YOJANA

VOL XVI No. 4 March 5, 1972 40 PAISE



UP Hill Fruits

★

Unorganised Labour

★

Rockets and Satellites

BIG DEEDS
HUMBLE MEN

In this feature Yojana *seeks to present the outstanding achievements of some of the many millions of obscure men and women who are working to build tomorrow's India.*

Mathkargola Takes to Rabi Cropping

History was made in Mathkargola, a village in Bhuban block of Dhenkanal district of Orissa when its inhabitants for the first time this year took to Rabi cultivation in an organised way and embarked upon raising crops like wheat, potato, cabbages etc. hardly thought of in the past. The experience no doubt was novel. The provocation however, was the killer cyclone that hit the coastal Orissa in October/November last. The cyclone had damaged the staple Kharif crop beyond redemption. The villagers were at their wits' end.

It was at this juncture the Block authorities, specially the Agriculture Extension Officer, stepped in, and persuaded the villagers to take to Rabi cropping, even though the topography of the village stood in the way and water for irrigation was hard to come by.

Egged by the Agriculture Extension Officer and the Gram Panchayat, the farmers took up Rabi cultivation with zest. Out of 120 hectares of cultivated land, the villagers put 20 hectares under wheat and the rest under potatoes, cabbages and other traditional Rabi crops. Irrigation was done through the five village tanks and the perennial stream that flowed at some distance. Fertilisers, pesticides and other inputs were applied as per the advice of the Extension Officer.

The result so far has been quite encouraging. The fields that lay barren during the previous Rabi seasons today present the spectacle of a greenery never seen before. The villagers are expecting a good harvest. Minor irrigation has caught the fancy of the people, and about 100 small farmers of the village have queued up to take advantage of the Small Farmers Development Agency's schemes pertaining to minor irrigation projects.

IR-8 : The Seed of Plenty

Tajenyuba Ao of Changki Valley, Nagaland broke all previous records of paddy production, last year, when he produced 125 maunds of IR-8 (Joya) paddy per acre, against an average of 30-40 maunds per acre produced by other farmers. Ao attributed his success chiefly to the use of the high-yielding variety paddy IR-8, and the help, encouragement and guidance that he received from the Village Gram Sevak and the Agricultural Extension Officer in the improved methods of cultivation.

In fact, Ao took to improved methods in the face of severe criticism from his farmer friends who advised him against the use of chemical fertilisers, which according to them, spoil the fertility of the soil.

Initially, Ao even had some difficulty in procuring the seeds of IR-8. However, he was able to overcome this. He sowed the seeds in an acre of land which he had prepared for this purpose under the supervision of the Agricultural Extension Officer, and then transplanted the matured seedlings after 25 days. After irrigating the field properly (3 to 6 inches depth of water), he applied chemical fertilisers and pesticides. In August, he harvested a bumper yield.

His success has attracted the notice of the neighbouring farmers and they are now enthusiastically taking to the cultivation of IR-8 paddy.

Best Village

Kalkulam in Sarode Panchayat was selected as the best village in the Kanyakumari district for the year 1970-71. A beautiful village, surrounded by an old fort, Kalkulam has a population of 1,082 spread over an area of 1,114 hectares.

Agriculture is the main occupation, and the village has 705 farming families. The farmers are readily taking to improved agricultural techniques and nearly 400 farmers were making use of the high-yielding varieties of seed in an area of 180 hectares.

Nearly 300 families are covered by co-operatives, which help them in procuring loans for agricultural purposes in time. The average loan per member is Rs 250/—.

Of the 550 hectares of cultivable land only 210 hectares are under irrigation. During the period of competition, the village, with its own efforts brought 29.4 hectares under double triple cropping.

The village has three poultry centres and a rubber plantation covering an area of 60 hactares.

Blood With a Smile

Hasmukh Parekh, a young man of Rajkot is true to his name (Cheerful) and an extraordinary example of selfless service. Until recently there was no Blood Bank at Rajkot. However, Parekh was always available for donating blood to the needy without any consideration for their status or creed. He has donated blood on seventeen occasions in the last few years and has also prepared serval youths ro render similar service.

Parekh just loves to help others. Whenever he hears of a fire, he rushes to the scene to render help.

In cases of serious illness when there is no male member in a family Parekh can aways be depended upon.

The courage and seflessness of Parekh have not gone unrecognised. The Gujarat Vyayam Pracharak Mandal, has honoured him with a silver medal and merit certificate.

YOJANA

Fortnightly Journal published in English, Hindi, Assamese, Bengali and Tamil on behalf of the Planning Commission

Vol. XVI No. 4

March 5, 1972

Phalguna 15, 1893

Yojana seeks to carry the message of the Plan, but it is not restricted to expressing the official point of view.

Chief Editor
Dwarkanath Munshi

Editor
M. K. Subba Rao

Assistant Editors
H.R. Pandotra
A.K. Wanchoo

Sub-Editor
Jasbir Batra

Staff Correspondent
Siddharthan Kariyal

Senior Correspondents
Bombay : **Avinash Godbole**
Calcutta : **S. C. Basu**
Madras : **S.V. Raghavan**
Shillong : **D.N. Chakravarty**
Trivandrum : **Rosscote Krishna Pillai**

Photographic Officer
T.S. Nagarajan

Editorial Office : Yojana Bhavan, Parliament Street New Delhi-1.

Tel : 383655 381026, 385481/340 402 and 420

Telegraphic address : YOJANA, New Delhi

Business Office: Business Manager, Publications Division, Patiala House, New Delhi-1.

Inland Subscription: Annual Rs 7.50, Two years: Rs 13. Three years: Rs 18.

Foreign Subscription: One year 15 sh or 2.50 U.S. dollars. Two years: 26 sh or 4.00 U.S. dollars. Three years: 36 sh or 5.00 U.S. dollars. Single copy : 18 d. or 15 U.S. cents.

LEST WE FORGET

Out of the performance of duties flow rights, and those that knew and performed their duties came naturally by the rights.

—Mahatma Gandhi

IN THIS ISSUE

POWER IN PLENTY 179

NOTES : *Disquieting Overdrafts—Second Satellite Station—Indo-Afgan Trade—Prospects of the Pill* 180

WORKMEN IN SMALL INDUSTRY MUST BE GIVEN A BETTER DEAL 183
A. P. Jain

GRATITUDE FOR OUR DEFENDERS— U.P. GIVES THE LEAD 185
H. C. Shukla

TEMPERATE FRUIT CULTIVATION IN U. P. HILLS —FINDINGS OF A SURVEY 187
A. H. Manwani and K. R. Rajagopalachar

SIDE TRACK 189

SMALL INDUSTRY—DEFENCE AND SELF-RELIANCE POTENTIALITIES 191
Kailash C. Chopra

INDIA'S AILING COTTON TEXTILE INDUSTRY 192
J. C. Khanna

J&K PLANS TAKE-OVER OF FORESTS 195

GUJARAT WORKS ON NEW PROJECTS OF PROSPERITY 196

TRIPURA IN TRANSITION 197
D. N. Chakravarty

A NEW DEAL FOR SMALL FARMERS 200
R. L. Pitale

THE HOLY GANGA CAN BE A HEATH HAZARD 201
Paritosh C. Tyagi

NEWSLETTERS 202

BOOKS 205

SNIPPETS 207

FOCUS—*Thumba Equatorial Rocket Launching Station* 209
Rosscote Krishna Pillai

COVER—HILL FRUITS: Cherry in Blossom and Apple
(See Story at page 187)

Helping one battalion speak to another. Assisting an Army patrol transmit strategic information to Headquarters. Today, ITI assists the Indian Army bridge the communication gap in inaccessible 'forward' areas.

ITI has designed, developed and manufactured light-weight, transistorised, multi-channel transmission systems for telephone and telegraph, and special, rugged field telephones for the Defence Services — to provide long-distance communication over land and radio. These equipment are sturdily built to stringent specifications to weather the most adverse climatic conditions.

Communication is our business

INDIAN TELEPHONE INDUSTRIES LIMITED, BANGALORE-16.

ITI HELPS THE JAWANS GUARD THE NATION'S BORDERS



AIYARS-ITI-720

Power in Plenty

POWER development in India since the day of Independence has been highly impressive. When we started planning as a free country in 1951 our total generating capacity was no more than 2.4 million kilowatts. In 1971-72 it was about 17.7 million and is expected to exceed 21 million kw by 1973-74, though falling short of the target by a little under 2 million kw. What is more significant is that a vast network has been built up in the country for carrying power from the generating centres to the consumer points. The network comprises over 10 lakh kilometres of the transmission and distribution system representing as much as a 50-fold increase since Independence.

The significance of this lies in the fact that electricity has been carried to villages in the four corners of the country to bring a new life and light into them. Today, we have about 1.23 lakh villages with electricity. By the end of the current Plan in 1973-74, 1.58 lakh villages would have received electricity. In other words, one out of four villages in the total of more than 5.6 lakhs has received electricity so far. And these are the bigger villages with relatively larger populations so that 43 per cent of the total rural population is already in a position to benefit from the supply of electric energy. Compare this with the position obtaining in 1947 when one out of 150 villages had been electrified and more than half the total electricity generated in the country was consumed in just six major cities.

RURAL electrification brings many advantages to the people both in their agricultural pursuits and other work. Agriculture is aided by pumpsets which provide assured irrigation to fields. By 1971-72, we had in India about 19.3 lakh pumpsets energised. Of these, about 3 lakhs were energised in 1971-72 alone which indicates that a good tempo has been built up which is expected to be maintained. Indeed, the States and the Rural Electrification Corporation are poised for a larger effort in the immediate years to come, and the target of energising 15 lakh irrigation pumpsets during the Plan period bringing the total to 26.5 lakh can be expected to be exceeded.

The Plan had not set up any target for village electrification because available outlays were considered to be adequate only for energising the pumpsets. The States have, however, been able to divert resources to rural electrification. The Rural Electrification Corporation which has adopted a project approach for financing shemes has already sanctioned about 145 schemes to bring electricity to over 13,000 villages and to energise more than 2.37 lakh pumpsets and about 27,000 industrial connections besides domestic connections in the villages.

Progress has also been achieved in the efforts at improving the transmission and distribution facilities, though transmission losses continue to remain high in many States. The importance of reducing the losses in transmission can be gauged from the fact that, according to some experts, for every one per cent reduction of losses the revenue benefit would be about Rs 5 crore which underlines the need for urgent and close study of the problem all over the country. Besides speeding up of work on transmission and distribution programmes, what is required is to strengthen the mains, instal static capacitors on rural power consumer installations and adopt other appropriate measures to reduce the losses to normal levels.

It may be mentioned that all lines constructed up to the end of the First Plan period were of a load carrying capacity of 110 kv and below. During the Second Plan, a new programme was taken up for the first time of construction of 220 kv lines and by now about 11,000 kilometres of lines of this capacity have been constructed. Beginning with the current Plan, construction of 400 kv lines has also been taken up. According to the present estimates, to cope up with the additional power generation likely to be available during the Fourth Plan, we will have to put up additional transmission lines of different capacities —11,400 km of 110 kv and 132 kv, 10,500 km of 220 kv and 530 km of 400 kv.

For meeting the requirements of transmitting the additional 17.7 MW of power proposed for generation during the five years 1972-77, the Ministry of Irrigation and Power has estimated that it would be necessary to add a further 20,400 km of circuit lines—8,700 km of 110/132 kv, 8100 km of 220 kv and 3,600 km of 400 kv. Of these, 10 lines will be of 400 kv—four in the Western Region and six in the Eastern region.

AS for the supply position in the different regions, Eastern and North Eastern regions have surplus capacity. To utilise that capacity, it is necessary to speed up work on transmission and distribution programmes so that the needs of the region are efficiently served. The Weastern region has for the most part been able to generate as much energy as is demanded. There is, however, no standby capacity with the result that whenever there is a breakdown such as happened in Tarapore Atomic Station recently, shortages develop. The difficulty is likely to continue and the only way to overcome the shortages that are expected in 1973-74 onwards is to expedite work on projects in the States of Maharashtra and Gujarat. The Southern region has also been meeting the power demand generally, but can soon slip into a position of shortages unless work on projects like Iddiki, Lower Sileru and Kalinadi hydro-electric schemes is pushed to completion expeditiously. The Northern region, however, is currently undergoing power shortages mainly owing to delay in the commissioning of certain power projects such as the Rana Pratap Sagar Atomic Station and a few other major projects. But the region is likely to overcome the shortage by the end of the current Plan when the nuclear station at Bhadarpur and the Bhatinda projects of a total generating capacity of 755 megawatts are completed. Here, the need is to speed up work on certain inter-State lines to obtain maximum benefits from the available capacity.

NOTES

Disquieting Overdrafts

FOR the past few years overdrafts of certain States with the Reserve Bank have been mounting at a disquieting rate. The problem has been engaging the attention of the Reserve Bank, the Central Government and others involved. The Fifth Finance Commission which examined the incidence of unauthorised overdrafts had made some recommendations relating to the procedure for dealing with such overdrafts and their avoidance. These recommendations were brought to the notice of the State Governments by the Central Government to correct the situation. Recently, greater urgency has been imparted to solving the question. Many opinions, sometime controversial, have been expressed about the different means and methods of overcoming the difficulty and the need to help the States to do so. It is, however, obvious that the position needs review to bring about greater financial order and discipline in the States and that the Centre will take a decision and implement it in the best interest of all concerned and ensure that the overdrafts are progressively reduced.

An idea of the magnitude of the overdrafts can be had from the official figures available. The total outstanding overdrafts of 11 States on June 28, 1971 were of Rs 371.29 crore as against Rs 82.74 crore a year earlier in respect of six States. Between 1966-67 and 1970-71 the volume of State overdrafts had, according to the revised estimates, gone up from Rs 15.8 crore to Rs 268.2 crore. Even if 1966-67 is considered to be an exceptional year in that the overdrafts a year earlier were Rs 120.2 crore, the increase is alarming. The precise reason for the high overdrafts of some States are not very clear. But the budget data for the last five or six years show that the overall deficits of State Governments had widened between the budget forecasts and revised estimates and so also their disbursements. In 1970-71 for example, the total disbursements increased in revised estimates over budget forecasts both in respect of Plan and non-Plan expenditure, the increase in the latter being much larger. Again, while the overall deficit in the revised estimates had shown a deterioration of Rs 320.4 crore over the budget estimates, Plan expenditure has gone up by Rs 104.6 crore and non-Plan expenditure by Rs 295 crore. And the overdrafts of 10 States at the end of March 1971 amounted to Rs 268.2 crore. The States have been obtaining short-term *ad hoc* loans from the Central Government to clear their overdrafts with the Reserve Bank. Such boans amounted to Rs 378 crore during the years 1965-66 to 1968-69. Since 1969-70 the Central Government initiated a scheme of special accommodation to meet the overall non-Plan gaps of some States and provided Rs 297 crore in 1969-70, Rs 195 crore in 1970-71 (revised estimates) and Rs 120 crore in 1971-72 (budget estimates).

Second Satellite Station

A new project to build the second Satellite Communication Earth Station, extending over an area of 30 hectares, between Dehra Dun and Rishikesh in U. P., was taken up recently. The Station will be fabricated, manufactured and installed by the Electronics Corporation of India, Hyderabad. Multiplex equipment and the low power communication equipment as also the semi-automatic telephone and telex exchange equipment will be supplied by the Indian Telephone Industries, Bangalore. The remaining equipment such as high power amplifiers low noise receivers, antenna composite feed and certain components will be imported. The system-engineering work is being done by the Overseas Communications Service of India. The total cost is estimated at Rs 7.81 crore, including the foreign exchange component of Rs 2.18 crore.

The complex will comprise the main station near Dehra Dun and the terminal building in New Delhi. The terminal building will house international telephone and telex exchanges, with provision for 80 telephone and 120 telex channels. A microwave link will connect the Earth Station with the terminal facilities at Delhi. It will have repeaters at Mussoorie, Roorkee, Muzaffarnagar and Meerut. When ready in 1975, the Earth Station will link up for operation with five other Earth Stations besides having TV capabilities.

Judging from he spurt in traffic in the last one year since the commissioning of Arvi Station — which was renamed the Vikram Earth Station on February 26 in recognition of the dedicated work on of the late Dr Vikram Sarabhai as Chairman of the Atomic Energy Commission — it has been estimated that by 1982-83 as many as 253 channels will be needed and telex traffic will go up more than 10 times and telephone traffic by about 15 times compared to the present overseas communication traffic. The Arvi Earth Station which at present is catering to India's overseas communication traffic, has about 50 channels working through the Indian Ocean Satellite. The Station is linked with Australia, Japan, East Africa, Malaysia and the United Kingdom. Satellite circuits have been extended to the USA, Canada and Europe via the UK. The proposed Earth Station at Dehra Dun will provide the additional capacity required for the estimated growth of traffic for the time frame 1974-75 onwards. It will also provide an important element of standby support to the Arvi Station and *vice-versa*.

The new project has been designed with a provision to increase capacity for links to more destinations and for having more channels to meet the needs of the growing traffic requirements. It will ensure balanced growth of regional traffic potential and expeditious,

reliable and high quality service. Capability to work with different satellites from two different Earth Stations widely spread out will have its advantages for better global coverage. The facilities of the new Earth Station will also be utilised by the Department of Atomic Energy for conducting experiments in educational television for national needs.

Indo-Afghan Trade

A new Agreement was signed between India and Afghanistan on February 20, this year which came into force from March 1, for a one year period. It aims to expand, diversify and further develop mutual trade on healthy lines to eliminate concentration of the trade in a few hands and remove difficulties that have arisen in the existing system. The working of the arrangements will be periodically reviewed.

The two governments will also provide facilities for setting up a plant in Afghanistan as a joint venture for the production of extracts of medicinal herbs and plants grown in that country. India has offered to make use of these extracts for its pharmaceutical industry. Drugs and medicines manufactured in the two countries will figure in our mutual trade to a larger extent than at present. Afghanistan is also keen to purchase medical and surgical instruments and other surgical supplies manufactured in India.

We have been concluding annual Trade Arrangements with Afghanistan to mutual advantage, after due consideration of each other's point of view, and in a very friendly and cordial atmosphere. As a result, the volume of trade in the last decade has multiplied four times over from Rs 6 crore to about Rs 24 crore. Unhappily there has not been much progress in diversification. Our main imports from Afghanistan continue to be confined to fruits, and exports to that country are primarily tea. Last year, however, an Indian trade delegation visited Afghanistan to seek way and means for diversification and further expansion. By now deficiencies in the present trading system and the measures that should be taken to remove them have been identified so that mutual trade could grow between the two in the interest of consumers and producers in both the countries.

In the last few years, we have striven to change our trading pattern and have placed increasing emphasis on trade with the developing countries of Asia, Africa and Latin America and with East European countries. Our trade with the East European countries has increased very rapidly and the USSR today has become our largest single trading partner. Similarly, the share of our exports to and imports from the developing countries of Asia, Africa and Latin America in our total global trade has increased very substantially. As a result of these measures, we visualise a structural transformation in our trading links over the coming years not only by diversifying the destination of our exports but also the sources from which we intend to meet our import requirements. India attaches great importance to trade with Afghanistan and it is in that spirit that we have sought to remove the deficiencies and open new fields of economic cooperation with our friendly neighbour.

Prospects of the Pill

THE pill, as a birth control device, has always aroused strong likes and dislikes. Not all of its detractors are die-hard reactionaries, believers in conventional morality or antagonists of the very idea of family planning. Indeed, there are any number of opponents of the pill in the camp of the protagonists of small family itself. Even in the advanced countries of the West there is a considerable volume of opposition to the pill especially after the report of the Dunlop Committee was published. They base their opposition on two factors. First, the pill is not as effective as it is made out to be. Secondly, it is injurious for health. That the Government of India is keeping its options open on the pill is, therefore, understandable. According to a recent report, a committee of experts has been appointed to go into the whole question of the use of the oral pill to arrive at same well-considered conclusions.

There is everything to be said for this cautious approach, in spite of the fact that the oral contraceptives have nearly 2 crore adherents the world over and have been recommended by an earlier high level observation team appointed by the Government. The team headed by Dr Rafiq Zakaria, the Health Minister of Maharashtra, after a tour of the United States and the United Kingdom, was for an early decision about the expansion of the pill programme in India in the light of favourable world-wide experience. The pill has many attractive features. For one thing, its use being unrelated to the act of coitus makes it aesthetic and convenient. And there is no problem of disposal as in the case of condom. Another advantage is that its use requires no privacy. This can be a positive factor in our congested cities like Bombay where, housing conditions being very poor, more than one family lives in one room.

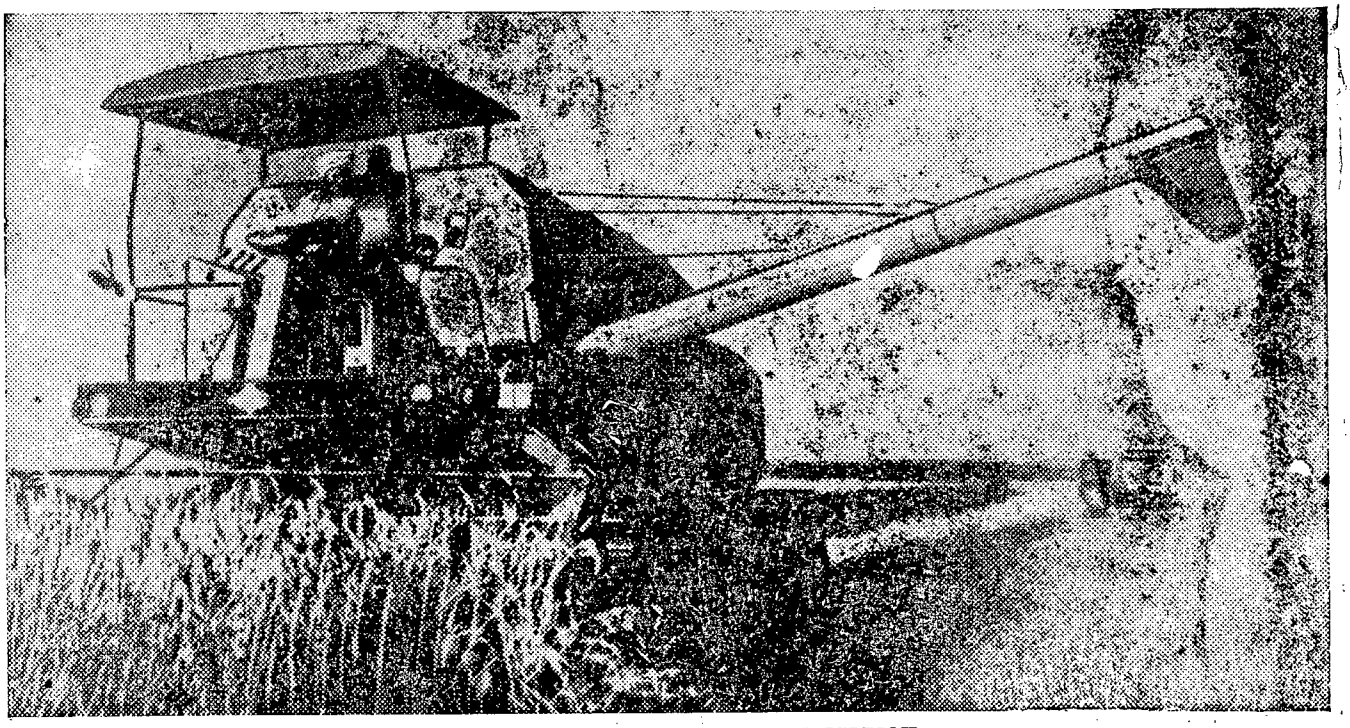
On the other hand, however, the pill has to be taken every day for a period ranging from 20 to 30 days a month. This means that in a clinic programme women should come regularly to the clinic for the supplies or the clinic staff make regular home visits. Then there is the need to have proper medical arrangements to attend to the needs of the cases suffering from side-effects like giddiness, nausea and bleeding. The cost of the pill for the lay person is high unless the supplies are heavily subsidised, which is yet another factor in the reckoning. All this makes it clear that the pill on a wider basis can be introduced after field research establishes its efficacy and acceptability in Indian conditions. This alone will keep the drop-out rate down to the minimum, a pre-condition for the effective use of the pill in controlling conception.

FARMERS!

IN JUST ONE OPERATION

HARVESTING COMBINE E 512

REAPS...THRESHES...CLEANS AND DELIVERS THE GRAIN



IF THE CROP IS HARVESTED WITH THIS MACHINE

- The field becomes available for preparation for the next crop in one day.
- The grain produced goes to the market immediately.
- There is no risk of inclement weather or any hazard destroying the crop.
- Loss of grain is much less as compared to any other method of harvesting.

NOW SUCCESSFULLY HARVESTING WHEAT ALL OVER PUNJAB AND U.P.

BUYERS PLEASE CONTACT IMMEDIATELY:

LANDTECHNIK AUS DER DDR DLT FORTSCHRITT

ESPI

TRADING COMPANY D-63, Defence Colony, New Delhi-3, Phone: 623812 Grams: ESPITRADE

SOLE SELLING AND SERVICE AGENTS FOR

HARVESTING COMBINE E-512 MANUFACTURED BY VEB KOMBINAT FORTSCHRITT LANDMASCHINEN, NEUSTADT, IN SACHSEN, DRESDEN, GERMAN DEMOCRATIC REPUBLIC

Exported by - **TRANSPORTMASCHINEN EXPORT-IMPORT 108, BERLIN, GERMAN DEMOCRATIC REPUBLIC**

Creative Unit-413

Workmen in Small Industry

are scattered and inarticulate. The trade union movement leaves them untouched. The employer, obtaining all assistance from the Government, exploits them. And the State itself can be charged of indifference. The helpless workers

Must Be Given a Better Deal

A. P. JAIN

EACH year during the last decade, 16-17,000 factories were registered in the small-scale sector of our industry. The total number of registered units stood at 2,14,000 in March, 1971. The work-force in the sector is nearly 33 lakh. If we take into account the units that are unregistered, (for which, unhappily, there is no definite assessment available with the Government), the overall employment potential in the small sector can be put at 65 lakh.

The increase in the Plan outlay for the development of small industries from Rs 52 crore, Rs 56 crore and Rs 89 crore in the first three Plans to Rs 236 crore in the Fourth Plan also gives an indication of the growth of the small industries sector.

The gross value of output in the sector under the purview of the Small Scale Industries Development Organisation (SSIDO), in both organised and unorganised sections, is estimated at Rs 4,050 crore, and the investment in fixed assets at Rs 475 crore. This gives an investment output ratio of 1:8.5, as against the ratio of 1:1 for the large-scale sector.

As on March 31, 1971, there were 30 industrial items which were produced entirely in the small sector. Fiftyfour other industrial products have a bulk production ranging from 30 to 40 per cent in this sector. With the reservation of many more products, a great period of growth awaits it.

Mr A.P. Jain teaches at the Arya College, Panipat.

As against this phenomenal growth, and potential for growth, labour conditions in this sector are what they used to be at the time of Independence. Improvements brought about during the past twenty years of socialist planning are confined to a small section of labour employed in big and regulated sectors of the economy. If they are felt in small industrial units and agriculture, it is only in the nature of exceptions, rather than the rule. There exists in India today a negative relationship between the employment potential of a sector, and labour conditions obtaining therein. The reasons are not far to seek.

Needed : Unions

Unionism has been the most important single factor which has improved the lot of workers in big industry. But it is non-existent in the small industrial and agricultural sectors of our economy. The big difference is felt in the small-scale sector when we measure the bargaining capacities of employers who are more or less organised and the labourers who are never so. The employer possesses the 'employing power' and reckonable powers of various other types. These powers are never met by other, equally potent, counteracting powers. Moreover, the employers' powers are activated through a system of social privileges and prerogatives.

As against this, labour has nothing to fall back upon except their 'working capacity'. Eduction, social organisation and other peculiarities make the labourer's individual bargaining capacity weak *vis-a-vis* the bargaining capacity of the employer. In such a situation, they are out-bargained by their employers, reducing their conditions to what is called in the terminology of labour economics, 'sweated'.

Forgetful Partners

Pigou, while discussing the problem of wage bargains, points out that a more special and limited disharmony is sometimes found in the wage bargains between employers and their work-people who are not properly organised into unions. Here, since the employers are strategically very strong, the wage rates would be fixed by general market conditions and there would be no scope for individual bargaining. But in actual life, according to the famous economist, there is usually a certain range of indeterminateness within which the wage rate may be moved up or down by bargaining. However, the employers' superior strength enables them to push wage rates below real worth. Also significant in this context is Marshall's observation that 'where there is little competition, price is indeterminate and then those are at a disadvantage who are known to sell without reserve'.

The obvious conclusion is that unless the workers are on an equal footing with their powerful employers, they are in no position to bargain for any improvement in their conditions. Left to themselves, the employers, however enlightened, will not go out on their own initiative to award to labour even their legitimate dues. This is particularly true of small entrepreneurs who have, according to the National Commission

on Labour, "made labour legislation the main target of attack in public and followed it up with non-observance or evasion in practice". Though small, "they speak the language of big employers". It is always their dream to reach the high echelons of big industry, and in their hurry, they forget their duty towards their weaker partners—labourers.

State Indifference

In India the Minimum Wages Act is the only piece of legislation which seeks to regulate wages and, to some extent, working conditions in sweated trades But when it comes to implementation, the proverbial tortoise could be faster. The Minimum Wages Act also envisages the revision of minimum wages every five years; these revisions, however, are hardly ever made. In the unregulated sections of our economy, the State stands accused of indifference. It has done precious little to protect workmen who are unable to protect themselves, as the plethora of legislation do not suit the requirements of small industrial and agricultural labourers.

And this has been pointed out to the Government by no less a body than the National Commission on Labour itself. The Commission found it a common complaint that the benefits of labour legislation have not reached the rural and unorganised labour.. "Apart from the ineffectively implemented Minimum Wages Act, they do not have any other legislative protection. The Factories Act, 1948, and the Industrial Disputes Act, 1947, which contain specific and detailed provisions for items within their purview, were not designed to meet the conditions and requirements in unorganised industries and employment."

There have been mainly two hindrances in the implementation of labour laws in the small sector, as elsewhere: (1) illiteracy, ignorance and the helplessness of the workers; and (2) the inadequacy and inefficiency of the administrative machinery.

It is not so much the lack of awareness that stands in the way of effective implementation of labour laws as the sense of insecurity which makes the workers helpless in becoming a party to the disregard of the law by employers, as the Labour Investigation Committee saw it. According to the Committee, "his illiteracy, ignorance and helplessness have been largely availed of by some employers who have been able to break and disregard the law with impunity. Very often, the worker himself has been a party to this, and, even where he has been aware of his right, he has connived at the breaches of law for the simple reason that security of employment is more important to him than the assertion of his rights".

As regards the inadequacy and inefficiency of the administrative machinery, the dispersed nature of the sector acts as a strong contributing factor. It makes bribery easy and widespread among the field staff. The stricter the postures of enactments, the higher the 'fees' charged by the field staff to let the employer evade the laws. And the absence of unionism among the labourers makes things easier for the employer and the conniving administrator.

Missing Link

Government's apathy is also explained by the 'deep economic urges' behind the small-scale sector. What the Powerloom Enquiry Committee noted in the context of its enquiry is true of the small-scale sector also: "Whenever the administration intervened to regulate it, it (the industry) proceeded in an unauthorised manner and because of the deep economic urges behind it, it was found difficult to curb or regulate it."

Though the trade union movement is attaining maturity in India, unions in the organised sector have never given a thought to the plight of labour in the small sector. By putting up demands for their own fraternity and getting them accepted, trade unions in India have widened the gulf between their members and their counterparts in the unorganised sectors of industry. By leaving such a large proportion of workers out of their field, they create a vital missing link in their chain.

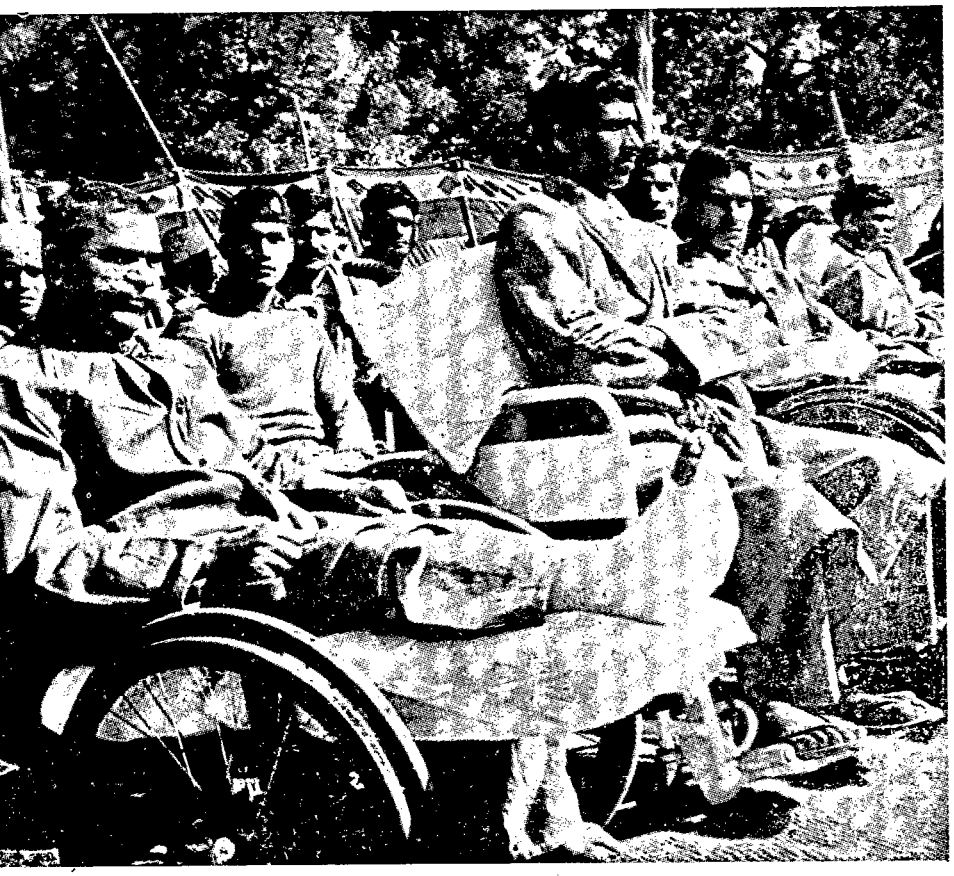
Secondly, the recommendations of various committees and commissions on labour have seemingly nothing concrete to offer for this neglected class of society. Huge expenditure incurred on such committess and commissions (the approximate expenditure on the recent National Commission on Labour is estimated at Rs 34.95 lakh), goes to benefit only that microscopic section of working class which is vociferous. The inarticulate is truly hapless.

And our academics also have to share the blame. While there is a surfeit of literature on various aspects of organised labour, (though, paradoxically enough, not very comprehensive), we find a disappointing paucity of authentic and worthwhile studies dealing with the plight of the labourers in the small units.

It has to be realised that the indiscriminate encouragement of the small sector will prove anti-labour, if there is no parallel consideration given to the plight of labour. It may be that to be employed in itself is a privilege in our country, but that should not provide an excuse to small entrepreneurs to exploit an exploited class further. A meaningful minimum of wages, working conditions and other facilities should be specially provided for these workers. Those units which are unable to provide such a minimum should not be encouraged to thrive at the cost of labourers. Here, the 'capacity to pay', as has been pointed out by the National Commission on Labour in the case of minimum wages, should not become a guiding principle.

Special Machinery

Being the source of financial and other assistance to almost all units in the small sector, Government can very well affect the labour policy of these units by inserting a 'fair labour practice' clause in the terms of assistance. The setting up of some sort of a special administrative machinery can also be recommended for these labourers, as has been suggested for agricultural labourers by the National Commission on Labour. It also has to be recognised that the problem of labourers in small industrial units cannot be properly dealt with unless it is taken up on a special footing.



Some of the gravely wounded JCOs and Jawans who have been allotted a house each under the Martyrs' Home Project in Lucknow.

Giving Shape to Gratitude for our Defenders

UP Gives the Lead

H. C. SHUKLA

THE Rehabilitation Directorate, a cell created by the three Services of the Armed Forces, is finalising proposals for the care and rehabilitation of nearly 8,000 soldiers and officers who were gravely wounded or incapacitated during the December war. The proposals include special family pensions, housing allowances and loans and out-of-turn employment in government organisations.

Besides, a large number of private business houses, schools and State Governments have come up with offers of help in the form of *ex-gratia* payments, scholarships and jobs. The greatest need, however, is living accommodation for the handicapped soldiers as well as for the dependents of those who laid down theirs lives in the service of the nation. While a soldier's widow and children could be kept out of need by family pensions, it is only the warmth and security of living accommodation that will ensure proper rehabilitation of the family.

In this respect, the Central Command Headquarters of the Army at Lucknow claims to be the first in the country to take the initiative. Under the Martyrs' Home scheme devised by the Command, housing colonies will be built, both in the rural and cantonment areas of the State for war widows, wounded Jawans and officers.

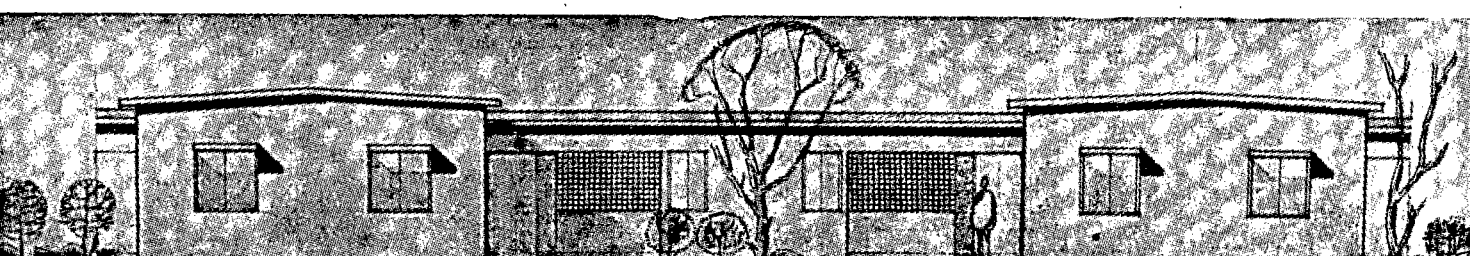
In the first phase of the scheme 12 houses for officers and 160 houses for JCOs and others will be constructed at Lucknow, Meerut and Dehra Dun at a cost of Rs 22 lakh. This sum will be provided by the UP Government. Similar colonies are to be constructed under the supervision of Army Engineers at Bareilly, Allahabad, Agra, Ranikhet, Lansdowne, Gorakhpur, Pithoragarh and Bulandshahar for JCOs and Jawans.

Officers' houses will cost between Rs 30,000 and Rs 40,000 each and will have two bedrooms, attached baths, a drawing-*cum*-dining room, servant's quarters, etc. They will be furnished and allotted on a hire-purchase system. Fifty per cent of the cost will be realised in ten years and the rest will be paid for by the Government. The money realised from the officers will be given away as educational stipends to their children.

Houses for JCOs and Jawans will cost about Rs 13,000 each. They will have two rooms and a bath, a kitchen, a verandah and a boundary wall. The furnished houses will have flush latrines and electricity. The houses are to be allotted on a nominal rent of one rupee per year for the first five years, and will be transferred to the tenants thereafter provided they had been living in them. Land for the houses in villages will be provided by *Gaon Sabhas*. The houses will be constructed under the supervision of the Block Development Officers.

In Lucknow, a colony located on the Sadar Bazar-Charbagh Road consisting of eight houses for war widows and eight for wounded soldiers will come up shortly; its foundation stone was laid at a solemn ceremony recently held at Lucknow. It is expected to be ready by May 1, 1972, and will cost a sum of Rs 7 lakh.

Mr H.C. Shukla is an Assistant Information Officer, Press Information Bureau, Lucknow.



Front elevation of two typical houses being built for war widows and incapacitated Jawans.

Lt General P. S. Bhagat, General Officer Commanding-in-Chief, Central Command, has estimated that a sum of Rs 60 lakh would be needed to provide houses for all the women widowed and all the soldiers wounded in the recent war.

Uttar Pradesh has also plans for setting up an artificial limbs factory and a nursing home. A crore of rupees has been set apart from the Prime Minister's National Defence Fund for the limb factory. So far, UP has contributed Rs 4.25 crore to the Fund; another Rs 1.5 crore is to be presented to the Prime Minister soon.

A Student Uprising with A Difference

SHAMSUDDIN

AT the Government Basic Institute at Dongergaon in Madhya Pradesh it was student uprising with a difference. What the determined and enterprising students of this institution revolted against was not consumer society or the examination system. They rose against the barrenness of the land belonging to their institute with such dedication and tenacity of purpose that they have earned the distinction, not once but for a second time, of being the highest corn-producing educational institution of the State.

This time they have produced 640 maunds of corn, 90 maunds of *alsi* besides 18 maunds of *til*, *arhar* and *chana*. In all they spent Rs 7,500 including the cost of seeds, manure, fertilisers etc. The harvest is expected to yield an income of Rs 15,000.

What is the secret of their success ? Well, the students do not want to make exaggerated claims. "There is nothing special in what we did," they say, "we were always awake to our duties and followed modern methods of cultivation". Added to this was the cooperation from the members of the staff which they received in full measure.

Liberal Pensionary Awards for Servicemen

THE Government of India has decided to liberalise the pensionary awards for the families of Servicemen either killed or wounded in action during the December war.

Widows of commissioned officers will now receive a family pension of 3/4ths of the pay which the officers were receiving at the time of death, up to the time which the deceased would have continued in service in normal circumstances. Thereafter, the family pension will be equal to what the deceased officer would be entitled to, had he rendered the full normal service.

In respect of all others, the family pension will be equal to full pay last drawn by the Serviceman at the time of the casualty.

Under the existing rules, family pension is available for the support of the parents and other dependents of soldiers for two lives. This concession has now been extended to the parents of the young officers who have died as bachelors.

If one of the parents dies the other will be able to draw the dependent's pension. The rates of the children allowance have also been liberalised. The special gratuity payable on death due to enemy action has been enhanced in all cases.

The Government has also decided to retain all officers and ranks who have been disabled but who can be employed in 'sheltered' appointments. Those who cannot be retained in service and have to be invalidated out will be paid a 'war injury pay', the quantum of which will be related broadly to the extent of disability sustained.

A soldier who has been totally disabled will get for life an amount equal to his total pay and allowances which he had been in receipt of at the time of his disablement. In the case of senior officers, the war injury pay will be subject to a total monetary ceiling.

Widows of Servicemen killed in action will be given land free of cost. Arrangements are being made for financing the construction of a house on the land, or for the renovation of existing homestead.

Any training required by widows and disabled Servicemen for employment will be provided free of cost. Various self-employment schemes are being formulated to enable widows and disabled men to supplement their pension.

Two dependents of each deceased Serviceman will be given special priority by the Employment Exchange for employment in Government departments. For this purpose, medical standards have been lowered in Government departments and undertakings.

Families of Servicemen killed or disabled would be entitled to medical attention in military hospitals.

Full cost of education of all children of those who were killed or disabled in the last conflict up to the end of the first degree course will be met by the Government. This will include tuition fees, hostel charges, costs of books, stationery and uniforms.

It has been decided to extend the above benefits to all families of Servicemen killed and ex-Servicemen disabled in the 1947-48, 1962 and 1965 conflicts. Similar orders will be issued in respect of para-military forces like BSF, CRP, Assam Rifles, etc., and civilians serving with the Defence Services including the Border Roads personnel.

Temperate Fruit Cultivation in U.P. Hills

Findings of a Survey

A. H. MANWANI
&
K. R. RAJGOPALACHAR

CULTIVATION of temperate fruit crops occupies an important place in the economy of hilly regions. In India, these crops, which include fruits such as apple and pear and stone fruits such as plum, apricot, peach, walnut, etc. are mostly grown in North-Western region at a height ranging between 1,600 to 2,400 metres above the sea level. During the last decade or so the area under these crops has almost doubled and it has been found that most of the cultivators with small land holdings have converted their lands to small orchards. A rational policy for the development of the hilly regions and the protection of the small orchardists can best be drawn up on the basis of reliable statistics on the existing pattern of fruit cultivation and the yielding capacity of trees of different varieties of temperate fruits.

The Indian Council of Agricultural Research couducted a pilot sample survey on fruit crops grown in the temperate regions of Punjab (now in H. P.), Himachal Pradesh and Uttar Pradesh. The present article deals with the results obtained from the survey carried out in three independent rounds, during 1963-66, in Nainital and Almora districts and more intensively in Nainital and Ranikhet tehsils which account for 73 per cent of the area under fruit in these two districts of U. P.

The total number of temperate fruit trees planted in regular orchards in Nainital—Ranikhet tehsils during the period under survey was estimated at 11.1 lakh with a standard error of 4.17 per cent. Those planted in stray plots accounted for about 6 per cent of the total number of temperate fruit trees in the region.

Messrs A. H. Manwani and K. R. Rajgopalachar belong to the Institute of Agricultural Research Statistics, ICAR, New Delhi.

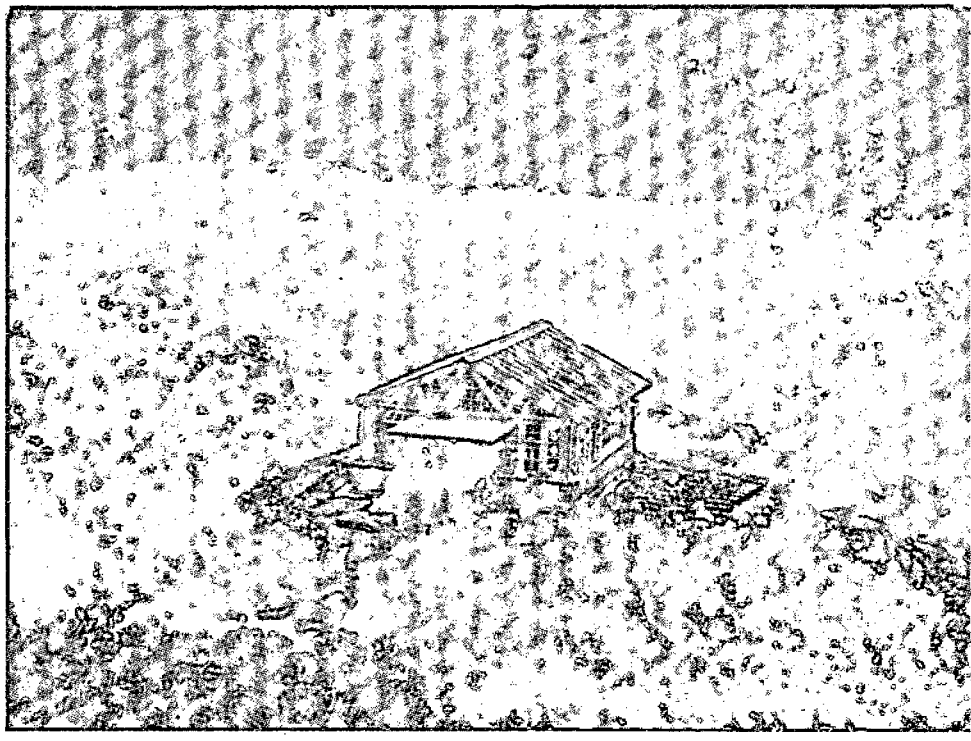
The total number of temperate fruit trees has been increasing from year to year. The increase from 1964 to 1965 was of the order of 26 per cent, and from 1965 to 1966 it was of 16 per cent. The plantation of trees of bearing age and of young categories was found to be in the ratio of one to two, which indicates that new plantation is being carried out at a very rapid pace.

Apple—the King

The major varieties of fruits grown are apple, peach, apricot, pear, plum, walnut and cherry. During the survey period the plantation of apple trees accounted for about 66 per cent of the total number of temperate fruit trees followed by peach with about 19 per cent. The plantation of apricot, plum and pear was roughly of the order of 5 per cent each. Neither walnut nor cherry was cultivated on a very extensive scale. The pattern of distribution of trees varied quite significantly among bearing and young categories.

Among the bearing trees, apple accounted for nearly 53 per cent while, among the young trees its contribution was as much as 73 per cent. This indicates that as far as the new plantation is concerned, the orchardists give greater preference to apple. The next in the line comes peach, which accounted for about 16 per cent of the young trees of the seven major fruit crops planted in the region. The new plantation

Glass house of the Fruit Cultivation Research Station, Ranikhet, U.P.



of pear, plum and apricot was accepted for 3 per cent. The distribution of trees among the bearing and young categories for pear, plum and apricot was of almost the same order, while that of apple, it was in ratio of 3:7.

The total number of orchards of all fruits planted in surveyed areas was estimated at 22,000. Of this, orchards having temperate fruit trees formed 67 per cent. Almost every orchard had bearing as well as young trees. The average size of an orchard was 139 trees in the group of villages which were traditionally growing apple, while in the villages which had recently taken to these crops, an orchard had only 28 trees on an average. Sixty per cent of the orchards were in these villages, which according to revenue records, were without any fruit plantation prior to 1963. Plantation of different fruit crops in the same orchard is quite common. Apple was planted in 40 per cent of the orchards.

About 80 per cent of apple trees were of full bearing age viz; 10 years and above, the majority of which belonged to the age group of 10 to 20 years. In the case of peach, as many as 61.4 per cent of bearing trees belonged to the age group below 10 years while, only 12.4 per cent of plum belonged to this age group. The percentage number of trees over 30 years of age was quite small-less than five for apple and less than two for others.

Apple Varieties

Quite a large number of varieties of apple are grown in the area but the most important of them, which together account for two-thirds of the total number of trees planted were *red* and *golden delicious*, *rymer*, *buckingham*, *early shanburry*, *jonathan* and *king of pippins*. The other varieties formed as much as 33.4 per cent.

Bearing ages are taken to be seven years for plum, apricot and peach, and six years for pear. The survey, however, revealed that quite a large number among the trees of bearing age do not bear fruit during the season, the percentage of such trees varying from year to year as well as from fruit to fruit. In the case of apple, the percentage varied between 16.8 and as much as 40.6, while in the case of pear the variation was 18.6 to 65.4 per cent.

Weather has been found to be the major factor contributing to the non-bearing of fruit. For example, during 1964-65 the percentage of trees which did not bear fruit was very high because the climatic and weather conditions during the year were very bad due to scanty snowfall in the region.

The Yield

The yield per tree of apple also varies considerably from year to year. The average yield per tree, pooled over three rounds of the survey, was estimated at 11.9 kg, which is sizably lower than that obtained in Kotgarh region of Himachal Pradesh. The average yield in terms of number of fruits per tree for the survey period was 131 fruits ranging from 97 to 176 in different years. On an average 27.6 per cent of apple trees of bearing age viz., 7 years and above, fail to bear fruit during the season. Of the rest only 3.8 per cent yield more than 40 kg with as many as 42.0 per cent giving 1 to 10 kg. The maximum yield of apple obtained from a tree during the period of survey was 175 kg. Only one out of about 8400 surveyed trees gave this yield.

Rymer is the highest yielding variety followed closely by *jonathan* and *king of pippins*. The average yield of delicious group of apple, which accounted for about a fifth of the bearing age trees, was 5.9 to 14.9 kg per tree. The *king of pippins* yields on an average 7.6 to 18.3 kg. in a year, the pooled average over three years being 12.7 kg., which is about the same as that of the *delicious* variety. But this variety yields on an average 144 fruits per tree per year as against 124 fruits by the *delicious* group.

The high yielding trees mostly belong to either *red delicious* or *rymer*. Although, from the point of view of average yield, *rymer* was the best, the maximum bearing capacity of an individual tree of this variety was slightly lower than that of *red delicious* grown in this region. Only 11 out of about 2800 trees of apple surveyed during 1966 yielded more that 100 kg. Almost all of these trees, were either of *red delicious* or *rymer* variety. The yield of trees of *rymer* variety varied between 114 kg (1,045 fruits) to 153 kg. (1836 fruits), as compared to 110 kg (950 fruits) to 175 kg (1750 fruits) for *red delicious* variety. All the high yielding trees belonged to the age group 15-25 years.

The survey revealed that apple starts giving fruit from 7 years onwards, its yielding capacity steadily increasing with the age upto 15-25 years. Thereafter, it remains steady for 5 years before declining. A tree in the age group 7-10 years gave on an average 6.3 kg (68 fruits) per year while in the case of a tree of the age of 10 years and above the yield was 13 kg (139 fruits). The yielding capacity of apple in Nainital-Ranikhet region is very poor when compared to that in Kotgarh region of Himachal Pradesh, where the yielding capacity is almost double.

Stone Fruit Crops

The stone fruit crops which were taken for the study of yield in this survey were plum, apricot and peach. The study covering the last two years of the survey was restricted to estimating the average yield per tree without categorising them according to their age or variety.

The pooled average yield per tree of bearing age of peach was estimated at 111 fruits weighing 8.1 kg. The maximum average yield of 138 fruits weighing 10.6 kg was obtained during the year 1966. This average was comparatively poorer due to the fact that roughly 21 per cent of the peach trees of bearing age failed to bear fruit during the season.

The pooled average yield per tree of bearing age of apricot was estimated at 293 fruits weighing 12.1 kg. When compared to other temperate fruit crops studied in this survey, the variation in yield per tree of apricot from year to year was the least. The average yield of plum per tree during a season was of the order of 231 fruits weighing 5.5 kg.

Wallbreaking in China

PRESIDENT Nixon's visit to the People's Republic of China will be remembered for long. It is a new peak in summitry as well as a new record for an American President on his peregrinations. It comes at the close of twentytwo years of mutual rejection and mutual discourtesy. But, for India, despite suggestions that the visit gave cause for envy and pique, it is a source of gratification. This country has been relentlessly at work for rapport between China and the world for the better part of a quarter century. However, time alone will indicate how far the rapport established, if any, during the 8 days which changed the world will help wipe out the mutual rancour of many years. So, understandably enough, American reporters accompanying the President feelingly noted the cool correctness of the airport reception, the still unerased condemnations of colonial imperialism on the ancient walls, as well as Chairman Mao's unprecedented gesture in meeting the State Visitor during the early stages of his stay. And the Shanghai communique was given an optimistic, if guarded, reception at the hands of the American Press.

The party of 300 accompanying the President was perhaps the smallest that ever went with an American Head of State outside the States. But the small Press party included some of the most competent newsmen in America. And the latest in electronic communications gadgetry gave a familiarity of faces (and un-pronounceable names) to an avidly awaiting American public. Many of these names, whose hyphens and upper cases have been checked and rechecked by countless newspapermen around the world the past fortnight, are legends inside China, veterans of the Long March, but known outside only to a select band of Hongkong-based research-minded Peeping Toms.

As the Premier told the President on the tarmac of Peking airport, the American people are a great people, the Chinese people are a great people. And so it is. It has been noted before our times by chroniclers of human achievements that the on y man-made object likely to be visible from the Moon is the Great Wall of China. And the Yankee is the only specie so far to have taken the small step for man but the great leap for mankind, looking at it from out there. Apart from this there are other links between th nations now noserubbing which renders the pacific but a pond.

During the early years of this century, missionary zeal carried the American across the Pacific with the White Man's Burden. Large numbers of Chinamen made the return journey across the Pacific to become cooks and washermen in their new home, the Californian coast. This crossover of cultures gave the world not only *chop suey*, but a Pearl S Buck and a Lin Yutang. The submerged group of Chinese on the American west coast also gave that land a foretaste of acrimony and tension arising out of race prejudice. And a small band of dedicated men belonging to this group, nuclear scientists, surfacing on the Mainland in the mid-sixties, forced the US to take a harder look at some new realities.

●

Despite his drawbacks, the rational man, the triumph of technology, is manifest best in America. But the rational man had his origins in Mainland China. Russel found cause to pay tribute to the rationality of the Chinese because they built dykes across the Yellow River at the dawn of civilization, when all other civilizations merely worshipped the life-giving, life-destroying rivers in their cradles. Mankind is beholden to the Chinese for many great advances in technology—cooking, writing, developing paper and gunpowder. Their rationality has also permitted each member of a Chinese family to advocate the religion of his individual choice. It was not uncommon for one to come across a family in pre-Communist China in which Christianity, Buddhism and Confucianism found their adherents. This indeed is a flowering of reason we Indians can envy.

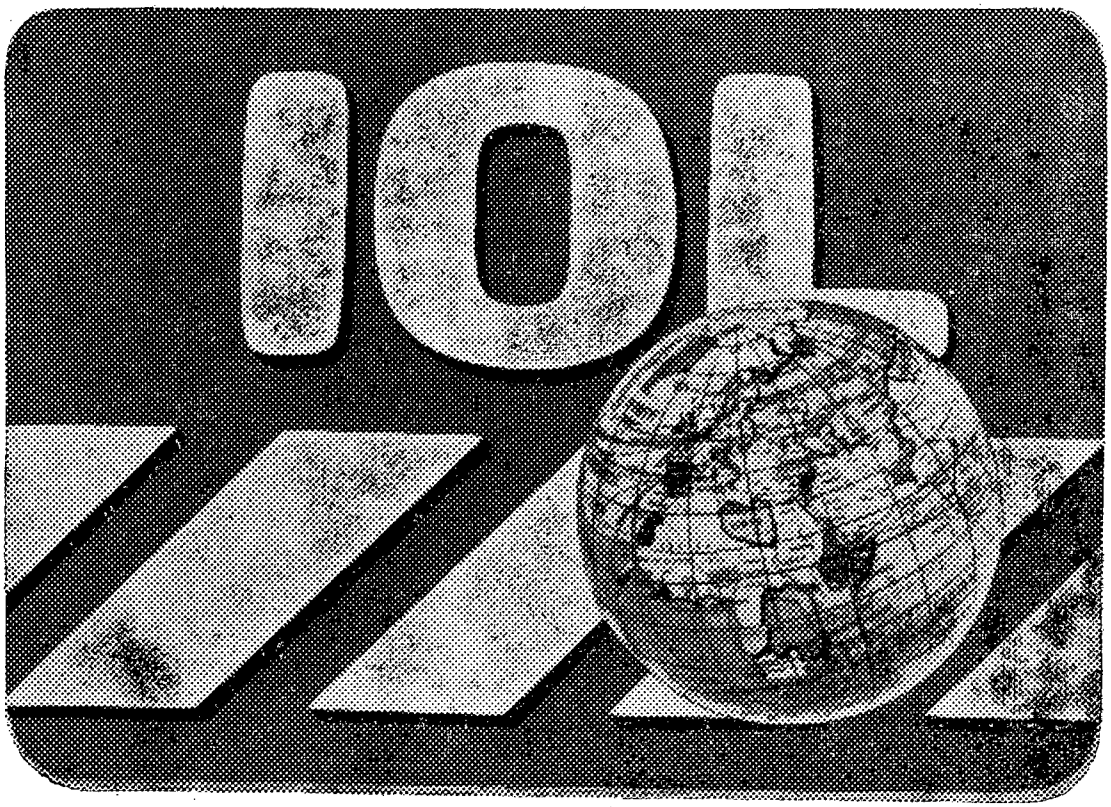
Sharing the limelight with Chairman, Premier and President is Dr Kissinger, the Jewish, German-born foreign policy adviser with the bad Press. No individual has had so much greatness detracted from him in the short but chequered history of American foreign policy as he. Even John Foster Dulles or Senator McCarthy were not disowned by their own countrymen to the same extent as Kissinger. The Doc's ever-smiling handsome face became anathema to the Indian and world Press because his tour programme across the Aksai Chin was made public only after the event, but with great ceremony and fanfare. With all his wisdom and knowledge of public affairs, Dr Kissinger has yet to learn how not to buy unpopularity by keeping his intentions close to himself at all times, imparting them a mystery which does not always belong, and making the world Press a sucker in the process. Was it surprising that Anderson and his ilk wanted their revenge ? And have perhaps had it ?



IGNORAMAN

Wants to know
Whether
Bangla Desh
should build the Bomb
before
NixEnlai
would recognise her.

This symbol:



the hallmark of quality and expertise in the fields of industrial gases and welding

The pioneer in the manufacture of industrial gases, welding equipment and consumables in the country, IOL keeps abreast of the latest advances all over the world.

The Research and Development Wing of IOL adapts what is relevant in international expertise to the Indian environment and introduces it in the Indian market.

That is why IOL is playing such an important role in the Indian economy. Today IOL has become indispensable to industry—in the private, the public and defence sectors alike.

No wonder the IOL symbol is a hallmark today.

Indian industry needs INDIAN OXYGEN

IOL

IOC-197 R

Small Industry

Defence and Self-reliance Potentialities

KAILASH C. CHOPRA

SMALL scale industries have a special role to play in war. They can produce a large variety of defence stores as well as goods for civilian consumption. It is interesting to note that small scale industries of Japan and some European countries drew benefit from the Second World War, consequent on the increases in civilian demands and defence stores, and drastic reduction in imports. Our experience also was none too different. Protection enjoyed on account of stoppage of imports for lack of foreign exchange also acts as a great inducement for the small-scale sector of industry.

The basic characteristic of ready adaptability is the one factor that makes small scale industries ideally suited for the supply of defence stores. A large number of small enterprises can be successfully and speedily adapted for defence production. During the conflict with the Chinese in 1962 and during the Indo-Pak war in 1965, the need for taking up new defence production was fully matched by the zeal and capability of the small scale entrepreneurs. During those weeks and months of crisis thousands of small scale units took up the manufacture of hundreds of items valued at crores of rupees. They included trigger assembly, electric sirens, ammunition boxes, carriers, blankets. etc., in the Punjab. In Uttar Pradesh, small units took up the manufacture of plastic bullets, mule shoes, PVC helmets, tank pins, shafts and spacers. Small entrepeneurs in Maharashtra took up the challenge of producing hand grenades, press eyelets, tubular rings, special casting nozzles, plugs, items of ammunition, shed doors, gears, freewheels, hand gloves, purka coats and trousers.

Country-wide dispersal is another major factor that emerges when we evaluate the role of small scale industry in defence production. Dispersal frustrates the enemy's attempts at attacking supply positions. Even when the infrastructure of entire regions are wiped out, the small scale sector of industry will remain a tower of strength, as it can operate effectively in other regions.

Economic Criteria

Starting from scratch in 1954, India had as many as 60,000 small scale industrial units in 1964. Today, their number is somewhere in the neighbourhood of 200,000. And this does not include a large number of unregistered small units estimated to be around 300,000. The contribution of this sector to our economic growth, national income, and employment is undoubted. Starting with the production of simple items like footwear, washing soap, furniture polish, etc., they have over the years acquired a degree of diversification and sophistication difficult to measure. And there is no reason why they should not be asked to share a greater burden in our national defence efforts.

The degree of technical skill developed in the small scale sector makes them comparable to corresponding units in the large scale sector, and the choice between small and large units could be made solely on economic criteria. Besides, the real and built-in advantages of small units afford a justification for strengthening it in spheres like electricals, chemicals, plastics, rubber, etc. These advantages include low overheads, direct supervision, lesser waste, low capital costs, and relatively shorter gestation periods.

In making the small scale sector fully live up to the needs of the nation, there are several imperatives we have to follow. Self-reliance and import substitution postulate a reorientation in the scientific and technological efforts of the country to make the small sector contribute more effectively. The efforts of credit institutions and development agencies is another imperative. The small entrepreneur is a person of small means and needs liberal financial assistance.

Greater Coordination

In concrete terms, they need technical assistance by way of prototypes, designs, samples, drawings, and so forth. Both Central and State authorities should provide adequate quantities of raw materials, both indigenous and imported. Raw material depots specially designed to meet the needs of small industry can mitigate the present difficulties in substantial measure. In the present state of haphazard growth, they can also do well with greater coordination, at various government and institutional levels. To ensure a quick flow of orders to appropriate units, coordination committees at the Centre and State levels could be set up. There is also a strong case for associating various Small Industries Service Institutes and representatives of small scale units with the indenting authorities of Defence and various other government departments.

Mr Kailash C. Chopra is Small Scale Industries Officer, Punjab National Bank, New Delhi.



Inside a Weaving Section

India's Ailing
Indu

J. C. K

· Obsolete machinery, risi
management and low-y
conspired to kill the goo

THE steady decline of our premier industry, cotton textiles, is part y the result of historical forces, and partly due to the apathy of the industry itself. For long, no serious attempt was made by mill-owners to modernise their machinery, or to improve the working of the mills. The country's dismemberment in 1947 gave away a good chunk of th· cotton producing area to Pakistan. Shortage of raw cotton has since been one of the most serious problems facing the industry. But problems arising from obsolete machinery have been of our own making.

And this neg'ect has cost the industry and the nation dearly. Inefficient machines have reduced productivity, inflated costs and eroded profits. The undue rise in prices of an essential commodity like cloth not only pinches consumers at home, but limits the industry's capacity to meet competition abroad. The replacement of cotton by manmade fibres the world over has made matters worse. Nevertheless, cotton textile industry still enjoys a pivotal position in this country, and it is the mainstay of our industrial economy. The industry employs about 9.5 lakh workers or about a fifth of our total factory labour besides many more engaged in ancillary activities. Its weight in the revised index of industrial production is 21 per cent, and it accounts for 15 per cent of the gross value of industrial manufactures and 17 per cent of the value added.

The industry has a total installed capacity of 1.79 crore spindles and 2.09 lakh looms. The actual utilisation in the spinning sector is only 1.38 crore spindles or about 78 per cent. On the weaving side, the organised mill sector produces 52 per cent of the country's total production, and the remaining 47 per cent is produced by the widely dispersed and decentralised sector consisting of powerlooms and handlooms. The expansion of the decentralised sector was made possible by deliberate State policies, which were largely influenced by employment potential and other socio-economic considerations And the decentralised sector grew in comparative strength at the cost of the mill sector. Its share in the total cloth production rose consistently from 40 per cent in 1965 to 47 per cent in 1970. Figures indicate that production in the mill sector during the past 20 years has been either spasmodic or stagnanat. The annual growth rate of the industry works out to 2.6 per cent. In the case of the mill sector, the growth was hardly 0.6 per cent a year, as the table attended shows.

The latest available data show that production of mill cloth was around 4,200 million metres in 1969-70 and 1970-71 and was expected to be about 100 million metres more in 1971-72. The rate of progress has, therefore, been obviously inadequate to reach the plan target of 5,100 million metres in the organised sector. All that is likely to be achieved under the present reckoning is that the output may reach 4,500 million metres.

Static Availability

As a result of the sluggish or declining rate of production in the mill sector, the per capita availability of cloth for the rapidly increasing population has remained within 13-15 metres during the past 20

Mr Khanna is a Research Officer in the Perspective Planning Division of the Planning Commission, New Delhi.

years. And this despite the decline in quantitative exports. Our per capita consumption of fabrics made of synthetic fibres remains below the limit of two metres.

The shortage of cotton and its spiralling prices, higher wage bills, inefficient operation of machines and the burden of heavy imposts have all contributed to the alarming raise in cloth prices in the past few years. Since 1962-63, the hike has been as much as 50 per cent and more. The demand for higher bonuses by workers has been a major cause of unrest in the industry leading to strikes and closures. Price control on certain coarse varieties has generally failed to benefit the consumer, since in most cases the manufacturers prefer to pay the penalty rather than fulfil their commitment

Corrective Steps

In view of the crucial importance of the cotton textile industry in our economy, it devolves on all concerned to do everything possible to pull it out of its present state of sickness and restore to it the place of pride it once enjoyed. This would require a hard look at some of the following deficiencies it presently suffers from.

Replacement of Plant: It is a pity that the goose that lays the golden egg has been left uncared for, for so long. But complacency can not longer be permitted. Units which have failed to replace out-of-date machinery must be forced to do so. As many as 59 mills have already been closed on account of uneconomic functioning. There is no reason why owners who had been reaping high profits for years should not spend some of it on improving the plants. The Textile Corporation has already taken up the management of a few sick mills to make them viable. But unless the industry itself realises the urgency, the process of renovation cannot be speeded up. Government is stated to have decided to extend liberal financial help for this purpose.

Augmenting Cotton Supplies: Owing to the inadequate production of cotton in the country, requirements

(*Continued on page 204*)

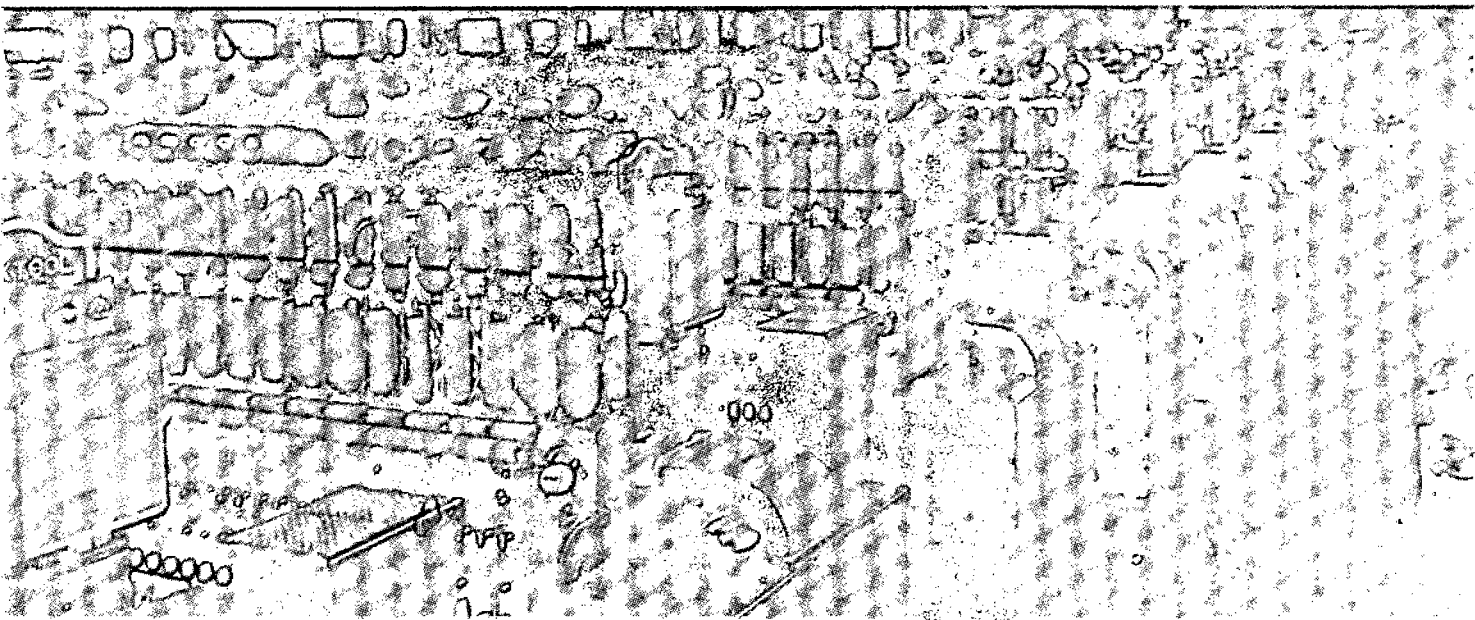
ɔtton Textile
:ry

INA

ɔduction costs, outmoded
g seeds seem to have
t lays the golden egg...



Carrying the Cotton Crop



Section of a Spinning Mill



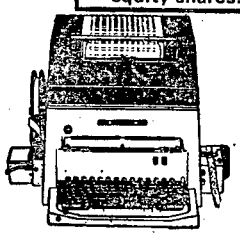
PECCAVI?..

When Sir Charles Napier captured Sind in 1843, he sent a native messenger galloping across to Lord Ellenborough, the Governor General, and the message contained one single word-Peccavi, which is Latin for 'I have sinned'. Lord Ellenborough, who had also spent years conjugating Latin verbs, understood at once that Sind had fallen.

Very romantic and very nice. But now there is a quicker and equally interesting way to send messages. That way you don't have to know Latin to decipher the telegrams you receive. The answer is neatly tied up in a package called a teleprinter, made by Hindustan Teleprinters, a Government of India undertaking. P & T departments, banks, commercial houses, news agencies all use them for quick speedy service. A small answer to a large problem.

SOME INTERESTING FACTS:-

1. **25% decrease in unit price—from Rs. 7000/- in 1968 to Rs. 5300/- in 1970.**
2. **Saving of Rs. 8,18 lakhs during '69-'70 on account of import substitution. Reduction of the imported components to 9.**
3. **Profit of about 19% on sales.**
4. **12% dividends on equity shares.**



hindustan teleprinters limited
(A Government of India Undertaking)
G.S.T. Road, Guindy, Madras-32.

J&K Plans Take-over of Forests

ENCOURAGED by the success of its Departmental Lumbering Project initiated in the State some 14 years back, the Jammu and Kashmir Government have embarked upon a phased programme of complete nationalisation of forests. The entire activity connected with the extraction of timber and other forest produce will be taken over by the State under the programme which is to be completed by 1980.

Of the State's total area, nearly 8,000 sq. miles are covered by forests. Of this the total area presently available for timber exploitation is nearly 2,900 sq. miles while the rest is under protective forests. The main varieties of woods for which the State is well known include pine, fir, birch, hazel, wild oak and maple. While the graceful birch trees grow at high altitudes in Lidder valley, Kolashai, Gurais and the surrounding area, pine, fire and *deodar* are abundant in Gulmarg, Sonamarg and Jehlum valley in the Kashmir division, and Bhaderwah and Kishtwar areas in the Doda district of the Jammu division. The best varieties of pine and *deodar* are found in the latter two areas and the Lolab valley in Kashmir. These jungles are also known for their minor-forest products which include herbs and medicinal plants.

Then and Now

Before Independence the forests in the State hardly yielded an annual revenue of Rs 25 lakh, which in recent years, has, multiplied several fold and timber exports have gone up. An all time record was reached in 1969-70 when the State's revenue from forests went up to Rs 5.20 crore.

The extraction from forests is handled by private agencies as in most parts of the country. Under the system in vogue in the State, leases are sold to private parties who in turn pay royalties to the Government.

The Government being keen on replacing the system to ensure more proper utilisation of the forest resources, have in recent years taken a number of steps to develop the forests and organise their extraction on scientific basis. The first important step in the direction was the setting up of a Departmental Lumbering Project in 1958-59. The volume of



timber extracted by the Project after two years of its inception stood at 44,178 cft, which increased to 48,851 cft in five years. In another five years the timber extraction by the Project was up by nearly 40 times, having reached 18,00,000 cft in 1970-71.

The State Government announced its decision to nationalise progressively, the extraction of timber at the beginning of the Fourth Five Year Plan period, when Departmental Lumbering Project was considerably expanded and some more areas were brought within its scope. The timber trade was also further rationalised.

Forward Policy

With a view to achieving the objective of complete nationalisation, the State Government more recently undertook a thorough review of the entire forest policy. Under the new scheme of things, forest cooperatives are being developed one each in Kashmir and Jammu to whom leases will be allotted during the current year. The progress under this bold experiment, which is expected to open up new vistas in forest exploitation on cooperative basis, will be watched carefully so as to gather lessons for future development.

Besides, the activities of the Departmental Lumbering Project are being planned and extended not only in the existing areas reserved for the Project but also in new areas to be gradually taken over from the private sector. The basis for planning will be to attain complete nationalisation in the Kashmir division by 1977 and in the Jammu division by 1980. The Project envisages the target of extraction of 32 lakh cft. of timber in 1972-73 to be raised to 52 lakh cft. in 1973-74. The Project authorities have been directed to work out a detailed plan, which among other things will indicate the drainages to be taken over year by year and the quantities of timber extracted from these.

The sale of leases to the private sector will henceforth be restricted to suit the Project's schemes keeping an eye on the unemployment problem of the State.

To ensure that Government revenues do not suffer in the process, appropriate steps are also being taken which include sale of enough leases to the private sector as well.

The period of leases sold to the private sector will, however, not

exceed two years in Kashmir and five years in Jammu. The quantities of timber sold will be realistically fixed so that no extensions become necessary. The leasees whose record of performance in the past has been unsatisfactory will not be given new leases, particularly, the firms having outstandings exceeding 10 per cent of their obligation. Care will be taken that individuals not entitled to new leases under this decision as owners of one firm, or the other, do not obtain fresh leases by bidding under the name of another firm.

Consistent with the role visualised for the private sector in the new policy decision, a Committee has been constituted to examine the question of increasing the output of this sector.

Recovering Arrears

The question of recovering huge arrears of royalty due from the leases to the Government is also engaging its attention. A Commission comprising one senior Forest Service Officer from outside the State, has been appointed to enquire into the reasons for accumulation of arrears of over Rs 3.30 crore in leases where there is no stock to cover the amount. The Commission has been asked specifically to locate the causes of this situation and also pinpoint the responsibility of the persons involved.

IN SEARCH OF ASSURED IRRIGATION

Gujarat Works on New Projects of Prosperity

FOOD production in Gujarat reached a new high in 1970-71. Helped by favourable weather conditions, the Gujarat farmer produced as much as 41.56 lakh tonnes of foodgrains, about 11 lakh tonnes more than the preceding year. The production, however, is feared to have slumped a little this year.

This variation in production underlines the continued dependence of agriculture in the State on the monsoon. Of a total of over 1 crore hectares of cultivable land in the State, only about 10 per cent has any irrigation facilities. Assured irrigation is one of the most important needs of the Gujarat farmer. He is hard-working and earnest to take up new and improved farming practices, implements and seeds. However, unless he is assured of adequate water supply he is unable to increase the foodgrains output in sufficient measure.

Hence with a view to providing more irrigation facilities, the State Government has undertaken several schemes, the latest being the Sabarmati and Panam projects. Work on both these projects began last November, after they were finally cleared by the Planning Commission.

Harnessing Sabarmati

The Sabarmati Reservoir Project at Dharoi, now commonly known as Dharoi Project, is about 150 km from Ahmedabad. Under the project 380 metres long and 44 metres high masonry dam will be constructed across the river Sabarmati. It is for the first time that a planned effort is being made to harness the waters of this river. Rising from the Aravalli Hills, Sabarmati, the fourth largest river of Gujarat, travels a distance of about 416 km to drain 1,600 sq km of its catchment area into the Gulf of Cambay. The idea of harnessing Sabarmati waters was first mooted in the 19th century, but for various reasons it could not take concrete shape during all these years.

The Project, when completed in about five years, will have a reservoir to store 7.36 lakh acre feet of water. Two direct canals taking off from the reservoir will irrigate 36,400 hectares of land in Mehsana and Sabarkantha districts. This will increase the productivity of the land and help the farmers to enhance their farm income by about Rs 3.5 crore per year.

The Cost

The Project, which is expected to cost Rs 17.58 crore, also envisages construction of a barrage across the river at Vasana, about 4 km downstream from Ahmedabad, to firm up the irrigation of 24,800 heactares of land through the Fatehwadi canal. It will, additionally, provide 15 crore gallons of water per day to growing population of Ahmedabad and 1.1 crore gallons per day to Gandhinagar, the new capital city of Gujarat, thus providing a permanent solution to the grave problem of water shortage in Ahmedabad.

Panam Project

The Panam Irrigation Project envisages the construction of a dam across the river Panam in the Panchmahals district, with a storage capacity of 2.60 lakh cub. ft of water.

The project will irrigate 38,592 hectares of land, mostly in the scarcity-prone Lunawada, Shahera and Godhra talukas of the district, which has a reponderance of Adivasi population. It will also supply 10 crore gallons of water daily to Baroda city and to the industrial units around it. The dam and canals which will be ready in about five years, are expected to cost Rs 10.66 crore.

The Sabarmati and Panam projects will go a long way in reducing the dependance of the State agriculture on the vagaries of nature. They will also help the toiling farming community in the area to improve their standard of living and to make the State self-sufficient in food production.

Tripura in Transition

D. N. CHAKRAVARTY

Our Shillong Correspondent

TRIPURA, figuring very prominently since long on the socio-political map of the country, is one of the youngest States of the Indian Union that have emerged as a result of recent reorganisation of the eastern region (See *Yojana*, February 6). This, formerly a princely State, made Union Territory in 1957, was conferred Statehood on January 21 last. With an area of 10,477 sq. km and a population of 15.56 lakh the new State is also the smallest in respect of area, and excepting for Nagaland, has the lowest population. Bounded in the north-west and south-east by Bangla Desh with which it has a common boundary of 832 km, Tripura is linked to the rest of India through a narrow strip along Assam and Mizoram.

Geographically, Tripura can be divided into three broad zones—the hill region, the flat plains and the river basin. A series of undulating hills, straggling from the north to south, have formed broad parallel valleys on its surface. The important hill ranges are Jampoi, Sakhon, Longtarai, Debtamura, Baramura and Atharamura. And prominent among the many streams and rivers running over the area are Gumti, Juri, Manu, Haorah, Muhuri and Dhalai. Its low lying lands along the north-western and southern boundaries are comparatively fertile and densely populated.

The climate of Tripura is generally hot and humid with an average rainfall of 210 cm per annum.

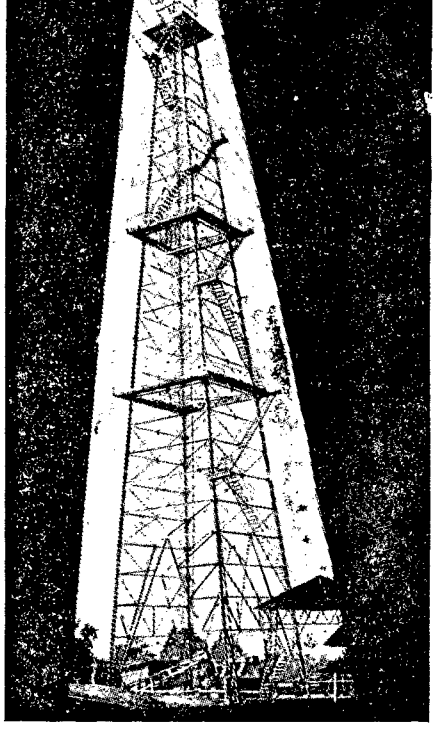
Agrarian Economy

The soil is generally laterite and only the flat land along the principal rivers is alluvial. Shifting cultivation known as *Jhum*, practised since times immemorial, has spoilt the natural qualities of the top soil. The hilly tracts, denuded of their mineral content by tropical sun and torrential rains, are not ideal for agriculture.

However, like most parts of the country, the State has predominantly an agrarian economy with over 70 per cent of the working population engaged in agriculture. Rice is the staple food of the people and is grown in over 75 per cent of the cultivated area. Tripura, which was self-sufficient in food till about early 'fifties has since become a deficit State due mainly to the abnormal population explosion. Besides rice, Tripura grows potatoes, pulses, sugarcane, and chillies. The main commercial crops are jute, tea, oilseeds and cotton.

Apart from the grandeur of the blue hills and the beauty of the green valley, Tripura is gifted with dense forests which are rich in flora and fauna. Bamboo and *Sal* trees are found in abundance. It is fairly rich in wild life though buffaloes and bisons have for some time past been becoming extinct due to deforestation and extension of shifting-cultivation in the area. Elephants, tigers, leopards, *Sambhar*, barking deer, wild boars, porcupines, etc., are among the animals abounding its forests.

Though mineral resources of Tripura have yet to be properly explored, its known resources consist of glass sand, clay, limestone, coal, lignite and ochre. The similarity of stone structures with those of Burma and other geo-features suggest the presence of crude oil here. The ONGC has already carried out prospecting operations and is hopeful about finding oil in Tripura where drilling is to begin in April this year.

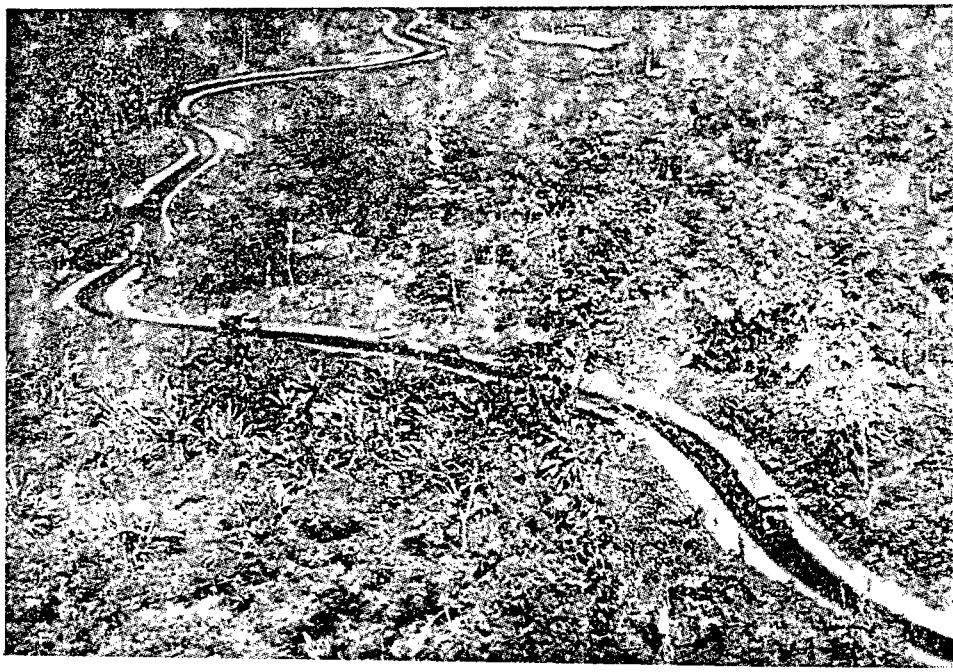


Oil prospecting—operation of promise

Onset of Democracy

Tripura has a rich past and a long history. Known in the early days as Kirata-Desha, it was the meeting ground of the earliest stream of Aryan overflow into

Agartala-Assam Road—the life-line of Tripura



the east. The Tripura royal dynasty ruled for over 1,300 years, till its last scion acceded to the Indian Union on October 15, 1949. It then became a part C State under Chief Commissioner; and following the re-organisation of States in 1956, a Centrally administered area with a Territorial Council consisting of 32 members out of which 30 were elected. Tripura took the first step towards responsible Government in July, 1963, when the erstwhile Territorial Council was replaced by a Legislative Assembly.

Until recently the whole of Tripura was treated as one district, with 10 sub-divisions. With effect from August, 1970 this part of the country has been divided into three administrative districts namely North Tripura, South Tripura and West Tripura. The number of Tehsils has also been raised from 45 to 284. The State has at present over 4,900 villages of which 871 are revenue villages; and the only six town places are Agartala (the State Capital), Kailasahar, Dharanagar, Udaipur, Belonia and Khowai.

Tripura has the highest population growth rate in the country, which is 2.6 per cent, next only to Manipur. It had a population of 5.13 lakh in 1948 and 6.39 lakh in 1958, rising to 11.42 lakh in 1961 and 15 56 lakh ten years later This abnormal rise in population can be attributed mainly to the large scale influx of refugees from the erstwhile East Pakistan, which it has been receiving almost from the day that came into being in 1947 following the partition. More recently, the liberation struggle of Bangla Desh had caused another big inflow which, of course, has sinee been steadily returning back home in the new republic.

Besides this largest constituent of the State's population, there are about 19 tribal communities in Tripura claiming a total population of a little over four lakhs. The well known among them are the Tripuris, Chakmas, Reangs, Lushais and the Malshums. Proud of their heritage and claiming descent from different Indo-Mongoloid racial strains, these tribes were until recently isolated from the mainstream of national upsurge.

The stagnation of centuries was however challenged when Tripura, like the rest of India, embarked upon the gigantic task of implementing its Five Year Plans. Although only a little less than Rs 2 crore was spent out of the total Plan outlay of Rs 2.80 crore, the First Plan of Tripura had great significance as it initiated for the first time an organised endeavour for economic advancement of the region.

Developmental activities witnessed considerable acceleration during the Second Plan when remarkable progress was made in sectors like agriculture, communication and education. During this Plan when entire outlay of Rs 9 crore was utilised, Tripura fully achieved its target of additional production of 10,000 tonnes of foodgrains.

Significant strides were made in all spheres of the State's economy during the Third Plan, with an actual expenditure of Rs 15.50 crore. Establishment of an engineering college, extension of the railway line from Assam to Dharmanagar and the setting up of Dumbor Hydel Project were some of the notable achievements made during this Plan. Tripura implemented its three annual Plans with a total expenditure of Rs 11.40 crore.

Changing Horizon

Keeping in view the urgency of maintaining the tempo of progress made in the earlier Plans, Tripura is now busy implementing its Fourth Plan with an approved outlay of Rs 34.66 crore.

The impact of all these Plans is palpably evident from the changed socio-economic life of the people in

Hydel Power Project at Dumbor



the State. Education which was the privilege of the fortunate few, only two decades ago, has now made inroads into the heart of the tribal villages. The percentage of literacy in the State now is 30.86 per cent. This is higher than many other States in the country. In the Sadar subdivision the literacy rate is as high as 36.73 per cent. While Tripura had only one college and 116 primary schools before Independence, it has now a dozen colleges, over 1500 primary schools and about 50 high schools, besides a few technical institutions.

In the field of communications also the State's progress has been equally spectacular. Whereas before Independence Tripura had the most undeveloped communication system, now all its sub-divisional headquarters are linked with Agartala, the Capital, with good all weather roads. Besides the Assam-Agartala road serving as its life-line, the State has now altogether 1,600 km roads, three air strips and an aerodrome.

Medical facilities have been extended to cover even the very remote areas. At present, the State has 11 hospitals and 25 public health centres. The progress in the field of cooperation and Panchayati Raj is also quite satisfactory. With 448 Gram Panchayats and 134 Nyaya Panchyats Tripura has already made considerable headway in the sphere of democratic decentralisation.

Rehabilitation of refugees, the weaning away of the tribal people from shifting habitation to permanent settlement and the initiation of the tribal and other backward communities of the State from tradition into the dynamism of the modern era are some of the most stupendous programmes the new State Government would have to lay its hands on.

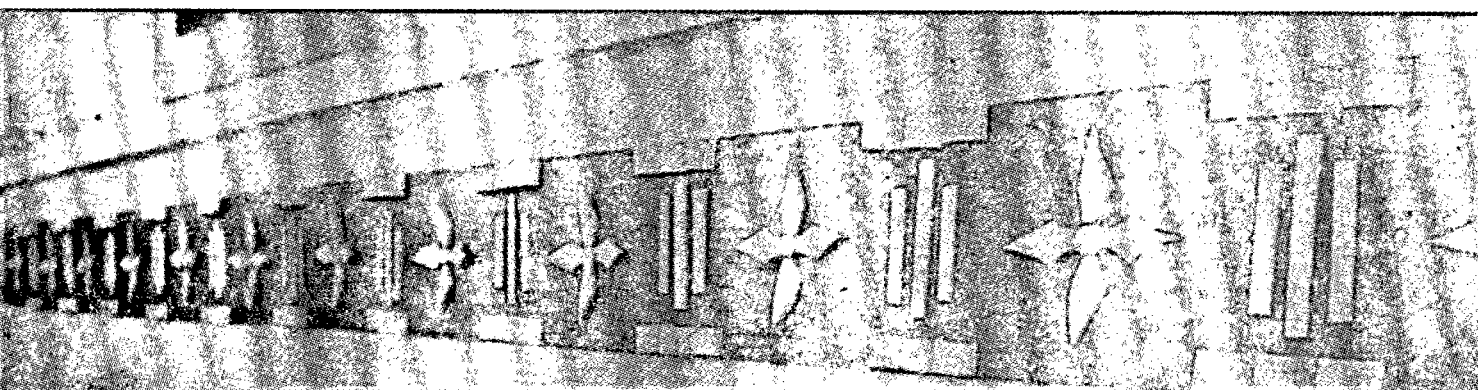


Kalai tribal girl.
(*Below*) Bamboo decoration—a wall panel

Industry and Handicrafts

The transport bottleneck coupled with lack of an organised and easy market has impeded the growth of industries in the State. Tea is the only organised industry and there are about 50 tea estates that some how place Tripura on the industrial map of the country. Notwithstanding this, the State has made considerable progress in strengthening its small and cottage industries like smithy, handloom, carpentry and processing of fruits. There is also quite a lot of scope for dairy development. Handicrafts of Tripura, well known for their artistic decoration and exquisite workmanship, have already received nation-wide popularity. The pride of place among its cottage industries goes to weaving, which is practised widely, and to cane and bamboo work. Many artistic articles like toys, trays, vases, photoframes, human figures, caskets and calendar and pen stands, attracting the fancy of the sophisticated people, are made out of bambo or its shoots and cane. Its ivory works and tribal jewellery are known for their originality and rich designs.

A land of magnificent natural beauty Tripura's enchanting cultural tapestry and its colourful people all combine to make this new State of our Republic a veritable tourists' paradise.



A New Deal for Small Farmers

R. L. PITALE

ALTHOUGH national concern for the small farmer is not of recent origin, his problems are receiving increasing attention under a package of special programmes formulated under the Fourth Plan. The object of these programmes is to help the small farmers to perceive and participate effectively in the immense possibilities of economic growth through specially organised efforts.

In 1965, the Government of Maharashtra formulated a scheme called the Integrated Area Development Programme (popularly known as Page scheme) with a view to helping agricultural labourers and small farmers cultivating less than five acres of land. The scheme attracted nation-wide attention and its basic approach was hailed by many observers, especially the planners at the Centre. After detailed discussion, the Government of India have now sponsored similar schemes for small farmers, marginal farmers and agricultural labourers in various other States.

Development Agencies

The Small Farmers Development Agency (SFDA) and Marginal Farmers and Agricultural Labourers projects (MFAL) are the main centrally sponsored schemes which cater to the principal objective of "growth with social justice" in the rural set up of the country, designed to provide much needed relief to the weaker sections of the rural society.

The basic objective of SFDA is to make the small cultivators economically self-sufficient by increasing their productivity and throwing up more job opportunities for them, in the agricultural sector, in an integrated manner. To achieve the objective of distributive justice along with increase in output, the problems of potentially viable small farmers in the selected areas are, in the first instance, identified with accent on intensive cultivation. Then they are helped with timely supplies of inputs, services and credit through the existing institutional structure in selected districts.

The programme for marginal farmers and agricultural labourers (MFAL) veers round the areas of consumer demand with accent on provision of supplementary occupations and employment opportunities.

The definition of small farmer essentially takes into account the group of farmers who are handicapped due to the lack of various facilities to develop their potentialities to make them viable landholders. The Government of India have indicated his status as one whose landholding is below two and a half acres (or one hectare approximately). The definition is not rigid but the holding limits would have to be fixed taking into consideration various factors such as availability of irrigation, soil type, etc. Moreover, the criteria of landholding helps to locate small farmers. A small farm is characterised by continuous deterioration of its physical capital and erosion of productive efficiency of the small farmer due to chronic malnutrition and hunger. The SFDA has to deal essentially with these two problems.

Selected Projects

According to Small Farmers Developed Agency programme, 46 pilot projects have been undertaken in selected districts throughout the country. In addition, 41 pilot projects for the marginal farmers and agricultural labourers have also been undertaken in selected districts in the country. The total estimated cost of these projects during the Fourth Plan is Rs 115 crore. Most of the projects were sanctioned in the second half of 1970-71, to be completed in the four year period.

It is reported that during 1970-71 about 4.6 lakh potential beneficiaries were identified and nearly 37,000 were covered under the cooperative fold. During the year short, medium and long term loans amounting to Rs 113.52 lakh, Rs 38.92 lakh, and Rs 83.11 lakh were disbursed among the identified small farmers. This, in effect, helped the beneficiaries to put up 1836 tubewells, 1,748 dug wells and 798 pump sets and purchase 438 milch cattle and 12,000 poultry birds.

Evaluating the Results

The programme is essentially an experiment in supervised use of credit to be obtained from existing institutions, aiming at achieving increase in productivity of land and developing subsidiary occupations for small farmers.

The evaluation of such a scheme is of utmost importance. It may first be seen whether SFDA has been helpful in preventing deterioration of physical assets and erosion of productive efficiency of small farmers. To ensure this in quantitative terms may be difficult, but the indicator can be the additional inputs made available to a farmer and increase in his consumption during the four year period. Data may be collected for the increase in production at constant prices over a period of four years and then compare it with the year preceding the implementation of the scheme. Implementation and evaluation of the scheme have to go hand in hand with a view to rectifying the defects and adopting corrective measures.

Mr R. L. Pitale belongs to the Indian Economic Service. The views expressed are his own and not of the organisation to which he belongs.

The Holy Ganga can be a Health Hazard

PARITOSH C. TYAGI

EVERY day, thousands of pilgrims bathe in the Ganga. They also drink its waters as a religious ritual. The Holy Waters, it is believed, wash away sin. A few score of pilgrims also bring with them disease-carrying germs of cholera, enteric fever and skin afflictions.

The Ganga is no less kind in its return. A survey a few years ago revealed as many as 71 drains discharging tonnes of organic matter into the river. It comes from temples, houses and industrial establishments on the banks of the river.

The drains vary greatly in size. The largest is at Trilochan Ghat, through which, proverbially, an elephant can pass. The smaller drains serve individual households or small groups of houses.

The assessment revealed that 15 drains each carried a discharge greater than 100 litres per minute; 19 carried between 25 and 100 litres per minute and the rest carried less than 25 litres per minute

The maximum discharge was assessed at 13,500 litres per minute in the case of Ghoraghat drain which flows into the river close to the most popular of the Ghats, Dashashwamedh.

Besides polluted water, half-burnt corpses are also thrown into the river at the Harish Chandra and Manikarnika Ghats. But the appalling sight do not make any impression on the deep religious faith of the pilgrims.

Mr Paritosh C. Tyagi is a Joint Director in the Planning Commission.

An analysis of the water taken 10 metres downstream of the major drains showed that it contained 20 to 50 per cent organic matter of a type found in the sewers of a typical northern Indian city.

The crescent shape of the river forces the current on to the Ghats. The pollutants constantly churu in the waters, and get dispersed only slowly. The water was far from safe for the health of the bathers.

The Uttar Pradesh Government on this discovery, prepared an estimate for the prevention of pollution at Varanasi. The proposals included the laying of Ghat sewers, arrangements for pumping and the remodelling of storm-water drains, sewerage in the inhabited locality of Assi, upstream of the Ghats; and miscellaneous works including elimination of pollution from Ramnagar on the opposite bank and on the upstream side.

Site conditions presented great difficulties on account of the steepness of the bank, fully built up with temples, bathing enclosures and steps into the waters. The wide differences in water level during floods and dry periods also complicated the location and engineering design of the proposals.

The overall cost of the proposals was worked out as Rs 55 lakh. The Municipal Corporation of Varanasi was unable to spend such a large sum of money. The Government of India has since agreed to provide 50 per cent of the cost as a grant-in-aid. The scheme is now under implementation.

At Varanasi



newsletters

Improving Leather Trade Prospects

(From Our Madras Correspondent)

THE Central Leather Research Institute (CLRI) at Adyar in Madras, was very much in the news recently. First, for the Seventh International Leather Fair and the Tanners' Get-Together, which concluded here in February last, and secondly, for the UNDP-sponsored rubber goods development project which is to be located at the CLRI campus.

The Leather Fair and the Tanners' Get-Together, which has become an annual feature since 1965 in the world of skins and hides, was organised by the Indian Leather Fair Society. Other highlights of the Fair this time included a seminar, a fashion parade, designs competition of footwear and leather goods, an exhibition, and inauguration of the new Guest House and the Trainees' Hostel attached to the CLRI. Mr A. Nagappa Chattiar, President of the Society, which organised the Fair, has announced a contribution of Rs 51,000 for setting up a research centre for footwear designs, to be located at the Institute's campus.

Exchange Earnings

The country's leather footwear exports during the last year were valued at Rs 8 crore, its principal consumers abroad being the East European Countries. The value of exports for the current year was estimated at Rs 10 crore, with the projection for the next year placed at Rs 15 crore. With this progressive upward trend, India has been able to achieve a breakthrough in relatively fastidious markets of Western Europe and the United States. The industry earns about Rs 100 crore annually by leather goods export particularly leather garments, shoes and other items of fashion and utility wear.

Of greater interest to the tanners was the seminar, which was co-sponsored, along with the Central Leather Research Institute, by the Central Public Health Engineering Research Institute, Nagpur. In view of the leather tanneries going up in number all over the country, it took up the problem of tackling the tannery effluents. The discussions aimed at arriving at the "parameters that constitute a hygienic slaughter house and the optimal and economic methods that could be offered to the tanning industry to treat and dispose the effluents in small, medium and large sectors."

CLRI's Achievement

The Central Leather Research Institute has also succeesfully tackled the problem of disposal of the effluents which has been plaguing tanneries. Instead of throwing out the fluid waste after the tanning process is done, the Institute has converted it into a useful agent for irrigation and as a fertiliser medium.

Tannery effluents contain toxic inorganic and putrescible organic matter which when disposed of on land or into water courses cause serious pollution. When disposed of on land, the effluents make it unsuitable for cultivation and also affect the sub-soil water ; and when let into a water course they not only import unsightly appearance to it but, being toxic, affect the aquatic life as well.

In the process evolved by the Institute, domestic sewage is first pumped into the 'trickling filter', which promotes the growth of micro-organisms through the filter bed. Tannery effluents are fed into the filter in increasing proportions till the filter gets comletely acclimatised to the effluents. At this stage the organic and the inorganic impurities are assimilated by the micro-organisms in the filter, and the effluents treated thus lose their injurious and smelling properties, retaining only such of the matter as could be usefully utilised for agricultural purposes.

In the farm attached to the Institute campus, some land has been set apart for utilising this purified effluent fluid to see the response of a variety of plants, including paddy. The results have been striking.

The effluents thus treated are rich in protein content and free from offensive odour, which the untreated effluents carry. What about the economics of using this process and benefit there from? The cost of process application, including the structural part of the filters, etc., it is estimated, comes to about Rs 20,000.

India's Second Wax Refinery

THE Madras Refineries Ltd., a public sector undertaking will soon have a wax refinery project, with an annual capacity of 20,000 to 23,000 tonnes, and currently estimated to cost about Rs 3.5 to Rs 4 crore. The clearance for the Refined Wax project has been given by the Refineries' Board of Directors which met at Madras early last month for its annual meeting. The plant will be located at Manali within the MRL complex.

In view of the growing demand for wax, Government has banned its export. The proposed Madras project, it is expected, will meet much of country's requirements. At present, the Digboi Refinery (Assam) alone is producing wax. Refined wax is used in a wide range of industries like match sticks, tarpaulin, wax paper, candles, cosmetics, among others.

Increased Production

During the year ended June 1971 the Madras Refineries made a net profit of Rs 102.50 lakh and more than doubled its production of asphalt from the designed capacity of 80,000 tonnes to 200,000 tonnes. Besides heavy demands from within the country, Bangla Desh has also asked for 10,000 tonnes of the product.

Production of Liquefied Petroleum Gas (LPG), more commonly known as domestic fuel gas, has also gone up from the installed capacity of 10,000 to 18,000 tonnes, and of motor spirit (petrol) from 1,20,000 to 1,50,000 tonnes. For kerosene, production was 4,80,000 tonnes against an annual capacity of 3,60,000 tonnes.

Magnificent Advance in Machine Tools

(From Our Bombay Correspondent)

IN the context of nationwide accent on self-reliance mention may be made of the Second All-India Machine Tools Exhibition and a couple of other similar events which Bombay witnessed recently. All these attempts reflected our industries' earnestness to reduce dependence on borrowed technologies and to increase production at home.

The second All India Exhibition of Machine Tools held in the city from January 30 to February 8 best provided a proof of the country's growing self-sufficiency and self-reliance in the industrial field. At the exhibition over 350 exhibits representing a wide range of lathes, metal working and metal forming machine tools, foundry equipment, welding machines, special purpose machine tools and a variety of hand, cutting and small tools were on display. These tools not only help in producing machines but also in starting small and cottage industry units. During the past, almost all the requirements of machine tools which may be rightly called 'mother' machines, were met through imports. But the picture has undergone a big change in recent times. Instead of importing them, India now exports quality machine tools and hand tools to many countries including the UK, USA, USSR and East and West Germany.

Although the country still gets some such tools from abroad, the percentage of imports to the indigenous production is steadily going down. The total production of machine tools in the country has increased from Rs 91.25 lakh in 1946 to Rs 37.24 crore in 1970. The exports increased from Rs 66.13 lakh in 1966-67 to Rs 279.49 lakh in 1970-71. The downward trend noticed in exports of machine tools during the last year as compared to Rs 295.21 lakh in 1969-70, was a little disturbing, which, however, was more than made up by the substantial increase in the export of hand tools and other small varieties. Their export went up from Rs 266 lakh to Rs 437 lakh during this period.

The other two events included a Seminar on Self-Reliant Economy, sponsored by the All India Manufacturers' Organisation and the Society of Goodwill and Culture, which was held on Feburary 5 under the chairmanship of Mr T. A. Pai, Chairman of the LIC.

"Industrial Engineering in the Changing Indian Conditions" was the theme of the 3-day National Convention and All-India Conference organised by the Indian Institution of Industrial Engineering, Powai,Bombay. Over 200 delegates from all parts of the country who included representatives from various public and private sector industries and undertakings, attended the conference. Many papers dealing with the industrial engineers' role and studies made by some of them in various fields were read at the conference which concluded on February 8.

An OCS Achievement

A team of engineers at the Overseas Communication Service (OCS) have successfully designed and fabricated an equipment which if imported would have cost Rs 33 lakh in foreign exchange. It has been manufactured at a meagre cost of just rupees one lakh.

The equipment called "Satellite Engineering Orderwire System" (SEOS) is needed for the communication between our satellite earth station at Arvi and seven other earth stations situated in Japan, Australia, Malaysia, Kuwait, Beharin, East Africa and the U. K. The OCS now is in direct communication with these earth stations, they being in the range of Intelsat III fixed in the Indian ocean area.

The OCS is also now making use of indigenous photographic film and paper instead of imported material, for which some modifications are effected in the picture equipment. The OCS engineers have achieved near self-sufficiency in the equipment acquired for the day to day maintenance. The manufacture of spare parts required for teleprinters is also being attempted at its mechanical workshop.

Promoting Industry in Backward Areas

(From Our Trivandrum Correspondent)

THE Kerala Industrial and Technical Consultancy Organisation, the first of its kind in the country, was inaugurated at Cochin on February 7 last. The founding of such an organisation as this signified the new promotional role which the Industrial Development Bank of India (IDBI), in co-operation with other financial institutions, intends to play for industrial growth in the country, more so in the backward areas.

The Kerala Industrial and Technical Consultancy Organisation (KITCO) is a joint venture of the IDBI, the Kerala State Industrial Development Corporation, the Kerala Financial Corporation, and other five nationalised banks in the State, and the Government of Kerala. The IDBI is contributing 51 per cent of the new organisation's capital.

The KITCO will provide industrial and technical consultancy services to anyone who wishes to set up an industry in the State. It will also provide manufacturing know-how and facilities for identification and implementation of project ideas. Its activities will be coordinated with the functions of the School of Management, University of Cochin, and the Centre for Development Studies, a recently started State Government institution at Trivandrum.

Despite the fact that the all-India, term-financing institutions like the IDBI, the IFC, the LIC and the Unit Trust, etc,. had during the period from 1951-52 to March 1971, sanctioned a total assistance of about Rs 1,600 crore and disbursed Rs 1,150 crore and accounted for roughly one-fifth of the total fixed investment in the private sector during the decade industrial development continued to be lopsided and tended to concentrate in the more developed

areas and States and industrial monopoly continued to spread.

Identifying the Problems

The schemes of financial assistance which these institutions had already announced were generally applicable to projects with capital costs not exceeding one crore. However, they are believed to have realised that such assistance alone would not suffice to promote the industrial development of backward and traditionally neglected areas. It was, therefore, felt that promotional work had to be undertaken which would include, among other things, identification of project ideas, preparation of preliminary feasibility studies, search for managerial and entrepreneurial talent, preparation of detailed project reports, managerial, technical and financial assistance for project implementation, critical evalution from the national angle and project supervision.

As one of the first steps in this promotional effort, the all-India financial institutions under the aegis of the IDBI initiated in 1970 surveys of specific under-developed States in the country. In addition to the State-level surveys, the institutions had also undertaken quick surveys of certain backward districts in different States. Such a survey was recently conducted in Trivandrum which had been identified as one of the backward districts in Kerala, with a view to assessing its industrial potential. The survey identified certain projects that should receive immediate attention of the newly formed KITCO. Similar surveys would be undertaken in the other four backward districts of the State, namely Canannore, Malappuram, Trichur and Alleppey.

After completing the State-level surveys and assessing the industrial potential of less developed districts as well as identifying project ideas and potential entrepreneurs who could take up projects for implementation, the financial institutions would, in consultation with the State Governments, select the viable project ideas and prepare preliminary feasibility reports on their own or with the assistance of technical consultancy organisations. Other steps enumerated earlier are expected to follow in quick succession.

Cotton Textile Industry

(*Continued from page* 193)

of the industry are met by import of about 6 to 8 lakh bales annually, costing the country Rs 80 to 100 crore. Import trade of raw cotton has now been taken over by the Cotton Corporation. The Corporation is expected to help curb unhealthy practices in the imports and distribution of cotton. However, a break-through in the supply of cotton can be expected only with strenuous efforts at home in increasing the yield per hectare. Our production performance of raw cotton is extremely poor compared to other countries. According to a recent FAO study, India has an average yield of only 140 kilograms per hectare, as compared to 565 kg in the USA, 480 kg in Spain, 470 kg in Sudan, 700 kg in Egypt and 300 kg in Pakistan.

The Fourth Plan had showed a base level production of 60 lakh bales of cotton and projected a target of 80 lakh bales. The achievement, however, has been depressing in that in the year 1968-69 the annual production was a little under 32 lakh bales. In 1969-70 it was about 52.3 lakh bales which came down to just 45.56 lakh bales in 1970-71. Several reasons account for this poor performance including the seasonal elements such as drought which affected production in 1970-71 in the Vidarbha region of Maharashtra, the major cotton producing State. At the same time only about 25 per cent of the total area of about 76 lakh hectares under cotton is utilised. Improved seeds are sown in no more than 60 per cent of the area. Even in the package programme areas which cover about 10 lakh hectares effective saturation by package of inputs is lacking. Government has now taken up measures calculated to help the extension and development of cotton as also improved maketing system to provide the necessary incentive to the producer. New varieties of cotton such as hybrid MCU V, MCU VI, etc., evolved by our scientists will be popularised and other provisions will be made under the cotton intensive development programme. The expectation is that the production will come up in 1973-74 to a level of 266 lakh bales.

Table I : Output of Cotton Cloth, 1951-1969

(*Million Metres*)

Year	Mill sector	Decentralised sector	Total
1951	3,727	1,031	4,740
1955	4,658	1,620	6,278
1960	4,616	2,013	6,629
1965	4,587	3,056	7,643
1966	4,239	3,097	7,336
1967	4,097	3,179	7,276
1968	4,366	3,530	7,896
1969	4,168	3,538	7,848

Table II : Export of Cotton Textiles, 1960-1969

Year	Mill sector	decentralised sector	Total
1960	6,353	264	6,617
1965	5,068	397	5,465
1966	4,234	370	4,613
1967	4,095	319	4,414
1968	4,750	186	4,936
1969	4,185	263	4,448

BOOKS

Fascinating Flashback

1921 Movement: Reminiscences; *Published by the Publications Division, Ministry of I&B, Patiala House, New Delhi; Pages 227*; *Price Rs 8.*

Half a century ago dawn broke out in India accompanied by grave notes for the alien rulers which resounded throughout the country, exhorting the people to "arise, awake; for those who sleep must lose and success comes only to those who awake". That was the time when Gandhiji had come on the Indian political scene in full measure to stay there and dominate it for the remaining 27 years of his life. He had first given a call in 1920 for non-cooperation with the rulers. His programme was simple; to boycott the impending elections under the Government of India Act of 1919, and the Government schools and colleges and law courts.

The question of non-cooperation had been hotly debated within the Congress Party where it was bitterly opposed by the followers of Tilak and many other luminaries of the time such as C. R. Dass, Lala Lajpat Rai, Annie Besant, Mohammad Ali Jinnah and others. Only Motilal Nehru had supported Gandhiji. Among the rank and file and particularly among the youth of the country, passive resistance and non-violence had not sounded very effective and attractive in the initial stages. They were bubbling with enthusiasm and fire for freedom which the youth particularly had felt, could only be forced out of the unwilling hands of the Britishers with something more than mere non-violence. Even so, it was quite surprising that two-thirds of the electorate abstained from the polls held in November 1920. The Khilafat Movement provided another impetus to the Movement and in the beginning of 1922 civil disobedience assumed the proportions of a national upsurge.

The massacre at Jallianwala Bagh in 1919, the severe and repressive measures adopted by the British calculated to kill the Indian spirit for freedom, had somewhat demoralised the people, but the non-cooperation and civil disobedience movement electrified the entire country and emboldened the people to undergo any suffering and sacrifices—long-term imprisonment and even going to the gallows. This was a novel warfare of non-violence against violence and suffering without protest. Later developments showed how much Gandhiji was correct in his assessment of the situation in so far as the strategy of struggle for independence was concerned. It was the relentless fight based on non-violence and non-cooperation that ultimately brought freedom to India.

These momentous days have been recapitulated by the people who either participated in that unique phase of the freedom struggle or had been closely associated with it in one form or another. Their first-hand reminiscences of the stirring days record history in intimate terms and make interesting reading in the compilation that has been brought out by the Publications Division as a commemorative volume to mark the 50th anniversary of the Movement. The volume opens out with a 38-page concise yet comprehensive story of this first unarmed revolt, by the eminent historian, Dr Tara Chand, followed by the reminiscences of eminent people from Shankarlal Banker, Kamla Devi Chattopadhyaya, R. R. Diwakar, J. B. Kripalani, Kaka Sahib Kalelkar, Syed Mahmood, Sri Prakasa to Indulal Yajnik and many others. It is a useful collection and should prove of immense value to the lay reader as well as the researcher.

—**L. N. Raina**

Industrial Cooperation

Handbook of Industrial Cooperation *by M.V.N. Pillai; Published by the Committee for Cooperative Training, National Cooperative Union of India, New Delhi*; *Pages 618*; *Price Rs 18.50.*

This handbook is based upon the author's long association with the cooperative department and an intimate knowledge of industrial cooperation. It is the first of its kind, if we leave out pamphlets that have appeared in the past from time to time. It deals with the organisation, structure, and role of industrial cooperatives; their problems, including financial, materials, personnel management; marketing; training; the role of the Reserve Bank and other financing agencies; and the departmental set up.

The handbook also features several agreement forms and proformas, model byelaws of industrial cooperatives, a list of various technical training centres, and important recommendations of the first and the second Working Groups on Industrial Cooperatives.

Among various problems facing industrial cooperatives in the country, lack of funds is a major one. Though financial accommodation is available to industries in the cooperative sector through State Cooperative Banks, most of the cooperatives are not in a position to avail of the facilities because of their weak organisational structure. Other factors like lack of technical knowhow, non-availability of raw materials, disloyalty among members, high costs of production, competition, absence of quality control and a lack of scientific management discredit the movement. Thus, more than 44 per cent of the total members of industrial cooperatives were dormant at the end of June, 1968.

Though the Second Working Group on Industrial Cooperatives has emphasised the need for revitalising industrial cooperatives,

practically no efforts have been made in this regard. The Fourth Plan suggests the identification of viable and potentially viable societies as a means of revitalising the sector. For this purpose, the author lists measures like changes in management, a relaxation of existing rules for liberal financial assistance, legal action against defaulting members, a greater flow of raw materials, sound marketing, and on top of everything, targets for revitalisation.

Mr Pillai suggests that the Khadi and Village Industries Board should shoulder the responsibility of revitalising the dormant societies. Officials in the Cooperative and Community Development organisations also can shoulder considerable portion of the responsibility. Early efforts to revitalise the dormant societies will go a long way in generating immediate employment at relatively low cost, and also in meeting the increased demand for the consumers goods.

Topics like purchasing, inventory control and cost accounting are not covered in this handbook. Though there is some overlapping in the scope of various chapters, the book, on the whole, is useful as a textbook also.

—**L. Sivaprakasam**

Welfare Literature

Documentation Service Bulletin, 1970; *Prepared and edited by H. N. D. Gandhi, Librarian, Department of Social Services, Ministry of Education and Social Welfare, New Delhi; Pages 299.*

A third volume in the series, first brought out in 1968, the Bulletin covers the current list of social welfare literature received. Part I of the Bulletin deals with the synoptical renderings of the articles published in various periodicals, and Part II with books and other documents in the field of social welfare and allied disciplines.

The list provides information on varied disciplines in the field, ranging from anthropology, backward classes, the caste system, beggary, nutrition, delinquency, and prostitution, prohibition, urbanisation and youth. The Bulletin would be of immense help to research scholars and social welfare scientists.

—**J. Batra**

Understanding Management

Secretarial Practice and Office Management, Vols. I and II *by Y. K. Bhushan and Ashok K. Mittal; Published by Somaiya Publications Private Ltd., Bombay; Pages 525; Price Rs 22.*

The range and scope of the company secretary has widened in recent years. The job requires a proper understanding of the concepts, functions, organisation and management of the corporate structure. The secretary has to be a jack of all trades and a master in the performance of secretarial duties too. It also involves an adequate knowledge of legal practices obtaining in company affairs which is helpful in the efficient discharge of duties.

A company secretary is an important functionary irrespective of the size and activities of the organisation. Government is reported to be serious in its intention of clothing the office with legal position and powers, making it a statutory requirement. It would then be incumbent on all companies to appoint qualified secretaries. Gradually, therefore, greater prestige and responsibility will accrue to the office.

The volumes under review explain secretarial functions and office management in the context of the Indian Companies Act. Various proformas included in the Work Book help students practice them, while learning the implications of the entries.

The term office is recognised as a place of work anywhere. In a company organisation, it is a conglomeration of people assigned with different tasks and provided with a paraphernalia of epuipment, machines, etc. It is the place where the total ty of performance is recorded scientifically through various books of accounts, minutes, etc. Its study is, therefore, essential for the students of commerce who may man various posts in companies after completing their formal education. Both the volumes are good additions to the existing literature on the subject.

—**Navin Chandra Joshi**

Rural Bengal

Six Villages of Bengal *by Ramkrishna Mukherjee, Published by Popular Prakashan Bombay; Pages 348; Price Rs 45.*

Prof. Ramkrishna Mukherjee wrote this book nearly 25 years ago. In 1958 it appeared as a "paper" in the Journal of the Asiatic society of Bengal. And in 1971 it appeared in the book form. The long gestation period indicates the state of Socio-anthropological studies in the country.

The book gives a segment of the life of rural society as it was lived nearly 30 years ago. Prof. Mukherjee had selected six villages for his intensive sociological survey in Bogra district of Bengal, now part of Bangla Desh. The villages are Hatsahar, Naopara, Amanipara, Raoir, Ghorsal and Silimpur.

The aim of the book was "to examine the system of relationship the rural folk have entered into, in course of their activities to make a living for themselves and their nearest and dearest; and secondly the relative importance of the system of relationship found among them as manifestations of their traditional social organisation". Chapter 1 deals with the general description of the people and the society. Chapter 2 is broad narration of the economic activities of the people and their way of living in 1941. Chapter 3 contains the component *units* of the economic structure, the interactions of which are represented as the economic life of the people when the whole phenomenon is seen collectively. It also gives a short account of economic forces which had been working in the society in the past, and which, by inference, works at present too. The last Chapter deals with the effect of the economic structure on social habits.

—**Pritam Lal**

Snippets...

Five hundred and fifty survey parties, each consisting of two graduate engineers, a junior soil surveyor and supporting staff, will shortly undertake a development survey of some of the poorest districts in the country. Based on the results of these surveys, which are called "rural engineering surveys," priority works like roads, rural electrification and irrigation would be undertaken in the area.

*

The Rs 56 crore integrated paper complex being set up at Mailani, in the Tarai region of UP will provide employment to about 1,000 persons and Save Rs 14 crore a year in foreign exchange when it goes into production in three years. Biggest of its kind in India the project will produce 200 tonnes of newsprint, 100 tonnes of writing paper and 100 tonnes of rayon chemical pulp per day.

*

Hindustan Machine Tools has received orders for a range of sophisticated machine tools worth 1.5 million dollars from a private firm in the USA.

*

The Central Building Research Institute, Roorkee, has developed a paint which can retard fire and save wood from burning to a great extent. The paint is easy to prepare and apply and produces an instant foam structure when it comes in contact with heat and retards the rate of spread of the flames. Like emulsion paint, it is water dilutable and can be finished with an oil paint without affecting its fire-retarding properties.

*

A new mini steel plant with an annual production capacity of 11,000 tonnes will go into production at Murthal in Haryana by the end of this month. The Rs 80 lakh private sector project will also manufacture plain carbon and alloy steel. It will utilise steel scrap as the basic raw material.

*

Construction of the Rs 1.50 crore overbridge near Safdarjang airport, New Delhi has begun. The 575-metre long and 37-metre wide road overbridge will have four traffic lanes and will be completed in about 18 months.

*

To cope with the distribution of the additional electric power that will become available during the Fourth Five Year Plan, an ambitious programme of laying power transmission lines over a distance of 22,430 kilometres has been undertaken by the Government of India. The lines will include approximately 11,400 kilometres of 110/132 kilovolts capacity, and 10,500 kilometresof 220 kilovolts and will be capable of transmitting electric power of 400,000 volts.

*

An experiment in land development and land shaping in the Chambal project command area in Rajasthan has resulted in the consolidation of holdings in a manner that reclaimed 20 per cent of the waterlogged area. The entire process involved a complete redrawing of individual field boundaries, removal of bunds and the reallocation of land to farmers.

*

A silent generating set for supplying power to field artillery radar has been developed by the Defence Research and Development Establishment, Poona. The newly designed set consists of a six-cylinder diesel engine directly coupled to a three-phase alternator delivering 18 kva current at 230 volts. The engine has a special silencer.

*

Under a trade protocol signed between India and Rumania for 1972, India will import more fertilisers from Rumania, besides rolled steel products, synthetic fibres and petroleum products. Its exports to Rumania during the period will include engineering goods, machine tools, wire ropes and pipe fittings besides traditional items. The total trade turnover between the two countries will reach Rs 65 crore in 1972.

*

Foreign aid agreements signed during the first nine months of 1971-72 (April to December,1971) amounted to $754.77 million (about Rs 566 crore). Of this project aid was $437.30 million (about Rs 327 crore) and non-project aid was $317.47 million (about Rs 238 crore), which included assistance in the form of debt relief amounting to $ 85.84 million (about Rs 64 crore).

*

The Housing and Urban Development Corporation (HUDCO) has signed two loan agreements of Rs. 4.28 crore with the Delhi Development Authority and the Rajasthan Housing Board. The loan of Rs 3 crore at concessional rate of interest will enable the D.D.A. to construct 3,500 houses for the low income group and economically weaker sections of the society. The loan or Rs 1.28 crore will enable the Rajasthan Housing Board to provide plots and 504 houses in a composite scheme, mainly meant for the low income group.

*

The Centre has sanctioned Rs 45.42 crore for the Cochin Shipyard Project, where it is proposed to build ships of 66,000 dwt. It will also provide facilities to repair ships up to 85,000 dwt. The annual ship-building and ship-repairing capacities envisaged are 1,32,000 dwt and one million tonnes GRT, respectively. The Project, is being executed in collaboration with Mitsubishi of Japan and is expected to be completed by 1975.

*

A process for the manufacture of leather boards from leather waste has been developed at the Central Leather Research Institute (CLRI), Madras. Successfully tested for six months in the laboratories of CLRI, the process will greatly help the leather goods industry in making cheaper goods like tool boxes and book covers.

*

A new type of bank "Sera Bank" where, instead of money, plant juices containing different disease-causing viruses will be stored will be established in New Delhi in the near future. The U. S. Government will extend a grant of Rs 3.95 lakh to the Indian Agricultural Research Institute for the establishment of this bank. First of its kind in this part of the world, this bank will help the Indian agricultural scientists to make further advancements in the campaign to produce more food.

*

A major step towards technological self-reliance has been taken with the decision to set up a Rs 50-lakh sponge iron pilot project at the National Metallurgical Laboratory, (NML), Jamshedpur. The project is expected to be commissioned by the middle of 1973. Sponge iron is a product of direct reduction process, which aims at bypassing the capital-intensive coke oven blast furnace complexes, requiring high quality coking coal for pig iron production.

*

Large reserves of coal, approximately 184 million tonnes, have been discovered by the geology department of the National Coal Development Corporation in the vicinity of east Bokaro coalfield. These reserves are of special significance in view of the proposed 1,200 kw thermal station to be set up at Tenughat by the Government of Bihar, which will reduce the cost of power generation.

*

The Madhya Pradesh Government has given the Fertiliser Corporation of India 360 hectares of land for their fertiliser project at Korba in Bilaspur district. The Rs 95 crore Korba Project, will be the tenth fertiliser unit set up by the Fertiliser Corporation of India and the third unit based on coal as feedstock. Expected to be commissioned in the latter half of 1975, it will produce 2,28,000 tonnes of nitrogen annually, and would save the country Rs 34 crore in foreign exchange.

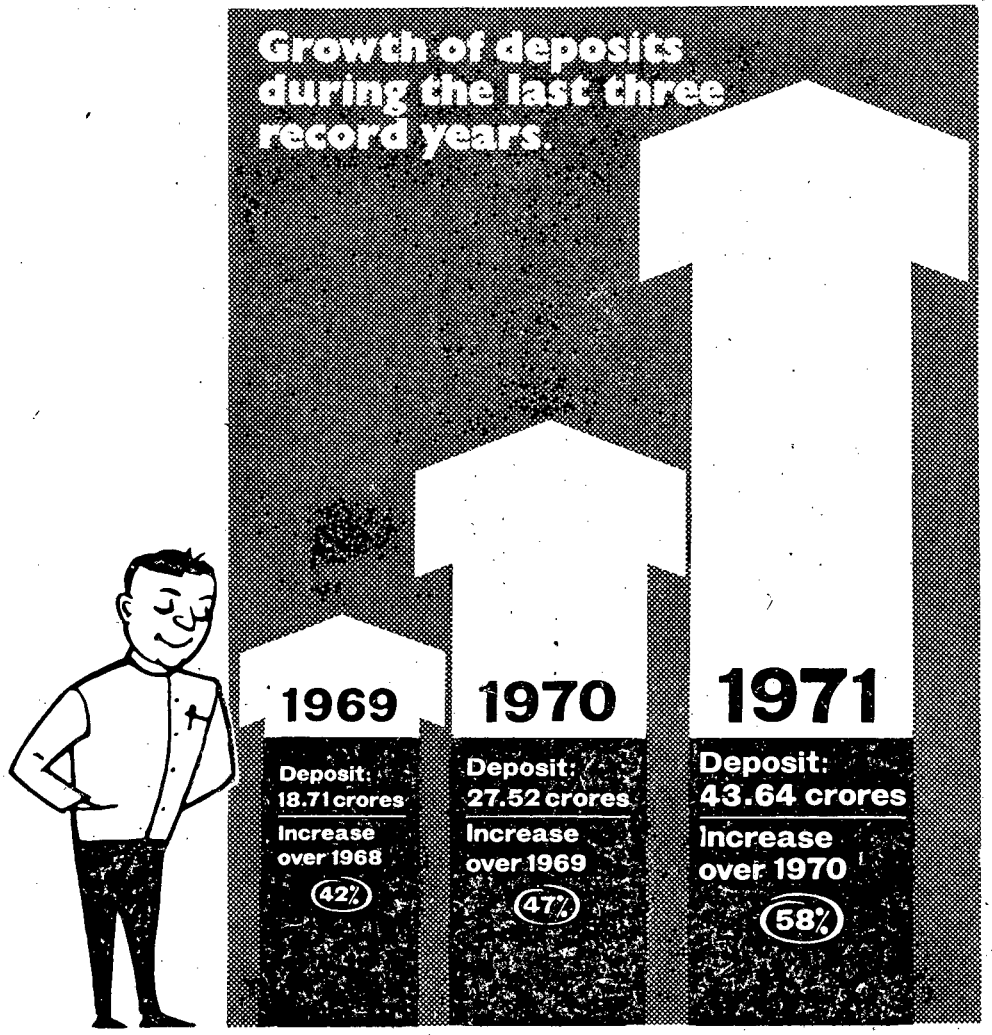
*

In the six-year period ended March 1971, power generation capacity in India increased from 10.18 million kilowatts to 16.40 million kilowatts —a rise of 60 per cent. Energy generation rose correspondingly from about 36,800 million units to about 60,000 million units. Electricity was supplied to 61,103 more villages, bringing the total number of villages electrified to 1,06,939. An additional 11,16,448 agricultural pumps were energised, raising the total number of energised agricultural pumps to 16,29,368.

NOTICE

The article 'Development of Fisheries in Gujarat' in *Yojana*, February 20,1970, was by Mr. H.D. Mehta, Regional Officer, Directorate of Field Publicity, Ahmedbad.

For Vijaya Bank
every year is a record year



Bensons - 2077

Vijaya Bank Ltd.

Regd. Office: Light House Hill Road, MANGALORE-3
Admn. Office: Race Course Road, Bangalore-1

Chairman: M. SUNDER RAM SHETTY

Thumba Equatorial Rocket Launching Station

ROSSCOTE KRISHNA PILLAI
Our Trivandrum Correspondent

THUMBA, 16 km from Trivandrum city was recently very much in the news for the three tragic events in relation to that place. The first was an accidental explosion that occurred last year in the rocket propellant plant there resulting in the death of a technician; the second was an unseemly factional agitation which drew police firing killing one person; and the third was the untimely death of Dr Vikram Sarabhai, the father of Indian space science, who nursed and nurtured Thumba to find its own feet. Thumba today is the cradle of space science and the rocket technology in the country.

On November 21, 1963 a two-stage Nike Apache rocket offered by the National Aeronautics and Space Administration (NASA) was fired from the launch-pad set up on the 224-hectare sandy beach near Thumba Equatorial Rocket Launching Station (TERLS), a base for firing rockets for scientific study of the upper atmosphere. The Station was organised by the Indian National Committee for Space Research, which was formed under the chairmanship of the late Dr Vikram A. Sarabhai in 1962 and which has since been expanded and redesignated as the Indian Space Research Organisation (ISRO). The TERLS and the other facilities established at Thumba and the different organisational complexes set up at Ahmedabad, Bombay, and Shriharikota(in Andhra Pradesh) for investigations into space science and technology of rocketry now function under the control and supervision of the ISRO.

Thumba was chosen as the site for TERLS for its proximity to the earth's magnetic equator. The

FOCUS

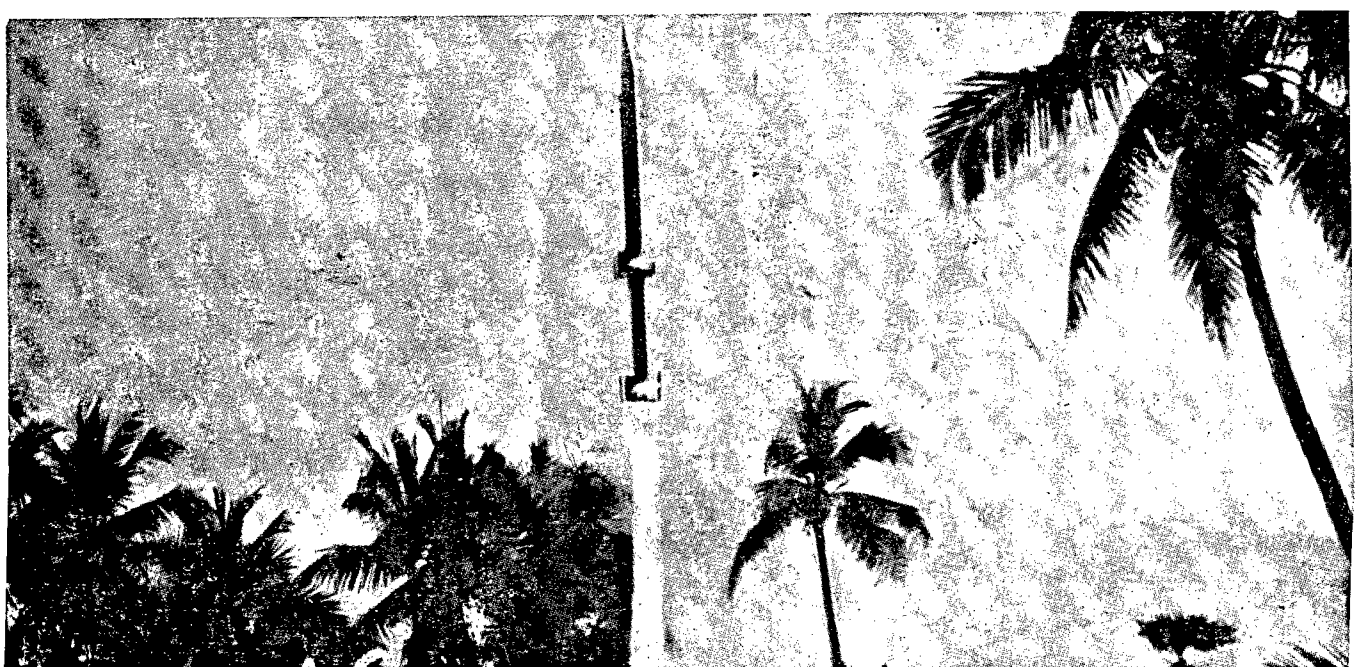
need for establishing a rocket launching facility at such a place as this was keenly felt because the upper atmosphere above the magnetic equator has certain peculiar characteristics and as certain phenomena like the electro-jet (flow of a continuous electron-density current) that require intensive study occur only in this region.

In 1965, the TERLS was accorded the UN sponsorship as an international facility for peaceful uses of outer space. Three years later on February 2, Prime Minister Indira Gandhi dedicated it to the United Nations. Thus, the Equatorial Rocket Launching Station was thrown open to the world scientific community for conducting scientific experiments for peaceful purposes in regard to the upper atmosphere. All such experiments are conducted after the relevant proposals are sent to the ISRO through the respective national space research organisations and after they have entered into bilateral agreements with it. For these experiments, designed for specific purposes, rockets and payloads are brought to Thumba by the intending space research organisation but they are assembled and launched by Indian scientists and engineers of the ISRO. Such sponsored experiments are conducted free of cost. International scientists are also allowed to use this Range for approved programmes on payment basis. The running expenses of the Range are fully met from the funds provided by the Department of Atomic Energy.

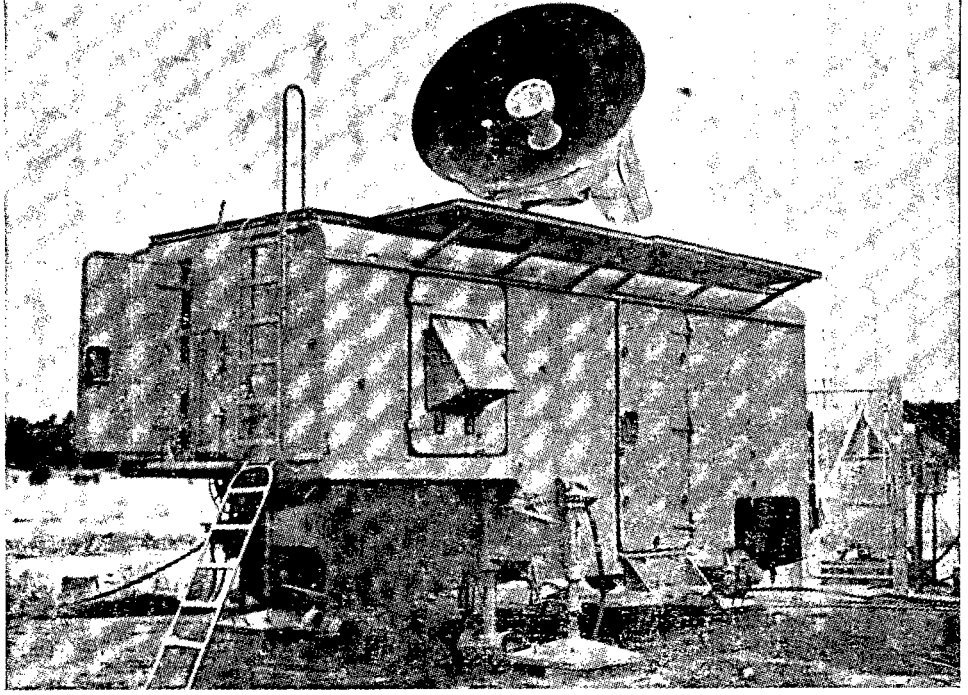
International Cooperation

Thumba has been lucky, even in its establishment, in getting international assistance. Three countries-France, the United States, and the Soviet Union have made liberal

Take off of a Centaure Rocket made at Thumba in collaborations with France



Regd. No. D-876



Radar gifted by the National Space Organisation of France for detecting rocket

contributions. Besides, USA has given two rocket launchers, a telemetry receiving station and equipment to determine the Doppler velocity and position (DOVAP) of rockets and has trained a number of scientists and senior technical personnel at their NASA stations. The USSR has donated an MI-4 helicopter for range surveillance and payload recovery duties, an electronic computer and a shake table for payload testing. France has provided a launcher, a radar and a high speed camera for taking altitude photographs of rockets. The entire ground station equipment including those facilities for radio communication, vehicle preparation, launching, tracking and so on has been set up by Indian scientists and engineers.

Made in India

In the last eight years, over 450 rockets have been fired from the Thumba Range. More than half of them like *Rohini* or *Menaka* were Indian-made rockets fired for flight-testing. Other rockets launched for the scientific study of the upper atmosphere included the US-supplied 42 two-stage Nike Apache and 36 single-stage Judy Dart rockets; 54 M-100 meteorological rockets from the USSR, and several other rockets namely, Centaures from France; and Skuas and Petrels from Britain. Only a week back a petrel rocket last in the series of 11 was successfully fired from here. All these rockets and their payloads were assembled at Thumba by our engineers and scientists and launched in collaboration with the respective national space organisations. The wide range of scientific studies carried out by the rockets included measurements of upper atmosphere winds and temperatures, electron density and electric field of the ionosphere (electrically charged layer of the atmosphere), investigation of equatorial electrojet, detection of X-ray flux and energy spectrum and the effect of the sun's illumination on the ionosphere and consequent ionisation. These studies have provided a fairly detailed and comprehensive picture of the meteorological conditions of the atmosphere below 70 km and of the different regions, D, E and F, of the ionosphere.

Thumba is, according to Mr H.G.S. Murthy, Director of the TERLS, best equipped to study the earth's electro-magnetic field over the magnetic equator and to look at the southern celestial sky. The rocket launching programmes are going on at a rapid pace and are resulting in the garnering of more and more information and knowledge with every passing day. The basic aim of Thumba, Mr Murthy adds, is to establish indigenous technology and knowhow in space science.

The immediate goal before the ISRO is the launching of a four-stage vehicle using solid propellants for placing an Indian satellite in a 400-km near-circular orbit by 1974. For this, an additional rocket launching facility is being developed at Shriharikota island. Thumba, being very close to a densely populated area, has been considered unsuitable for the flight-testing or launching of long-range rockets.

Defence Applications

The dedicated efforts of the ISRO scientists and technologists have also brought in a number of untargeted benefits of immense value to defence, communications, education, culture, and family planning. The numerous electronic instruments and control and guidance systems, the newpropellants and the several new alloys and materials like fibre glass developed at Thumba would find several new applications in defence, meteorology, agriculture and industry. The ability to send a satellite into an orbit around the earth can also be put to use, if need be, in defence; the principles and methods of launching a satellite can be effectively and readily applied to long-range missile technology.

Social Benefits

The social benefits accruing from the Thumba complex to the people around the area, mostly consisting of fisherfolk, have also been manifold. The families displaced from the Station site have been rehabilitated at State expense and adequately compensated; training assured for a male member of every evicted family for three generations; a school and a co-operative society organised; and evictees' children studying in Industrial Training Institutes are offered scholarships by the ISRO. All those among the evicted families of fishermen who have had any kind of technical training or basic educational qualifications have been given jobs at the Thumba Range.

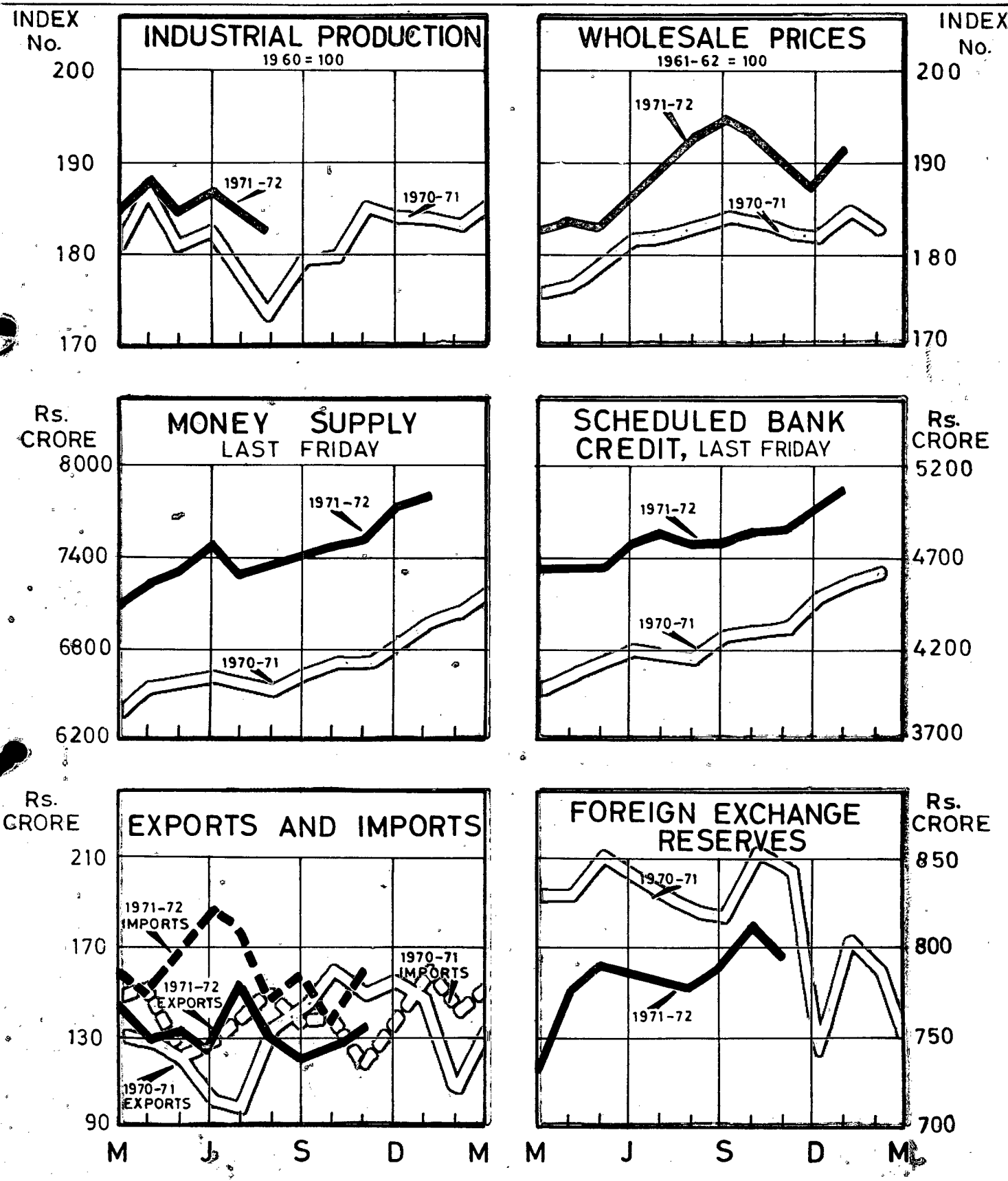
Moreover, bidding fair to be the focal point for a number of ancillary industries, specially electronic industries, Thumba has become a generator of employment opportunities. Already a few small-scale industries in Trivandrum are feeding Thumba. Since they have only a limited capability and are not able to meet its requirements of high precision equipment and components, the Kerala Government in consultation with the ISRO and the Electronics Commission, is working on a plan to set up a small industries complex around Thumba which would fulfil many of its needs.

Printed at Navin Press Unit No. 2, 70 Okhla Industrial Estate, New Delhi-20 and Published by the Director Publications Division, Patiala House, New Delhi-1

YOJANA

307
Δ

VOL. XVI No.5 MARCH 19, 1972 40 PAISE



THE BUDGETS ✿ STATE OF THE NATION

This year 13 million more will share pot-luck with us

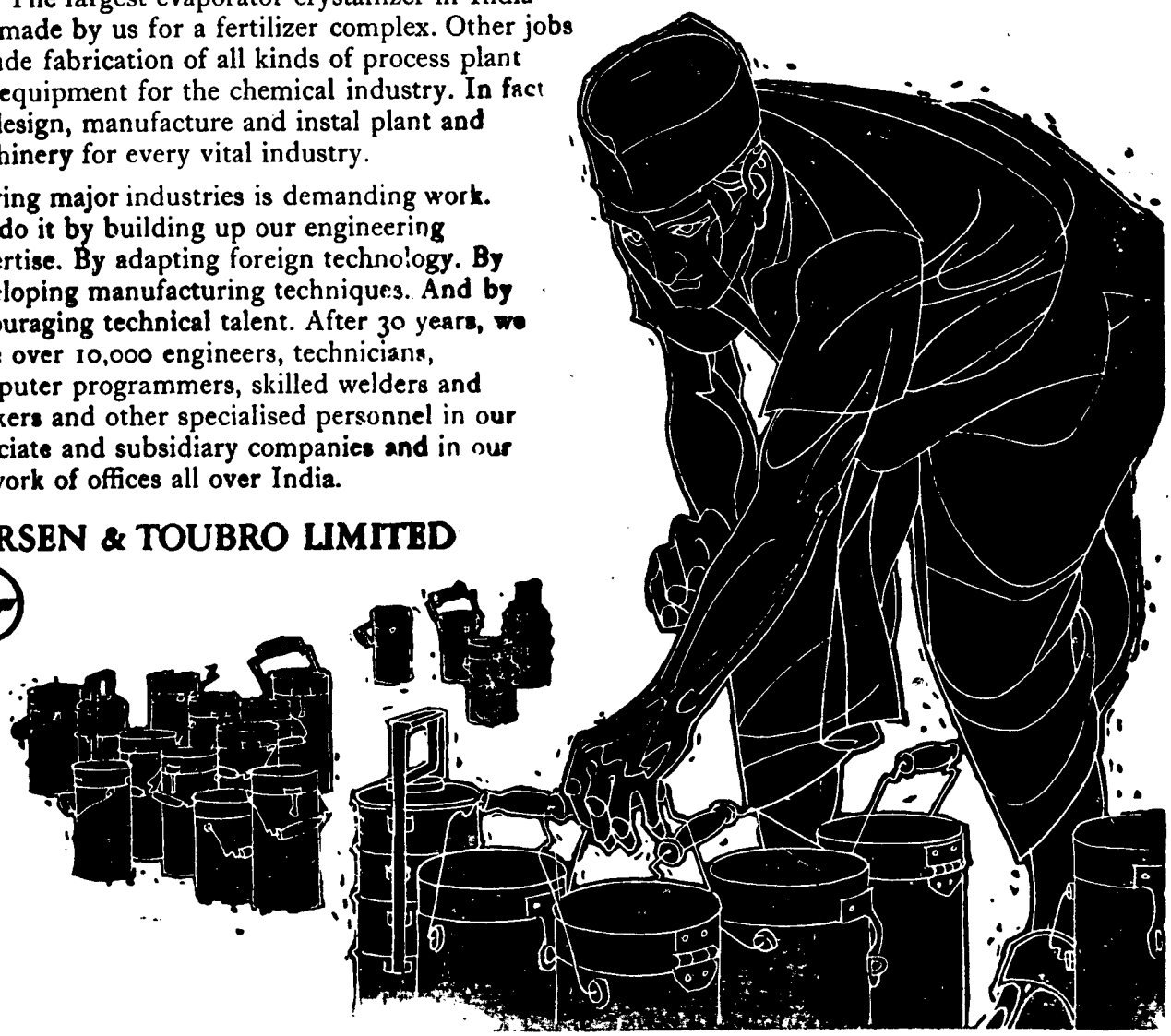
so we have some down to earth ideas cooking

The thought of 13 million more for dinner every year puts food on your mind. Even a small helping for each means millions of tonnes of food grain. How are you going to dish it out? By prodding the earth to produce more. That brings us to fertilizers. One tonne on 30 hectares means an extra 10 tonne production of food grain.

We don't make the fertilizers but we play a major role in manufacturing and installing fertilizer plants. That's one industry we've thought of in a big way. The largest evaporator crystallizer in India was made by us for a fertilizer complex. Other jobs include fabrication of all kinds of process plant and equipment for the chemical industry. In fact we design, manufacture and instal plant and machinery for every vital industry.

Serving major industries is demanding work. We do it by building up our engineering expertise. By adapting foreign technology. By developing manufacturing techniques. And by encouraging technical talent. After 30 years, we have over 10,000 engineers, technicians, computer programmers, skilled welders and workers and other specialised personnel in our associate and subsidiary companies and in our network of offices all over India.

LARSEN & TOUBRO LIMITED



YOJANA

Fortnightly Journal published in English, Hindi, Assamese, Bengali and Tamil on behalf of the Planning Commission

Vol. XVI No. 5

March 19, 1972

Phalguna 29, 1893

Yojana seeks to carry the message of the Plan, but it is not restricted to expressing the official point of view.

Chief Editor
Dwarkanath Munshi

Editor
M. K. Subba Rao

Assistant Editors
H.R. Pandotra
A.K. Wanchoo

Sub-Editor
Jasbir Batra

Staff Correspondent
Siddharthan Kariyal

Senior Correspondents
Bombay : **Avinash Godbole**
Calcutta : **S. C. Basu**
Madras : **S.V. Raghavan**
Shillong : **D.N. Chakravarty**
Trivandrum : **Rosscote Krishna Pillai**

Photographic Officer
T.S. Nagarajan

Editorial Office : Yojana Bhavan, Parliament Street New Delhi-1.
Tel : 383655 381026, 385481/340 402 and 420
Telegraphic address : YOJANA, New Delhi
Business Office: Business Manager, Publications Division, Patiala House, New Delhi-1.

Inland Subscription: Annual Rs 7.50, Two years Rs 13. Three years: Rs 18.

Foreign Subscription: One year 15 sh or 2.50 U.S. dollars. Two years: 26 sh or 4.00 U.S. dollars. Three years: 36 sh or 5.00 U.S. dollars. Single copy : 18 d. or 15 U.S. cents.

LEST WE FORGET

It is well to be firm and not bow down to evil. But it is also well always to be conciliatory and always to stretch out your hand to those who will grasp it; because, though their Government may not do so, the people will always grasp an outstretched hand, not only the people of a particular country but the people of all the countries of the world.

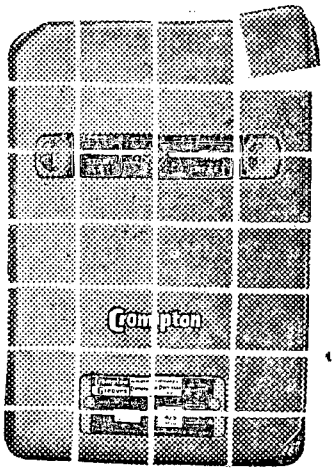
—*Jawaharlal Nehru*

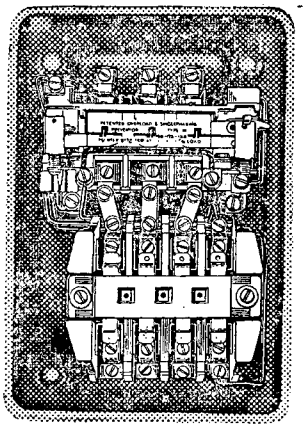
IN THIS ISSUE

THE STATE OF THE NATION	215
NOTES : *Jobs for Millions-Bokaro Moves Ahead*	217
THE UNION BUDGET 1972-73	219
SIDE TRACK	223
THE RAILWAY BUDGET— SURPLUS AFTER FIVE YEARS	225
MADRAS RUBBER FACTORY'S CREDITABLE EXPORTS AND SELF-RELIANCE *S. V. Raghavan*	227
OPINION REPORT ON THE UNION BUDGET 1972-73 *(Exclusive interviews on the Budget with 14 experts from Bombay, Calcutta, Madras and Trivandrum)*	228
BOOKS	236
SAVINGS AND INVESTMENT MUST RISE *Ruddar Dutt*	237
ABORTION LAW REFORM *Dr (Mrs) Nirmal Sawhney*	239
NEWSLETTERS	241
SNIPPETS	244
FOCUS—*The Massive Mandate*	245
COVER—*Selected Economic Indicators* *(See also pp. 215-16, 219-22 & 228-35)*	

CG-70

What is the crompton starter built on?





our EXPERIENCE

An experience of over 80 years in manufacturing quality electrical equipment of all kinds. From simple plugs and sockets to massive transformers. A tradition of years of service and supply to major electrical projects all over the country. This is what every Crompton Starter is built on. Built with the finest materials, to exacting standards. To protect your motor effectively, under all working conditions.

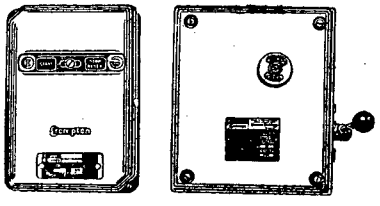
When you need a starter you can really rely on, choose Crompton.

Important features of the Crompton Starter:

- Positive Single Phasing Preventor. Trips even when your motor is running far below its rated capacity.
- Sturdy contacts easily accessible for inspection, maintenance, renewal.
- Under Voltage protection.
- Ample wiring space inside—accommodates thicker aluminium conductors.

Direct-on-line starters upto 15 BHP.
Star-delta starters upto 175 BHP.
Auto transformer starters upto 125 BHP.
Combined stator-rotor starters upto 150 BHP.

**RIGHT FROM THE START,
USE THE RIGHT STARTER**



Crompton Greaves LIMITED

The State of the Nation

BUDGET time always affords the right opportunity for an annual stock-taking of national affairs. The President's address to the Joint Session of Parliament and the Economic Survey issued by the Government on the occasion provides a clear and authentic picture of the past year and an outline of what is to come.

For us, 1971-72 was a year of great challenges as well as accomplishments and the nation has a justifiable sense of confidence and pride. When the President had addressed Parliament in May 1971, we had given to ourselves a new and strong and stable Central Government following the mid-term elections. At that time we had set ourselves firmly to the task of economic and social transformation. Little did we know then that a war would be thrust on us by Pakistan even while she had already gone in for the blood-bath in the erstwhile 'East Pakistan' which drove out an unparalleled one crore people from their hearths and homes to take shelter with us.

The hostilities forced us to set aside our developmental preoccupations and put the economy quickly on a war footing. Happily, the war was over in a short 14 days. The refugees are back in their homes. The Indian army which went into action in concert with the Bangla Desh forces has returned after its unique mission of liberation and reconstruction. And a new nation is born which is now set on the path to a secular, democratic socialism. We have also extended the hand of friendship to the people and government of Pakistan and proposed direct talks without preconditions. It is to be hoped that good sense will prevail and Pakistan will respond to our initiative in a spirit of goodwill.

YET, the stresses and strains of the war, of the influx of refugees and, before that, the natural calamities have had their effect. For the one crore refugees that had crossed into our country, arrangements had to be made for their care at short notice which involved a heavy strain on both our material and organisational resources. The budget for 1971-72 had provided for no more than Rs 60 crore for their relief. This had to be steadily supplemented first by Rs 200 crore and then by another Rs 100 crore which involved additional resource mobilisation adding up to Rs 500 crore of total resource mobilisation during the year. This order of fresh fiscal imposts in the course of a single year, was, in fact, unprecedented. Indeed, the aggregate of the additional resource mobilisation by the Centre in the first three years of current Plan would amount to Rs 2,300 crore (net of States' share) which exceeds the original Plan target of Rs 2,100 crore for the entire five year period. This excludes the effect of the special levies for the refugee relief and the measures announced in December 1971 in the wake of the outbreak of hostilities with Pakistan.

The natural calamities also took their usual toll. On the one hand there was drought in large parts of Maharashtra and Andhra Pradesh and, on the other, the States of Uttar Pradesh and West Bengal were hit by floods. And Orissa reeled under the heavy blows of a severe cyclone. The economy showed remarkable resilience and responsiveness in meeting these challenges. The massive effort at resource mobilisation was spread over the Centre and the States. Along with this, the Union Government made every effort to curtail and discipline its expenditure on non-contractual non-Plan items by at least 5 per cent. The same, however, could not be said about the States where, for the most part, fiscal management was somewhat more uncertain and the overdrafts of 11 States amounted to Rs 403 crores at the end of January last. Among the measures to be devised for national development is the need to tap part of the additional incomes which are accruing to the affluent sections of the farm community. Government have appointed an Expert Committee to examine the problem.

The budgetary deficit turned out much larger than was anticipated earlier and money supply increased in disconcerting measure. All the same, the price situation did not go altogether out of hand at any time. In the calender year 1971, the average rise in the general price level was 3.9 per cent against 6.2 per cent in the preceding year. At the end of January, 1972, the wholesale price index was 4.1 per cent higher than a year ago indicating that the situation was more or less under control but demanding relentless efforts to hold the vital price line. This somewhat easy position in prices was, to a substantial extent, due to a basically satisfactory state of foodgrain production. The credit policy and the price control measures and the careful husbanding of the foreign exchange reserves coupled with liberal imports in strategic fields also made their contribution.

FOODGRAIN production in 1970-71 was a record 10.78 crore tonnes which is expected to be surpassed by the 1971-72 harvest. As a result, Government has stopped concessional imports of foodgrains. This happy situation of an ever-increasing foodgrains output has created problems of another nature—expanded requirements of storage and transport, not to speak of the demand for funds for procurement operations which have sharply increased. In the production of commercial crops, however, we have much to do and the green revolution has to be extended to cover cotton and jute and other major raw materials like oil seeds. Efforts have to be continued to develop new high-yielding varieties of seeds even while some success has already been achieved.

One of the very important factors for determining the efficiency of our agriculture and the progressive establishment of an egalitarian society in the rural areas is the need for effective and quick implementation of land reform measures. Some States like Assam, Bihar, Kerala and West Bengal have made headway in providing security of tenure and ensuring a greater measure of equity in rentals. Assam, West Bengal, Rajasthan and Tamil Nadu have also enacted legislation lowering the ceiling of landholdings. A national policy providing for lower ceilings has been enunciated which is based on the recommendations of the Central Land Reforms Committee, and the State Governments have

been advised to amend their laws suitably in the light of these recommendations. The results of the latest elections in the States which have brought into power a party wedded to substantial land reforms promise expeditious implementation of the policies already laid down. Elsewhere, in this issue (*see* FOCUS pages 245-246) we have detailed the economic and other programmes of the winning party as enunciated in its election manifesto which laid special emphasis on land reforms.

Along with the ceilings on land holdings and other reforms, measures have been undertaken to impose ceilings on urban property. Eight States have already favoured Central legislation on the subject which can be brought into force only after the constitutional requirements of getting resolutions to the effect passed in the legislatures has been satisfied. In the meantime, a study group has been examining certain aspects of implementation as recommended by the Housing Ministers' Conference.

IN industry, however, the tempo of activity has shown signs of progressive decelaration in the past few years. This is a matter of serious concern and calls for urgent remedial steps. Some measures already taken are to promote and ensure better utilisation of capacity, giving special attention to the needs of medium and new entrepreneurs. The small scale sector has shown significant and encouraging increases and has been receiving relatively larger allocations of raw materials and liberal imports to facilitate its functioning. But, urgent attention is required to be given to increasing production of steel and fertilisers, among others, in the industrial sector. Together with improving the output of commercial crops and achieving higher levels of technological competence, efficiency in production and cost competitiveness, this holds the key to what is now called the *Arthic Swaraj*.

The imperative of quickening the pace of self-reliance has gained fresh and added urgency. The tendency on the part of aid-giving countries to use their credits as a lever to influence our policies is the most compelling reason for us to attain this goal. The core of self-reliance lies in efforts at raising the domestic rate of savings on the one side, and greater import substitution and export promotion on the other, so that the low savings and balance of payments problems can cease to be speed breakers in the process of growth. In other words, self-reliance should not be merely doing without a certain quantum of external aid at the cost of investment. It should, in fact, reflect our ability to maintain, if not enhance, the rate of capital formation and growth envisaged in the plans despite shrinkage in the availability of foreign assistance.

The actual contribution of foreign assistance to the financing of economic development has been remarkably small in recent years and the commitments have been consistently lower than the utilisation of assistance. At the same time, debt servicing has been increasing continuously from a level of Rs 143 crore in 1961-62 to about Rs 450 crore in 1971-72. A sizable amount of our foreign exchane resources in 1970-71 had to be used up in the process of liquidating short-term indebtedness with the International Monetary Fund. We had also to increase the gold portion of the quota with the Fund which involved a further outgo. The payments to the IMF amounted to Rs 176.3 crore of which 99.4 crore consisted of free foreign exchange. It is a matter of great satisfaction that we have been able to liquidate all outstanding indebtedness to the Fund from the very high level of Rs 380.6 crore ($ 507.5 million) and also increase our quota which together have greatly strengthened our international liquidity position. That the shocks of the year caused relatively little disturbance to the economy is a measure of the strength which has been built into it over the years. This augurs well for the future and generates the hope that resilience of this nature can be channelised for faster and more self-reliant growth.

IN the midst of the preoccupations with defence and economic development there were several other notable events. One of these was the abolition of princely privileges—after the Constitution was amended for the purpose—as a step forward to ushering in a society of equals. The north-eastern region, for long obscure and relatively neglected, was reorganised to give birth to the new States of Manipur, Meghalaya and Tripura and the Union Territories of Mizoram, and Arunachal Pradesh. The North Eastern Council will be established soon. With the new set up, the States and the Union Territories can be expected to make rapid progress through close coordination of their development efforts.

The recent elections all over the country in which about 20 crore people were involved and which was held so soon after the war were remarkably peaceful and demonstrated the maturity of our people and our deep faith in parliamentary democracy.

In the international sphere, the emergence of the new, severeign republic of Bangla Desh as a close friend of India holds out prospects of fruitful cooperation and coordination in the economic field and all-round development of the infant republic. The struggle of Bangla Desh for democratic rights and fundamental freedoms encountered a lack of sympathy from the government of the great democratic country of the USA as well as from China which was a matter of disappointment in our country. But the entry of China into the United Nations was a welcome step and the new move to rearrange their relations with the United States, it is hoped, will lead to a true relaxation of tension.

Earlier in August 1971 India entered into a Treaty of Peace, Friendship and Cooperation with the Soviet Union. It is a treaty of peace against war and is not aimed against any country. In fact, "India does not seek lead rship or domination" as the President stated in his address "nor will it tolerate domination by any country. We want this sub-continent and indeed the entire south Asian region and the Indian Ocean area to be free from power rivalries or domination and to develop into an area of peace and cooperation rather than one of confrontation."

NOTES

Jobs for Millions

A financial outlay of Rs 2,000 crore for various schemes which would generate 40 lakh jobs in different sectors in the next two years has been suggested in the interim report by the Expert Committee on Unemployment. The Committee which was set up in December 1970, has outlined some programmes for generating employment in a short time, particularly for the rural unemployed and under-employed. It has suggested that these should be implemented forthwith over the next two years. Some of these are programmes such as roads and inland water transport schemes, which would create roughly 8.50 lakh jobs; minor irrigation programme, 27.50 lakh comprising roughly 4.5 lakh skilled and 23 lakh unskilled workers; rural water supply schemes, 52,000 out of whom 8,000 will be for engineers and skilled persons and 41,000 for unskilled workers and; education including adult literacy, 2.8 lakh—all for the educated. Some other recommendations seek to reduce to the minimum extent possible, under-utilisation of installed capacity in industries, prevent diversion of funds from the roads programme, accelerate the pace of execution of rural water supply, implement all the recommendations of the Committee on Inland Water Transport, and undertake a comprehensive programme of expansion of primary education and mass literacy. Indirect employment of considerable magnitude is also expected to result if the Committee's proposals are implemented. Since all the schemes outlined by the Committee, except the one relating to rural housing, are already included in the Fourth Plan and specific provisions have been made for them in the outlay, the Committee's proposals would involve during the next two years a net addition of the order of only Rs 740 crore.

An important aspect of the recommendations is that the rural electrification programme should be extended to cover 37,000 villages and to provide for 3 lakh pump-sets over and above the existing Plan targets, with an investment of Rs 235 crore. This recommendation has been made, keeping in view the employment and wealth generation potential of the rural electrification programme.

Taking into account the deplorable housing condition in rural areas and the resources generated in these areas by growth of production in the agricultural sector in recent years, the Committee has recommended that a large scale programme of construction of rural houses (7.7 lakh units) should be formulated, initiated and launched by the Government. It should also provide the necessary institutional framework and actively promote the programme through rural publicity media and the Government agencies operating in the rural areas.

About the role of banks, the Committee says that they should play an increasingly fruitful and purposeful role by taking a broad and liberal view of the various categories of self-employed persons and provide them with assistance. No class of persons wanting to set up in a profession or business activity should be denied credit facilities. In this context, the Committee has stressed that a decision on the recommendations of the Committee on Differential Interest Rates should be taken very early by the concerned authorities.

Bokaro Moves Ahead

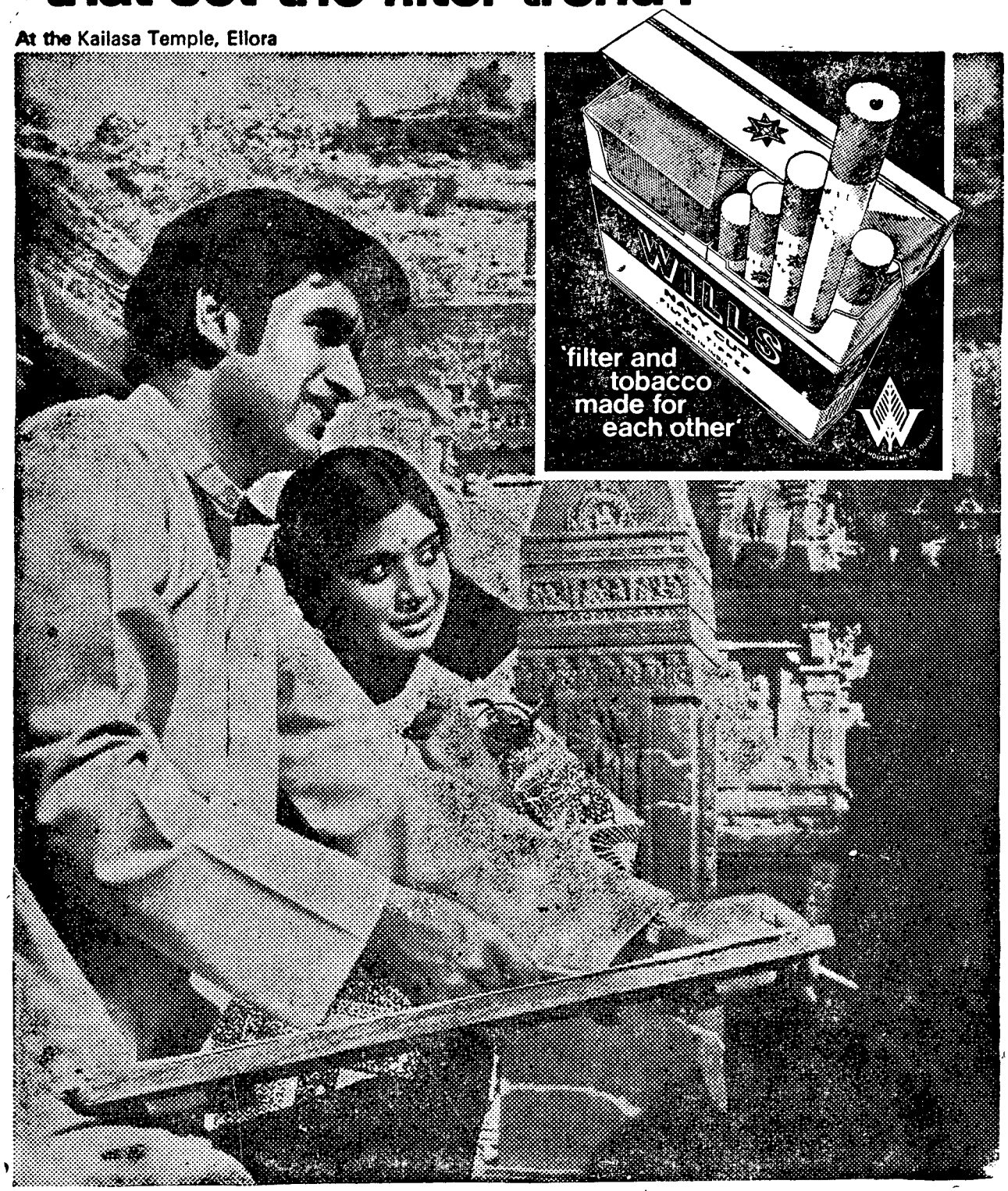
WITH the lighting of its first coke oven battery on March 6 last, the steel project at Bokaro has entered the primary operation phase The battery will be heated up gradually and continuously for the next three months to prepare it for the production of coke to synchronise with the commissioning of the first blast furnace complex in June next. When that happens, the first stage will have been implemented and it would have taken four years and nine months to do so since construction first started at the project in October, 1967. Bokaro is known for its long and somewhat chequered history. The implementation of the first stage had got prolonged for a variety of reasons. Shortage of steel, delays in the delivery of indigenous equipment by the Heavy Engineering Corporation and other suppliers and labour problems were among the major factors responsible. In the meantime, the cost of the project has gone up significantly and the Plan outlay has also now been sizably increased.

It is a matter of some solace though that nearly 70 per cent of the equipment and over 95 per cent of the structurals required for the first stage were procured and assembled from a large number of units spread all over the country. And what is equally significant, quite a few of the items were manufactured in the country for the first time. This explains to an extent the delays that have occurred in the implementation of this giant project, the largest of steel plants in India and in South-East Asia. The initial difficulties, it is hoped, have been overcome. A measure of this is provided by the tempo of construction which has substantially accelerated during the last 15 months. Today, about 60,000 people are working at the Plant site where work goes on round the clock and the rate of erection of structurals and equipment at 12,000 tonnes a month, is more than double of what it was in 1970; the highest rate achieved so far in a steel plant in this country. Similarly, there have been record performances in the erection of refractories which has multiplied six times over the level achieved in 1970. and in the civil engineering works. These efforts are directed to at least completing the 25 lakh tonne stage along with the hot strip mill by the end of the Fourth Plan. The ultimate capacity has now been raised to 55 lakh tonnes from the earlier expansion schedule of 44 lakh tonnes in order to achieve reduction in the per tonne capital cost of the Project. When in full operation, Bokaro is expected to make the most decisive contribution to the economic prosperity of the country.

It's the 'made for each other' blend that set the filter trend !

WILLS FILTER

At the Kailasa Temple, Ellora



WF 6456-2

THE UNION BUDGET 1972-73

Accent on Plan, Self-reliance, Social Justice

PRESENTING the Union Budget for 1972-73 in the Lok Sabha on March 16, the Finance Minister, Mr Y. B. Chavan, said that in many ways the financial year that was drawing to a close was the most eventful in our recent history. In a reference to the reign of terror and repression in the former 'East Bengal', the influx of ten million refugees into India and the subsequent serious developments, Mr Chavan said that the events of the past year would continue to cast their shadows over the coming months as well. The country would have to assist the friendly people and Government of Bangla Desh in their immediate task of reconstruction and rehabilitation. A sizable beginning in this direction was made in the current year itself. Inclusive of cash payment of about Rs 20 crore which was being charged to the Rehabilitation budget, the commitments so far made for assistance to Bangla Desh amounted roughly to Rs 130 crore. Mr Chavan added that the intention now was to provide for a total commitment of Rs 200 crore in this regard. Of this, Rs 82 crore might be disbursed before the end of the current financial year and the balance in 1972-73.

The accumulated stocks in the economy have been drawn upon and there have been unusual wear and tear of the country's productive assets which will have to be made good. Economic conditions in the recent past contain many pointers to the areas where further sustained effort is necessary. Quite apart from tackling the immediate problem of better management, greater capacity utilisation, improved raw material supply and industrial relations and a general environment of more active demand, creation of additional capacity in a number of vital areas would have to be expedited. A reasonable degree of price stability would not be possible without a rapid increase in the production of the basic necessities of the people.

In keeping with the imperative need to accelerate the pace of growth and social welfare, the budgetary provision for the Central and Centrally-sponsored Plan schemes has been increased from Rs 1,455 crore in 1971-72 to Rs 1,787 crore in 1972-73. This increase of Rs 332 crore or by nearly one-fourth in a single year represents the sharpest step-up that has been attempted in the Central sphere over the past so many years. The increase in Plan outlay is spread over virtually all the sectors of the economy. Agriculture, Community Development and Cooperation account for an increase of Rs 23 crore; Irrigation & Power, Rs 18 crore; Mines and Metals, Rs 23 crore; Industry including Petroleum, Chemicals, Steel and Heavy Engineering, Rs 44 crore; Shipping & Transport, Rs 56 crore; Posts & Telegraphs, Rs 14 crore; Railways, Rs 8 crore and Atomic Energy, Rs 30 crore.

By far the largest increase is being made in the provision for those schemes which combine an element of social welfare with future growth potential. Taking all such schemes together, the budget provision in 1972-73 would be Rs 240 crore as compared to Rs 130 crore in 1971-72. An important innovation relates to a new lump sum provision of Rs 125 crore to cover the requirements of rural water supply, rural home sites, slum clearance and improvement, primary education and schemes for the educated unemployed. Since there are wide differences in the requirements of different States for these essential amenities, a lump sum provision of the nature would make it easier for us to make an impact in each State in the field where such impact is most urgently needed.

Among other schemes, the budgetary provision for the Small

Plan Outlay

(a) In Central Sector—Rs 2,062 crore

(b) In States and Union Territories—Rs 1,666 crore

Social Welfare Schemes—Rs 240 crore

Defence allocation—Rs—1,218 crore

Food subsidy increased to—Rs 100 crore

Assistance to Bangla Desh to total —Rs 200 crore

Overall deficit in 1971-72—Rs 385 crore

Farmers Development Agency is being doubled from Rs 6 crore this year to Rs 12 crore next year and for marginal farmers and agricultural labourers from Rs 3 crore to Rs 6 crore. Similarly, the provision for special nutritional programmes for children is being almost doubled from Rs 11 crore to Rs 21.5 crore. Programmes for dry farming development, rural works in drought-prone areas and the crash programme for rural employment are being continued with a total provision next year of Rs 72 crore.

In addition to the provision made in the budget, resources are also available for the Central Plan from the internal surpluses of public sector enterprises (Rs 275 crore) and by way of contribution from financial institutions (Rs 245 crore). Inclusive of budgetary provision as well as internal resources, the total outlay on Central Plan schemes is thus expected to increase from Rs 1,823 crore in 1971-72 to Rs 2,307 crore, i.e., by Rs 484 crore or by about 27 per cent.

State Plans

There will also be a substantial step-up in the Plan outlays of the States. In the light of the discussions that the Planning Commission has already had with the State Governments, the Annual Plan outlay of the States and Union Territories for 1972-73 is expected to be Rs 1,666 crore as compared to Rs 1,440 crore in 1971-72. This includes a provision of Rs 782 crore by way of Plan assistance from the Centre to the States and Union Territories. Substantial part of the increase in the Central Plan outlay is on schemes which are initiated and executed by the State Governments themselves.

In addition to Plan assistance, the scheme of special accommodation by way of loans to those States which have substantial non-Plan gaps will be continued; the provision under this head for next year is Rs 130 crore. But the State Governments on their own will also have to mobilise resources on a substantial scale if the Plan outlays now proposed for them are to be implemented without recourse to overdrafts from the Reserve Bank. The Minister of Planning and the Finance Minister have been in close touch with the States in this regard. There are genuine difficulties in some States in liquidating past overdrafts over a short period. In recognition of these difficulties the Central Government has arranged, in consultation with the Planning Commission, that such States would not be called upon to liquidate their existing overdrafts immediately,

Surplus on Revenue Account - Rs 219 crore

Deficit on Capital Account - Rs 594 crore

Overall deficit - Rs 375 crore

Additional Taxation proposed - Rs 183 crore of which Centre's share - Rs 133 crore

Uncovered Gap - Rs 242 crore

Higher duty on fertilisers, power driven pumps, steel, cigarettes, art silk fabrics

Duty on Kerosene up by 6 paise per litre

Winnings from windf lls-lotteries, crossword puzzles to be taxed

Last year's special levies to continue

No change in personal income tax

Surcharge on Company taxatian raised to 5 per cent

Anti-tax evasion steps

but would be asked to repay next year only 15 per cent of the estimated overdrafts at the end of 1971-72. The State Governments have agreed to take steps to reduce the overdrafts progressively. It is proposed to adopt a new set of procedures to ensure that overdrafts are not used in future as a continuing mode of financing State expenditures.

The Union Government propose to announce soon the composition and terms of the Sixth Finance Commission. In a federal polity like the one in India, the evolution of satisfactory financial relations between the Centre and the States has a vital bearing on progress and harmony in the country at large; and the next Finance Commission will have a very important role to play in laying the base for the Fifth Five Year Plan which will be launched two years from now.

Outside the Plan, every effort is being made to restrict expenditure to the minimum. The provision for defence next year is being kept at Rs 1,408 crore, *i.e.*, about the same as the Revised Estimates for the current year. This is because apart from providing for normal increases in costs, salaries and dearness allowance, adequate provision has also to be made for recouping the losses suffered during the war and for looking after the families of those who have made the supreme sacrifice for the defence of the motherland.

Self-reliance

Net receipts from external loans next year are expected to show a substantial decline from Rs 469 crore this year to Rs 374 crore in 1972-73. Recent events have once again served as a reminder that even as the country strives for greater growth and social welfare, it cannot neglect the urgent need for reducing dependence on external assistance. The policy to be progressively independent of external assistance is not directed at anyone and its thrust is towards invigorating the country's own internal efforts. There are a few major areas, such as cotton, oil-seeds, fertilisers, steel, petroleum products and spare parts for equipment installed in the past where dependence on imports is still high. Similarly, export earnings can be increased rapidly by creating additional facilities for mining, fishing and manufacture of a large variety of engineering and consumer goods. Detailed plans are being worked out for each of these sectors to increase production rapidly so that the growing requirements can be

Summary of Receipts and Disbursements

REVENUE RECEIPTS

(*Rs crore*)

	1971-72 Budget	1971-72 Revised	1972-73 Budget
Tax Revenues	3,608	3,846	4,228 (+) 183*
Less—States' Share of Tax Revenues	890	945	1,005 (+)50*
Net—Centre's Tax Revenues	2,718	2,901	3,223 (+)133*
Non-Tax Revenues	1,009	1,180	1,120
Total—Centre's Revenues	3,727	4,081	4,343 (+)133*

CAPITAL RECEIPTS

(*Rs crore*)

Market Loans (Net)	168	294	215
External Aid (Other than PL 480)	324	367	363
PL 480 Aid	113	80	(—) 1
Loan Repayments	930	1,294	1,029
Other Receipts	488	552	489
Total—Capital Receipts	2,023	2,587	2,095

REVENUE DISBURSEMENTS

(*Rs crore*)

	1971-72 Budget	1971-72 Revised	1972-73 Budget
Civil Expenditure	1,725	1,900	2,026
Defence Expenditure	1,079	1,248	1,218
Grants-in-aid to State & Union Territory Governments	783	959	880
Total Revenue Expenditure	3,587	4,107	4,124
Revenue Surplus (+) Deficit (—)	+140	—26	+219 (+)133*

CAPITAL DISBURSEMENTS

(*Rs crore*)

Civil Expenditure	491	755	420
Posts & Telegraphs	38	24	53
Railways	151	152	159
Defence	163	163	190
Loans and Advances	1,553	1,852	1,867
Total—Capital Disbursements	2,396	2,946	2,689
Deficit on Capital Account	(—)373	(—)359	(—)594
Overall Deficit	(—)233	(—)385	(—)375 (+)133*

**Effect of Budget Proposals.*

met without undue dependence on imports and surpluses created for augmenting exports.

Despite the substantial increase in Plan outlay and without any credit for mobilisation of additional resources, the overall deficit in the Central Budget for 1972-73 is now expected to be limited to Rs 375 crore. This satisfactory outcome is the result mainly of the fact that during the past critical year, the Union Government was able to introduce what amounts virtually to three different budgets with substantial measures for additional resource mobilisation. The total receipts on account of the taxation measures introduced last year would be Rs 500 crore in a full year.

Social Justice

Important as the Central Budget is as an instrument for furthering social and economic objectives, it has to be supplemented by basic changes in the country's economic institutions and policies. During the last year, Government has taken a number of steps in this direction. The taking over of the management of general insurance, the guidelines given to financial institutions in regard to convertibility of loans into equity and participation in the management of the enterprises assisted by them, continued efforts to direct the new vitality of the nationalised banking system towards improvement in the economic conditions of the small and new entrepreneurs in industry and agriculture and the policy of differential interest rates—are all various facets of the same thrust forward towards the goal of economic progress with social justice.

Direct Taxation

The budget proposals make no change in the rates of income-tax and surcharge on income-tax in the case of tax-payers other than companies. Winnings from States or other lotteries, and crossword puzzles, will be taxed on a concessional basis at 34.5 per cent after a deduction of Rs 5,000 plus 50 per cent of the balance.

Payments made to contractors by the Government, local authorities, statutory corporations and companies will be taxed at 2 per cent, and those by contractors to subcontractors at 1 per cent.

The special deduction of 5 per cent of profits in the case of domestic companies engaged in priority industries is proposed to be done away with. The surcharge on company taxation will continue to be 2.5 per cent for the assessment year 1972-73. But on income-tax payable in advance during the financial year 1972-73, it will be 5 per cent.

Measures have been proposed to prevent evasion or avoidance of taxes and to rationalise the incentives available to promote saving and investment. Changes will be introduced in the taxation of charitable and religious trusts in the light of the Wanchoo Committee's

recommendations. Voluntary contributions received by them will be exempted from income-tax only if these are applied to charitable or religious purposes or are accumulated for such purposes in the specified manner.

Each income tax payer will soon be given a distinct and permanent account number.

Investment in industrial proprietary concerns or partnership firms will now be exempted from wealth tax up to Rs 1.5 lakh. Contributions made towards the unit-linked-insurance plan of the Unit Trust of India will qualify for deduction in computing the taxable income of an individual in the same manner as life insurance premia and contributions to provident funds. The income of approved gratuity funds will be exempted from income tax prospectively from the assessment year 1973-74.

Also, to give a continuing momentum to industrial growth through fiscal concessions, specific provisions will be made in the Taxation Amendment Bill, which is proposed to be introduced later in the year, which would be designed primarily to promote industrialisation in backward regions.

In December last, a regulatory customs duty was imposed at 2.5 per cent ad valorem on most imported products, with a higher duty of 10 per cent on a few selected items. The present budget proposes a uniform rate of 10 per cent ad valorem on all items which pay a duty of 100 per cent or more and 5 per cent ad valorem on items paying 60 per cent or more but less than 100. The remaining items will continue to bear the regulatory duty of 2.5 per cent.

Excise Duties

The major taxation proposals are in the field of excise duty. The regulatory duty on unmanufactured tobacco levied last December will be converted into an additional excise duty and the proceeds transferred to the States. The basic and special duties on different varieties of unmanufactured tobacco are being merged and rounded upwards.

A similar rationalisation and rounding off is proposed for cigarettes. In art silk fabrics the duty on low-priced varieties will be reduced and on higher priced varieties it will be stepped up. The revenue by way of additional excise duties will increase by Rs 25 crore and this entire increase will go to the States.

In keeping with the principle laid down by the Fifth Finance Commission that from 1972-73 the special excise duties which have been levied in the past exclusively for the benefit of the Centre should also be included in the divisible pool, the Finance Minister has decided to merge the special excise duties with basic excise duties and to round off the combined rates so as to introduce simplicity in the rate structure. As a result, with just half a dozen exceptions, all the ad valorem rates of excise duties will fall under six different slabs—10 per cent, 15 per cent, 20 per cent, 25 per cent, 30 per cent and 50 per cent. For example, in the case of cement, the basic duty of 20 per cent and the special duty of 4 per cent will now be replaced by a combined duty of 25 per cent. Similarly, items which carry a basic duty of 15 per cent and a special duty of 3 per cent will now have a rate of 20 per cent. The four items which have a basic duty of 40 per cent and a special duty of 8 per cent will pay a combined rate of 50 per cent. The prevailing aggregate rate for coffee at Rs 102 per quintal will be rounded downwards to Rs 100 per quintal. Similarly, the rate for vegetable non-essential oils, is being reduced by Rs 10.25 to Rs 100 per metric tonne.

The tax on certain component parts of wireless receiving sets is being replaced by suitable changes in the duty on the sets in such a way that the incidence of duty will increase with the price of the set. The present exemption from duty for low cost sets under Rs 165 and manufactured by the small-scale sector will be continued.

There are a few items where the opportunity of merging the special duty with basic duty is also being taken to raise additional revenue. In the case of paints and varnishes, the additional revenue will be Rs 2 crore and in paper Rs 5 crore. The higher rates of duty on paper will apply only to the more expensive

(*Continued on page 244*)

Plan Outlay Under Major Heads

(*Rs crore*)

	—71-72	—72-73
Central Sector	1,688	2,062
Central Plan met from Budget	1,312*	1,624
From internal resources of Public Sector Undertaking including PL 480 assistance to Rural Electrification corporation	233	275
Centrally Sponsored Schemes	143	163
Union Territory Plan	65	62
Central assistance for State Plan	720	720
Total	2,473	2,844
Central Sector Outlay by Heads of Development:		
Met from Central Government's Budget—	1,455	1,787
Agriculture & Allied Programmes	267	278
Irrigation & Flood Control	5	5
Power	62	88
Industry & Minerals	454	545
Transport & Communications	398	465
Social Services	251	385
Other Programmes	18	21
Met from internal resources and other sources—	233	275
Power	28	38
Industry & Minerals	97	109
Transport & Communications	108	128

* *Takes into account outlay of Rs 105 crore on certain schemes since included in the Central Plan.*

Space Graffiti

DURING schooldays, he does it when confronted with the virgin surface of the form desk. Later in youth, his head a-spin with the sweet scents of spring, the canvas shifts to the tree in the wood bordering the lovers' lane. In unfettered manhood, his gate-post and office door, cuff links and bed linen, personal apparel and stationery, civil lists and telephone directories, not to speak of the carved headstone at journey's end, must all bear witness to posterity as to his name. Man is a great epitaph maker.

Now that rocketry has enabled him to hurl sundry shapes of metal and plastic into outer space, he has not missed the opportunity. Pioneer 10, the craft travelling 49,889 km an hour to Jupiter and beyond, carries a drawn-to-scale, highly flattering, image of himself, his spouse, his planet, his galaxy, etched on a 15 cm by 23 cm aluminium plaque anodized with gold. Cornell astronomers Carl Sagan and Frank Drake, and Sagan's artist wife Linda, are the creators of this cosmic epitaph.

And well an epitaph it might prove to be. Catapulted into outer space by Jupiter's massive gravity, Pioneer 10 will take 80,000 years before it reaches the star closest to the sun; it may be several million years, before its message is deciphered by an encountering intelligence in space. There is no guarantee to man's continued existence on the earth till then. For all we know, the Pioneer may come back to the earth itself, to be pounced upon and investigated by an advanced civilisation of a specie of reptile that may inherit the earth after man.

But the scientists responsible for this message from mankind are modest in their naivete. They write in *Science:* "We do not know if the message will ever be found or decoded. But its inclusion on the Pioneer spacecraft seems to us a hopeful symbol of a vigorous civilisation on earth."

Nevertheless, the hope has its hazards.

Even on earth, prescient man, able to communicate with brother man with a variety of facial expressions, gestures, symbols; smoke, radio and other signals; sound produced with instruments and his own built-in system, finds it difficult to communicate with his kin when separated by time or space. Witness, for example, the imbroglio he has got his descendants into by gouging symbols into seals during his sojourn in the Indus Valley, a few centuries ago. And if that is what man's symbols can do to his own logic, how many inter-galactical linguistic congresses must tie themselves into knots before the beings in Galaxy-73 interpret the binary symbols of Drake and the Sagans ?

But we assume too much, that Galaxy-73 will have light, like that of the sun, and the beings there will have 'eyes'. As a matter of fact, the Pioneer plaque itself depicts fourteen lines symbolising specific pulsars, which are supposed to be stars collapsing on themselves, intense sources of energy, but devoid of light, as their gravities do not permit any light to escape from their systems. If these 'black holes in space' support life systems in their peripheries, which is not inconceivable, the beings there may depend upon methods other than reflected light to be aware of the physical world. And if the Pioneer lands into their midst, Linda Sagan's fine draftsmanship may not be of much avail.

It is possible, just possible, that Galaxy-73 has intelligent beings (and it is not an impossibility, mathematically), but with one singular difference....The vital variation being a man's raised right arm (as on the plaque) meaning, *not* friendship as in NASA circles, but, an invitation to un-natural sex with battle to death, or much worse, as consequence, in which case, Arthur Clarke may yet prove right if they react with a "quick, Henry, the Flit!"

However, this preoccupation with US Mail to Outer Space merly sidetracks us from Outer Space Mail to Beings on Earth. It can be that *they* are at *their* wit's end trying to communicate with us.

In recent times, pilots flying high above southern Peru's high mountain plateaux have discovered vast triangular patterns, sometimes extending nearly a mile along flat-topped ridges. One belief is that they are works of engineering executed by Nazca valley Indians in 800 AD. The straight lines of the geometrical designs are ruler-straight and their angles could hardly be bettered with modern surveying instruments. Some of these lines with a relationship to summer and winter solstices may have served the Nazcas as vast astronomical calendars.

But certain animal shapes, sometimes 150 feet in length and resembling, with human logic, eight-legged spiders and long-billed humming birds, are harder to explain. According to one theory, the Nazcas drew them on the mountains as offerings meant to be seen by their sky-dwelling gods.

Yet who knows, the sky-dwellers might have been here long ago, leaving their graffiti for mankind to decipher...and bird-brained man flips about demanding a piece of terrestrial logic from extra-terrestrials.

—S. K.



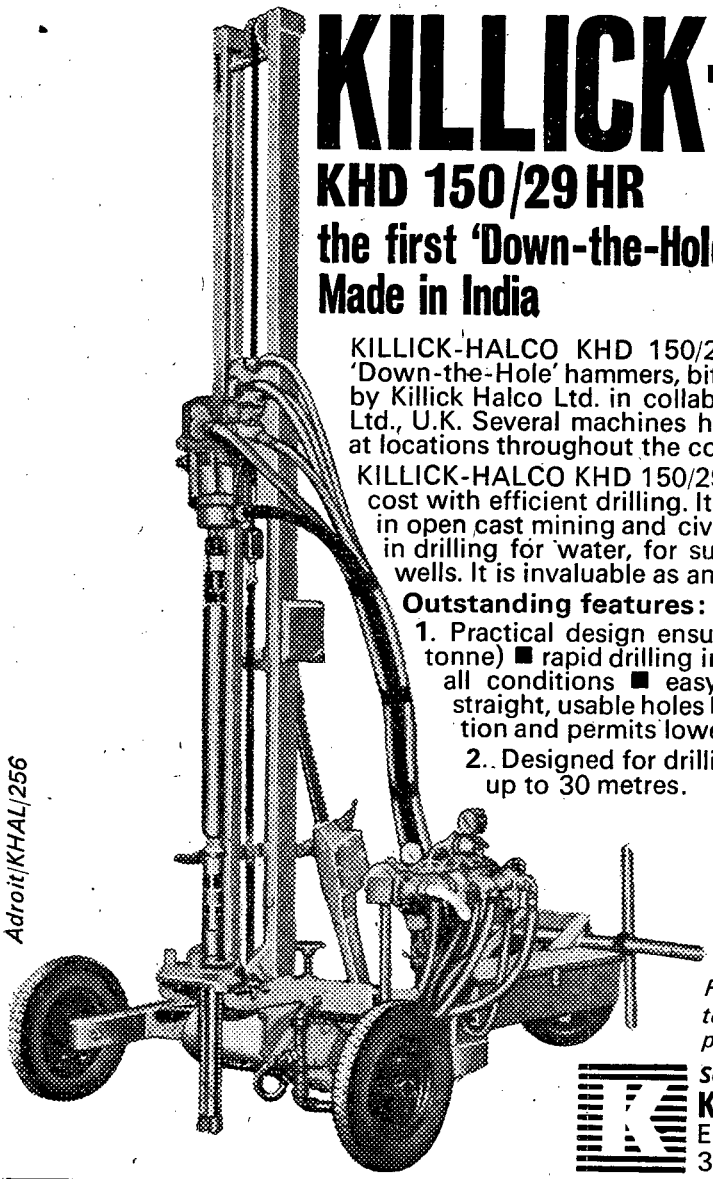
IGNORAMAN

Wants to know
if
GNP Means
Gross National
Poverty

KILLICK-HALCO

KHD 150/29 HR

the first 'Down-the-Hole' Hammer Rock Drill Made in India



KILLICK-HALCO KHD 150/29HR Drill-along with Halco 'Down-the-Hole' hammers, bits and spares-is made in India by Killick Halco Ltd. in collaboration with Halifax Tool Co. Ltd., U.K. Several machines have already been in operation at locations throughout the country.

KILLICK-HALCO KHD 150/29HR Drill combines low prime cost with efficient drilling. It has been used to great effect in open cast mining and civil engineering operations and in drilling for water, for surface bores and inside open wells. It is invaluable as an utility rig on any site.

Outstanding features:

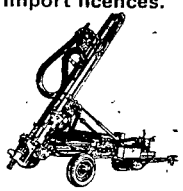
1. Practical design ensures:- ■ light weight (only 3/4 tonne) ■ rapid drilling in all strata at any angle under all conditions ■ easy mast positioning ■ clean, straight, usable holes ■ easy, levelling and stabilisation and permits lowering into wells.
2. Designed for drilling 102 mm and 112 mm holes up to 30 metres.

Adroit/KHAL/256

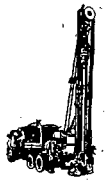
For details and complete technical service please contact:

Sole Selling Agents,
KILLICK NIXON LTD.,
Engineering Department,
31, Murzban Road, Bombay-1

Other drilling machines in the HALCO range, not yet made in India, are available against actual users' import licences.



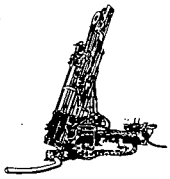
Halcodrill 250



Halcodrill 625 for 165 mm D. Drilling



Halco 'Tiger'



Halcotrack 625 for 165 mm D. Drilling



Halcotrack 400

The Railway Budget
Surplus After Five Years

THE Railway Budget for 1972-73 shows a surplus of Rs 32.53 crore. This is the first time in five years that the Railways will be out of the woods. Presenting the Budget to the Lok Sabha, on March 14, 1972, the Minister of Railways, Mr. K. Hanumanthaiya, pointed out that economic forecasts envisage increased agricultural, industrial and mining activities in the country, which would be reflected in the higher earnings of the Railways.

Gross receipts for the year 1972-73, on the existing level of freight and fares, is Rs 1,126.10 crore, Rs 48.10 crore more than the Revised Estimates of the current year. The earnings from passenger fares are expected to increase by Rs 10.50 crore. The main increase in earnings, however, would come from goods traffic, which is expected to improve both in quantity and quality. Higher production of steel and the restoration of normal conditions in the eastern region would enable the Railways to carry an additional 95 lakh tonnes of revenue-earning traffic. Larger movement of commodities like cement, fertilisers, petroleum products, iron and steel, and machinery and merchandise is also anticipated. The Budget Estimate, therefore, places the receipts from goods traffic at Rs 704 crore, an increase of Rs 39 crore over the Revised Estimates.

Net Revenue

After allowing for the ordinary working expenses, depreciation reserve fund and other charges, the net revenue will be Rs 175.23 crore. Out of this the three liabilities to be met are Dividend to the General Revenues (in full), contribution to Development Fund and the instalment towards repayment of loan from the General Revenues, altogether accounting for Rs 191.73 crore. That leaves a deficit of Rs 16.5 crore. In previous years, the gap was filled by borrowings from the General Revenues to balance the budget. This year, however, the sum is found mostly by rationalising the present structures of freights and fares The total annual revenue from the proposals will be Rs 17.68 crore. As the revised rates will take effect from April 15,1972, the additional revenue for the year will be only Rs 17 crore. Goods traffic in the coming year is expected to increase by 95 lakh tonnes of revenue earning originating traffic. Most of this will be in steel, coal, fertilisers, petroleum products. Agri cultural, industrial and mining activities as well as exports are expected to grow. These factors will generate a great deal of business for the railways and consequently improve their earnings. Passenger traffic is expected to go up by 3 percent over the Revised Estimates for 1971-72.

Relief to Finances

The major relief to Railway finances has come from the Railway Convention Committee of Parliament which has recommended the exemption from payment of dividend on the capital-at-charge of the non-strategic portion of the North-East Frontier Railway, unremunerative branch lines, and on over-capitalisation; exemption, for a period of three years, from payment of dividend on the capital outlay, to the extent of 25 per cent annually, when the work is in progress; and the payment of interest to Railways at the current dividend rate on fund balances kept with the General Revenues. These recommendations gave relief to the Railways to the extent of Rs 21.53 crore for 1971-72 and Rs 22.19 crore in 1972-73. Therefore, the Revised Estimates for 1971-72 also show a net surplus of Rs 9.08 crore, instead of a deficit of Rs 6.87 crore as envisaged in the Budget Estimates.

War Effort

An assessment of the Revised Estimates reveals that several important events during the year had affected the economy of the Railways. The highlight of the year was the nation's success in the recent war. The contribution of the railways to this success was considerable. Never before in our history after freedom had the Railways been called upon to do such a strenuous work as was done with great devotion during, before, and after the 14-day war. The Railways ran well over 2,000 special trains for the movement of defence personnel and equipment. After the end of the conflict the Railways had to move prisoners of war and refugees, which again involved the running

RAILWAY BUDGET AT A GLANCE

Particulars	Actuals 1970-71	Budget Estimates 1971-72	Revised Estimates 1971-72	Budget Estimates 1972-73
			(Figures in Rs crore)	
Gross Traffic Receipts	1006.69	1070.25	1078.00	1143.10
Ordinary Revenue Working Expenses (Net), i. e., after taking credit for recoveries	732.34	765.44	784.32	809.14
Appropriation to Depreciation Reserve Fund from Revenue	100.00	105.00	105.00	110.00
Appropriation to Pension Fund	15.00	15.00	11.50	16.00
Net Miscellaneous Expenditure (including cost of Works charged to Revenues)	14.62	17.91	15.95	15.73
Total	861.96	903.35	916.77	950.87
Net Railway Revenue	144.73	166.90	161.23	192 23
Dividend to General Revenues	164.57	173.77	152.15	159.70
Net Surplus (+)/Short-fall(—)	—19.84	—6.87	+9 08	+32.53
Operating Ratio	84.2%	82.7%	83.5%	81.8%

of over 800 special trains. Remarkable about this was not the volume and magnitude but that all this was accident free. It proved to be a peak in the efficiency of railway employees, inspired by patriotic fervour. The work of the Railways and its employees has earned public approbation. But it has also entailed some sacrifices in terms of revenues to the Railways and inconvenience to the public.

Railwaymen's Sacrifices

Unprecedented floods which affected parts of Uttar Pradesh, Bihar and West Bengal dislocated railway traffic and involved additional expenditnre on repairs and restoration. Thefts of overhead wires, telecommunication cables and railway equipment, especially in the eastern region, dislocated the movement of traffic. All these placed a severe strain on Railway finances.

In Bangla Desh, railway communicotions had been battered badly. A whole programme of restoring the damaged railway system therein had become necessary. The Bangla Desh Government made a request for help involving supply of materials for temporary and permanent repairs to a large number of bridges and for the restoration of tracks. Our railwaymen, in association with Bangla Desh Railway authorities, did such expeditious work that the restoration of traffic on the important sections was made possible within a few weeks. The four major bridges which had been blown up by the Pakistani forces are being repaired by replacement of girders.

About nine thousand railwaymen who are members of the Territorial Army Units were mobilised to assist in the movememt of trains in the difficult areas and for restoration of damages.

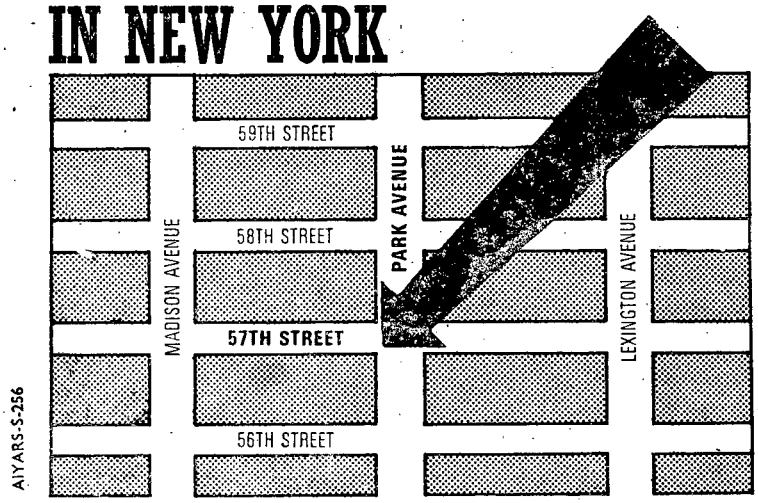
Thirteen railwaymen lost their lives while on normal duties, and twenty six were wounded while on duty in the border areas. The Railway Minister placed on record in the House, his high appreciation of the devotion to duty displayed by the railway men.

Development Programme

At the mid-term appraisal of the Fourth Plan, outlay for the Railways had been increased by Rs 125 crore to Rs 1,400 crore. With this, the Railways would be able to acquire additional rolling stock worth Rs 37 crore and spend another Rs 60 crore on increasing line capacity on certain sections and on the construction of new lines during the remaining Plan period. It has been decided to establish a broad gauge link between Kanya Kumari, on the southern tip of India through Delhi up to the foothills of the Himalayas in the far north.

One more railway production unit to produce approximately 20,000 wheel sets and 25,000 loose wheels per year will be set up. This will make the Railways virtually self-sufficient. As dieselisation and electrification have made further progress, the level of imports is bound to increase much more than the present figure of Rs 50 lakh per year. In order to do away with dependence on imports, it is proposed to add a traction gear plant to the Diesel Locomotive Works at Varanasi.

STATE BANK—
THE ONLY INDIAN BANK
WITH A FULL-FLEDGED OFFICE
IN NEW YORK



The address of
the New York Office is:
460, Park Avenue,
New York, NY 10022.
Telephone: (212) 371-5600
Cable: INDTHISTLE via RCA
Telex: 236—305

STATE BANK



Indigenously developed—the calender and the mills

Madras Rubber Factory's Creditable Exports and Self-reliance

S. V. RAGHAVAN

Our Madras Correspondent

TO Madras Rubber Factory Ltd (MRF), a national recognition in the form of a certificate of merit for its outstanding export performance for the year 1968-69, announced recently by the Union Government, has come as a happy coincidence, for this year the factory is celebrating its silver jubilee.

During the period October 1968 to September 1969, the factory exported products worth Rs 53.1 lakh to 31 countries including the United States, the 'home of tyre technology'. The exports to the US accounted for over Rs 8 lakh. In 1969-70, it had a record export performance of Rs 58 lakh worth of products and in the year ended September 30, 1971, the exports were of the value of Rs 47 lakh, the shortfall being the result of a workers' strike for over three months during that period.

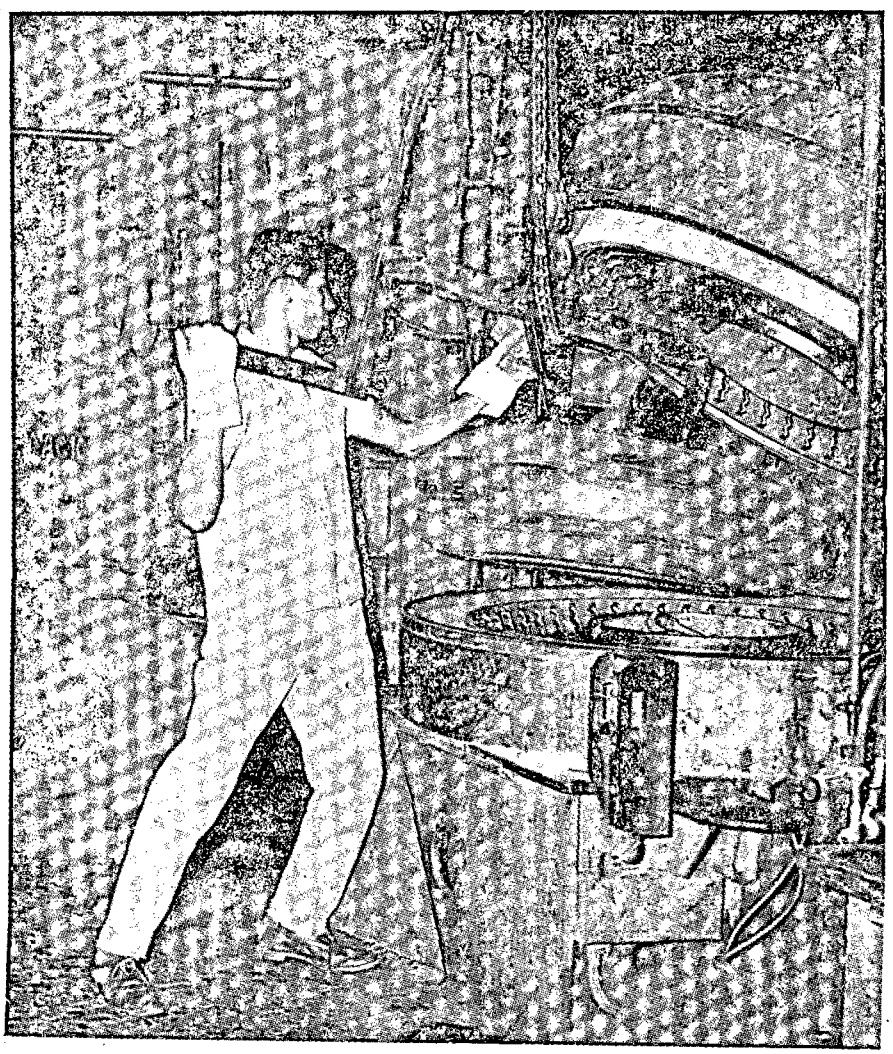
The MRF has also done some pioneering work in the field of export publicity and market reaserch for which it was awarded a trophy by the Chemicals & Allied Products Export Promotion Council.

Started as a small unit, in collaboration with M/s Mansfield Tyre and Rubber Company of the USA, to make toy balloons 25 years ago, it has grown into one of the biggest tyre factories in the country, with an annual capacity of 600,000 tyres and tubes. The MRF undertakes the manufacture of all types of tubes and tyres and tread rubber for use in the whole range of automotives from the scooter to the heavy truck.

When its Goa unit, for which the Letter of Intent has been issued by Government, goes into production in about a year's time with a rated capacity of 300,000 tyres and tubes, the MRF will be the second biggest tyre factory in India. This also marks a significant breakthrough in indigenous technology, for, the unit is being set up with a minimum capital goods import of Rs 1.15 crore. The rest of the equipment is being fabricated by the Indian engineers of the MRF. A good deal of the credit for this successful policy of import substitution goes to its Research and Development Department. The MRF today, according to Mr James Hoffman, President of the Mansfield Tyre & Rubber Co., is "as self-reliant as could be by a common desire of both the partners."

Another project on the cards of the MRF is a cycle tyre and tube unit at Arkonam, within about 60 km from Madras, in South Arcot district, with an annual capacity of 20 lakh tyres and tubes..

The MRF-made tyre curing press with mould in operation at its factory



The Budget

OPINION

Dr P. R. Brahmananda, Mr N. B. Newalkar, Mr N. M. Wagle, Mr G. C. Shroff (Bom
(Madras) Dr S. N. Sen, Mr B. M. Birla, Mr A. V. Sheth (Calcutta)

analyse here the Central Budget
taxation, *'Garibi Hatao'*, self-relian
investment, prices — in

Our Senior

Avinash Godb
Bombay

S. C. Basu: Ros
Calcutta Triv

What is your general reaction to the new Central Budget ?

Dr M. S. Adiseshiah, Director, Madras Institute of Development Studies and former Deputy Director-General of UNESCO.

I call this budget a holding action because we are between two periods, between the enormous strains mainly due to Bangla Desh and its antecedents, and we are on the other hand at the point of sizable economic breakthrough. The budget must be looked at from both these points of view and represents, I believe, a good compromise between these two contradictory forces.

Mr S. Narayanaswamy, Head of Messrs Chitra & Co, a leading Stocks and Shares firm in Madras.

The budget has shown fair awareness of the severe stress and strains to which the economy has been subjected through the last three years because of inflation and fiscal inducements therefor. The individual assessee has been left alone as it is unlikely that he can any more make a meaningful contribution to the Central revenue. The levy on lottery windfalls is morally well-conceived as such income is the most unearned of all incomes.

As was expected, the main stay of the deficit filling effort has been a portfolio of indirect levies. It is wrong to think that only kerosene levy will hit the common man. The enhanced steel and aluminium prices will further push up construction and structural costs. It is evident that the Finance Minister has been driven from pillar to post and has been going about with a powerful search light for focal points of taxation. The capital market has little to enthuse over and the investor is very much where he was before the budget was presented.

Mr P.A. Seshan, Assistant Editor, The Hindu, Madras.

It is an unimaginative budget without any positive approach to the question of raising industrial production. There was no need for raising corporate taxation because its revenue implication is negligible while the disincentive effect is serious. Also there could have been definite incentives for saving out of personal income; the increase in the duties on steel and aluminium will be reflected in the price for end products which have inflationary implications. The general reaction nevertheless may not be so unfavourable as it should be because of the negative help to industries in the form of higher import duties and larger outlay. I think the economy will bounce.

Mr K. Easwaran, Chairman of M/s Easun Engineering Co., Ltd., Madras.

If for once, the Government can be said to be even-handed it is in this budget. It will neither benefit the Government nor is likely to encourage employment nor keep down the prices. The budget stands out by itself with no impact.

Mr N. B. Newalkar, Chairman, Maharashtra Small Scale Industries Development Corporation, Bombay.

The Union Finance Minister has made every possible attempt to keep the tax burden as minimum as possible. In the last year, because of exigencies, he had to resort to tax increase from time to time. Though one should concede that minimum increase is a welcome feature, the Union Budget has also to stimulate investment and development and last but not the least, employment. The attempts in the budget to achieve this objective are very feeble and as such the budget proposals are hardly likely to accentuate the national economy and much less give a boost to industrial development which has become stagnant over the course of the last few years.

Mr G. C. Shroff, Managing Director, Excel Industries Ltd., Bombay.

There is nothing spectacular in the budget and actually there was not much scope also to further increase taxation in view of the taxation measures during the past year.

Dr E. T. Mathew, Reader, Department of Economics, University of Kerala.

The budget has, indeed, produced a very passive reaction in me. There is nothing startling about it. In fact, its key note is caution. Considering the

REPORT 1972-73

) Dr Malcolm S. Adiseshiah, Mr P. A Seshan, Mr K. Easwaran, Mr S. Narayanaswamy
P. K. Gopalakrishnan, Dr E. T. Mathew, Mr S. V. Pandit (Trivandrum)

n its major national aspects—
defence, employment, savings,
clusive interviews with

rrespondents

. V. Raghavan :
Madras

e Krishna Pillai :
rum

increase in the Plan outlay and the considerable defence spending that has to be maintained, the tax measures proposed are not unduly harsh. However, they will, to a certain extent, inflict more burdens on the common man; for example, the taxes on kerosene and aluminium. But these are unavoidable in the circumstances in which the economy is placed today. In a country where poverty is widespread and the rich constitute a very small minority, the poor also have to bear their due share of the cost of economic development. Of course, the Finance Minister has given his own reason for imposing a levy on kerosene. Also, we must view this levy against the background of the welfare measures proposed in the budget. A sum of Rs 240 crore has been set apart for schemes with an accent on social justice including those for rural water supply, rural home sites and primary education. All these add to the real incomes of the poorer sections of the community. These additional tax measures, therefore, need to be supported. That is to say, one should not have any serious objection to these levies.

Mr N. M. Wagle, Chairman, City Industrial and Development Corporation of Maharashtra, Bombay.

The Revised Estimates prove that every year the anticipated receipts are underestimated. It is not a good thing because the surplus thus realised is many times used for non-development expenditure.

The Finance Minister had actually no scope to increase taxes, but if the direct taxes were lowered, Government would have got more revenue.

In fact there is need for efficiency all around. If that could happen production will automatically increase. There will be demand for more licensed capacity which in effect increases employment opportunities. The only encouraging feature of the budget is the increased allocation in the Plan outlay. This could quicken the tempo of industrial production, subject to planned expansion being implemented. In the past the implementation has been below targets. The defence allocation is substantially bigger, but considering the need for building our defences it could not be avoided.

There should be some incentives to honest tax-payers. As has been reported in the Press the Wanchoo Commission has recommended such a step. There is need for speedy disposal of cases of industrial licenses and increase in installed capacities.

The levies will definitely hit the engineering goods industry but the industry cannot hope to increase prices in view of the falling demand in electric motors, diesel engines etc. They can only minimise their loss by efficiency and expansion in production.

What do you think of taxation proposals? Do you think they would place more burdens on the common man and, if so, do you think they are imperative in the circumstances and need to be supported?

Dr P. K. Gopalakrishnan, Director, Bureau of Economics and Statistics, Trivandrum.

Despite the overall deficit of Rs 375 crore, one should unhesitatingly say that the Finance Minister has cast the tax net with great circumspection. It cannot be said that he had any other alternative. It has to be specially noted that the overall deficit is largely due to a big increase in the Plan outlay which is 22 per cent higher than in the last year. This increase also provides for a sum of Rs 125 crore for rural water supply and unemployment relief. This is a welcome feature of the new budget.

Dr B. R. Brahmananda, Professor, Monetary Economy, University of Bombay.

For obtaining fresh resources, the Finance Minister has stepped up the rates of indirect taxation on (a) basic consumption necessities like kerosene and (b) basic production necessities in agriculture and industries, like steel products, aluminium, fertilisers and electric pumps. The effect of the first (a) is to hurt the poorest strata of the community for whom indirect tax on a necessity is virtually like poll tax. At the same time the better-to-do groups will not be hit adequately by these measures.

All taxes ultimately come out of surplus, but a tax on a necessity of the poor causes injury without any scope of shifting.

The effects of (b) are more round about than the Finance Minister imagines. For example, a detailed input-output study will reveal that the bulk of the

steel is consumed by the public sector itself. Either profits will go down or the Government will have to advance more loans. It is an illusion to think that in the net, the Government will mop up more resources in this manner. As regards production inputs in agriculture, like fertilisers, electrically operated pumps etc., there are likely to be two consequences, (i) burden on loans will go up and (ii) the inequalities in the rural areas will tend to go up, as the less well-to-do farmers will have to economise on their inputs.

Will this budget enable the country to move forward speedily towards the declared objectives of national policy, namely Garibi Hatao and socialism? What, in your view, is the most important facet of the budget that will help in accelerating the pace of the country's progress on the path of planned development?

Dr Adiseshiah

I believe that the budget makes it possible to move in both the directions in so far as it provides financial and structural incentives. But the attainment of these two ends does not depend on the budget alone. In economic jargon the budget presented is a necessary but not a sufficient condition for achieving the attack against poverty.

Mr Seshan

The sceptic may say that the budget is not really socialistic in character, but the Government will be spending large amounts on subsidised sale of food-grains, eliminating malnutrition amongst the weaker sections, providing protected water supply in the rural areas on an unprecedented scale and initiating also schemes for relieving unemployment among the educated and in the countryside. The Central and State Governments can implement the Plan vigorously on new lines which can result in significant improvement in the standard of living of the common man if only the available resources were utilised fully and purposefully.

Mr Easwaran

There is no facet of the budget as far as I can see which will take the country towards *Garibi Hatao* or socialism. Socialism has any meaning only if job opportunities, whether for the time being equal or unequal, are available to all. Any policy of Government which does not provide for 5 million direct jobs does not take into account the mood of the people.

What is required in the next 15 or 20 years, as long as it does not have to depend upon the pleasures of our lenders of foreign exchange to us, will have to be taken up immediately and throughout the country.

Dr Brahmananda

Socialism means many things to many people. For the vast poor in the land, socialism can only mean an improvement in their living conditions. In Indian economy today, there are not two but three broad classes. The first consists of urban and rural property owners who are really affluents. The second class consists of what Marx in his later days, termed as 'the limpen proletariate'. This consists of the bulk of employees in the public and private organised sectors, and a sizable portion of peasant proprietors, as well as, members of the trade and professional classes, like journalists, lawyers and professors like me.

This class is well protected by some measures of social security and its greatest desire is to keep its relative status.

But the third class consists of the vast masses of the poor, for whom there are no regular jobs or regular source of income, and whatever they get is very meager. This is an important category both in urban and rural areas, and it is this category that has given the bulk of the support to the socialistic programme of the Government. But, unfortunately, the system of excise levies on bare consumption necessities and steady rise in prices are hitting this section very hard. I am, therefore, reluctant to say the budget proposals aim at promoting the well being of this class, except in remote, indirect and long-term manner.

Mr Newalkar

The only feature of the budget proposals that might contribute to the professed objective of social justice is special and enhanced allocation for slum clearance, educated unemployed etc. and for stimulating rural employment. There is nothing else which will initiate progress towards narrowing down the inequalities and disparities. There are no positive measures which will end disparities. There are no positive measures which will encourage industrial investment. The negative measure is that the corporate taxation has not been enhanced excepting the surcharge.

Mr S. V. Pandit, President, Trivandrum Chamber of Commerce.

In the present tempo of rapid economic and social changes, we had our own apprehensions about the budget. But I must frankly say that the impact of the proposals would be less harsh than what we had earlier feared. However, it is doubtful whether the people would be able to bear the additional burden of the new imposts that would certainly reflect on the cost of living.

The increasing cost of steel and cement that will result from the increased duties on these items is bound to have a retarding effect on the speed and progress of building constructions all over the country. However, this years' budget proposals will have the welcome distinction of leaving untouched some of the traditional items marked out for annual imposition of additional tax burdens. As a businessman, I would like to refer specially to the two per cent tax proposed to be levied on payments to contractors.

This additional new proposal would tantamount to the Government taking away by the left hand what it would give by the right. Also, I doubt whether this tax would ultimately bring in any appreciable returns.

As for assuring remunerative prices to the farmer, how could he look forward to such prices in view

of the additional levies proposed on fertilisers and power driven pumps which would certainly result in increased farming costs? The farmer even now asserts that the returns from his investment in the farm are not adequate. No doubt, the Government had made repeated attempts in all earnestness and sincerity to hold the price line but tangible results are yet to be seen.

Dr Gopalakrishnan

The Finance Minister has earmarked larger outlays in the public sector, thus paving way for greater industrial activity. This is a welcome step, in view of the fact that the rate of increase in industrial growth has recently shown a declining trend. I am, however, afraid that this gesture is too small to prevent the decelerating trend which has recently become more, and more pronounced. The problem here is largely organisational. Timely steps should be taken to utilise installed capacity fully and to generate surpluses. The budget does not promise any serious steps in this direction.

Dr Mathew

The budget will not enable the country to move forward speedily towards the declared objectives of national policy, namely *Garibi Hatao* and socialism. The increased Plan outlay proposed in the budget, which is not based on deficit financing of a high magnitude, is the most important fact of the budget that will help in accelerating the pace of the country's progress on the path of planned development.

No Measures Are Proposed for Abolition of Monopoly Growth

The fiscal measures envisaged in the budget will not result in an effective and optimum garnering of internal resources for development. In fact, this is not a budget keyed to maximum resource mobilisation. The tax proposals are not of a comprehensive nature. For all practical purposes, direct taxes have not been touched at all. No effort is made to maximise savings through incentive provisions. Much more attention should have been given to industrial growth with special accent on export promotion. In this context one might express a fear that the tax on steel might affect the engineering industries adversely.

A serious inadequacy of the budget is its complete neglect of fiscal measures designed for industrial growth.

In view of the emphasis laid on socialism as the country's goal, it has to be particularly noted that no measures have been proposed in this budget for the abolition or restriction of monopoly growth of capital in industry or for the mopping up of the wealth or income of the new rural rich. Such measures would relate to agricultural income and wealth taxation, which is not a Central subject now.

In the present uncertain availability of adequate foreign aid and in the context of recently expressed and oft-repeated keen desire to do without foreign aid will the fiscal measures enunciated in the budget result in an effective and optimum garnering of internal resources for development?

Mr Seshan

Though it has not been spelt out clearly how self-reliance will be promoted and industrial and agricultural production will increase, it is probably expected that there will be an automatic growth in industrial production which is so badly needed now with intelligent use of foreign exchange reserves and activisation of unused industrial capacity with a re-endorsement of industrial licences and better management-labour relations. In view of the likelihood of important developments in the coming months it may be said that the whole strategy has not been revealed.

Dr Adiseshiah

I have three points:

a) I feel the budget does not take into account the sizable shortfall in foreign aid and possibly it is not the function of the budget to do this.

b) There will have to be a separate policy and programme for expanding our exports above the second decade target of 7 per cent growth.

c) There should not only be selective cut in our imports of non-priorities but also some reorganisation of internal manufacturing priorities to produce more goods of mass consumption and in the prcoess decrease their import content.

Mr Narayanaswamy

The garnering of internal resources has to be a continuous process and need not be linked with the quantum and nature of foreign aid. The tapering off foreign aid quanta not only from the U. S. but from other countries is largely conditioned by internal economic upsets in aid offering countries. Only in far small a measure are such quanta regulated by India's foreign relations.

Mr Easwaran

The main absence is expected to be the U. S. aid. The U. S. A. stipulates purchase from that country, but if we have 60 per cent of the money that we spend on U. S. items we can purchase the same equipment from other countries. The most useful aid to our country has been from the World Bank both for raw material and capital equipment. By taking advantage of the present feelings of the people, if a person of the Prime Minister's image exhorts the people to give up show and buy only minimum necessities, the country can save a lot of foreign exchange and go in a major way for import substitution. We can certainly progress beyond the imagination of most people thereby.

Mr B.M. Birla, Industrialist, Calcutta.

As far as the cause for self-reliance is concerned, except the marginal increase in certain import duties which may encourage a little bit of indigenous production, there is not otherwise going to be much effect on self-reliance.

Self-reliance presupposes a very large expansion of production. The Finance Minister has said that he

proposes to introduce some measures for increasing production in the backward areas. It is possible that when these measures take shape, they might give an indication of the Government's policy for the development of backward areas which constitute almost 75 per cent of the country.

Mr A.V. Sheth, President, Calcutta Stock Exchange.

Mr Chavan has been told to face the challenge posed by the shrinkage in foreign assitance. Though he hopes that such assistance would be resumed in due course, he has endeavoured to close the gap in foreign assistance by raising additional domestic resources. He has also taken appropriate measures to accelerate the pace of self-reliance. The comfortable foreign exchange reserves which this country is holding at present, will serve as a handy cushion.

Dr Gopalakrishnan

In the context of the shrinking external aid and the oft repeated search for self-reliance, the budget proposals are a big disappointment in that they could justifiably have been different. The vast and promising are property and net wealth taxes in India which could have been legitimately explored. The yields from an integrated wealth tax for 1971-72 could have easily amounted to Rs 300 crore with rates varying from 0.5 to 5 per cent. Compared to these estimates, the present annual yield from wealth tax is less than Rs 15 crore. This is ridiculous. There is no valid justification to exclude this area of taxation especially since we are committed to the evolution of a socialist society.

Will the fiscal measures proposed in the budget help in mopping up the newly acquired wealth of the beneficiaries of the Green Revolution ?

Mr Narayanaswamy

The Central Government has taken the only possible step to mobilise rural income through fertiliser and pump set taxes. After all, agriculture is still in the State List. The Government is so concerned with garnering resources that they have left no sector untouched.

Dr Gopalakrishnan

Although the imposts on kerosene, fertilisers and power-driven pump sets may not be immensely popular, as an attempt to mop up gains from agriculture, specially the large farm incomes amounting to about Rs 16,000 crore that have remained virtually untaxed, these have to be welcomed.

What alternative measures would you propose, in the place of the present ones, for enabling the country to attain the targetted growths in national and per capita incomes and the targetted increases in agricultural and industrial production ?

Dr Adiseshiah

Regarding agricultural production, the key points are: introducing high-yielding varieties in non-food crops, particularly cotton and oil seeds, and making a beginning in introducing the new technologies in dry farming.

In this regard, the present enhanced taxes on fertilisers and pump sets must not apply to the small farmers. I hope that this can be ensured in the Finance Bill. In any case, these regressive taxes should be replaced when the Raj Committee recommendations on Agricultural Incomes and Capital Gains Tax are accepted and enacted.

As far as the industrial production is concerned, two things are needed to attain the target of 7 to 10 per cent growth. First, capacity production of public sector plants similar to those achieved by the Bharat Heavy Electricals at Tiruchi; secondly, with the comfortable resource position of scheduled banks there should be a less restrictive credit policy towards the corporate sector. This would require a review of our Farm Price Support Policy.

To what extent do you think this budget will promote saving and investment, and meet the development commitments of the Fourth Plan ?

Dr S.N. Sen, Vice-Chancellor, Calcutta University.

The saving-investment nexus is a function of many variables and the impact of fiscal policy is certainly one of them. This budget is unlikely to affect this nexus in an adverse manner. On the other hand, the promise that it holds out that there may not be any significant rise in the rates of direct taxation in the near future, may actually lead to the creation of a better climate for stimulating investment. The increase in Plan expenditure after a lapse of two years—and the increase had been substantial in spite of so many commitments—is bound to react favourably on the investment climate, and given the promise of political stability in almost all States, one can expect a good revival of investment. If the Government machinery is geared up to the necessary extent, the commitments made in this budget will no doubt go a long way towards meeting the development targets of the Fourth Plan. No industrialist can help noticing that this significant increase in the Plan expenditure has been achieved in spite of large demands for raising non-Plan expenditure and without any increase in direct taxation. On the whole, one should expect a favourable wind in the investment market.

Dr Adiseshiah

The positive element is that savings will be encouraged because of the tax holiday on incomes. Here again the savings and investment growth needed does not depend on the budget only. With the spread of banking network and the acceleration of small savings drive we should attain a savings target of around 14 per cent which will also compensate the cut in foreign aid. For, now, it is not resources which are our costraint as witnessed in the financial and physical targets shortfall for the current year. It is one of structural and

managerial bottlenecks, which must be met to meet more adequately our development commitments.

Mr Narayanaswamy

The impact of the budget on investment must be regarded as negligible.

Mr Easwaran

There is no device in the budget which encourages savings or investment at any level.

Dr Brahmananda

I have not yet studied the budget proposals in details. My first query, however, within myself was, as to whether the budget introduces measures to bring about an improvement, directly or indirectly, in the ratio of domestic saving to national income. This ratio has been steeply falling since 1964-65. Today, it is about just the same (around 8 percent) as it was in 1950-51. At present, given the capital-output ratio of the order of 3.5:1 or so, the current rate of growth of capital formation is about equal to or even less than the rate of growth of population. At the same time, as the machinery components of the new capital is rising, there is bound to be a higher rate of growth of unemployment. I am glad that the Economic Survey has accepted my stand-point that the serious problem besetting the revival of investment is paucity of savings. It is well realised that inflation is not contributing to any net rise in savings. From this angle there has been no communication between the Economic Survey and the budget.

What effect the budget will have on prices and the common man?

Dr Sen

On prices, one comes to the most difficult part of the budget. Normally the rise in excise duties, especially on steel and aluminium, is likely to lead to some increase not only in their prices, but also in the prices of a number of other commodities. These will, no doubt help anti-inflationary forces as they absorb surplus purchasing power. So the overall impact on the general price structure may be uncertain. One must, however, note the impact of a large volume of 'Black' purchasing power neutralising the latter effect. Apart from this, one has also to take into consideration the impact of continuing flow of deficit-spending. While the volume of deficit-spending in any single year may not be large, as is the case with this year's spending, one has to take into account the fact that such a method of financing has been in use continuously for a large number of years, while the rate of increase in real output has not been very satisfactory over these years. If the stimulus to investment as provided in this year's budget succeeds in raising the volume of industrial output to a significant extent, and the 'monsoon god' is not on the whole unfavourable, the impact of this year's budget on the price-structure may not prove to be inflationary.

Mr Newalkar

Excise levies on steel products and aluminium will result in price rise to the actual users and ultimately to the consumer. These two are the basic commodities for the engineering industries and already in the past three years their prices, especially that of steel, have been revised upwards. It is but natural, therefore, that the heavy levy imposed on steel products and aluminium will not stimulate engineesing industries.

Same is the case with levies on fertilisers and electrically operated pumps. These will not result in taxing the rich and more prosperous sections of the cultivators. It will proportionately hit the common cultivator also who uses fertilisers. But the levy is not likely to hit the consumers directly; it will be a burden on the industries. Duty on kerosene will also hit the common man, it being one of the necessities of life.

These levies make one feel that the budget proposals are not likely to boost development—agricultural or industrial.

How far, do you think, this budget will help increase employment opportunities and foster the growth of new entrepreneurship particularly ?

Mr Sheth

The budget as presented to Parliament aims at accelerating economic growth with social justice. It provides for a massive increase in Plan spending and the total size of the Central and Centrally-sponsored Plan schemes has been increased from Rs 1,455 crore in 1971-72 to Rs 1,787 crore in 1972-73. This increased provision—if it can be utilised—will serve as a catalytic agent for development in both the public and private sectors. To that extent, further employment opportunities will be created. Though no specific provision has been made for development in the eastern region, it is expected that the increased Plan outlays would be utilised in this part of the country to as large an extent as possible, since the Government is keen on activating economic growth and increasing employment opportunities in the eastern region.

The allocation of Rs 240 crore for social justice, including a lump sum of Rs 125 crore for the educated unemployed, primary education, slum clearance, rural water supply, etc—if properly and fully utilised—should help expand employment opportunities. But it is unfortunate that the Rs 50 crore project to meet rural unemployment as provided in the previous budget could not be implemented. This is not a good augury.

Mr Newalkar

So far as small industries are concerned, the budget proposals have not taken into account their special disabilities and extended the area of differential taxation, direct or indirect, excepting perhaps the retention of no excise duty on transistor radios of the value of Rs 165 and less. The small scale industries cover a long range and particularly those which have been started by technologists and engineers do deserve differential fiscal levies. They deserve the benefit of development rebate too, though it is likely to be abolished by 1974.

It is hoped that as has been assured by the Finance Minister, when the new fiscal policy will be formulated

on the basis of Wanchoo Commission's recommendations, small scale industries will get a better deal. This is essential because small scale industries are the most potential and fast maturing sector of the national economy.

Mr Birla

There is no particular proposal in the budget for the development of new entrepreneurship in the eastern region. However, larger allocation in the Plan will naturally create more employment.

Dr Mathew

It is a sad thing to note that there are no specific proposals in the budget for the creation of more job opportunities. However, the sharp step up in Plan outlay might have a favourable impact on the employment situation.

Mr Shroff

I feel that instead of raising taxation level on profits made, the Government should tax the capital employed. At present there is no penalty for ineffiiciency. The licensed capacity is also not fully utilised in many concerns. If the Government were to levy tax on the capital employed, nobody will afford to keep the plants idle. It will naturally increase employment opportunities and increase industrial production bringing in its wake a downward trend in prices. The budget proposals are not in any way indicative of Government's progress towards the national objective of socialism.

Mr Narayanaswamy

The emphasis on agricultural production is logical in a country like India and this must continue. Balanced industrial growth is very essential but can lead to disillusionment as employment provider as modern industry is highly automated. Tertiary sectors generally provide more employment than industries.

In view of our recent experience, do you consider the allocation made in the budget for defence adequate ? To what extent will this allocation go to promote the general industrial development of the country ?

Mr Easwaran

Defence expansions in all countries do promote a certain amount of industrial activity. We have the relic of the British days where they did not want the private enterprises to participate in arms and armaments manufacture. Therefore the armaments factories which are all under Defence Production sector will provide greater employment. The spill-over to private and other public sector projects will certainly provide for greater industrial activity.

Mr Narayanaswamy

An increase in defence allocation was expected and is legitimate; but still perhaps inadequate.

Dr Adiseshiah

In the absence of authoritative information on defence aspect of the budget, Dr Adiseshiah was not inclined to say anything on the question of defence and general development as a consequence of defence requirements.

Mr Birla

It is difficult for me to say whether the allocation made in the budget for defence is adequate. However, considering the bigger role India has to play and also considering our neighbours, we have to have a strong defence force. Any expenditure needed for that must be provided. Other countries are spending much more, our defence budget is modest.

The defence expenditure having an impact on the general industrial development of the country will depend on how much equipment we intend to produce internally as any purchase from outside will have no direct effect on the industrial development.

Mr Pandit

Taking an overall view of the budget, it is heartening to note that taking a lesson from the magnificent victory in the recent Indo-Pakistan conflict, the need for an adequte provision for defence has been recognised and sufficient funds based on a realistic assessment have been provided in the budget.

Mr Sheth

It is notable that the Finance Minister has been able to keep defence spending for 1972-73 at the same level of Rs 1408 crore, which represents the revised

Political Stability will Revive Investment

estimates for 1971-72. In sum, the provision for defence shows an increase of Rs 167 crore over the budget estimates for 1971-72. But such an increase is perhaps unavoidable, considering the hardware which had been lost in the Indo—Pakistan war. Considering that replacements of defence equipments will be largely made from indigenous sources, industries producing such equipment should get a boost. As a large proportion of defence industries is located in the eastern region, industrial development of this part of the country should benefit correspondingly.

What impact the budget proposals will have on export-oriented industries like jute, tea and engineering goods ?

Mr Birla

I do not think that the budget proposals will create any impact on the export-oriented industries provided steel is available to such industries at the international prices as per the policy of the Government.

Mr Sheth

The Finance Minister has undoubtedly reiterated the need for stimulating exports. But the budget proposals do not, unfortunately, provide any incentives for the growth of exports. As a matter of fact, the expected downward revision of the fiscal levy upon jute goods has not materialised. But Mr Chavan must be closely watching the trend of jute exports and he would not hesitate to revise the fiscal levy on jute goods downwards if the situation so demands. Similarly, tea and engineering goods exports have also not qualified

for any incentives. In view of the rise in steel prices due to additional levies proposed, the question of giving fresh concessions to the export of engineering goods needs attention. Owing to increasing competition in overseas markets the tea industry should also qualify for some incentives as far as exports are concerned.

Do you think the deficit financing contemplated in the budget is within safe limits ? Is it affecting the masses and economy ?

Dr Brahmananda

There are different measures of deficit financing. In India in recent years, deficit financing has contributed to the rise in price level. Through the control he wields over the banking system, the Finance Minister has become the sole arbiter of the course of the price level in the economy. As we have given greater importance to loans than deposits from the public and as there are delays and defaults in the recovery of the loans, the moment of expansion depends upon the authorities. I see no virtue in converting a saver into a borrower. The same thing is also happening in the cooperative sector.

In India today, it is not the capitalist or medium and small capitalist sector but the non-possessing sector whose number is legion, that is bearing the burden of deficit financing and credit expansion. Unless the authorities can see outside the perspective of the classes

Deficit Financing Has Long Ago Outlived Its Utility

to which they belong, it is difficult to make a dent upon poverty. I believe that deficit financing has long ago outlived its utility. It is the most regressive in its effect on the poor. It does not contribute to the rise in savings. It comes in the way of exports. It should be completely eschewed under the present circumstances. The gap between the Government receipts and expenditure is an illusory problem. At the lower level of prices the real value of expenditure will flow to the exchequer, through savings.

A steep rise in interest rates, exemption of savings from income tax and prospect of falling price level will together convert the gap into surplus, with considerable joy to the poorest sections of the community.

What have you to say about the increased Plan outlay ? Will it not give fillip to production and employment ?

Mr Newalkar

It has been proved in the past that the Plan outlay of the Government sets pace for economic development and the proposed increase in the annual Plan outlay which is substantial is the only redeeming feature which will go to boost development.

But the most important object which has to be achieved at no distant date is development through employment. Government spending on some schemes which virtually take the shape of relief measures will not go to solve the ever-widening and more forbidding problems of growing unemployment. Boosting agriculture, horticulture and acquaculturc on one side and industry, transport and communications on the other will alone, with in-built developmental impulse, help to achieve development through employment with consequent investment.

If there are no incentives to industries, how is it that upward tendency is noticed in post-budget session of the share market ?

The reaction of the market is one of relief and not of buoyancy. It is mainly due to the pleasant surprise of milder dose of taxation than was expected by the business and industry. But it is a negative feature. At best one can say that the budget proposals have not adversely affected current economic climate.

Is the budget socialistic in its frame, content and outlook ?

Dr Sen

The difficulty in this question is with regard to what one actually means by socialism. I would prefer the use of the word, egalitarian, rather than socialistic. When this year's budget is examined against the background of those of previous years, one has to answer the question in the affirmative. In this budget the prevailing design has been to tax the upper income groups with the exception of one or two levies. Moreover, as we pay attention to the pattern of new development expenditure, the emphasis becomes quite clear. In fact, as we look to the tax structure of this country, the trend is definitely towards egalitarianism. If the degree of the inequality of incomes is found to be increasing, this is due mostly to large-scale evasion of taxes both direct and indirect. The budget statement promises a thorough examination of the recommendations of the Wanchoo Committee, and if these are implemented quickly, there will definitely be an impact on the structure of incomes with a greater trend towards equality. Given the tax structure and the changing pattern of the development expenditure, the distribution of incomes will tend to be more and more equal as concealment of incomes for avoiding taxes becomes more difficult. This budget carries on the trend towards the reduction in the inequality of incomes, and as such is definitely socialistic in content and outlook.

Does the provision of Rs 125 crore for slum clearance, rural housing, schemes for the educated unemployed show that the Government is conscious of their responsibility in this regard ?

Dr Brahmananda

I have no doubt that as individuals, the Prime Minister and the Finance Minister are keenly concerned with the goal of removal of poverty. But unfortunately they are not economists and they are busy with affairs of the State. At best they can give broad directions. Schemes which you mentioned are certainly helpful but in the absence of a concerted, well-thought-out plan for poverty removal, inter-temporal and inter-spatial, such isolated measures may not have that impact which the leaders desire. We must not forget that bulk of the poor are affected by inflation. There is no pay commission to escalate their money-wages and there is no way they can escape this burden.

BOOKS

Financial Relations

The Central Financing of State Plans in the Indian Federation *by Amiya Chatterjee; Published by Firma K.L. Mukhopadhyay, Calcutta; Pages* 214; *Price Rs 30.*

Amiya Chatterji's book fills in a long-felt need of the students of economics who are handicapped in respect of practical application of academic theory. The book provides a deep insight into the operational functioning of the Centre in the financing of State Plans. It gives in detail the various vicissitudes the concept of Central Assistance has passed through, during the past 20 years.

The author also discusses the question of devolution of funds in accordance with the Constitutional provision for setting up a Finance Commission. Attempt has also been made to present an integrated view of the Constitutional Rights and economic responsibilities of the Federal Government *vis-a-vis* the States. The book also highlights the difficulty in having a comparative assessment of the incidence of central taxes per head and the receipts of tax shares and grants per head in the absence of data.

The lapsing of funds due to the inability of the executive to spend the appropriated amount within a specified period is also discussed. The suggestion is to relax the procedure pertaining to the spending of allocated funds in departments like Irrigation and Public Works. This will minimise the haste in spending the money by a specified date.

In the concluding chapter the author has discussed the possibilities of using central assistance as financial inducement for development. The book also suggests that a single machinery should be set up to examine the Plan and non-Plan details of revenue expenditure with a view to recommend grants for all purposes, instead of having two separate organisations of Planning Commission and the Finance Commission which is set up quinquennialy according to the Constitutional provision. In a nutshell, the book serves as a useful guide to all those who are interested in the financial collaboration of the Central Government in the developmental activities of the State Governments.

K.B. Lall

Key to a Maze

The Organisation of the Government of India, Second Revised Edition, *by the Indian Institute of Public Administration; Published by Somaiya Publications, Bombay,* 1971; *Pages 538; Price Rs 60.*

This volume provides an overview of the history, organisation and functions of the complex machinery that is the Government of India. Considerable research has gone into this revised compilation, and with a few new chapters added and data updated, one finds it both interesting and informative.

The first part covers the constitutional development and growth of the government machinery. The chapter on administrative changes from 1773 till today, outlines important landmarks in the history of administration. Since the establishment of a Central Government in 1773, the machinery has assumed significant dimensions. In 1843, when the Central Secretariat was set up, there were only four departments, Home, Foreign, Finance and Military. In August, 1957, the number rose to 18. And now, there are as many as 50 departments and 500 attached and subordinate offices besides more than 100 public undertakings, employing more than 27 lakh persons. Along with the proliferation of activities were changes and innovations, varied and numerous, in the content and complexion of the system. But significantly, the basic frame of the machinery remains almost intact.

The second part delineates the evolution, functions and organisation of each central department with details of its divisions, offices and staff, supported by charts. We also get a bird's eye view of all the public undertakings under each department. Chapters on personnel administration and financial administration provide an insight into the services, staffing pattern, training, budgetary control, etc. The Institute has done well by adding a chapter on the Administrative Reforms Commission, touching upon the areas of its inquiry and important findings.

But having done this much, one feels, a brief outline of the major efforts in administrative reform, especially after Independence, could also have been provided. This would have added to the richness of the volume. Nevertheless, it is a valuable reference book for all interested in public administration, and a useful induction material for freshers in government service.

—Chandrasekharan.

Public Sector Memorabilia

Commerce Yearbook of Public Sector, 1971; *Edited by Vadilal Dagli; Published by Commerce (1935) Ltd. Bombay; Pages 372; Price Rs 25.*

The first edition of *Commerce Yearbook of Public Sector* was published in 1970. This new edition carries more comprehensive material on the Undertakings. A noteworthy feature of the new volume is a synoptic statistical asesssment of the size of the public sector in relation to the Indian economy, which is followed by a review of the working of the enterprises owned by the Central Government.

The *Yearbook* is a welcome publication and contains all the basic information about each of the 113 Central Government Undertakings and 220 State Government Undertakings.

—Pritam Lal

Towards Self-reliance

Savings and Investment Must Rise

RUDDAR DUTT

CAPITAL formation in the Indian economy depends largely on how much we can increase the share of savings in net domestic product from the level that obtains today. In the post-independence period, India has continued to be a net importer of goods and services and the gap in the balance of payments has been financed by external assistance. This trend has to be reversed and for this purpose, the level of domestic consumption has to be reduced further to generate an export surplus. It is then that the objective of self-reliance can be realised.

The net domestic consumption of NDP has remained around 91 per cent during 1968-69 to 1971-72. This leaves very little for investment. The Planning Commission, in its perspective, hopes to reduce the level of consumption to 83.8 per cent of NDP. This will release 15.9 per cent of NDP for investment and an export surplus of 0.3 per cent.

An underdeveloped country seeking growth alongside self-reliance has to step up investment and, eventually finance it very largely from its own savings. The basic medium term and long term development objectives set out in the Fourth Plan require that the present virtual levelling off in the rate of savings must soon be made to give way to a quite sharply rising trend so that a corresponding rise in the rate of investment may be feasible on the basis of mobilisation of domestic resources.

The Fourth Plan Mid-term Appraisal has attempted an estimate of investment and saving as a proportion of net domestic product (NDP) at market prices during the seventies.

The rate of investment reached a level of 12 per cent in 1960-61, the last year of the Second Plan. In 1965-66, the last year of the Third Plan it was a little higher at 13.4 per cent. But during the next three years, there was a sharp set back and the rate tumbled down to barely 9.5 per cent in 1968-69. This decline was to a large extent due to a fall in the rate of savings. The saving rate which had touched a peak level of 11.1 per cent in 1965-66 slumped to 8.4 per cent in 1968-69, when foreign saving rate fell to the low figure of 1.1 per cent showing a sharp decline from the earlier years as can be seen in Table I.

The annual average level of investment during the Third Plan was 12.2 per cent of NDP while during the Annual Plans it was only 10.7 per cent. Since the average annual inflow in the foreign savings in the two periods is nearly the same (i.e. 2.2 per cent), the fall in the average level of investment from 12.2 per cent to 10.7 per cent is accounted for by a fall in savings from 10.0 per cent to 8.4 per cent.

Expectations and Assumptions

On the basis of the level of actual savings and investment realised during the first three years of the Fourth Plan, the Mid-term Appraisal has attempted a projection of the level of saving and investment during the entire Fourth Plan period. Table II (on the next page) reveals that the Fourth Plan expects to raise the level of investment, as a percentage of NDP at market prices, from 9.5 per cent in 1969-70 to 11.1 per cent in 1973-74. Similarly the rate of domestic savings is expected to rise marginally from a level of 8.4 per cent in 1968-69 to a level of 10.2 per cent in 1973-74. This is in sharp contrast to the Plan targets of 13.4 per cent and 9.9 per cent respectively by 1973-74.

Taking the Fourth Plan period as a whole, the annual average level of investment will be around 10 per cent and annual average savings 8.9 per cent, foreign savings accounting for 1.1 per cent.

The average annual level of investment is expected to be lower in the Fourth Plan than the period of the Third Plan or even the period

TABLE I

Rate of Investment and Savings
(1960-61 to 1968-69)
Percentage of NDP at current prices

Year	Investment 2=4+3	Domestic Savings	Foreign Savings
1960-61	12.0	8.9	3.1
1961-62	10.8	8.6	2.2
1962-63	12.0	9.6	2.4
1963-64	12.7	10.7	2.0
1964-65	12.0	9.8	2.2
1965-66	13.4	11.1	2.3
Average for Third Plan	12.2	10.0	2.2
1966-67	12.2	9.0	3.2
1967-68	10.6	7.9	2.7
1968-69	9.5	8.4	1.1
Average for Annual Plans	10.7	8.4	2.3

Prof. Ruddar Dutt is Head of the Department of Economics, Atmaram Sanatan Dharma College, New Delhi.

of the Annual Plans, when the economy suffered the combined effect of drought and recession. Thus, the economy has a long way to go before adequate rates of savings and investment are realised for a self-generating economy growing at a rate of 6-7 per cent per annum. Even the relatively low rates visualised in the Mid-term Appraisal are based on three assumptions viz.,

(i) The marginal rate of savings in the public sector in the next two years (1972-73 and 1973-74) is as high as 73.5 per cent.

(ii) No extra-expenditures are incurred by the Government either on Bangla Desh refugees or in the form of any future increase in pay and dearness allowance of Government employees.

(iii) The marginal rate of private savings is sustained at the current level in the last two years of the Plan.

Some of the assumptions given above are of doubtful validity and the Mid-term Appraisal is conscious of this fact. It, therefore, states: "Should any expenditure on these accounts become necessary, other things remaining the same, public savings would correspondingly go down. In that case, the above estimate of public savings could be realised only by either equivalent economy in public expansion or drawing enough of private disposable income into public disposable income. In the latter case, however, the private savings would be adversely affected". In view of the expenditures on Bangla Desh refugees in excess of the anticipated levels and in view of the fact that the Government is not in a position to check the rising price level which may induce pay increases to Government employees, even the relatively low level of 11.1 per cent of investment targeted in the Plan seems improbable of realising.

Public Sector Savings

The investible resources of the public sector consist of (i) savings of the public sector, (ii) draft on private savings and (iii) draft on foreign savings. Savings of the public sector are derived from net disposable income of the public sector which consists of State revenue out of taxation and factor incomes arising in public enterprises. The public sector draws on private savings in several ways. The State gets investible funds by market borrowings, out of the borrowings of public financial institutions and public enterprises. The State also derives resources from small saving schemes. In addition to it, public savings consist of receipts in State provident funds, annuity deposits, compulsory deposits and other miscellaneous capital receipts. This leads to an inflow of resources to the public sector and to that extent private sector's share in private savings is reduced. To this are added the net inflow of foreign savings. In this way, net available resources with the public sector are enlarged.

TABLE II

Total Availability of Investible Resources during the Fourth Plan (1969-70 to 1973-74)

Percentage of NDP at current prices

	Investment	Domestic Savings			Foreign Savings
		Public	Private	Total	
1968-69	9.5	1.4	7.0	8.4	1.1
1969-70	9.2	0.9	7.5	8.4	0.8
1970-71	9.6	1.1	7.2	8.3	1.3
1971-72	9 6	0.8	7.4	8.2	1.4
1972-73	10.5	2.2	7.3	9.5	1.0
1973-74	11.1	2.9	7.3	10.2	0.9
Average for the Fourth Plan	10.0	1.6	7.3	8.9	1.1

Whereas the share of public sector in the total investible resources in 1968-69 was 56.8 per cent, it is expected to rise to a level of 64.5 per cent by 1973-74. This is due to the fact that in India, on ideological grounds, the State is encouraging a diversion of savings from private sector to the public sector. This is being done on account of the following reasons: (i) The savings of the private sector lead to the creation of private assets which are the exclusive privilege of the rich few and, consequently, tend to enhance and perpetuate inequalities of income and wealth. On the other hand public savings can be directed into areas of priority investment which can be used as a lever for growth with social justice. (ii) Private saving, when it fails to find a profitable investment, is used to satisfy the frivolous wants of the rich for jewellery, costly consumer durables and ostentatious consumption. Contrariwise, a purposeful State can make use of public savings to increase the welfare of the masses, rather than of the upper classes. (iii) Private savings which take the form of unaccounted money tend to promote luxury house building, speculative inventories and real estate, smuggled gold and clandestine foreign exchange balances. Transfer of private savings to public sector can help to check canalisation of private savings in essential consumption.

Private Sector Savings

In the public sector, the disposable income of the corporate sector is a form of direct savings. There has been a great demand for the generation of surpluses in the public sector so that they can become an effective source for financing economic growth. For this purpose, operational costs of the public sector undertakings have to be reduced consistent with efficiency so that retained profits are enlarged.

Private sector comprises (i) the private corporate sector, (ii) the cooperative sector and (iii) the household sector. The disposable

(*Continued on page* 240)

Results of a Case Study

ABORTION LAW REFORM

Need for Educating the Masses

DR (MRS) NIRMAL SAWHNEY

ABORTION which is the miscarriage of pregnancy before maturity is of two types—natural and induced. The former usually occurs due to some physical impairment, shock or stress. Induced abortion, on the other hand, is a deliberate attempt to terminate unwanted pregnancy. According to official figures, nearly 65 lakh abortions, 40 lakh of them illegal, take place in India every year. The yearly total of abortions, legal and illegal, in the world is estimated to be about three crore.

Birth rates have generally declined in countries where abortion has been legalised. In Japan, Czechoslovakia, Poland and Hungary this measure has played a decisive role in reducing birth rate in the shortest possible time. The Japanese record indicates that the rate of abortions rose from 11.8 in 1949 to a peak of 50.2 per 1000 women of child bearing age in 1955, the period in which that country achieved an unprecedented decline in birth rate. Similarly in Hungary—the country with the lowest birth rate in the world—during 1960-61 as many as 139 abortions for every 100 births have been noted. In Bulgaria, Czechoslovakia and Poland, the corresponding recorded rate is 58, 54, and 34 per 100 births respectively.

Safer Methods

Abortion was used to regulate human fertility almost from the dawn of human existence. In course of time most countries attempted to restrict abortion, partly on religious grounds, but largely because the methods available were primitive until relatively recently. This endangered the life or health of large numbers of women.

The advance of medical science has, however, made safer methods of abortion possible obviating the need for restriction. Changes in religious and legal views have been followed by changes in abortion laws in many countries.

Legislative permissiveness varies from country to country. Abortion is permissible on medical or contraceptive grounds in the Asian countries of Japan, China, Singapore; Hungary, Czechoslovakia, Poland, Romania, Yugoslavia, USSR, German Democratic Republic, the UK, Sweden, Denmark and Switzerland in Europe; Ethiopia and Kenya in Africa; Cuba in South America and many states in the USA.

Second Line of Defence

The aim of legalising abortion in any country is to bring down the incidence of criminal abortion because of its danger to life, health and fertility of the women. In India abortion law has been liberalised not only to protect the physical and mental health of the mothers but also as a second line of defence in the battle against unwanted children. It should be stressed that this is not our first line of defence.

The main provisions of the Medical Termination of Pregnancy Bill which Parliament has approved are that pregnancy can be terminated if its continuance would involve a risk to the life of the pregnant woman or of grave injury to her physical or mental health, or if there is a substantial risk that the child born would suffer from such physical or mental abnormalities as to be seriously handicapped.

Grave injury has been further explained to include pregnancy caused by rape or as a result of failure of any device or method used by any married woman or her husband for the purpose of limiting the number of children.

Todate, there is no such thing as a hundred per cent effective contraceptive. So, there will always be a number of "contraceptive failures" ending with pregnancy for the women—the classic "unplanned pregnancy and the unwanted child." Such a situation will come as a grievous shock which constitutes a grave injury to the mental health of the pregnant women. The new abortion law which comes into force from April 1, 1972 permits termination of pregnancy in such circumstances.

Experience throughout the world has been that higher the occupational and educational status of a group, greater their receptivity to the programmes of family planning. There is a definite and undeniable relationship between the socio-economic status of a people and their attitude towards different methods of family planning. That this is especially true of a country like India and a radical birth control measure like abortion is indicated in the results of a study conducted in the city of Lucknnow. In all 500 persons, selected at random from among the visitors to the seven family welfare planning clinics scattered all over the city, were interviewed on the desirability and feasibility of liberalising abortion. Obviously they were people who believed in family planning. It is generally observed that those who have crossed the barriers of society and have accepted the use of conventional contraceptive techniques at least, are in a better position to

Dr (Mrs) Sawhney is a social scientist attached to the State Family Planning Bureau, Lucknow (UP)

throw light on the desirability and feasibility of the relaxation in abortion law. It was for this purpose that the random survey was conducted.

In was found that 31.6 per cent of the studied couples are for abortion as a method of family limitation, whereas 69.4 per cent show unfavourable attitudes. In a similar study conducted at Delhi on the attitude of medical practitioners towards liberalisation of abortions, the percentage of people who supported abortion as a birth preventive technique was as high as 53.7. In what follows an attempt is made to correlate the views on abortion with the socio-economic characteristics of the surveyed population.

Reaction Determinants

The study revealed that illiterates are completely opposed to the reform of abortion law. Amongst those who can be classified as literates with education up to fifth class, about 20 per cent showed their inclination, while 80 per cent were resistant to the idea. Couples with secondary education exhibited greater preference for it as a method of family planning (35 per cent). In the case of higher education group (degree holders) the percentage of for and against abortion, is almost equal (58 per cent for and 52 per cent against). Another study based on the data collected from the highly educated group *i.e.*, university teachers with educational qualifications as M.A. and Ph.D. has found almost a similar percentage of supporters of the liberalisation of abortion law.

Economic status is yet another determinant of the pace and degree of changes in society. Thus correlating the income of a couple with that of their attitude towards changes in society the survey found that only a little over 15 per cent of the couples with income up to Rs 100 per month favoured the idea of induced abortion. The percentage increased with the higher income groups: Rs 101-200 (22 per cent), Rs 201-300 (26.67 per cent) and Rs 301 and obove (57.69 per cent).

Since human beings are greatly influenced by the social and religious customs, tradition and norms, it is worth while to classify the opinions expressed according to the main religious classes in India—Hindu, Muslim, Sikh and Christian. Of the total of 384 Hindus interviewed, including scheduled castes, a little over one-third (34.9 per cent) were for abortion, whereas nearly 65 per cent were opposed to it. Muslims showed great resistence with 84.3 per cent of the surveyed population (89) opposing the method as a form of birth planning. Similarly, the Sikh community also frowned upon the relaxation in the abortion law. As the number of Christian couples interviewed was very small (6 only) no comments need be offered.

In another study conducted in city during 1968, the community-wise figures in favour of abortion were 17.4 per cent (Hindus), 3.76 per cent (Muslims), 21.67 per cent (Sikhs) and 60.33 per cent (Christians). This proves religion is one of the determinants which influence people's attitude to a substantial degree.

Like religious groups, different castes have also their own social procedures, taboos and standards to follow. The proportion of upper caste Hindus favouring abortion is higher (36.8 per cent), than that of intermediate caste (23.3 per cent), lower caste (30.3 per cent) and non-Hindus (17.9 per cent).

The findings of this study show that populat on problem cannot be solved in isolation by chemical or medical services. What is required is a vigorous programme of mass education to convince the people not only of the benefits of small family but the relative merits and demerits of each and every method offered to achieve this objective. This is all the more necessary in the case of a radical measure, like abortion, and for two very good reasons: First, it runs against the grain of the beliefs of many of our religious-minded people. Secondly, the liberalised terms for terminating pregnancy can very often be misused either by unscrupulous elements or out of sheer ignorance. In both cases the consequences can be fatal. Government should take all these considerations into account in publicising the new and essentially progressive measure.

Savings and Investment

(*Continued from page 238*)

income of the corporate and co-operative sectors is synonymous with savings, because there is no such thing as corporate or cooperative consumption. However, while determining disposable income, there are a large number of loop-holes which enable conspicuous consumption by top business executives and directors as the operating expenses of the firms. This leads to a leakage in savings for consumption purposes. It is necessary that such leakages are plugged.

Since the corporate sector is relatively small, the bulk of disposable income arises in the household sector. But the rate of savings in the household sector is barely 7-8per cent. It is difficult to raise the level of savings in this sector, more so because of several sociological constraints and the consequence of the demonstration effect created by the higher income groups in recent years.

Simultaneously, two phenomena are noticeable. First, there is a competitive increase in non-functional consumption on ceremonies like marriages, etc. Secondly, there is a rat race in the use of prestige articles and services, which are rapidly becoming the indices of higher living standards. The continuous rise in prices has eroded whatever little savings the less-well-to-do could make earlier.

Thus, growing inequality has acted in a two-fold manner to cut into the saving potential of the household sector. The Fourth Plan Mid-term Appraisal, therefore, states, "It is commonly claimed in defence of inequality that it at least yields a higher rate of saving. In India, this hypothesis does not hold good. Inequality, in fact, is a major constraint on efforts to step up the rate of household saving. It may be pointed out that, during the years of the great inflationary rise in prices during the mid-sixties, when inequlity must have increased, the rate of private saving did not go up but declined from 9.6 per cent in 1965-66 to 7.1 per cent in 1967-68."

We must reverse this trend so as to increase the rate of savings and investment for our progress and prosperity.

newsletters

Kerala Budget

Gloomy Picture with Purple Patches

(From Our Trivandrum Correspondent)

KERALA'S budget for 1972-73, presented in the State Assembly on February 25 last, visualises a far from alluring prospect. With additional taxation proposals for Rs 5.5 crore which are expected to bring down the revenue deficit for the year from the overall figure of Rs 16.50 crore (Revenue—Rs 191.32 crore) to Rs 11 crore, the budget, according to the State Finance Minister, "has been framed against the background of severe resource constraints." It also points out with concern the State Government's deficit which is steadily increasing year after year, in view of the widening disparity between the expenditure and the resources that could be raised.

The budget seeks to raise additional resources by (1) increasing the rate of general sales tax from 3 to 3.5 per cent; (2) levying a 3 per cent purchase tax on petroleum products bought by the Indian Oil Company and other companies from the Cochin Refineries and transported outside for sale and (3) levying an irriagation cess of Rs 25 per hectare on the 4 lakh hectares of irrigated land in the State. A revision of electricity tariff and larger resources for the Electricity Board has also been proposed.

It is not, in the least, surprising that against the dull fiscal background of the State, no spectacular developmental or welfare scheme has been proposed. The meagre amount of Rs 3.03 crore provided for certain employment schemes (soil conservation in Harijan areas and tribal blocks, engineers' co-operatives, functional industrial estates and abolition of shifts in primary schools) might not enable the State to touch even the fringe of the problem. The number of job seekers registered with the Employment Exchange has almost doubled from 1.79 lakh at the end of 1967 to 3.57 lakh at the end of 1971. Among them, the number of educated unemployed at the end of 1971 was: those below S S.L.C. – over 1.56 lakh; and S.S.L C. over 1.67 lakh; graduates over 20,800; I.T.I. certificate holders about 10,000; and medical graduates over 400. These figures are based on a sample survey conducted as far back as 1965. According to it, the State had over 5.5 lakh unemployed and 14 lakh underemployed persons.

While the State Planning Board has, in the Economic Review for 1971, taken note of the general awareness of the State Government for rapid industrialisation, specially in the small-scale sector to relieve unemployment, the budget does not give it any concrete expression. Except providing for the expansion of some of the already existing industries, no large-scale industrialisation programme has been formulated. Even the development schemes for traditional and agro-based industries that dominate the industrial sector like the cashew, coir and handloom industries and which are presently in crisis of "unprecedented dimensions" would be dependent on substantial financial support from the Central Government for their implementation.

Industrial production in the State has been stagnant. Most of the State Government-owned companies (seven in all) have suffered losses. Productivity in the traditional industrial sector, which has continued with outmoded techniques of production, has been low. And employment in the organised private industry has been declining although more and more institutional finance has been provided to it.

While the State's economy, as spelt out in the budget, seems to be nowhere near a "take-off" stage, there are a few purple patches as well. Rice production has recorded an increase of 5.87 per cent. Pepper production has gone up by 4 per cent. There has also been a marginal increase in the production of other crops except tapioca and bananas. Among plantation crops, coffee and rubber have registered increase in output. Fish production, too, has risen marginally. However, a Green Revolution, as witnessed in various other States, has yet to touch Kerala. Agriculture in the State is making only a gradual march-forward.

During 1971-72, the prices received by the farmer declined considerably while the index of prices paid by him, which includes both domestic expenditure and farm cultivation costs, moved up. This has placed the cultivators in a relatively disadvantageous position.

Against the backdrop of a stagnant economy, the budget has proposed a few noteworthy measures under social welfare and social justice. The rate of old age pension goes up from Rs 20 to Rs 25 and the minimum pension to retired civil service personnel from Rs 49 to Rs 50 per mensem. On the other side, pensions, allowances and other concessions worth Rs 4.4 lakh paid to the erstwhile princes and feudal chieftains are abolished. A few schemes have also been proposed for quickening the pace of implementation of land reforms, providing housing facilities to the landless (funds expected from the Central Government) and for ameliorating the lot of the weaker sections of society.

The mid-term appraisal of the non-Plan gap by the State Government showed it to be Rs 107 crore whereas the Planning Commission estimated it at Rs 67 crore. The State Government's overdraft at the end of the current financial year would amount to Rs 33.53 crore. The budget states that Central assistance for the State's Fourth Plan has been fixed at Rs 175 crore. During this period the State has to remit Rs 129 crore by way of repayment of earlier loans and Rs 63 crore by way of interest on Central loans.

A Budget without Shocks

Tamil Nadu's New Levies and Welfare Measures

(From Our Madras Correspondent)

FOR the many of those bracing themselves for a fresh dose of taxation, and others expecting it at some point or other, the Tamil Nadu Budget for 1972-73, presented on March 1, was a pleasant surprise. It was practically free from many or heavy levies; even the few additional levies on existing rates have been assigned for welfare measures of the rural and the agricultural segments of the population.

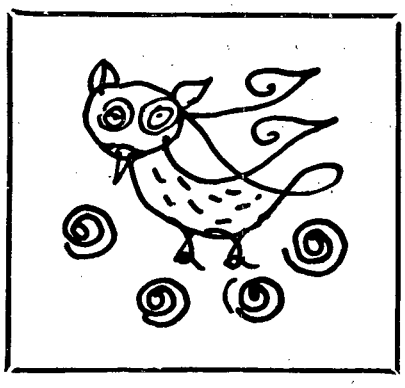
One new levy is a surcharge of 10 per cent on Motor Vehicles Tax, which is expected to yield Rs 1.50 crore. The proceeds of this levy, will go into building a Road Development Fund. A five-year programme will be undertaken, as a first step, to link the villages having a population of 1,500 and more with main roads and also connect the adjacent small villages. Besides, drinking water facilities will be provided in the villages. To enable the Panchayat Unions to provide these facilities and link roads for the small villages and hamlets in their areas, the ceiling for the local cess surcharge levied by them will be raised from the present level of Rs 1.50 to Rs 2.50.

Another levy is the increase in the betting from 15 to 20 per cent for bookies and totalizators, and from 20 to 25 per cent for others. The resulting additional income of about Rs 50 lakh is proposed to be utilised under the Beggar Rehabilitation Fund to afford adequate medical aid and provide for maintenance and vocational training of these less fortunate among the society. There are 60,000 beggars and 6,000 leprous beggars in the State, and the Beggar Rehabilitation Fund created in June 1971 has already raised, by way of donations and contributions from the public, over a crore of rupees.

To cover the overdraft arising from the implementation of the Plan during 1971-72, credit has been taken for a ways and means accommodation of Rs 66.33 crore from the Central Government, of which Rs 1.99 crore will be paid during the current year and Rs 9.95 crore in 1972-73. Repayment of both interest and principal to the Centre on this account has been provided for in the budget estimates.

Debt Reduction

Under some of the important decisions announced by the State Government, various measures are proposed to be introduced during the year to lessen the debt burdens of the agriculturists, labourers, wage earners and Government employees in the low-income groups. It is also proposed to wipe out arrears of rent due from tenants to landowners up to June 30, 1971 (till the end of *Fasli* 1380) by another legislation. This would apply to all tenants who have cleared their dues for the current *Fasli*.



Under a new scheme called the "Tamil Nadu Fellowship Scheme" scholars from the State now living abroad will be invited to come back and stay in this State for specific periods ranging from six months to a year, "in order to introduce in our institutions the modern techniques learnt by them abroad." Fifty fellowships will be awarded in the first instance under this scheme.

The Government employees have been promised higher rates of House Rent Allowance, effective from April 1, this year. The new rates will be 12 per cent for Madras city, 8 per cent for Madurai and Coimbatore, 6 per cent in Grade II areas and 4 per cent in Grade III areas. The system of confidential reports, 'long considered by the N.G.G.O's to be a relic of feudal attitude,' will also be dispensed with, and in their place only records of disciplinary action, if any, against the employees will be taken into consideration at the time of promotions.

There are also proposals of interest to the Panchayat Unions. These include i) the take-over of 1,000 miles of bus-route roads from the Panchayat Unions, and ii) the take-over and running of 200 old dispensaries, which the Panchayat Unions had inherited from the erstwhile district boards.

Combating Price Rise

The problem of rising prices of essential articles of daily use is sought to be tackled by expanding the scope of the existing State Civil Supplies Corporation and establishing soon a Tamil Nadu State Trading Corporation. A Tamil Nadu Dairy Corporation is also proposed to be set up to implement schemes of higher milk production and provide adequate facilities for the collection, processing and distribution of milk.

Inasmuch as the Government have not been in a position to get any significant land surplus, because of the various exemptions under the existing Land Ceiling Act, it is proposed to withdraw all exemptions in favour of trusts created after January 26, 1950. Trusts for educational purposes and medical facilities will, however, be allowed these exemptions to a limited extent.

In addition, the Government have decided to reduce with effect from March 1, 1972, the present ceiling of land from 60 to 40 standard acres allowed for a family.

Necessary legislation for these two proposals will be introduced in the current session.

The Budget for 1972-73 anticipates a receipt of Rs 397.27 crore and an expenditure of Rs 394.78 crore, with a surplus of Rs 2.49 crore against an expected surplus of Rs 1.74 crore for the year 1971-72.

Making the Konkan Coast More Navigable

(From Our Bombay Correspondent)

WITH the acquisition of the 500-tonne 'Agasti', built at the Mazgaon Docks, Maharashtra Government has now four dredgers. This will go a long way in making many a small port more accessible on the Konkan coast. The automatic, cutter-suction type 'Agasti', the first of its kind built by the Mazgaon Docks, costs the State Government Rs 1.08 crore. Its foreign exchange component comes to about Rs 22 lakh.

Maharashtra has a long coast line, about 560 km from Daman in the North to Vengurla in the South, dotted with 49 small, medium and big ports. The majority of these, however, are small or meduium, and include places like Malvan, Vengurla, Vijaydurga, Jaigad, Ratnagiri, Dabhol and Harnai in Ratnagiri district and Srivardhan, Janjira-Murud, Revas, Dharamtar, Uran, and Mora in Kolaba district. Many of these ports had of long become unserviceable due to the accumulation of silt at their approaches deposited by rivers flowing from the Sahyadri ranges. Steamers cannot approach the wharfs and the passengers and goods have to be transhipped in small country boats. The travelling public, therefore, prefers road transport, although costly and time-consuming for the long distances involved. For example, Bombay can be reached from Janjira-Murad in about four hours by sea, whereas it takes six to seven hours by road.

Athough small ports come under the purview of the State Government, the Central Government was looking after these on an agency basis till recently. As a first step towards assuming full responsibility Maharashtra now has created a, special port development authority. The authority will remove the silt from 12 out of 49 ports in the first instance. It is estimated that a mass of about two lakh cubic metres of silt will have to be lifted to make these ports fully navigable. The State Government already has a tidy fleet of three dredgers—'Vashishtha', 'Girana' and 'Shastri', but they could not cope with the work and the need for a bigger, modern dredger was felt. The contract for such a dredger was given to the Mazgaon Docks which started working on it in June 1970 and delivered it to the State Government on February 10 last, much ahead of schedule. The new dredger 'Agasti' is fitted with a 675 H. P. engine and can remove 500 tonnes of silt per hour, from a maximum depth of 10 meters.

Piped Water for Rural Areas

Maharashtra Government has chalked out an ambitious programme for supplying piped water for villages and has provided a sum of Rs 2 crore for it in the Fourth Plan period.

Under the programme, the Government advances loans upto 90 per cent to the cost of the scheme and the remaining 10 per cent is to be met by the villages concerned. The Life Insurance Corporation has agreed to advance Rs 10 crore for these schemes during the Fourth Plan period. Of this, Rs 2.37 crore has already been given to 23 Zila Parishads. In addition the Government has since May 1962 been implementing a programme for providing at least one well for the supply of drinking water for each village. During the past nine years 36,058 wells were constructed at a total cost of Rs 746.19 lakh. The Government has provided a sum of Rs 210 lakh during the current year for this purpose.

LIC's Big Housing Scheme

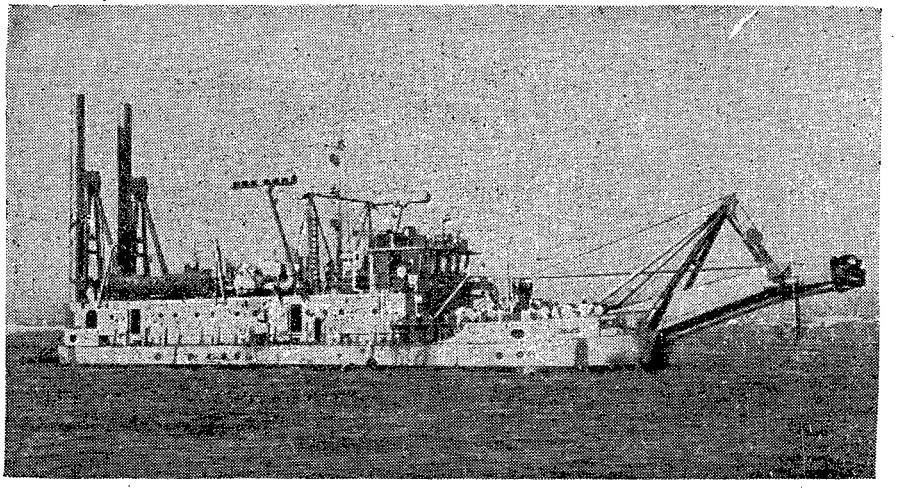
The Life Insurance Corporation of India has undertaken a housing project at Borivli in Bombay, under which over 3,000 flats of various sizes are under construction. Of these, the first lot of 300 flats is already complete for allotment. The flats will be given to the policyholders on an instalment basis. The prospective purchasers will have to form a cooperative society to which the entire building will be sold. There was a big response to the advertisements announcing this scheme. The entire project is expected to be completed by the end of 1973.

Housing Board's Decision

The Maharashtra Housing Board has now decided to offer 46,000 tenements built over the years to the tenants on ownership basis.

The tenements will be handed over to tenants' co-operatives. The residents of these tenements will have to pay a part of the agreed price in cash and the remaining amount in monthly instalments spread over five years. The Board has evolved a formula under which prices will be much less than prevailing market rates, at least in Bombay, where over 90 per cent of these tenements are located. The Board will utilise the money so realised for constructing more houses.

The dredger, 'Agasti' built at the Mazgaon docks



Snippets...

The U.P. Government will implement an employment programme costing Rs 8 crore during 1972-73 meant mainly for the educated and technically qualified unemployed such as agricultural graduates and engineers. It will provide direct employment to more than 13,000 people and indirect to 2,000 people. The cost of the programme will be shared equally between the State and the Central Government.

*

The Oil and Natural Gas Commission has struck high quality oil at Dabka gas field in Baroda district.

*

A Rs 3 crore scooter plant is to be set up in the private sector in Hyderabad, with a production capacity of 50,000 scooters and 30,000 motorcycles per annum. The cost of the vehicle would be between Rs 2,000 to Rs 2,500, and 60 per cent of the components would be obtained from the ancillary small-scale units in Hyderabad.

*

The export of cashew kernels during April 1971 to January 1972 amounted to 54,184 tonnes valued at Rs 55.02 crore. This is 25 per cent more than the exports during the corresponding period, last year,

*

The World Bank has approved a grant of one lakh dollars (Rs 7.3 lakh) as part of an initial fund for an international crops research institute for the semi-arid areas, to be located in India. The Institute is expected to concentrate on four of the world's major crops, namely sorghum, pearl millet, chick-peas and pigeon peas, and will benefit farmers owning non-irrigated land.

*

The engineers of the Beas Dam Project have invented and fabricated a Belt Crete which can supply concrete at any point between its span unlike the simple conveyor which carries the concrete to its far end only. By making Belt Crete in their own workshop, the project authorities have saved Rs 94,000 in foreign exchange besides effecting an economy of Rs 3.82 lakh in the operational cost.

*

The International Development Association (IDA) has approved two credits amounting to $ 44 million (Rs 33 crore) to benefit farmers in Bihar and Maharashtra. The Bihar project aims at improvements in the agricultural marketing system in the state and the credit approved by IDA is for $ 14 million (Rs 10 crore). The $ 30 million (Rs 22.5 crore) approved for Maharashtra is to be utilised to finance investment in minor irrigation and land development.

*

India tops the world in highest per hectare yield in grape cultivation with 25 tonnes per hectare, five times the world average yield. Grapes are grown over 10,000 hectares in the country. Mysore tops with 3,900 hectares, followed by Maharashtra and Andhra Pradesh.

*

India has orders on hand for exporting Rs 56 crore worth of railway wagons and equipment, besides about Rs 15 crore worth of general engineering goods during 1972-73.

*

The Indian Grain Storage Institute is releasing four types of metal storage bins for mass production during the current harvest season, in order to cut-back the 10 per cent of foodgrains production lost to rats and insects each year. Forty lakh rupees from PL 480 funds have been earmarked for Punjab, Madhya Pradesh, Bihar and UP to subsidise modernisation of rural grain storage practices,

*

A project for the establishment of a large-sized sheep breeding farm at Fatehpur in Sikar district of Rajasthan has been drawn up. Likely to cost about Rs 89 lakh the farm, when fully developed, will have about 7,000 head of sheep of all types.

*

Residential accommodation for workers of 30 Ordnance Factories spread over six States is being given high priority. The Ministry of Defence has prepared a 10-year programme for the construction of houses for workers at a cost of Rs 27 crore. By the end of the current financial year, 6,100 quarters of various types are expected to be completed.

*

India has entered the foreign markets for the export of electric fans. In 1970-71 fans and parts earned foreign exchnge valued at Rs. 1.44 crore out of which ceiling fans alone netted Rs. 1.26 crore. Iraq emerged as the leading buyer of Indian fans with an intake valued at Rs 80 lakhs, last year. Among the other importers were Sudan, Kuwait, Nigeria, Iran and Malaysia.

*

The Gujarat State Financial Corporation and the Gujarat Industrial Investment Corporation have devised a scheme to attract medium and large industries to less industrialised areas in Gujarat, by advancing interest-free loans against sales tax.

*

The Diesel Locomotive Works, Varanasi has taken up the production of 2,600 HP engines as prime movers for standby power generating sets. The Atomic Energy Commission has placed orders for some emergency diesel generating units to be installed at the Kalpakkam nuclear project. Similar orders are expected from industrial units which consume large quantities of electricity and have frequent power breakdowns.

The Union Budget

(*Continued from page 222*)

varieties. Printing and writing paper used for exercise note-books and text books will not be affected. Newsprint would also continue to be exempt from duty.

The more expensive varieties of artificial synthetic fibres and yarn such as polyester fibre and yarn will bear higher duties.

The basic duty on steel products is being raised by about 30 per cent and the regulatory duty of 50 per cent will apply to these basic rates.

The regulatory duty of 25 per cent on aluminium and its products is being raised to 33-1/3 per cent of the basic duty.

The hitherto comparatively low rate of duty on kerosene, an item of common consumption in rural and urban areas which is also sometimes misused by adulteration with other products, particularly high speed diesel oil is proposed to be raised by Rs 59.75 per kilo litre or roughly by about 6 paise per litre.

Agriculturist in the Net

In the agricultural sector, while the whole question of taxation is being examined by the K. N. Raj Committee, the budget proposes steps to raise additional revenue from this sector by levying duty on tractors, fertilisers and power-driven pumps designed primarily for handling water.

The Finance Minister, in his speech on the budget stressed that his proposals should be judged against the background of the formidable challenge confronting India. The level of investment in the economy needs to be raised substantially for the well-being of the most dis-advantaged sections of the society. Bangla Desh has to be assisted in its immediate task of restoring a measure of stability and viability to its economy and India cannot let down her guard in regard to the security and integrity of the nation. At the same time, deficit financing must be kept within reasonable proportions.

The Massive Mandate

IN retrospect, it seems that elections to State Assemblies held recently proved to be a continuation of the process which set in at about the same time last year when the mid-term poll to the Lok Sabha was held. At that time, belying the forecasts of many a pessimistic political pundit, the Congress (N) romped home with a thumping majority. This time the party has clinched a similar decisive victory in most States securing a massive mandate from the people.

An aspect which observers have noticed is that the experience of general elections and mid-term elections held so far since Independence has aroused among people discreet political consciousness. The result is that today the voter, by and large, thinks in terms of his vote being more party-oriented than candidate-oriented. Development considerations have better hold on him than narrow loyalties. The economic issue of removal of poverty and the related need to have political stability are more important to the voter today than other considerations.

This rational observation leads to the conclusion that the decisive mandate given by the people reflects their acceptance of the programme of the party they have voted into power and, what is more important, their confidence in the party's ability to implement the programme. The latter, namely the question of confidence, is very important because there are obviously other parties which have, more or less, similar programmes but which, the people seem to have thought, would not be in a position to implement them.

The results of the recent elections are by now too well-known to need any restatement. It was a winning spree for the ruling Congress Party gaining absolute majority in 14 of the 16 States which went to the polls. The States which gave the clear mandate are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu and Kashmir, Himachal Pradesh, Maharashtra, Mysore, Madhya Pradesh, Punjab, Rajasthan, Tripura and West Bengal. Of the two remaining States, Meghalaya voted to power the All-Party Hill Leaders' Conference. Under an electoral understanding with this party, the Congress had fielded only 13 candidates, 9 of whom won by impressive margins. The other State, Manipur, did not give a clear majority to any single party. Similarly, of the two Union Territories which went to the polls, the Congress unseated the Jan Sangh in elections to the Delhi Metropolitan Council while in Goa, Daman and Diu, it suffered defeat at the hands of the Maharashtrawadi Gomantak Dal. The defeat of the Congress Party in Manipur and Goa only lends credibility to the free exercise

FOCUS

of will by the people through the ballot box.

Five States and three Union Territories did not go to polls this time. Orissa and Tamil Nadu had elected their legislatures in March 1971, Kerala in September 1970 and U.P. and Nagaland in February 1969. In U.P. the Congress Party is in power and in Kerala a coalition of Congress and Communist Party of India is ruling the State. Tamil Nadu is under DMK (Dravida Munnetra Kazhagam) rule while Nagaland has a government run by the Naga Nationalist Organisation. Orissa is being ruled by a three-party coalition comprising the Swatantra, Utkal Congress and Jarkhand parties. Among the Union Territories, Pondicherry went to polls in March 1969 and is being ruled by a DMK-CPI Coalition. Mizoram, the newly created Union Territory, is scheduled to have elections in the latter half of next month. Arrangements are yet to be finalised in the other new Union Territory, Arunachal Pradesh.

What is the content, specially the economic content of the programme which made the electorate return the Congress Party so solidly to power? The Party manifesto promised to establish, as a first step, a system which would ensure to vulnerable sections of the community minimum quantities of essential goods at fixed and reasonable prices. In pursuance of its goal to achieve through peaceful democratic means, a "Socialist Revolution" embracing all the people and permeating all the spheres of national life the Congress Party reiterated its triple objectives: "Poverty must go, disparity must diminish and injustice must end". Among other things, the Party's election pledges include the following points. (*a*) All those below the level of subsistence—particulary in rural areas—will be helped to improve their income, through land reforms, improvement of agricultural techniques and provision of subsidiary occupations. (*b*) Land reforms based on the principles already outlined will be carried through and in the towns and cities, an urban ceiling will be enforced. (*c*) The drive to spread knowledge will be given new dynamism with compulsory school education for every child up to the age of 11 by 1975 and up to the age of 14 by 1980. (*d*) To remove the scourge of unemployment, a massive integrated programme will be organised to provide employment, for millions, particularly the landless labour. (*e*) Conditions will be created to put to national use engineering and scientific talent. A countrywide effort will be made to deploy other trained personnel particularly in the fields of education, administration and trade. (*f*) Steps will be taken to establish a gigantic National Water Grid by link-up of all the major rivers of the country from the Ganga in the North to the Kaveri in the South. This would help in putting the nation's water resources to the most beneficial use besides adding a new dimension to the country's communication network.

Reiterating its complete and unswerving devotion to the tenets

Printed at Navin Press Unit No. 2, 70 Okhla Industrial Estate New Delhi-20 and Published by the Director. Publications Division. Patiala House. New Delhi-1



of secularism and democracy, the Party made particular mention of its commitments to safeguard the interests of the minorities and the weaker sections, and pledged to provide facilities for primary education to religious, linguistic and other minorities, give attention to their socio-economic problems and prevent any discrimination against them in the matter of recruitment and promotions in services. Committing itself to undertake an overall integrated development programme, the manifesto said that the programme will include a housing scheme providing tenements, particularly for the poorer sections of the society and public servants, provision of adequate transport facility, power and water supply and public sanitation.

In a reference to the need to achieve effective economic self-reliance, the Party manifesto said that attempts might be made in the realm of foreign relations to exploit any weakness and, as in the past, such pressures would have to be resisted. Self-reliance being the economic counterpart of political independence, its achievement would deter other powers from the temptation of attempting to put pressure on this country. While thus emphasising the need for self-reliance, the Party's manifesto said that though India should not deny herself such friendly assistance as would enable her to strengthen the critical sectors of the economy, "We should redraw our economic programme and mobilise our material and intellectual resources so as to enable us to do without foreign aid". This would mean curtailment of consumption by those strata of society which have benefited most from the social investment that has already been carried out, because progress towards self-reliance must be accompanied by greater efforts to reduce social and economic inequalities.

These, then, are the highlights of the economic content of the Congress Party's manifesto. All political ideologies—socialism, communism or capitalism—are based on economic systems and in a large federal polity of continental dimensions like that of India, it is necessary that fundamental tenets leading to national wellbeing should animate the policies of the Centre and the States in equally strong measure. Otherwise overall progress and social change would be hampered. There has to be the closest possible relation and coordination in the social and economic programmes and their implementation by the Central and State Governments. Especially, in matters like agricultural production, irrigation and power, health, education and welfare of the backward classes, the pace of progress is largely determined by the dynamism of States and their eagerness to promote social change. These are the considerations which a mature electoratorate like ours weigh in deciding on voting a party to power.

In 1967, the Indian electorate had tried an experiment and produced a political mosaic, keeping the Congress in power at the Centre but installing different parties or their combinations in some of the States. This was in fact considered by some pessimists as the beginning of the end of the stability of democratic processes in the country. What has happened since then has only revealed to the world at large the depth and inherent strength of the Indian democtratic spirit and traditions. The country's performance in these years has also generated the hope that the newly emerged solidity and coherence will be used to achieve more rapid progress in the direction of social justice.

—M. K. S.

