which work under the Area Development Departments in each State are made responsible for execution of this scheme and management of Kisan Nagars. Various institutions in the Kisan Nagars would, however, be run by respective departments or organisations concerned. Some statutory rules would have to be framed for continued maintenance and extension of these townships which would slowly develop into full-fledged towns.

In brief, the spatial planning has to be done in the following stages :

Preparation of existing inventory of facilities, institutions, services in the area and population and village settlements served by them at present.

Selection of viable micro-regions or units for spatial planning. They could be administrative units like Nyaya Panchayat or others based on Geographical considerations. Thus, such micro-units will be units in between the block and the villages.

If for spatial planning, boundaries of existing micro-administrative units require changes, it should be done right at the start.

Deciding upon the new supply and service facilities, organisations and other institutions needed, keeping in view the existing facilities, resources, population and distance standards and locating them by converging and integrating the various public and private infrastructures at one location.

Developing of micro-area as a viable socio-economic unit utilising integrated multi-sectoral approach with multi-level spatial planning with a view to providing large scale employment within the area itself, to ensuring conservation of resources, equitable distribution of benefits and growth with social justice, to removing poverty through better management and mobilization of local talents, skills and resources and stimulating an organised community effort for changing attitudes and driving out stagnation, lethargy and fatalism from their minds.

Annexure A

A. Commercial Infrastructure—supply and service

1. Regulated market or Sub-markets
2. Cold storage
3. Workshop for repair of machines
4. Custom hiring service for mechanised tools
5. Sale depot for fertilisers, pesticides and seeds
6. Television, Radio and Watch repair service
7. Milk collecting and Chilling Centre
8. Veterinary hospital and stockmen Centres
9. A.I. facilities and bull Centres
10. Branch of Land Development Bank and other Banks
11. Warehousing storage services
12. Processing facilities
13. Irrigation services
14. Transport facilities for bringing inputs and taking out farm outputs
15. Cane purchase Centre
16. Shopping Centre
17. Diesel Pump
18. Raw material depot for coal, cement, iron steel, building and scarce materials for supply to rural artisans, industrial units besides house building industry in the rural areas
19. Training-cum-production Centre for fruits and vegetable processing and rural craft

(B) Social Infrastructure (according to requirement)**(i) Education**

- Primary School
- Junior High School
- High School
- Inter College
- Degree College
- Technical Education College/Institute

(ii) Communications

- Road
- Culverts
- Bridges, if any
- Bus station
- Post Office
- Telephone & Telegraph

(iii) Health & Medical

- Public Health Centre
- Maternity Centre
- Midwife Centre
- Safe drinking water
- Homoeopathic Dispensary
- 21 Ayurvedic Dispensary
- Unani Dispensary

(iv) Housing Colonies**(v) Power Lines****(vi) Rural Cinema****(C) Organisations***Economic Organisation*

- Location of office of village level functionaries
- Community Hall
- Co-operative Societies/Industrial Societies
- Cane Purchase Centre
- Bank Branches

Social Organisations

- Youth Clubs
- Mahila Clubs
- Police Chauki

(D) Projects*Productive Key and Supporting Projects as identified for the area such as*

- Brick Kiln
- Lime Kiln
- Spinning Mill
- Paddy and Pulse Processing Units
- Sugar Mill
- Cold Storage
- Cottage Industries Units
- Rural Markets and Supply Centres for the local trades

(To be continued)

2178

2,200 words

"Never has there been an event with more serious consequences, longer in gestation and less foreseen", said Tocqueville about the French Revolution. How aptly it describes a government project under implementation! Watching the different government agencies interacting with each other, one is reminded of the words of Hobbes:

"Bellum omnium contra omnes (war of all against all)".

It is even said that every government project goes through the following stages:

- (i) initial euphoria
- (ii) disillusion
- (iii) panic
- (iv) search for scapegoats
- (v) praise for those who objected initially.

But it is well to remember that a project does not implement itself and odds in this world are stacked heavily against things happening the way we want. In fact, the patron saint of all the government projects seems to be Murphy, the author of the famous Murphy's Law: "If something can go wrong, it almost certainly will". Project behaviour and implementation dynamics, therefore, deserve a more detailed study by management experts and practising managers, particularly in the public sector. 2,300 words

Small sector in national economy

IN EARLY 50's, the small scale sector started modestly with the manufacture of simple consumer goods only but has now made considerable progress in terms of the areas of manufacture and production. The estimated value of production in small scale industries (at 1979-80 prices) during 1983-84, was Rs. 30,415 crore as compared to 27,700 crore during 1982-83, signifying an increase of 9.8 per cent. Employment in this sector also increased to a little over 84 lakh persons in 1983-84 from 79 lakhs in 1982-83 an increase of over 6 per cent.

The share of small scale sector in India's total production is very significant at almost 25 per cent. Only 6 per cent of the total production of this sector is exported. Thus its latent potential remains to be exploited.

The Government is keen to help the small and medium industry in its development. New Import and Export Policy announced in April, 1985 contains a number of measures which would assist the development and growth of small and medium industry in the country. □



The author here calls for the formulation of Five Year Plans on a more realistic basis. He points out that progress in implementation of IRDP and other poverty alleviation measures show that the development has been very slow and like dreams targets remain unfulfilled. He cautions that the next two decades would be a period of trial as provision of finances and fiscal management would be an uphill task.

JAWAHARLAL NEHRU, the chief architect of the plan frame of free India, made a rather paradoxical statement of Indian economic life when he said, "India is a rich country inhabited by poor people". In 1951 we had to deal with a population of 361 millions, while we are now required to deal with the population of 684 millions. In the modern theory of demographic transition, increase in population is classified into the following three stages

- (i) Stable population growth;
- (ii) Rapid population growth; and
- (iii) Stationary population growth.

While developed countries have reached the third stage after crossing the first two stages, it has not been possible for most of the underdeveloped countries to cross the second stage. India in whatever name we may describe her (under-developed or developing) is still in the second stage. Her population shows rapid growth as per census statistics upto 1981, but from the following comparative statistics of 1971

Do our plans need structural changes?

S. K. Bhattacharyya

of per capita income of four countries, it appears that we are still a poor country

(In terms of Rupees)

1. USA	36,884
2. West Germany	25,544
3. England	17,992
4. India	992

We have spent a lot of money for the economic development of our teeming millions (which has been the goal of our economic planning). The following statistics of total outlay during the last six plan periods will reveal that we increased our outlay substantially keeping in view the increasing trend of our population growth:

Plan period	(Total outlay in millions of rupees)	
	(Public Sector)	(Private Sector)
1st Plan (1951-56)	19600	18000
2nd Plan (1956-61)	46000	31000
3rd Plan (1961-66)	63000	41000
Annual Plans (1966-69)	67560	—
Fourth Plan (1969-74)	167740	89800
Fifth Plan (1974-79)	372500	161610
Sixth Plan (1980-85)	693800	468600

But it cannot be said that the above outlays have been result-oriented. Food, clothing and housing are the three basic needs of our people. It is true that there has been no famine in recent years. It is also true that we do not come across naked people now-a-days. But is it not equally true that mal-nutrition

is rampant and thousands die every year in winter due to lack of warm clothings? As regards housings a survey made by Dr. S. L. Hendre, 30 per cent i.e., 270 million Indians are homeless. Is this not a deplorable state of affairs after three decades of planning? We wanted to reduce the number of our countrymen below the poverty-line as per the following statistics. It is however, revealed that no significant progress has been achieved to the extent contemplated :

People below poverty line

People below the Poverty line in	(In Millions)	
	1979-80	1984-85
rural areas.	259.56 (50%)	166.02 (30%)
People below the Poverty line in urban areas.	57.28 (40%)	49.14 (30%)

And what is this poverty line? In 1977 the team experts appointed by our Planning Commission defined this line as "the midpoint of the per capita monthly expenditure of people having a daily calorie intake of 2400 per person in rural areas and 2100 in urban areas. In terms of 1979-80 prices, these midpoints are Rs. 76 and Rs. 88 respectively. Even we are able to bring down to such people to 30 per cent after over three decades of planning it would be no marvellous achievement because clothing and housing have not been properly accounted for in the above compilation of expenditure.

It appears that there are some defects in our plan frame and restructuring is necessary. In the report published by the World Bank in 1972 India's place in the developing countries is as low as 22nd. Our ex-Prime Minister admitted this deplorable state affairs as under— "To plan when population growth is unchecked is like building house where the ground is constantly flooded." Is the flood of population growth in India uncontrollable? It is really a serious issue, specially when we are having nearly 40 per cent of our people below the poverty line in whose case birth rate is exceptionally high.

Future economic development

We started our first plan in 1951. Opinions differ about the nature of economic development attempted through our previous plans. One opinion is, by now we are no longer an under-developed economy, notwithstanding our request for aid from I.M.F. and World Bank and that we are a developing economy. Prof. Nurkse, who studied under-developed economies in details is, however, hopeful about the transformation of an underdeveloped economy to a developing economy. He has nicely portrayed the features of a developing economy as under :

"Such an economy is characterised by increase in capital resources, improvement in the efficiency of

labour, better organisation of production in all spheres, development of means of transport and communications, growth of banks and other financial institutions, urbanisation and a rise in the level of living, improvement in the standards of education and expectation of life, greater leisure and more recreational facilities and the widening of the mental horizon of the people. In short, economic development must break the poverty barrier or the vicious circle and bring into being a self-generating economy so that economic growth becomes self-sustained". If we labour hard and with foresight, would it not be possible to fulfil all the above conditions most of which will be fulfilled within the next decade and a half? If by AD 2000 we repay all our loans and are able to restore confidence in the mind of our people below the poverty line, we would be able to usher in a new era in which we may even find ourselves in a 'developed' condition instead of a "developing" one.

Doles, subsidies, no solution

The other view is, the picture is not so rosy. The progress in the implementation of our IRDP and other anti-poverty measures during the Sixth Plan has not been satisfactory so far. Dr. Bhabatosh Datta, one of the most eminent economists of our country, while reviewing our performance in respect of the sixth and previous five plans commented that the pace of development has been slow and we have not been able to reach our targets. Even our Planning Commission, the official body for the framing and implementation of our plans, have given a stricture on the extremely poor performance in this direction. The socio-economic milieu in the slums of our towns is no better than in our villages. More doles and subsidies would be no effective solutions of the problem. The acid test of a 'developed' economy is that it is of the self-generating type. We are contemplating an employment-oriented Seventh plan. We aimed at 8 per cent industrial growth rate for our 6th plan, but our performance could not exceed even 5 per cent so far. In the past we could not prepare our plans on realistic basis. It is imperative that our future plans are framed on more realistic basis and once we frame our plans, we have to labour hard to reach the targets by having regular reviews at the levels of States and the Centre. Dr. Nancy Berdsall of the World Bank, while addressing a seminar on the World Development Report 1984, has recently commented that India's population would increase substantially in absolute numbers. It is better that we pay heed to this note of warning.

Curbing population growth

Our Ford Foundation economists who made a detailed survey of our economic planning opined that soon after the year AD 2000 a second India will emerge because of India's population growth rate and unless the present strategy of planning is changed, the

13 expected massive increase in population which would swell to 100 crores would pave the way to disaster. Social justice is the crying need and it would be necessary to eliminate unemployment and poverty from the life of our teeming millions below the poverty line. 'Prosperity for all' should be the slogan. By ensuring proper redistribution of income in favour of the poor according to a properly phased programme it may be possible to have favourable effects of increased consumption on the part of those below the poverty line to have an overall increase in production, savings and investment.

Our expenditure on family planning has been increasing steadily since 1952. While family planning, by using contraceptive pills on a larger scale, will have to be continued during the next three decades, there is considerable force in the argument advanced by some economists that economic development for the downtrodden masses is the best contraceptive pill. For bringing about this economic development, it may even be necessary to change the present pattern of our mixed economy. The state may have to acquire the ownership of all important sectors of production and introduce more stringent measures for improving the efficiency of public sector enterprises.

15 Would it not be proper also to re-examine the administration of our Planning Commission, which was established 35 years ago? Should we make our Planning Commission an autonomous body or tighten up central control? The study team of the Administrative Reforms Commission set up sometime back pleaded forcefully for the involvement of our States, in setting out targets and fixation of monitoring cells at regional and sub-regional levels in the states. Sarkaria Commission have recently opined that if all Central Cabinet Ministers are to be included in the Planning Commission, it is necessary that an equal number of State Ministers should also be co-opted, because the States are responsible for an equal proportion of our plan outlays. But if our Planning Commission is reconstituted in this fashion, will it not be an unwieldy body, incapable of taking quick decisions? Is it not enough that the Chief Ministers of States are associated with decision-making, leaving it for them to ensure implementation at their Cabinet levels? A rigid system of annual reviews and carry forwards from year to year during the five-year period may possibly be a workable solution of the Centre Vs. State controversy.

Funding the plans !

From data available, it appears that provision for funds for the Seventh Plan would be a headache for our Planning Commission. A huge amount of Rupees Forty Thousand Crore was shown as deficit in the original planning forecast papers, which has recently been brought down to ten thousand crore in the re-

vised draft plan. According to the Planning Commission, it will not be difficult to have profit to the tune of Rupees thirty three crore from the State-owned undertakings in the public sector out of which it will be possible to cover the gap of Rupees Twenty Thousand Crore. In the original planning forecast papers, this profit was estimated at the much reduced figure of thirty thousand crore. As regards savings, our Planning Commission have framed their estimates on the increased rate of 26 per cent during the Seventh Plan period. According to them, this increased rate will materialize as a result of additional contributions to savings from our countrymen below the poverty line, who will rise above the line due to the implementation of our plan targets in this regard. Thirdly, the members of the Planning Commission are counting much on indirect taxes which generally provide 80 per cent of the total revenue and are of opinion that earnings from indirect taxes anticipated will facilitate provisions of funds use to the operation of the aforesaid three factors is not, however, shared by economists. According to the latter, provision of adequate funds for the Seventh Plan would be a Herculean job, because prospects of foreign aids on a massive scale are rather bleak and the anticipated profit from the State-owned enterprises may not materialise, unless these enterprises are radically modernised and their productivity is enhanced by ensuring much more efficient management than what are having at present. The apprehension is, the deficit gap would be covered through deficit finance, which will have inflationary effect of a severe type jeopardising the interests of the common man. The shape of things to come during the next plan period is, therefore, uncertain and we cannot visualise a rosy picture of our economy in the near future. The two decades would be a period of trial during which our planners have to be extracautious about the ways and means position of our next five year plans. The beginning of the Twenty-first Century may possibly be the take-off stage of our economic life which will make our plan self-generating. To ensure that we reach this take-off stage in due time, financial provision would be an uphill task during our 7th, 8th and 9th plan periods. While tapping different sources, we should try to avoid inflationary situations which are detrimental to the interests of our teeming millions. Then again, with regard to targets, physical output planning may be introduced simultaneously with monetary planning. Secondly, the new 20-point programme or similar other programmes of other parties which are now being used as political blue prints may be converted into planning documents with five-year physical targets. Last but not the least important would be debt-servicing planning with repayment and re-cycling of loans from IMF and foreign countries and involvement of the whole nation in raising funds for this purpose should be ensured by the planning authorities. □ 2,200 crore



Indian agriculture needs toning up!

Mohd. Talha

Our country has gained tremendous success in achieving self-sufficiency in foodgrains. Against this the growth of population continues to be still faster. The author feels that agricultural output can be further increased by bringing more area under cultivation, by improving productivity in terms of yield per hectare and by extending irrigation facilities in the parched lands.

AGRICULTURE OCCUPIES a predominant position in the development process of Indian economy. Considering the importance of the same, Government has given priority to this sector in the development strategy. As a result, the Seventh Five Year Plan gives greater emphasis for accelerating the pace and development, taking steps to increase growth of agricultural production, to remove regional and cropping imbalances, to evolve of new varieties of seeds, to increase consumption of fertilisers, to expand irrigation facilities, to extend the supply of institutional credit, price support to farmers and so on. These measures, no doubt do have a favourable impact on the progress of agriculture and the country could be able to achieve self-sufficiency in food. Although there has been a significant improvement in the agricultural productivity and the yield per hectare has gone up, agriculture will continue to play an important role in the years to come.

In India, nearly seventy per cent of the total population depend upon agriculture for livelihood. There is no doubt that the country has recorded considerable progress in agriculture sector since the begin-

ning of planned era. But the progress is not up to the mark. Table No. 1 shows the trends in foodgrains production in India.

Table No. 1
Trends in Foodgrains Production in India between 1950-51 to 1983-84.

Year	Area (million hectare)	Production (million tonnes)	Yield per hectare (Kgs./hectare)
1950-51	97.32	55.05	566
1960-61	115.58	82.02	710
1970-71	124.32	108.42	872
1980-81	126.67	129.59	1,023
1982-83	123.32	128.35	1,041
1983-84	N.A.	150.60	N.A.
% inc./dec over 1950-51	26.7	173.5	79

Source:— State Bank of India Monthly Review, May 1984, p-222.
N.A.—Not Available.

Data given in Table 1 reveals that from 1950-51 to 1982-83, total output of foodgrains increased at the rate of 2.7 per cent per annum and this was largely due to rise in the productivity per hectare which went up by 1.9 per cent per annum. But on the other side total area under foodgrains showed a marginal increase of only 0.7 per cent per annum. Foodgrains constitute nearly 70 per cent of the total gross-cropped area in the country, though less than 30 per cent of the area under foodgrains is irrigated.

Kharif season (June—October) accounts for three-fifth of the foodgrains production and rabi season (October—May) constitutes the remaining two-fifth. Over 54 per cent of the value of agricultural output is contributed by foodgrains. Fertiliser consumption has also gone up from 1½ kg. per hectare to 44.9 kgs. per hectare. Similarly, the acreage covered under high-yielding varieties of seeds accounts for 53 per cent of the total acreage under cereals. Total foodgrains production rose from 55 million tonnes in 1950-51 to 151.5 million tonnes in 1983-84, and was to be around 148.5-150.5 million tonnes in 1984-85. But the progress made on the agricultural front does not leave room for complacency.

Looking to the performance of the agricultural sector from a long-term angle, it is seen that the rate of growth of agricultural production has been falling in recent years. Similarly, the rate of growth of acreage under cultivation decreased from 1.5 per cent per annum between 1949-50 and 1964-65 to 0.4 per cent per annum between 1967-68 and 1983-84. In 1950-51 the rate of growth of agricultural production was 3.3 per cent and the same came down to 2.3 per cent in the mid-sixties.

With the application of the new technology in the form of improved varieties of seeds, increased use of fertilisers and other modern inputs, the rate of growth of foodgrains production potential went up, and as a result, the rate of growth reached to a level of 2.7 per cent in 1968-69. Since then it has again shown a gradual deceleration to 2.0 per cent by 1982-83. The annual increase in foodgrains production potential is below the growth rate of population (2.2 per cent per annum) during this period. Per capita foodgrains production appears to have been more or less stagnant in last few years.

It is matter of great concern that the annual rate of growth in agricultural production stood at 2.6 per cent which is slightly above the rate of growth of population at 2.2 per cent and one bad monsoon could upset the precarious balance. For this state of affairs, many causes are there. Firstly, institutional shortcomings, secondly, technical drawbacks and human factors etc. Thirdly, non-availability of good quality of seeds, manures, tools, etc. with which farmers undertake agricultural operations. Fourthly, regional as well as crop-wise imbalances in agricultural production are still persisting in the country. This can be seen from the data that the rise in foodgrains output from 1979-80 to 1983-84 was 41.8 million tonnes. Of this increase, over two-thirds came from the major producing States, namely, Uttar Pradesh, Punjab, Andhra Pradesh, Haryana, Maharashtra and Madhya Pradesh. Added to this nearly 9-per cent of total foodgrains is produced by Punjab alone, the share of which in the total population of the country comes to 2.4 per cent. This explains

the large marketable surplus of foodgrains which Punjab has been contributing.

Yield per hectare in the traditional rice cultivating regions has lagged far behind and requires to be stepped up. Rice output in the Eastern States such as Orissa, Bihar and West Bengal accounted for 10.9 million tonnes in 1982-83, i.e., 23.5 per cent of the country's total rice output and 35.3 per cent of the total acreage under rice cultivation in the country.

Similarly, production also needs to be increased in the traditional rice-growing North-Eastern regions, which constitutes 8.2 per cent of total rice acreage and nearly 7 per cent of total rice production in the country. As compared to this, non-traditional rice-growing States namely, Punjab, Haryana, Uttar Pradesh, and Rajasthan accounted for nearly 24 per cent of total rice production and more than 18 per cent of total area under rice cultivation. Even in the case of wheat there has been wide regional disparities in productivity. In Punjab it is 3,007 kgs. In Haryana it is 2,526 kgs. Hence special attention need to be paid for increasing productivity in other wheat-growing States, particularly Madhya Pradesh (1,092 kgs.), Bihar (1,343 kgs.), Uttar Pradesh (1,860 kgs.) and Rajasthan (1,830 kgs.).

Cropping imbalance

Indian agricultural sector is also facing the problem of imbalances in the cropping pattern which can be observed from the fact that the share of wheat and rice in total foodgrains output went up from 53 per cent in 1950-51 to more than 69 per cent in 1983-84, while the share of coarse grains and pulses declined from 30.7 per cent in 1950-51 to 18.1 per cent and 8.3 per cent in 1983-84 respectively. Similarly, per capita availability of vegetable oil is nearly 6 kgs. per year, as compared to the world average of 13 kgs. a year. India will have to make efforts to double the production of oilseeds from the present level of about 13 million tonnes to 26 million tonnes. Therefore, oilseeds production will have to go up nearly 6 per cent per year as against the current annual growth rate of less than 2 per cent. Another instance of cropping imbalance is that of sugarcane, which has been showing wide cyclical fluctuations in the output, causing corresponding variations in the output and price of sugar and other sweetening agents. After two successive years of bumper sugar production at 84.3 lakh tonnes in 1981-82 and 82.3 lakh tonnes in 1982-83, sugar production in the country fell to 58.9 lakh tonnes in 1983-84 and is likely to be about 60 lakh tonnes in 1984-85.

Hence to achieve a balanced approach in regard to the cropping pattern, it is essential that an overall integrated price policy for all agricultural commodities should be evolved as an incentive to farmers. Though some short-term fluctuations will not cause

very wide movements in the output of various crops. Therefore, not only technological breakthrough is necessary to increase the yield of pulses, oilseeds and coarse grains, but there is also an urgent need to introduce an integrated price policy for agricultural commodities. In the absence of crop planning in the country, only such a policy will help to eliminate stagnation as also large fluctuations in the output of various agricultural commodities.

Fixing procurement prices

In order to increase foodgrains output, it is essential to ensure that prices should serve as an incentive for increasing production and procurement so that farmers could get reasonable returns. But in these years it appears that the price incentive has not recorded much success in increasing procurement and building up food stocks. As a result the Government procurement operations cover only about one-seventh of the total rice, one-fifth of total wheat and only fraction of one per cent of coarse grains produced in the country. In India Agricultural Prices Commission (APC), after taking into consideration the cost of cultivation, has recommended the procurement prices. Table No. 2 indicates the trends in procurement prices of paddy, wheat and coarse grains between 1971-72 and 1983-84.

Table No. 2

Trends in Procurement Prices of Paddy, Wheat and Coarse grains between 1971-72 and 1983-84

(Rs. per quintal)

Year	Paddy	Wheat	Coarse Grains
1971-72	58	76	55
1972-73	58	76	60
1973-74	70	82	72
1974-75	74	105	74
1975-76	74	105	74
1976-77	74	105	74
1977-78	77	110	74
1978-79	85	112.5	85
1979-80	95	115	95
1980-81	105	117	105
1981-82	115	130	116
1982-83	122	142	118
1983-84	132	151	124
% inc./dec. over 1971-72	127.5	98.6	125.4

Source : As Table No. 1

From the Table No. 2 it can be seen that the procurement prices of paddy has increased from Rs. 58 per quintal in 1971-72 to Rs. 132 per quintal in 1983-84, indicating an over all rise of nearly 127.5 per cent. Similarly, the procurement prices of wheat went up from Rs. 76 per quintal in 1971-72 to Rs. 151 per quintal in 1983-84, showing an overall rise of nearly 98.6 per cent. Likewise, the procurement prices of coarse grains went up from Rs. 55 per quintal in 1971-72 to Rs. 124 per quintal in 1983-84, i.e. an overall increase of nearly 125.4 per cent.

Till 1977-78, procurement prices showed marginal change and were often not adequate to meet the cost of production. But thereafter, the Government increased procurement prices for foodgrains to offset, to some extent, the increase in input prices and to ensure a reasonable return to the cultivators. From 1977-78 to 1983-84, procurement prices of paddy was increased by 71.4 per cent to Rs. 151 per quintal, that of wheat by 37.3 per cent to Rs. 151 per quintal and that of coarse grains by 67.6 per cent to Rs. 124 per quintal. For 1984-85, the procurement prices of wheat was raised by Re. 1 to Rs. 152 per quintal and the procurement price of common varieties of paddy was raised by Rs. 5 per quintal to Rs. 137 per quintal.

In providing a reasonable return to cultivators the policy does not appear to have achieved much success. For instance a comparison of procurement prices fixed with the available estimates of cost of production shows that often the procurement price was not adequate to cover the full cost of production though the gap has been considerably narrowed down. According to available data the cost of production shows that as against the procurement price of Rs. 77 per quintal in 1977-78, the per quintal cost of output of paddy was higher in the major paddy-growing States namely, Andhra Pradesh, Bihar, Haryana, Tamil Nadu and Uttar Pradesh. Though the procurement price was raised to Rs. 105 per quintal in 1980-81, it was lower than the cost of production per quintal in Bihar and just about covered the cost in Andhra Pradesh.

Irrigation

Irrigation development in years to come will have to be based on quick completion of on-going schemes such as utilisation of potential and better management, unfinished irrigation projects, medium and even minor, which are in an advanced stage of completion and are capable of yielding full or partial benefits in near future. New schemes should be restricted to medium irrigation projects in drought-prone areas and in tribal and backward areas, and to minor irrigation schemes. These should be funded adequately in years to come so as to yield benefits either within the Seventh Plan or in the early years of next plan period.

Banking facilities

In years to come it is stipulated that direct finance to agriculture should account for 15 per cent of the total bank credit by March, 1985 and 16 per cent by March, 1987.

According to the Annual Report of the Finance Ministry, Government of India for 1983-84, an overall target of 16 per cent of the total credit was set for banks. Since 1981, the banks had already crossed the target and touched a level of 17 per cent. Therefore, the new target has been exclusively set for

agriculture instead of for agriculture and allied activities.

There are various financial requirements and banking facilities in the development of agriculture. Some financial requirements and banking facilities are as follows :

- (i) Introduction of the lead banks schemes to provide banking infrastructure in the rural and semi-urban areas and various forums to tackle the problems of flow of credit to agriculture.
- (ii) Appointment of various working groups and study groups simplifying the lending procedure and introducing changes into the system and methods of financing, formulation of bank credit schemes.
- (iii) Introduction of special projects and programmes namely, SFDA, MFAL, DPAP, CAD tribal sub-plan, hill areas development programme, desert development programme, special poultry production programme, intensive cattle development programme, small fishermen's development programme, IRDP, special component plan and the like under which the Government provided organisation staff and subsidy so as to help beneficiaries and banks to participate in the process of development. An effective role be assigned to credit in development and measures should be taken to link various credit schemes efficiently. In this process ARDC| NABARD has needed assistance for improving quantitatively.

While the above performance can indeed be considered modest, one has to endeavour to probe in detail to find out the reasons and compelling factors under which the commercial banks have been working the task of lending in rural areas. This is essential in order to appreciate that in future all-out efforts and policy will have to be evolved to improve the capabilities of banking system to increase the credit absorption capacity in rural areas where productivity, production and profitability of agriculture enterprise could be stepped up by deploying money to bring science and technology to the doors of the farmers. It is against this background that one has to appreciate the present challenges and future tasks.

Raising agricultural production

From the foregoing paras it has been brought out that agricultural output can be increased by increasing area under cultivation by increasing productivity in terms of yield per hectare and by extending more irrigation facilities. At present, there is nearly 10 million hectares of fallow land over and above the current fallows which stand at about 15 million hectares which is a potential source for raising agricultural production. Out of the total area of nearly 329 million hectares in the country, net cultivated area comes

to 143 million hectares and gross cultivated area is about 175 million hectares. However, since the scope for expanding area under cultivation is limited, further increase in agricultural production should come from enhanced yield per hectare as well as from the multiple cropping. Similarly, there is plenty of scope for increasing yields per hectare in respect of major crops in the country which are far below yield levels obtained in other producing countries of the world.

There is further scope for raising productivity of irrigated lands. According to the information supplied by the Planning Commission irrigated lands should yield at least 4-5 tonnes of grains per hectare as compared to the existing yield which is hardly 1.7 tonnes on an average. Hence the yield per hectare of irrigated lands needs to be increased by ensuring timely availability of agricultural inputs namely, fertilisers, irrigation and high-yielding varieties of seeds. For this operation, according to the Planning Commission Rs. 800 crores are required. As against the total irrigation potential of 65.6 million hectares created till the end of June 1984, actual utilisation comes to 60.5 million hectares. This means the irrigation potential of about 5.1 million hectares is not being utilised.

For increasing yield per hectare, it is also essential to promote optimum use of fertiliser. In our country there has been wide variation in the use of fertilisers among regions to regions, seasons to seasons, crops to crops. To day the India's average stands at 44.9 kgs. per hectare. The figures for the consumption of fertilisers per unit of gross cropped area ranging from 2 kgs. per hectare in Nagaland to 149.3 kgs. of Punjab and 231.4 kgs. in Pondicherry.

Increasing use of high-yielding varieties (HYV) of seeds is another aspect to be seen in raising productivity. To day, most of the HYV coverage confines to wheat and rice. In 1983-84, nearly 76 per cent of the 24.4 million hectares of crop area under wheat was covered by HYV's, in the case of rice it came to 54 per cent of the crop area of 41 million hectares. But for coarse cereals, HYV coverage stood at 29 per cent. Added to this in the case of rice and wheat, the use of HYV seeds is concentrated in Punjab, Haryana, Uttar Pradesh and Andhra Pradesh.

Prospects for agriculture

According to the latest Economic Survey, agricultural sector's performance will improve if the economy is to grow at about 5 per cent per year in years to come. Total agricultural production may have to grow at a higher rate as compared to the underlying trend rate of growth attained in the past years. To achieve this objective, it is vital that substantial investment should be put in land development, development of fallow land, development of irrigation potential and better utilisation of potential already created and increased production of quality seeds, pulses and oil-seeds. In order to increase agricultural production, full utilisation of existing irrigation potential has been rightly emphasised.

Rs. 110/-

Rs. 55/- each



Integrated agricultural development

D.K. Pahalwan and R. S. Tripathi

In another fifty years the population of India may double itself and require 277 million tonnes of food. It is not too early to start improving the management of agro-resources and integrate the agricultural planning, say the authors.

INDIA COVERS ABOUT 328 million hectares of land area. Its agro-climatic conditions favour raising of more than two crops in a year. The variation in agro-climatic factors helps in obtaining a well diversified agricultural production.

In view of fast growing population, food grains has had the highest priority even since we attained independence. It would continue to be our main concern in years to come. Planning Commission estimated that in 50 years from now, we may have a population of about 1375 million, we will then need to produce 277 million tonnes of foodgrain to meet the per capita requirement of 225 kg per year.

Much attention has already been paid for providing the agro-resources like fertilisers, irrigation water, improved seeds, credit, market, improved technology and extension services to the lower levels of their users. However, still there is vast scope for mobilization of these needed resources in the country. Effort has been made here to pin-point the future agro-resource management, and integrated planning for agricultural development.

High productivity of small farms

The agrarian structure of our rural economy is such that small and marginal farmers constitute nearly 73 per cent of the total farmers although they cultivate only about 23 per cent of the total cultivated area. Their earning from farming alone is small, due

to low size of holding and uncertain production. However, in spite of the use of low inputs, the production potential per unit area is comparatively more under the small and marginal farms as compared to big farms. On the other hand, medium and big farmers do not manage their farms well thus the productivity of such farms remains below their potential. Hence, there is an urgent need to provide the inputs to the small and marginal farmers and awareness of role of farm management as well as business concept among the big farmers.

During last decades, the major objective of agricultural research and development was to achieve self-sufficiency in food. During 80's, the goal would not only be to further improve productivity and stabilized production but also to generate rural employment. Indian agriculture could be made more profitable by reducing the cost of production through more effective use of material inputs and by keeping a better balance between monetary and non-monetary inputs.

Improving the agriculture

The imbalance in the relative growth of different crops was observed, particularly after the 'green revolution'. The most urgent requirement today is to accelerate the growth in production of pulses and oil-seed crops. Poor plant population, inadequate plant protection, cultivation in marginal and submarginal areas are some of the factors which reduce the yield of these crops. Special attention will have to be paid for strengthening research on these crops to improve their production and nutritive values. It is also required to evolve diversified cropping systems in heavy and well distributed rainfall areas instead of the mainly monocropping system with paddy that exists at present.

Statewise proper cropping patterns should be developed according to the soil, climate, availability of irrigation water and other agro-resources. Further, the cropping plans for different sizes of holdings be based on cost, return and risk. The farming systems should

be designed in such a way that crops suffer less due to drought and/or flood conditions. The availability of inputs like fertilizers, pesticides, seeds of high-yielding varieties/hybrids etc. has to be insured at right time and also at reasonable prices.

Better availability of manure

Maximisation of biomass production and re-cycling of organic-wastes would be some of the objectives of our future agricultural planning. It is estimated that about 1000 million tonnes of organic wastes in the form of crop-residues and another 300 to 400 million tonnes of cattle dung and organic droppings are available annually in the country. These materials contain approximately 6 million tonnes of nitrogen, 2.5 million tonnes of phosphorus and 4.5 million tonnes of potassium. Even if a significant portion of these essential nutrients are efficiently re-cycled, not only our yield but also the land would improve. Hence, emphasis on organic-forming should be given for improving the soil productivity.

Social forestry with planting of quick growing plants for fuel and timber is one of the solution of our major rural fuel problem. Installation of biogas plants in rural areas may be helpful in supplying energy for cooking and running of farm pumps. It also supplies good quality of farm yard manure. Hence sufficient incentives in the form of subsidies along with wide publicity for the use of 'gobar gas plant' would be helpful in solving our rural energy problems. Efficient use of solar and wind energy in agriculture and provision of good supply of electricity and fuel particularly diesel in crop growing season will further help in improving our future food production.

In the country's sixth five year plan, it has been postulated that fertilizer consumption must grow at a certain minimum rate to sustain the agricultural production in years to come. The estimates of total consumption of nitrogen, phosphorus and potassium for the year of 1989-90 is about 11.83 million tonnes. Even to sustain this growth it will be necessary for the government, industries, extension and promotion agencies to intensify their efforts and provide a good marketing system to its real users. Moreover, in future, there should not be any more sharp increase in prices of fertilizers.

On the other hand, for increasing the fertilizer use efficiency proper agronomical practices should be adopted inspite of the several constraints. The practices like green manuring, legume intercropping and legume in multiple cropping systems will be also helpful in decreasing the inorganic nitrogen fertilizer demand of a farm. Possibilities of use of industrial wastes and by products as a manures and fertilizers should be tested. This will not only helpful to meet the future nitrogen demand but also check the industrial pollution.

Integrated strategy

A potential means of increasing agricultural production specially in rainfed areas is through collection and conservation of available water resources and by achieving a high efficiency of its utilization. An integrated strategy for utilization of ground and surface water resources and harvesting of rainwater in agro-ecological areas will be helpful in transforming our agricultural and rural economy.

Maximum utilization of irrigation facilities

Studies all over India had revealed that under irrigated conditions, the average yield of crops is comparatively higher and more stable than in the unirrigated or rainfed areas. Hence, there is an urgent need to increase the area under assured irrigation water supply. As per the report of National Commission of Agriculture, the ultimate irrigation potential in the country is estimated at 113 million hectares (2025 A.D.). Of this, about 58.8 million hectares by major and medium irrigation projects and 54.5 million hectares by minor irrigation projects. This will be equal to about 52 per cent of the gross sown area (210 million hectares).

The irrigation potential that has been created in the country when the sixth five year plan started was 56.6 million hectares which is about one third of our cropped area. In the sixth five year plan, it was proposed to create an additional irrigation potential of 5.7 million hectares from major and medium irrigation projects and 8.0 million hectares from minor irrigation projects. On the other hand, it was observed that the gap between utilizer and created irrigation potential is increasing with the increase in the irrigation potential. Hence, for controlling and/or minimizing the water loss in conveying, a detailed study of the system becomes necessary to make the each project efficient and productive. Importance of lining of canals and proper scheduling of irrigation for different crops should be made available to the farmers.

Inefficient application of water can be minimised. Work on the command area development and popularization of crop-soil-water management practices may be encouraged for increasing the productivity of crops. Besides this, our irrigation policies should envisage (a) maximum production per unit area through multiple cropping under assured irrigation water supply (b) maximum production per unit of water in region of medium and low rain-fall and (c) stabilization of agricultural output in drought areas. In addition to this, the linkage among the irrigation and electricity departments should be strengthened for potential use of water for productivity purposes. It has been noticed at present that this linkage is rather weak or some time non-existent among these two sister departments.

Need for mechanisation

15 With the development of high yielding photoinsensitive, short to medium duration varieties of cereals, pulses and oilseeds and efficient agro-techniques under adequate irrigation facilities the possibilities of adopting relay and multiple cropping for maximising crop production have increased. However, the great limiting factor in adopting the intensive cropping pattern is the timely availability of sufficient labour to complete the important pre-and post-harvest cultural operations such as preparation of fields, sowing, weeding, harvesting and threshing etc. These have a direct impact on yield. Selective mechanisation or selective use of farm tools and machines not only helps in increasing the agricultural output by timely completion of field work but also would generate more employment. It was estimated that increased agricultural activities due to adoption of improved farming technology with better water management generate, on an average about 40 man days of employment per hectare. Hence, the question that mechanisation of agriculture may affect the employment of landless farm workers does not hold valid.

Better means of communication

16 The marketing opportunities will have to be carefully studied and appropriate advice and facilities should be given to farmers at right time so that their efforts are adequately rewarded. Individual, group or cooperative storages should be encouraged so that farmers can keep their produce to avoid middle-men interactions. Further, improvement in the basic marketing infrastructure needs considerable attention by the planners and administrators so that proper supply of input-output can be maintained in the markets. The importance of transportation may be realised in many ways. It helps in reducing the cost of production by lowering the cost of transport of inputs from the market to the farm and outputs from the farm to the market. Thus, for the smooth development of agriculture in India there is an urgent need to link the villages with the main cities of the locality and country as a whole by constructing roads, rails and water-transport systems specially in backward and neglected regions of the country.

17 Integrated weeds, pests and disease control measures along with increase in the production and coverage of herbicides and pesticides will be helpful in controlling weeds, pests and diseases. Necessary emphasis should also be laid on strengthening research on fruits, fodders, vegetables and horticultural crops. Designing of proper coastal agriculture-cum-mariculture system of farming not only helps in improving the diets and malnutritional problems but also checks the coastal erosion.

Developing mariculture

The territorial water of India extends to a distance of 12 nautical miles. Hence, utilization of about 12

million hectares of sea area for harvesting fishes from sea has to be potentially exploited. Research on aquaculture should also get higher priority to develop relevant technology for production, collection, processing and marketing of both inland and marine fisheries.

19 Animal population figures indicate that India is having largest animal population. It includes 178 million cattles and 58 million buffaloes. Most of the milk is produced by buffaloes though milch cows (22 million) outnumber milch buffaloes (15 million). However, because of their low productivity, milk and milk products are not even sufficient to meet the per capita requirement of the people. Secondly, the marketing infrastructures of the animal products are practically non-existent in the rural areas and thereby the producers are not getting proper remuneration. Special attention should be paid to popularize the animal husbandry and poultry production in dry and hilly areas under mixed farming system.

20 Forests occupy an area of nearly 63 million hectares constituting 20.5 per cent of the total geographical area of the country. In an agricultural country like India, forests play an important role in providing the economic goods. It also helps in maintaining the productivity of agriculture and ecosystem. Apart from the material utility of the forests in fulfilling various requirements of local people, they also help in checking floods, ensuring perpetual flow of water in rivers and maintain a balance between different gases in the atmosphere. Installation of forest based industries near the forests will also provide the gainful employment to unemployed or underemployed particularly tribals and backward people.

21 Extension agencies or institutions are an important media for communication of farm technology from the research institutions/centres to the farmers.

How trees prevent pollution!

THE PLANTATION OF TREES is beneficial for reducing pollution caused by vehicles etc.

Based on the studies conducted by the National Botanical Research Institute, Lucknow, Banaras Hindu University, Varanasi, Jawaharlal Nehru University, New Delhi; Institute of Science, Bombay; Calcutta University, several pollution-tolerant plant species have been identified. The Department of Environment is also initiating an All India Coordinate Project on plant responses to air-pollutants. The thrust of the work will be to identify suitable species in different regions for reducing air pollution.

There is no specific programme for plantation to reduce air-pollution. However, some of pollution-tolerant species are included in the general scheme of plantation.

Re-1057



Dumping hazards on the weak !

Subhash J. Rele

When some items of clothing, medicine or food are banned in home market of developed countries, the manufacturers have nothing to worry about. They can still sell those items outside, especially to the third world. In this way, in their efforts to minimise the losses, they are free to sell death to unknown customers. And even law can't touch them for this criminality ! The author cautions that the third world should wake to the dangers of this hazardous dumping and learn to fend itself.

DUMPING HAZARDOUS PRODUCTS in the poor, less developed third World countries has become a booming billion dollar business. It also promises to become one of the hottest international controversies of the decade. Each year thousands of tonnes of hazardous products manufactured but banned in the United States find their way into the third world markets. Dumping involve not only manufacturers and retailers, a vast array of export brokers, tramp steamers, black marketeers and go-betweens who traffic an estimated \$ 2 billion worth of unsafe goods overseas every year, but also the US Export-Import Bank, which finances large dumps ; the Commerce, State and Treasury Departments which have the statutory authority to stop or control dumping, but won't; and a President, who in his quiet way, subverts the efforts of the few progressive members of the Congress who seek to pass uniform anti-dumping legislation.

More than a year ago, the UN General Assembly adopted a resolution introduced by 23 developing

countries prohibiting the export of banned, hazardous products without the knowledge and official permission of the importing country. On the face of it, the resolution seems uncontroversial but the Reagan administration cast a dissent vote in a 146-1 vote. The argument forwarded by the American administration was that it would create excessive regulation and restrict free trade. Most of the US manufacturers show no compunction about dumping hazardous products banned in their country on third world people. Dumping does raise hackles in some developing countries but it has no long-term impact.

In the garb of transfer

The wholesale transport of either manufacturing plants or the technology required to produce hazardous goods into another country is also a kind of dumping. Plants may be shifted from sites in the US and located in under-developed countries for a number of reasons including the availability of cheap labour force and energy supply, tax incentives and the avoidance of environmental regulations and occupational health and safety standards. A desperately poor country often will accept a "runaway" plant which produces hazardous goods as the only way to bring in capital investment jobs and tax revenues. When for example, aldrin, a highly toxic pesticide and dieldrin, its breakdown product, were banned in the US in 1974. Shell Oil, quickly switched their production from its California plant to the Netherlands thus enabling Shell to continue exporting the pesticide to other countries. A year after the American ban 13 children died in Brazil of aldrin and dieldrin poisoning.

Dumping has been a favourite money-spinner of several US multinational corporations. Public attention was, however, focussed in 1977, when US manufacturers exported about 2.4 million baby

garments treated with the carcinogenic chemical Tris, which had been banned from domestic sale. ⁵ Laboratory tests subsequently showed that Tris caused kidney cancer in children exposed to it at the rate of 300 per million boys and 60 per million girls. The Consumer Product Safety Commission banned the domestic sale of all Tris-treated children sleepwear. While the small manufacturers sought to recoup some of the loss from the Federal Government, two larger multinational corporations safeguarded their financial interest by unloading the stock in Third World countries. More than three years later, Tris-treated fabrics were exported to Ghana. Experts in the trade estimate that tens of millions of pairs of ⁶ Tris-treated pajamas were shipped quietly out of the US between the time Tris was banned in 1977 and June 1978; when the CPSC slapped a ban on Tris exports. Many of the sleepwear even went to Europe and many more to the under-regulated and unsuspecting lesser developed countries. It is obvious that in such cases checking the number of children who became victims of cancer would be impossible.

Pesticides and fungicides

Several other examples of this sinister practice began to attract public attention. An undisclosed number of farmers and 1,000 water buffalos died ⁷ suddenly in Egypt after being exposed to leptophos, a chemical pesticide which was never registered for domestic use by the Environmental Protection Agency, but was exported to 30 countries. Another report also surfaced that 400 Iraqis had died and 5,000 more had been hospitalised after eating wheat and barley imported from the US. The grain had been treated with a mercury fungicide banned from domestically used grain.

Women are passive recipients of many potentially hazardous drugs and other devices when low-cost alternatives exist. The intrauterine device called ⁸ Dalkon Shield has been making sad news everywhere. After the device killed at least 17 women in the USA, the manufacturers withdrew it from the domestic market. It was sold overseas afterwards without let or hindrance, and is still in common use in several poor countries. All over the under-developed world, including India, there are over half a million women with the Dalkon Shield implanted in them and the majority do not know what it is all about. It was recently revealed that the multi-national corporations distributed, with an alleged consent of an American agency, larger quantities of the same contraceptive, 'unsterilised' in the Third World, a practice that ⁹ would never be allowed in the USA itself. Nobody can give count of the number of women who lost their lives and their health.

Pacifiers that kill

Few hazardous products have created more excitement than the US manufactured pacifiers. Between

1964 and 1975 atleast 7 healthy American babies choked to death on pacifiers. During this time, hundreds of babies experienced near-fatal suffocation, cardiac arrest, brain damage and lesser injuries after swallowing poorly designed pacifiers. It wasn't until October 20, 1976, after many more accidents and several additional fatalities, that the Consumer Product Safety Commission proposed pacifier's safety standards. CPSC's proposed regulations laid that a pacifier should have a shield large enough to prevent it from being swallowed, and have two ventilation holes on the shield to ease breathing if swallowed. Not one single pacifier on the American market satisfied the new standards. In 1977, the CPSC announced a virtual ban on the manufacture of old-style pacifiers. Even before the ban became final, the dump began. The Evenflo Product Co. of Ohio, famous for its baby bottles, exported more than 1,63,000 hazardous pacifiers throughout the world making it biggest dump in Iran, Venezuela, ¹⁰ Puerto Rico and the Dominican Republic. Binky Baby Products of New Jersey dumped 50,000 pacifiers in Canada, South Africa and Venezuela. The dump continues even now. Not many bother about the consequences. ¹¹

Toothless task force

The discussion on hazardous product's exports began in the US in 1979 with the formation of a Government Committee called Inter-agency Task Force of Hazardous Substances in Export Policy. The Task Force has hardly any teeth and dumping goes on unabated. Often included in the shipments are banned drugs and pesticides such as Aldrin and Mirex, both of which have been withdrawn from ¹² use in USA. Random inspection at various docks of food exports found such items as 6,700 boxes of insect-ridden rice bound for Chile; 3,200 pounds of moulded flour headed for Abu Dhabi and 200,000 pounds of yellow cornmeal contaminated with bird and rodent faeces destined for Netherlands. Regrettably, the current US position is yet another example of the Reagan administration's patronisingly dangerous attitude towards the Third World countries. After entering the office, 34 days later President Reagan rescinded ex-President Carter's order which ¹³ called for an unified notification process whereby the US Department would inform all other nations about products banned or restricted by the White House. Reagan asked the Secretary of State Alexander Haig and the Secretary of Commerce Malcolm Baldrige to re-examine the entire matter. Both of them sent a Memorandum to the President in total agreement with the "hands-off" position of the chemicals and pharmaceutical industries, the strongest multinational group in the USA.

How considerate ?

What concerned Government officials was that it was perfectly legal and morally justified to dump ¹⁴

almost anything found too toxic or dangerous for American consumption on innocent overseas consumers. The welfare of the poor in the Third World countries has never been on the Presidential agenda. The top brass in the US Administration found solace in the fact that the US was not the only country dumping hazardous products overseas. Several other industrialised countries like UK, West Germany and multinational corporations have been caught in the "unworthy, unscrupulous" act as well.

In November 1979, "Mother Jones", the monthly magazine, released an extensive investigative report on dumping. The magazine detailed a booming trade in banned drugs, unregistered pesticides, dangerous consumer products and obsolete technologies. The export of such products from the US alone was estimated to have reached a volume of \$ 1.2 billion annually. The US industries and mncs were furious. In several cases they strongly objected to the Government's intervention. They trotted some indefensible arguments in their defence: they argued that it should be the right (headache) of an importing country to make its own risk-benefit analysis of a product, and decide for itself whether or not to import the products. Secondly, the US should not impose its own standards on other countries. Thirdly, placing controls on products serve as a disincentive to exports and will hurt the country's balance of trade and reduce US industrial production. Again, focussing attention on any one of the products places a stigma on the entire industry that makes it. If importers cannot or do not buy a product from the US, they will simply shop elsewhere.

Criminal offence

The enlightened circles in the Third World argue that the American business leaders who tout themselves as the most ethical business people in the world should lead the way in ending this dumping. It is in their best interest to do so, for by dumping toxins on the Third World they are actually poisoning the very markets they seek to develop. Realising that the current American administration is unlikely to do anything to curtail the flow of toxins and other hazardous products into foreign markets, trade officials overseas have begun to take matters into their own hands. Some countries have taken immediate action: like Zimbabwe suspended the use of Depo Provera, the contraceptive which created havoc with women's health; Kenya banned certain pesticides and medicines. Recently, Bangla Desh banned certain dangerous drugs. Under-developing countries do not have the bureaucracy to control imports—particularly when they watch for tricks that many corporations use to get their products past custom officials.

Recently, the International Organisation of Consumers Unions (IOCU) particularly their Regional Office in Penang, Malaysia, took up the cause. IOCU

has brought the dumping crisis to the attention of their 121 member organisations located in 50 countries and activated numerous other consumer advocates and government leaders throughout the Third World. IOCU has also brought the issue into the General Assembly of the UN. 19

There is no reason why dumping should not be clearly defined by statute and one more appropriate term, such as "illegal for export" be applied to products found to be dangerous in the country of their origin and therefore anywhere. Dumping should be made a criminal offence. Any enlightened Government should find such a proposal sound. The US government, for example, which already controls exports through the Commodity Control and the Bureau Census must accept the responsibility of monitoring the banned hazardous products for export. Nobody expects Reagan to declare dumping a criminal offence. The Third World, in particular, has to fend for itself by boycotting imports of hazardous products from the US and other countries. The industrially advanced First World is too selfish, too self-centered to bother about the poor in the Third World. They are too preoccupied with buliding their skyscrapers of pelf, profit and power. 20

Special assistance for tribal development

SPECIAL CENTRAL ASSISTANCE for tribal sub-plan for 1985-86 has been fixed at Rs. 140 crore which is higher by Rs. 14.5 crore than last year. Generally, the Special Central Assistance is utilised mainly for family oriented schemes and such critical infrastructure relevant to the family oriented programmes.

Under the tribal sub-plan, a Special Central Assistance of Rs. 486.62 crore was allocated to states and Union territories during the Sixth Five Year Plan. The Working Group on Tribal Development have recommended a Special Central Assistance of a higher magnitude for the Seventh Plan period (1985-90). The VII Plan allocation is yet to be decided by the Planning Commission.

The tribal sub-plan is an area development plan with particular focus and emphasis on development of tribal population. At present, it covers 75 per cent of the Schedule Tribes in 17 states and 2 Union territories. The Special Central Assistance is in the nature of an additive and is supplemental to the flow from State Plan for the tribal areas.

The expenditure pattern of Special Central Assistance during the VI Plan reveals that about 43 per cent was utilised in sectors of beneficiary oriented nature, 32 per cent on social services, 4 per cent on infrastructure and 21 per cent on other related sectors. □

Andamans' march towards progress

We present here an interview with Shri M.L. Kampani, Lt. Governor of Andamans and Nicobar Islands, by All India Radio Port Blair correspondent, Shri M.R. Madhusudan Varma, which was earlier broadcast by AIR. The interview throws light on the all-round developmental activities of the Islands and the projected targets in the Seventh Plan.

Correspondent :

Development of a remote territory that too distant from mainland separated by sea is a major task. Mr. Lt. Governor, Sir, how do you look at the developments of these Islands ?

Mr. Kampani :

We are separated from the mainland by 1200 k.m. of sea. This distance from the mainland does present lot of problems but these are not unsurmountable. The development of communications between the main land and the Islands has therefore been of great importance in the past plans and we are giving due emphasis on this in the 7th five year plan also. We are dependent on the mainland for most of the items required for development; these include Cement, and Steel, Petroleum products, Food supply, and Consumer items. In each plan major portion of our outlays has been spent on improving communication. In the 7th plan out of total outlay of 285 crores, about 139 crore has been allocated to the sector Shipping and Transport.

Correspondent :

Islands have achieved and exceeded the targets in almost every item of 20-Point Programme in the

Sixth Plan. Will you please tell how this speedy implementation was possible ?

Mr. Kampani :

Basically it is due to co-operation which we have received in abundance from the people of the Islands and they have interest in improving their lot. We have a democratic set up with the Pradesh Council at the territory level. We have good Panchayats and you know our members of the Pradesh Council are elected indirectly through three electrol colleges. 14 members come from 43 Panchayats, 5 members are elected from amongst the Port Blair Municipal Board members and 6 other from amongst the Captains of the tribal villages. This body has played an important role in bringing the requirements of the people to the Administration and helping in speedy implementation of the programmes being taken up by the administration. Also we have been able to sanction schemes well in time in the early part of the year so that people can start work immediately after the monsoons when the working season starts. Regular monitoring of the programme has also helped in ensuring their speedy implementation.

Correspondent :

However Islands have not achieved self-sufficiency in most of the spheres including the food front. For almost everything we have to depend on mainland. What steps are you taking to tackle this problems?

Mr. Kampani :

We do not have much land in the Islands. Our total area is 8923 Sq. K.m. Most of it is covered by lush green tropical forests. A decision, therefore, was taken much earlier, and very wisely so, that the Islands territory need not be self-sufficient in food supplies. This was basically done to ensure that more land is not brought under the conventional agriculture at the cost of the forests. We are, therefore, more

keen on developing plantations than increasing the area under conventional agriculture. Our present plans in agriculture are to go in for plantations and intensive agriculture by improving our farm technology, use of better fertilizers, seeds, etc.

Correspondent :

Andaman and Nicobar Islands are unique with the presence of 6 types of tribals. What welfare measures have you taken for the upliftment of these tribals and the primitive tribals like Ongees, Jarawas, Sentenelese and Shompens ?

Mr. Kampani :

As you mentioned, we have 6 tribes. Their total population is about 23,000. Out of this Nicobarese are about 22,000. They are very progressive people and have organised their community life on co-operative basis. The other five tribes, that is, Andamanese, Ongees, Shompens, Jarawas and Sentenelese are in different stages of development. The Andamanese and Ongees have been settled on permanent cultivation and have also been provided with dwelling houses and are living in groups. Shompens are staying in small villages very wisely separated from each other. They are now in contact with the administration and every effort is being made to increase this contact and give them assistance by providing more nutritional food, medical assistance and facilities for catching more fish, hunting, etc. Two separate contact teams have been set up one each for contacting Jarawas and Sentenelese. To ensure regular and continuous contact the team visits the tribes on full moon day. Over the months the tribes expect this team to visit them on the full moon day. This has improved the contact with Jarawas and a large number of them come to meet our teams whenever they visit them. The Sentenelese, allow our team to land on their islets and leave the gifts, but they themselves remain a little distance. As such, we have no contacts with them but it is expected that we will be able to get closer to them in the near future.

Correspondent :

What are plans to exploit the tourist potentialities of the Islands ?

Mr. Kampani :

The Islands have considerable natural beauty. Islands are endowed with unpolluted clear sea water, lush green forests and mangrove creeks. Islands have also become a land of national pilgrimage as it was here that many of our freedom fighters were sent and put to suffering and torture. We have been developing tourist infrastructure. We have already 2 good hotels run by private parties. They have about 70 rooms and both the parties are thinking of adding more

rooms. One more three star hotel with about 60 beds is under construction. The administration has already about 142 beds and are thinking of putting up a hotel and also another tourist room with about 60 beds. The future of the Islands will depend on developing water sports and speedy communications between the islands which have already been opened up for tourists. Every effort is being made to provide this facilities. Another prospective to link up Port Blair with Bangkok. Possibly a flight could go from Madras to Port Blair to Bangkok. This will attract considerable number of tourists from the East. We are trying to improve our air port so that it can take international flights.

Correspondent :

This time Islands have received the 7th plan outlay three times bigger than that of the last plan. What is the reason for this increase and what are the plans and projects planned to be taken in the 7th plan period ?

Mr. Kampani :

In the Islands we are in the process of developing infrastructure. We have, therefore, spent considerable amount on shipping, on development of roads, on power, and other such sectors. As you will see in our 7th five year plan the emphasis has been on shipping and roads. We are going to spend more than 139 crore out of a total outlay of 285 crore on shipping alone. This includes 90 crore for 3 ships which will ply between the mainland and the islands. We also, during the plan, hope to complete the Andaman Trunk road. This road touches more than 300 k.m. between North, Middle and South Andaman which are now separated by sea. The Middle Andaman portion is ready; 53 k.m. remaining portion in the North Andaman will be completed and about 22 k.m. in the South Andaman. With the completion of this road, there will be less pressure on the ship as far as the northern islands are concerned and people will be able to travel from Port Blair to Diglipur by road. We have also earmarked 13 crore for Kalpong Hydro Electric Project in Diglipur area. This will give us about 3 mega watt of power. We have total installed capacity of 10 mega watt. During the 7th five year plan period we want to increase it to 25 mega watt. We also want our medical cover to improve, particularly the specialist services, to provide better medical care to the people. More emphasis will have to be given to animal husbandry as there is considerable scope for the development of cattle, piggery, poultry, goatery and duckery. There is shortage of good housing. We have to provide better houses to our Government servants and also to the general public. We have improved our fish catch in recent years. Government is very keen in the development of these remote areas.

(Courtesy : All India Radio)

Importance of electronic data processing

Yojana Correspondent

THE UNION MINISTER of State for Planning, Shri K.R. Narayanan, emphasised the need for developing countries to acquire the latest knowledge and all the modern tools and methods for collecting and processing the vast amount of socio-economic data needed for developmental planning and policy formulation. He was inaugurating the sixteen-week long training course on electronic data processing organised by the Central Statistical Organisation of India in collaboration with the Computer Centre of the Department of Statistics, Planning Ministry, with the support of the United Nations Development Programme and the Economic and Social Commission for Asia and the Pacific in New Delhi recently. This was the fourth training course. The first such training course was started in December 1982. The trainee participants were from Afghanistan, Bangladesh, China, Indonesia, Nepal, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vietnam.

The Minister stated that the developing countries needed trained personnel in increasing numbers in all technological fields, especially in the field of statistics, computers and electronics. These were the modern tools and methods with which we could put our old societies, concealed in traditional ways, on new and dynamic paths of development, he added.

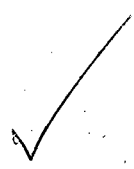
Highlighting the importance of training courses like this, Shri Narayanan said that in such training we not only learnt electronic data processing but became familiar and friendly with the mind-boggling new inventions in the ever expanding electronics. He gave a note of caution against the misuse of electronic machines and said, "living as we do in the Asian-Pacific region in ancient societies with time tested values and patterns of living, we must not allow ourselves to be dominated even by the most sophisticated and fascinating machines which were rapidly assuming

a kind of life of their own; we must always keep the lead in human hands and lend the machines to our purposes and use them for the development and progress of mankind and of course for the development of our countries according to priorities determined by us. That means we must, first of all, learn how to use these machines and make them minister to human and social purposes".

Shri Narayanan underlined the importance of statistics and said how during the last 34 years statistics in India was serving as the hand-maiden of democratic planning and helped the country in the formulation of its plans and in the resolution of its socio-economic problems. He also highlighted the great importance that the Prime Minister, Shri Rajiv Gandhi, attached to science and technology in development, in taking India into the oncoming 21st century and said that it was important that we in the developing world should not miss the computer and the electronic revolution as we missed the earlier technological and industrial revolutions in history.

Highlighting the importance of computerisation, the Minister said computerisation opened new vistas and opportunities for statisticians reducing the time lag in data processing and facilitating quicker and deeper analysis. Storage and retrieval of data, updating of information, and tabulation and analysis of survey results were made easier and more systematic by computerisation thus providing valuable, timely and relevant inputs into the overall developmental process and policy formulation.

The training course comprises Sampling and Survey Methodology and Electronic Data Processing. So far the Government of India has conducted three such courses. Nearly 50 personnel have since been trained. □



Continuing education for adults

Iqbal Mohiuddin

Adult education is meant for those who can't spare time for formal education, who are not interested in acquiring degrees and diplomas, but want to improve their economic condition by equipping themselves with technical and general information regarding their jobs and environment.

THE EDUCATIONAL process consists of a series of tasks arranged as an ordered development sequence of intellectual behaviours (reading, thinking, memorizing, studying, etc.) structured around a body of content that progress from known to unknown, from concrete to abstract and from simple to complex. These tasks must be selected and arranged in such a way that the resultant responses insure achievement of the learning objective.

Why continuing education for adults ?

Most of the students in the age group 15-35 cannot afford either to attend or continue their formal education as they are either productively busy or looking after the domestic work or due to economic reasons.

The adults, to be covered by the non-formal education are those who cannot afford to wait.

The above-mentioned points suggest that there is a need for developing a non-formal education programme for adults. But in order to develop a relevant and functional programme of non-formal education we will have to take into consideration the characteristics and the needs of the adults.

Environment-oriented approach

On the basis of the experience of the past and the resources and commitment available at present, a

workable approach for continuing education for adults is hereby proposed, which may help in developing the necessary competencies in the beneficiaries through the maximum utilization and exploitation of the environment adopting the need and problem based-approach. This may be called as "Competency, Environment-Oriented and Need-based Approach". In order to reveal the nature of this approach it seems necessary to specify these three components and realize their functional relationship.

The aim of this approach will be to develop competencies in illiterate adults to understand what they listen and read, express what they want to say and write, to add, subtract, multiply and divide numbers etc.

In order to make continuing education for adults environment-oriented the tasks to be accomplished include : practical knowledge of the environment, revealing the potential of the environment in terms of its relationship with the health and vocations of the people. The whole approach should be such as the higher education may develop a healthy and positive attitude and a sense of belongingness to the environment.

In order to adopt the need-based approach local specific and group specific needs and problems pertaining to health, vocation and social and national life should be identified, analysed and understood and solutions for satisfying the needs and solving the problems should be identified. Relationship among the individual needs, problems, social values, physical and social environment, and the inter-relationship of all these with different subjects and disciplines should be reflected in the curriculum and instructional programmes in a functional way.

Dimensions of curriculum

The role of higher education in the promotion of continuing education for adults should be identified under six categories of dimensions of non-formal-

education curriculum for the adults of rural and urban areas. There are :

1. Health
2. Vocation
3. Environment (Physical and Social)
4. Social Awareness
5. Literacy
6. Numeracy

5 The identification and clarification of the content included in these dimensions may involve a thought-provoking approach for the development of curriculum and instructional materials by the Universities. These are the basic factors on which a need-based and environmental oriented curriculum may be framed for the adult and continuing education of rural as well as urban areas.

The role of higher education

The role of Universities in the promotion of adult and continuing education in rural areas should be (i) to develop need-based educational activities and programmes for the adults and (ii) to develop suitable instructional materials with the help of different agencies.

6 The Universities should act as a catalytic agent for boosting up the academic and vocational training activities of the affiliated colleges which collaborate in the promotion of adult and continuing education programmes in the rural areas. A special cell should be established by the universities which will find out and classify the local needs of the adults of the rural India. On the basis of their priorities, the environment oriented and need-based curriculum would be framed and implemented by the Universities for rural areas.

7 The cell will also be responsible for providing training courses in work-experience etc. for preparation of items such as soap, chalk and candle.

8 The special cells set up by the Universities should identify the needs and problems of the rural areas and find out the unexplored resources which have not attracted the attention to meet their requirements. The role of higher education will be to educate the adult population to have a sort of cooperative life without sacrificing, their individuality. Due to lack of knowledge and ignorance the illiterate adults of the rural areas do not know as to whom should they contact in case of their economic, social or cultural needs. They should be given full knowledge by the Universities through their specially framed continuing education programmes for rural areas. Similarly, vocation training should also be given to the adults for the improvement of techniques of production.

Craftsmen are the essential service class of rural men and the essential service class of rural India. Knowledge of new techniques should be given to them. The role of educationists can not be over-emphasised in the rural sphere. They have to contribute a lot of their expertise and practical knowledge to the adults and continuing education programmes of rural India. Surveys are to be done for finding the needs and problems of the villages and for setting up different cells to cater the needs of the rural population. These specially established cells in the rural areas should give the information to the adults regarding block development programmes, district development centres, rural electrification programmes, rural road development programmes etc.

In urban areas

Again the six prescribed components of curriculum for adults (i.e., health, vocation, environment, social awareness, literacy and numeracy) may be applied in urban areas. Urban areas have different problems from those of rural areas. In the cities the population is denser and has special problems. The vocational problems of the urban population are quite different from that of the rural population. The role of Universities for the promotion of continuing education for adults in urban areas should be to identify the types of needs, vocations, identification of local problems, their analysis and to develop possible solutions of the problems through higher education. Having in view the vocational needs in a particular physical and social environment the Universities should provide vocational training courses to the adults of urban areas. Research-based knowledge should be provided to the vocational beneficiaries for the development of their skills. Kanpur being a centre for leather and training industry, the adult workers should be provided the technical know-how for the improvement of the industry. The technical curriculum should be provided through higher education of the Universities. Research-based knowledge should be provided to the adult workers who are engaged in them. To provide research based knowledge to the adults of the Urban areas. is the purview of higher and technical education. Thus we see what important role the higher education can play for the promotion of adult and continuing education in urban areas.

Promoting continuing education

The system of research in Nalanda University was based on practical knowledge and on-the-spot enquiry. A research scholar was asked to find within the radius of five miles from his house anything which had no medical value. The research scholar did the job thoroughly and returned to the University after five years and reported to his supervisor that he did not find anything which had no medical value. He was awarded degree on his findings.

This was the spirit behind research during the ancient days in Nalanda University. The professional technical institutes/colleges make enormous contributions through research-based knowledge for the development of science, technology, medicines and agriculture both in rural and urban adults for the improvement of their vocations. Agricultural Universities in U.P. are doing their job well and also provide technical knowledge regarding various aspects of agriculture to the peasants and adults of the rural areas.

The professional and technical colleges produce doctors and engineers for the well-being of humanity. The doctors can help the adults with information about various diseases, teach them about their health, nutrition and hygiene. Health-based instructional material, can be produced for the benefit of the rural and urban population. In the same way engineers can also help the rural and urban population in getting their water problems solved. Buildings, roads, canals, underground drainage system etc. can be provided by the engineers and knowledge about them may be provided to the adults through higher education, training camps, literacy and community centre.

Chemical institutes can also help by testing soils for better use either for agricultural purposes or construction works. Broad knowledge of soil can be provided in higher education for the benefit of adults in the rural and urban areas.

Radio and transistors are the cheapest source of communication to the rural population. Even newspapers can not beat them because news papers are (i) costly and (ii) they reach the remote villages very late or sometimes do not reach at all. So the most reliable source of getting latest news is the radio and transistors. But, the people, sometimes, do not know how to handle them properly. Such information should be given in the technical and vocational camps to the rural as well as urban illiterate adults. Universities should develop their own radio programmes for the adults either themselves or with the collaboration of some agencies. These programmes should be problematic and need-based. Universities may create new department for this purpose.

The peasants using tube-wells and tractors for agricultural purposes in the rural areas and the mechanics using machines or other adults using miscellaneous tools in the factories in the urban areas, sometimes do not know how to repair their machines or how to handle them properly at the time of their breakdown. The elementary technical knowledge should be given to them for saving their time and energy. Co-operative shops should be established in the rural areas which can provide spare parts for pumping sets and tractors at the time of need at the reasonable prices.

Coaching centre both at rural and urban levels should be established by the colleges of education for providing technical education and professional guidance to the adults. Universities may take up programmes on vocational, technical and scientific matter, medical and agricultural aspects etc., for the specific purposes of transmitting the knowledge of their training to the adults of rural and urban areas.

Courses and instructional material may be prepared in the University Deptts. of Education for Adults based on their specific needs and the needs of the region. Teachers and expert education may help in accelerating this programme at both the levels, urban as well as rural. These courses may be taught in the rural and urban community specifically established for the continuing education for the adults.

Women's literacy is also an important aspect of continuing education for Adults Programme. Provision should also be made for continuing education for women in the curriculum of higher education. Need-based programmes for women should be chalked out by the Universities and should be implemented for the upliftment of women in society both in rural and urban areas. In this way the colleges, technical and professional institutions can play their vital role in the promotion of continuing education for both adults, males and females in rural and urban areas through higher education.

Now, I have an humble submission for the kind consideration of the people engaged in the conduct of higher education programmes recently started by quite a good number of Universities. Invariably majority of these programmes, to my utter surprise, have been confined only to the formal system of education, trying to rope in only those people who are desirous of higher degrees and diplomas for one reason or the other and completely being indifferent to the larger section of adult population who are not interested in acquisition of degrees or diplomas but are in dire need of improvement of their economic plight. To my mind, until and unless they are covered under the umbrella of continuing education unit of the Universities the latter is not worth calling itself a continuing Adult Education Programme. My friends, associated with these programmes in the Universities should give serious thought to it and do something concrete to remove this lacuna.

Economic policy and planning

M. M. Ansari

IN THE PAST three decades, several volumes have been published on the problems dealing with the major issues in economic policy and planning in India; some have tried to suggest remedial measures. Unfortunately, barring a very few, none appears to have been able to develop a proper perspective for policy planning that should be consistent with both democratic polity and federal structure and mixed economy. The present volume, under review, which has been brought out to commemorate late Professor Baljit Singh, is however no exception.

1 The book comprises a collection of 23 articles which are grouped into four parts, namely; (i) Technology, Manpower, Demographic change and Development; (ii) Institutions and Development Planning; (iii) Development Patterns—National, Regional and Sectoral; and (iv) Trade, Fiscal and Monetary Policies for Development. A general comment on the book is in order. First, some of the articles are contributed by eminent economists and their views are already known among the economists and the planners. Second, as the articles have been written independently with different objective and perspective and at different points of time, there is no coherence and consistency between them. Each article, however, concentrates on specific theme and some of them raise pertinent issues.

2 In Part-I, the first three articles provide a detailed discussion on the strategic importance of technology in development of the Third World countries and emphasise on the need for technological transformations of such countries for accelerating the pace of development. While the fact is that almost every country is making its utmost effort to make use of available technology for bringing about desirable improvements in efficiency and productivity, their success is greatly hampered by both the non-availability of adequate physical and financial resources to acquire technology and the reluctance of the advanced countries to transfer the appropriate technologies. The dilemma however is that while the developing countries have jointly raised the voice at the international forums for transfer of technology, these countries have not made desirable endeavours for extending the application of the available technologies in all the sectors of the economy and regions which are within their purview.

3 The article on approaches to planning for employment creation in rural areas has rightly emphasised on the need for strengthening linkages of the type indi-

4

Economic Policy and Planning in India; Edited by A.K. Singh. T.S. Papota and R.S. Mathur, Sterling Publishers Pvt. Ltd., 1984 Rs. 200/- P.P. 467

cated above. The analysis has however been carried out in isolation from (i) the role performance of the rural development programmes which have been implemented during the Five Year Plans; and (ii) the extent to which the present rural employment schemes and rural economic activities are inconsistent with the activities of the organised sector. In fact rural and urban economic activities has been playing a complementary role, though this role could be revitalised and strengthened through appropriate policies; such policies could have been detailed in the light of our past experiences.

5 The evidences on interlink between the demographic conditions and the major socio-economic indicators of development are noteworthy. As may be expected, the relationship between fertility and income, employment and education indicate changes in the desirable direction. In-depth upto-date studies on these aspects would undoubtedly assist in formulating appropriate policies from time to time.

6 The application of regression approach as has been tried, in the subsequent article, to determine the extent of relationship between labour supply and earnings, is not ideally suited to the kind of data which has been used in the study. Infact, the informations characterising qualitative aspects are not easily susceptible to measurement. One would expect on a priori grounds that acquisition of skill and age factor (experience) would be positively associated with earnings. The result however show a negative relationship; meaning thereby, increase in age and improvement in skill would adversely affect the labour earnings. The results contradict the theoretical expectations which could be attributed largely to mis-specification of the econometric functions. As many of the users may not be fully aware of the intricacy from which the results are derived, the inferences drawn from such exercises might lead them to misplace policy emphasis. A great deal of caution ought to be exercised therefore in both selecting the methodology and drawing the conclusion.

7 In Part II, while making observations regarding the functioning of the Union Planning Commission and the performance of India's mixed economy, the authors have rightly emphasised the need for relaxation in the central control over the functioning of the Commission and for revitalising the operation of the mixed economy. In both the cases, a considerable political will would be required to effect certain socio-economic changes in the country through appropriate reforms, so that economic activities could be increased through increase in people's participation.

8 A major area of concern, namely, agrarian economic structure, has been discussed in another article, which focussed on the problems and dilemmas of land reforms and points out the responsibility of the elite class in activating the forces of economic change. Needless to mention, as compared to pre-independence

era, a considerable degree of land reform has already taken place and a lot is still being done in various parts of the country. It is, however, difficult to arrive at a consensus as to what extent such reforms could be carried out, given the constitutional provisions for property rights and more importantly, the domination of property owning class and wealth capitalists in the decision making process. In the Indian context, the socio-economic settings which is characterised *inter alia*, by both federal and democratic polity and mixed economic structure, the different aspect of property relations ought to be reckoned with in proper perspective. Nevertheless, it has rightly been argued that the elite group should make a concerted efforts to create such conditions which would increasingly help involve peasantry class as agents of change in the process of development. This would however require both strengthening of rural based development personnel who may be responsible for implementing the programmes and mobilization of target groups so as to increase the responsiveness of the latter in order that optimum results could be attained. This aspect has been clearly brought out in another article on rural development personnel.

Public Distribution System, as examined in the book, has been one of the major policy measures for ensuring efficient delivery of some of the essential consumer goods at reasonable price, to the weaker sections of the society. An assessment of the performance of the system over the past two decades indicate several deficiencies and shortcomings which largely emanate from administrative inefficiency (including corruption) and mis-management of the distribution system. It has therefore been rightly suggested that a proper re-orientation of the system is a must with a view to ensuring effective distribution of the essential goods which largely serve the interest of the poor people.

The articles devoted to describing the patterns of development, in part-III, are seemingly imbalanced in their coverage. Out of the five articles, four deal with agricultural aspects of India's growth (including one on the development of hill regions in a state), the remaining one is devoted to discussion on rural industrialization. None of them has examined the overall inter-regional and the nature of sectoral change over the plan periods; the study of which is imperative for drawing a well conceived policy conclusion. While examining the impact of drought on production of food grains, it has been suggested that Agricultural Stabilization Tax-Expenditure Scheme (ASTE), which is in essence a crop insurance scheme should be implemented so as to protect the interests of crop growers. Under this scheme 'the sum of premia collected should equal indemnities paid over a period'. Though the scheme appears to be laudable, it raises a number of questions about its implementation aspects which unfortunately, has not been cared to examine, while making this proposal.

The comparative study on growth of agriculture in Punjab and Haryana has clearly revealed, as may be expected, that agricultural output is positively associated with the extent of use of modern inputs. The study has moreover shown that the gains in output may get neutralized if there is large increase in agricultural work force. 14

The article on the development of hill regions ignores many vital points while arguing in favour of the development of such areas, though it rightly lists down the positive gains from hill regions. The unit cost of development in the areas characterised by hill regions is generally so high that the different criteria which determine the allocation of resources across the regions do not favour massive deployment of funds in the areas where from the returns are relatively non-optimum. This problem is faced particularly in a resource deficient country like ours. Ever since the Fourth Five Year Plan, all the hill and tribal regions have been classified under special category states and are given special treatment by the centre in regard to the distribution of central assistance. The examination of the impact of such measures would have been useful than merely cataloging the reasons for huge plan outlay in such region. After all, a high magnitude of resources which is sought to be diverted to the backward regions is to be drawn largely from the advanced regions. Therefore, at the initial stages of development relatively potential regions ought to be developed at an appropriate pace. The article dealing with the development of hill areas in Uttar Pradesh has unfortunately ignored this vital aspect. 15

One of the approaches of rural development is no doubt to pave the way for speedy rural industrialization which, in turn, is contingent upon some of the essential infrastructural facilities like power, transport and communication and markets etc. Besides this, in the present age the extent of industrialisation is heavily dependent on the application of scientific knowledge and up-to-date technology. In a country where more than 60 per cent of people are illiterate and, of which, a considerably large proportion live in rural areas, how can we expect rapid industrialization without having extended adequate infrastructural facility and without having provided required minimum level of education and entrepreneurial capacity? While the need for rural industrialization should not be underrated, the essential pre-requisites ought to be met so as to expedite the process of rural industrialization. 16

Moreover, the existence of some of the giant oligopolistic firms would entail effective protection of rural industries from the sweep of competition posed by non-rural based manufacturing concerns. This problem could possibly be tackled through effective regulatory measures for demarcating lines of both the products as well as technology between rural and non-rural areas in order to ensure that the use of a relatively high technology and modern managerial capa- 18

city of the latter do not encroach upon the industrial activities of the former areas and take undue advantage. This however is not so easy to do, especially when political will is lacking.

19 The last part, IV, runs under the heading of Trade, Fiscal and Monetary Policies for Development. There is however no attempt in any one of the articles to assess the economic performance in the light of the relevant policies pertaining to India's foreign trade and fiscal and monetary policies even though this part is devoted to examining this aspect. Probably, none of the articles included in this part of the book, intended to attempt to make policy analysis, though the theme chosen for discussion has been ably dealt with in some of the articles.

20 In the recent times there has been world wide discussion on international economic relations. The major issues in inter-country trade relations are duly highlighted in one of the articles, as may also be found in the documents of certain international U.N. agencies.

21 While the paper on the states' plan finance reads well and advances the argument that federal transfers have been increasing over the years and are generally progressive, it reflects a somewhat biased view, in favour of the centre, by ignoring the fact that : (i) the aggregate financial transfers to the states on all accounts as a proportion of the total national resources has been steadily declining in the recent times; (ii) the performance of the centre in mobilization of resources has been relatively poor than the states; and (iii) the statutory powers of the centre in raising internal and external resources are more than the powers enjoyed by the states (Yojana Sept. 16, 1984). Since the author's analysis in the book has been trickily presented, the arguments may not be tenable by most of the state governments, including those ruled by the same party which in power at the centre.

22 The discussion on taxation, policy and integration of monetary variables in the growth models, in the subsequent three articles, are of academic interest and a voluminous literature on the related subject can be found every where. In these articles there is no worthwhile original analysis which might have a bearing on policy planning in India.

23 The last article on sectoral shifts in employment across the regions is unduly grouped in this part which is not devoted to regional analysis. Surprisingly, the article concludes that the effects of population on agricultural employment and productivity is almost neutral over the years. Contrary to this finding, another exercise presented in the book and as already commented upon above, has demonstrated that increase in population has adverse impact on both employment and agricultural output. While examining the determinants of employment patterns and interpreting the results, the *a priori* justification of the multiple-regression equation, from which the conclusions

are drawn, should have been ascertained. The findings of the study that the pattern in employment has been shifting from agricultural to non-agricultural sectors is duly corroborated by other studies also.

In this part of the book some attempt to empirically examine the savings and investments behaviour in the past would have been of immense value from the point of view of both to justify the coverage of the book and to provide useful literature to users. Likewise, the study of potential capacity of the Indian economy and the methods by which the emerging needs of the country could be financed would have been a welcome addition.

It may be hoped that the second edition of the book, if brought out, would duly incorporate the changes indicated above and would focus on the problems which the title of the book i.e. economic policy and planning in India, encompass under its purview. An attempt in this direction would indeed be good endeavour to commemorate late Professor Baljit Singh. While the editors effort to compile rich materials at one place is commendable and is extremely useful for students as well teachers, the price of the book at Rs. 200/- is too high and is therefore beyond the affordable capacity of many students who may necessarily like to benefit from the book. □ 2,500 w/v

HUDCO loans for rural housing

The Housing Urban Development Corporation (HUDCO) sanctioned an amount of Rs. 183.58 crore for construction of rural houses during the Sixth Five Year Plan.

Out of 8,65,983 rural dwellings in various States sanctioned by HUDCO during the Plan period, 5,80,377 dwelling units had already been completed and another 1,55,846 units were in progress. □

Production and export of tea

THE TEA BOARD in consultation with Tea Industry has formulated proposals for increasing tea production from a level of 645 m. kgs. per annum to 760 m. kgs. in the Seventh plan period.

The proposals envisage an investment of Rs. 900 crore on various measures such as extension, planting, replanting, rejuvenation, soil and water, management of factory, modernisation and research. Achievement of this target will enable India to maintain its predominance in tea production and exports. □

Strategy to meet demands for steel

THE PRODUCTION from the integrated steel plants is being stepped up and during the current year itself the public sector steel plants are expected to put an additional half million tonnes of steel into the market. This is to ensure that the steel requirements of consumers in the country are met fully.

Another half million tonnes is expected to be produced by mini steel plants and re-rollers. As such, indigenous availability would go by about a million tonnes in 1985-86 as compared to the previous year. The balance of unsatisfied demand would be met by imports and the flow of imports is monitored so as to ensure that there is no glut as it arose in 1983-84.

It had become somewhat more difficult to serve the needs of smaller consumers in recent years because of the decline in availability of piecemeal wagons from the railways. Steel Authority of India Limited (SAIL) needs approximately 35 per cent of its wagons as piecemeal wagons to meet demands of consumers who needed less than rake loads. However, SAIL had only been getting about 20 per cent in the form of piecemeal wagons.

The Government is engaged actively in taking steps to bring about an improvement in the performance of SAIL. The chief executives of the steel plants are being given greater freedom of action and along with this accountability is being more strictly enforced. Government is determined that the steel plants should operate on commercial line as far as possible and that managers are given the freedom to manage. It is only on this basis that accountability can be enforced effectively.

With the commissioning of additional capacity of Vizag, Bokaro and Bhilai steel plants, the present gap between demand and supply which is 1.5 million tonnes, will come down to .5 million tonnes by 1990-95. However, unless additional capacity is created in the country, the gap between demand and supply by the year 2000 would go up to 5 million tonnes. The Government is planning to liberalise the licensing policy for private sector mini steel plants based on modern technology so that they can grow and help to fill this gap. □

To improve working of IRDP at block level !

A HIGH POWER COMMITTEE in the Planning Commission is looking into the question of improving the administrative set-up both at the block level as well as the professional technical services level for the implementation of Integrated Rural Development Programme (IRDP). This Committee, whose tenure has been extended up to December, 1985, would suggest infrastructural set-up for a number of programmes already announced apart from suggesting steps to involve democratically elected institutions at the local levels for the formation and implementation of these programmes during the Seventh Plan period. The Committee would also study the feasibility of decentralised planning at the district level with a view to integrating rural development schemes with the local development programme.

Though over 49 per cent of the sample households below the annual income of Rs. 3,500 have crossed the minimum income level as against the target of 30 per cent, the Government has identified a number of infrastructural bottlenecks.

During the Seventh Plan period, the efforts would be to ensure effective implementation of IRDP, especially the problem of integrating beneficiary-oriented programmes with area development programmes and with the development of agriculture in the rural areas as a whole.

Under the IRDP, 35 lakh households have been covered by 1984-85 as against the target of 30 lakhs. The overall number of families covered during the Sixth Five Year Plan 1980-85 have been over 15.4 million as against the target of 15 million. The Scheduled Caste and Scheduled Tribe beneficiaries which form the poorest segments of the rural community have been benefited from 28.6 per cent in 1980-81 to 44.17 per cent in 1984-85, thus crossing the stipulated target of 30 per cent.

The Plan expenditure on account of IRDP, though lagged behind the target during the initial years, increased in the later years. Credit mobilisation also went up steadily from 289.05 crore in 1980-81 to 836.28 crore in 1984-85.

During the Sixth Plan, the IRDP benefited a total number of 16.5 million families or a population of about 80 million. The number of villages covered under the programme was 5,86,000. The total number of villages in the country is a little over 6,00,000. □