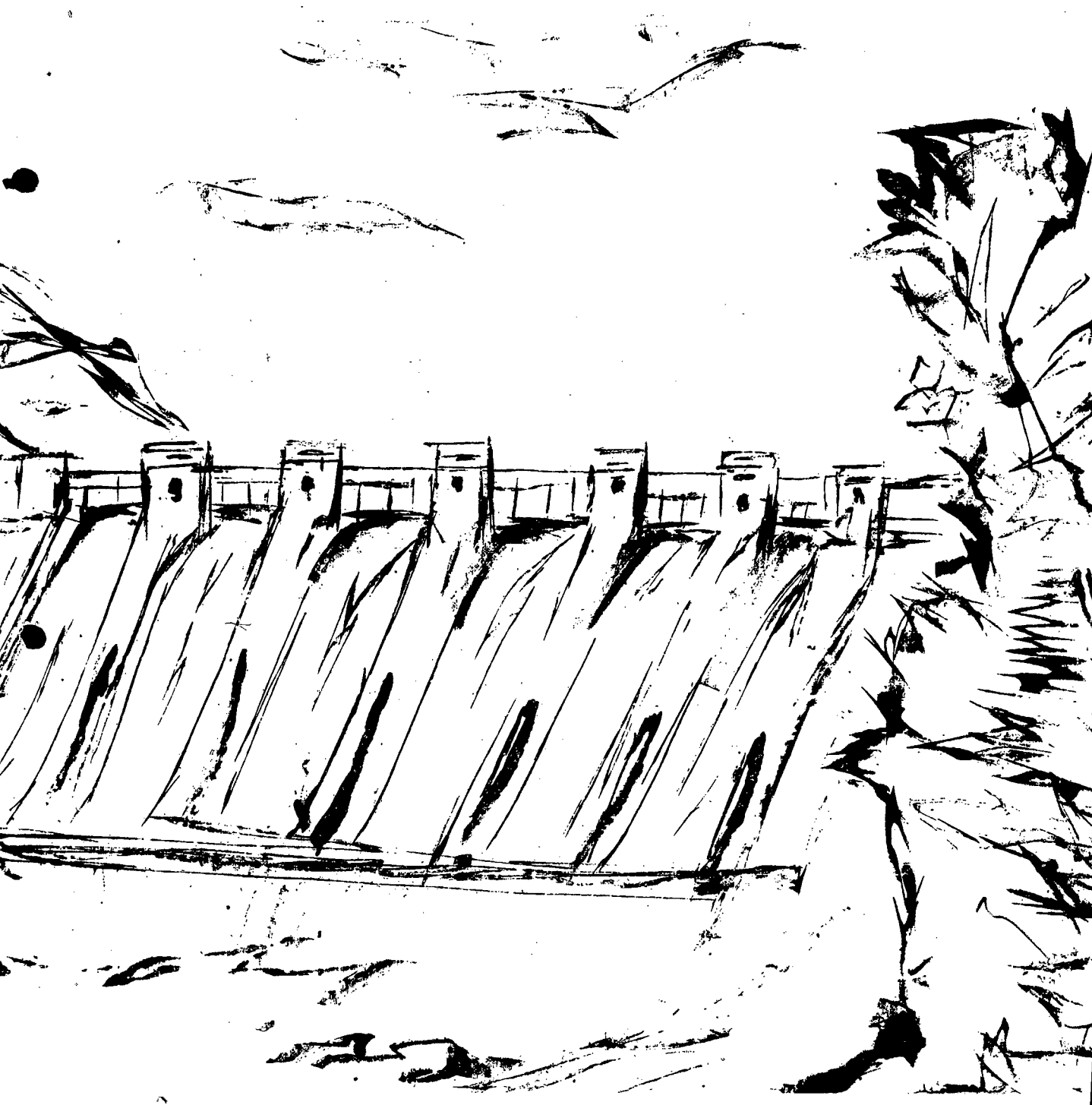
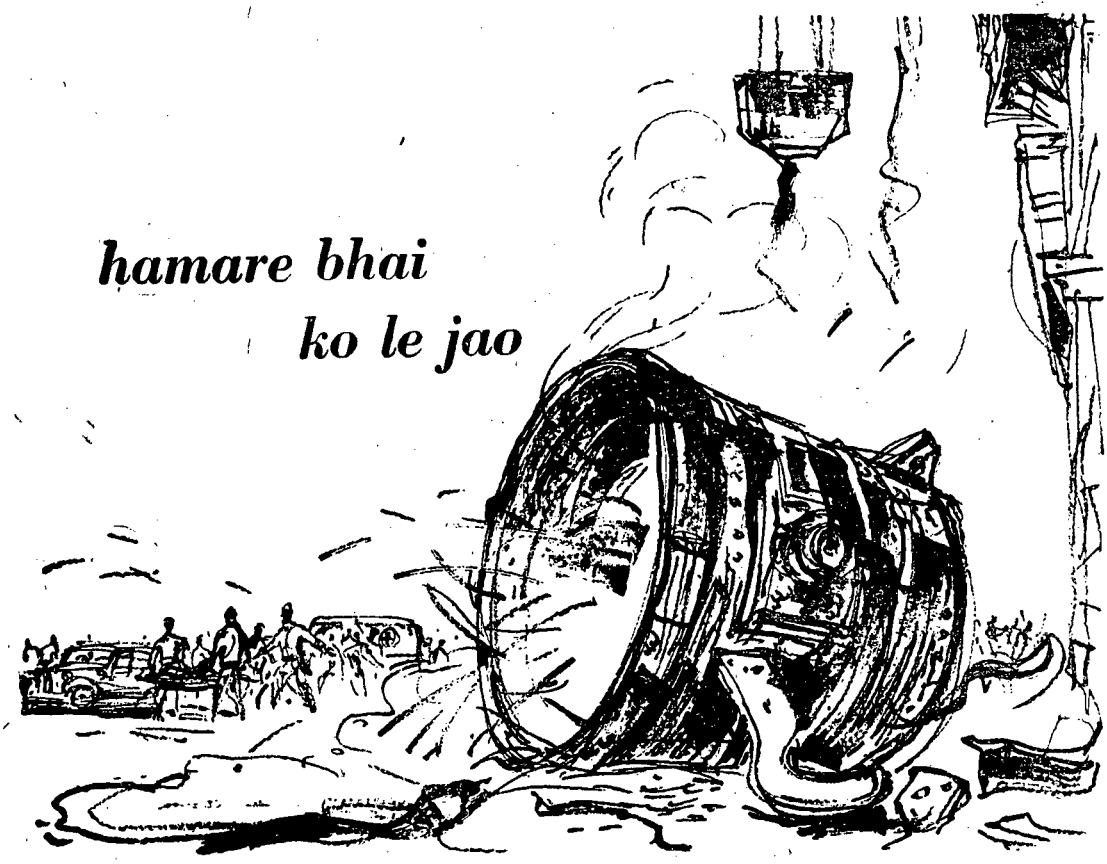
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YOJANA

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hamare bhai ko le jao



It happened some years ago in the steel melting shops at the Jamshedpur works. A large ladle, carrying 75 tons of molten iron, suddenly crashed to the ground with a deafening noise from an overhead crane. The spattering sparks and red-hot metal seriously injured a number of brick-layers working at what seemed to be a safe distance. The air was rent with the frenzied shouts of the men and the hissing of steam.

The first ambulance could remove only five of the injured to the hospital. General Manager Keenan could take only three more in his car. He chose the three who had a better chance of survival than the rest. One of these men, a Hindu worker, however, refused to go. "Do not take me away", he said. Disregarding his own agony, he feebly nodded towards a half-burnt Muslim colleague, and said: "*Hamare bhai ko le jao.*" As Keenan recalls, "The Hindu who was in pain and danger of death remembered, not that the Mohammedan was of a different faith, but that he was his brother."

This feeling of comradeship, born of the common bond of labour, is the spirit that characterises Jamshedpur, where industry is not merely a source of livelihood but a way of life.

JAMSHEDPUR

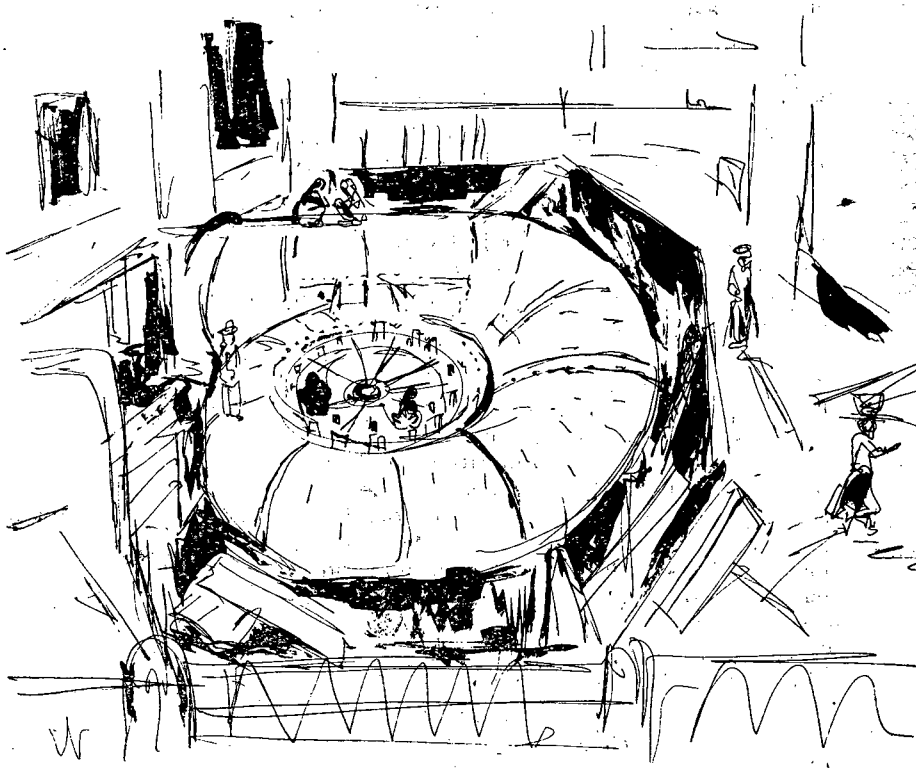
THE STEEL CITY

The Tata Iron and Steel Company Limited

IWTTN 535

A PILGRIMAGE TO CHAMBAL

Devoted Hands Help Engineers To Do Job On Time



Heirs to the Courage of Rana Pratap

THERE were four people inside the cradle of the ropeway—Fateh Singh, Nanku and two labourers. Fateh Singh kept his eyes fixed on the current gauge. He was finding out the speed of the Chambal waters on the site of the Gandhisagar Dam. Suddenly, with a jerk, the cradle went up and swung to the right. Before anyone could cry for help, the link gave way and the cradle crashed into the torrent 35 feet below. With great presence of mind Fateh Singh wriggled out of the cradle and managed to throw the life-saving tubes to the labourers. But Nanku went down. His hands were seen above the waters for just a moment as though imploring help from the open skies; the whirlpool sucked him down. But Fateh Singh decided to brave the whirlpool's fury. He jumped in. After a frantic struggle, victory was his. Nanku was rescued. And thousands of people who had gathered on the banks cheered this heroic incident.

Who is Fateh Singh? Ask anybody in Chambal right from the Chief Engineer to the day labourer, you will get the answer. One of the overseers of the project, he is much more than an overseer. His whole life is tied up with the region where now has risen the Chambal project. He is a well-built man in his middle forties, and has a laugh that can be heard over the waters of Gandhisagar, a laugh that pierces through an Ashutoshian moustache.

Mr Fateh Singh comes from Kuna. This village and 3,000 acres of land owned by this zamindar, as well as his homestead, are now under water. Is he sorry? No, because the old has given place to the new, and with the compensation of Rs. 35,000 he was given, he was able to start anew in Hamirgarh, a new village.

But then, he has his career of overseer, and has been connected since 1944 with the Chambal Scheme.

Report by KALI BISWAS
Drawings by R. SARANGAN

Mr Kale, a colleague of his, said Mr Fateh Singh had helped the authorities in recruiting labour when the work began.

How was it that, although a zamindar, he felt interested in a hydro-electric scheme? Mr Fateh

Progress At A Glance

Stage I : The work is now almost complete, the fourth unit in the power house being installed.

Stage II : Work has been taken up. The excavation of the Rana Pratap Sagar dam is almost complete, and the building of a dam for power-house is in progress.

Stage III : The Kota project report is under scrutiny and the work is expected to begin soon.

The first two stages are expected to be completed during the Third Plan period. The entire project is to be built at an estimated cost of Rs. 96.24 crore.

Singh did not want to appear to wear a halo. He said he was convinced that the future of the area was tied up with the project and he wanted to contribute his share to the scheme. When I referred to the story of the ropeway accident which I had heard from an engineer Mr Fateh Singh said, with true modesty, "It was God who had saved Nanku's life, my part was nominal.

I found out that Mr Fateh Singh had worked as a surveyor, a water guager and a driller. He had also taken part in excavation, construction and concreting.

Mr N. D. Nayate, Superintending Engineer from whom I gathered details of the main engineering problems of the project and of the people who had done outstanding work, had good words to say about Mr Fateh Singh. His zeal and devotion, he said, had qualified him for all kinds of work. In fact he could do the work of an assistant engineer, although he did not have the academic qualifications.

The very first issue of *Yojana* published on January 26, 1957, gave a graphic account of the work that was then in progress. *Yojana* was vistiing the place again after nearly five years. In these five years, the first stage of the project, comprising the 1,685-feet-long Gandhisagar dam, the power-house, the Kota Barrage and the canal systems has been completed. In the power-house, inaugurated in November last year, three units of 23,000 kW each are working, and a fourth is under construction, with provision for the fifth. Transmission lines have been laid to Ujjain, Indore, Ratlam and Bhopal.

Work on the second stage of the project, comprising the Rana Pratap Sagar Dam and the power-house is now under way.

The project is a joint undertaking of Madhya Pradesh and Rajasthan. They will have an equal share of the benefits, sharing 321,000 kW of power and irrigation facilities for 14 lakh acres.

An important achievement of the project was that the Gandhisagar dam and power-house had been completed according to schedule. Mr Nayate said that this had been possible because of the excellent co-ordination between the Madhya Pradesh and Rajasthan Governments as well as the co-operation given by labour to the supervisory staff.



Mr. Fateh Singh... much more than overseer

I FOUND out these statistical details from Mr Nayate as we walked along the high bank on the other side of the river. We saw the ravine leading to the vast reservoir, while a few score feet beneath us, waters of the Chambal rushed out of the spillways of the dam. Commanding the entire area stood a 30-foot-high cement concrete sculpture representing mother Chambal offering her bounty to two little sons, Madhya Pradesh and Rajasthan.

Could Mr Nayate tell me something about the engineering achievements and about any outstanding work done by any engineer working under him? "The 18,00-feet-long bridge we just crossed, as well as the 22-mile road leading to Ramapura were completed far ahead of schedule. The credit for this achievement", Mr Nayate said in an affectionate tone, pointing to a person in our group, "goes to Mr Mahajan". Mr Mahajani felt embarrassed when I gazed at him. "If I completed the job," he mumbled, "it was only because of the help and guidance I got from my seniors. It was teamwork".

From the compound of the Circuit House I watched the sun going down behind the ramparts of the distant, old Chorasigarh Fort situated on the western hills. Under the placid waters of the vast lake stretching for miles in front of me lay buried, I was told, Khilchipur, Gudla, Kuna, Nimod, Malasari and some 70 other villages. Mr Tiluram, another engineer, told me that all the villagers had been rehabilitated in new villages. They had been given adequate compensation. As if reading my thoughts Mr Tiluram asked me if I wished to visit one of the new villages. Before I gave a second thought to it, off we were in a jeep, driving along the Jhalawar road.

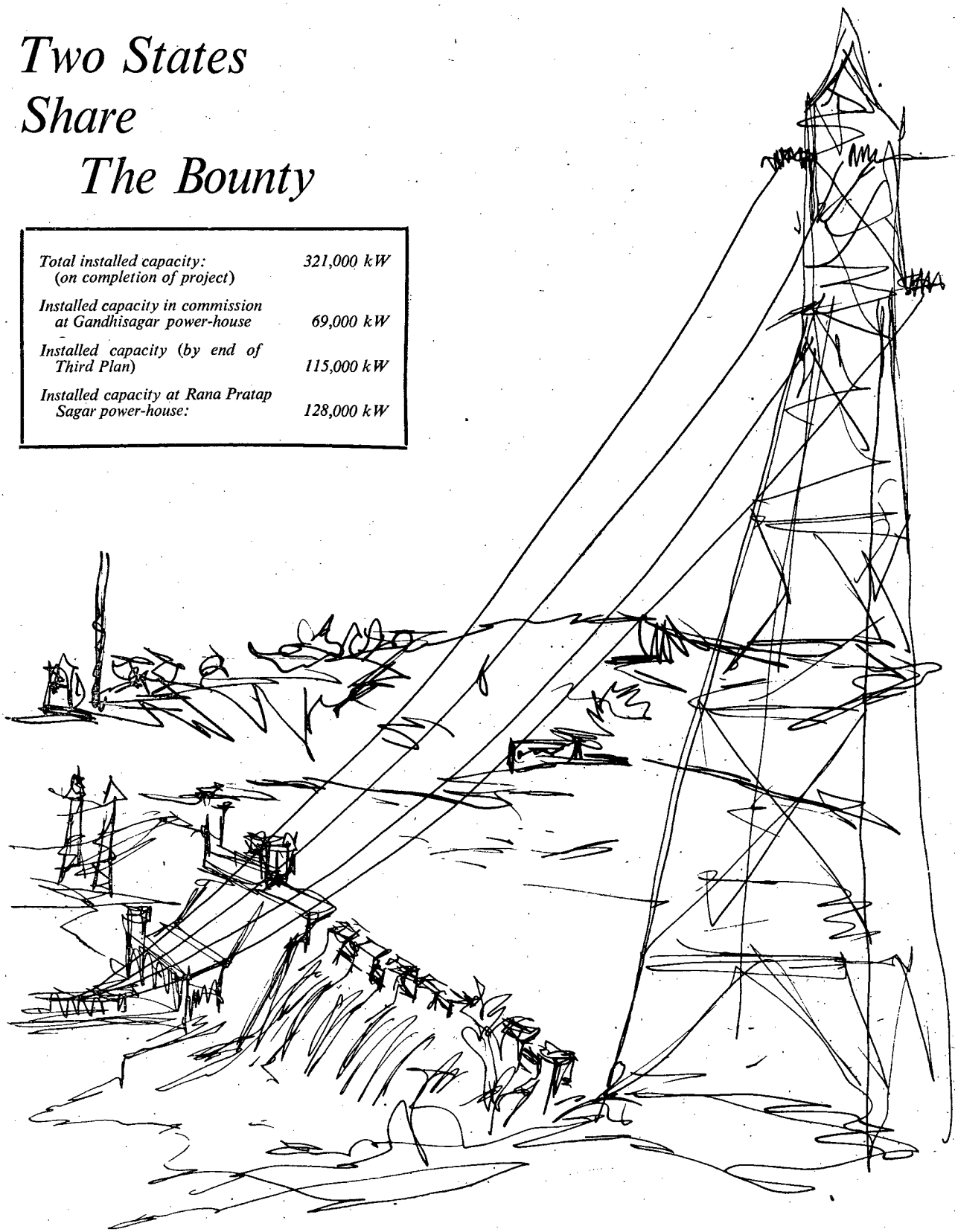
We stopped at a village called Prem Puria, about 10 miles from the lake. Abode of love—a romantic name indeed! Who gave this name to the village, I asked. In answer I was shown a middle-aged man called Ramchandra. His white turban stood out against his shining, dark forehead. A sleeveless jacket and a serviceable pair of shorts gave a hunter-like freedom to his movement. Ramchandra, I gathered, was from

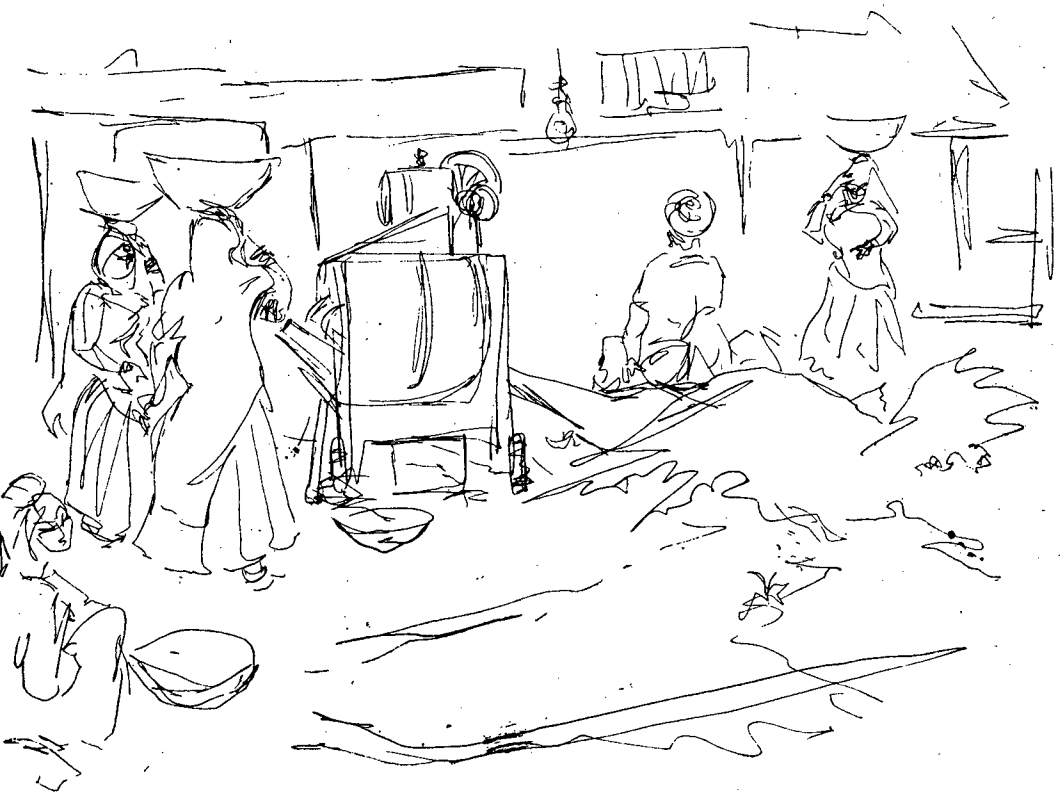
IN THIS ISSUE

Pilgrimage To Chambal	**1**
Wild Life —Yuvraj Digvijay Sinh	**5**
Editorials	**8**
Education in Third Plan —Shriman Narayan	**9**
"Blossoms In The Dust" Reviews by Justice G. D. Khosla and J. P. Chaturvedi	**10**
Young Eyes, Haunting	**13**
You Ask Us	**17**
Side Track	**18**
Government Publications—II —N. K. Goil	**19**
Saris of Chanderi —Pride of Place	**26**
Money In the Nut	**Cover iii**
Cover : Gandhisagar dam —Drawing by R. Sarangan	

Two States Share The Bounty

Total installed capacity: (on completion of project)	*321,000 kW*
Installed capacity in commission at Gandhisagar power-house	*69,000 kW*
Installed capacity (by end of Third Plan)	*115,000 kW*
Installed capacity at Rana Pratap Sagar power-house:	*128,000 kW*





Labourers at work at the Rana Pratap Sagar Dam site

Khilchipur. He has received 15 bighas of land as compensation and started growing dry crops. Then there was Mr Nandlal Tentwal, teacher of the primary school. He had 20 students on the roll. Not all the people of Prem Puria were equally contented with the new life, though. Some could not get over their nostalgia for the old days. Said one, "What is the use of *bijli* if we don't get water for drinking and irrigation?" When I noticed that not far from the cluster of huts, a tank was being built while a drinking well was already there, I knew that here was a man who grumbled for grumbling's sake.

We had gone to Gandhisagar straight from Kota by jeep. On our way through the 35-mile hilly road, the driver had once lost his track. So he wanted to have an escort for the return journey. Mr Fateh Singh sent word to someone who, however, did not turn up at the appointed time. "Please don't worry", Mr Fateh Singh said. "I have sent for another. If he fails, I shall accompany you. I have been in this area for years and I know the place like the palm of my hand".

The man who had been sent for did come at last. As the engine of the jeep cleared its throat Mr Fateh Singh hurried to us with a jug and a couple of glasses. "The journey will be tiresome. Please take this 'Nibu Pani'", he said.

I MET Rupa Ganpat first. A cobbler of Aurangabad, he had come to Gandhisagar with his family about five years ago. He makes *chappals* from old tyres and sells them to the labourers at 50 naye Paise a pair. For the last two years he had been running a shoe shop at Rawatbhatta, a village on the banks of the Chambal in the Chittorgarh district of Rajasthan. Bansilal, his neighbour whom I met next, was from Kanauj. He ran an impoverished barber's stall, though he insisted on calling it a saloon because he had provided chairs and mirrors as in the cities. Like these two, there were other entrepreneurs in this shanty bazaar. They were from different parts of the country: Avadh, Hariana, Khandesh and they ministered to the needs of the workers building the Rana Pratap Sagar Dam and power-house, the second stage of the Chambal project.

The river is wide here and is flanked on either side by hills. The bed is full of rocks and thick slabs of stone. Where we stood the murmur of the waters passing through the diversion channel filled our ear. The excavation work was almost complete and the ground was ready for the masons to take over. The mobile crane moved like a stork and the bulldozer cleared the rubble with great noise. On occasions the air was rent with the thud of explosives which split the unyielding rock. If the machines were busy so were the men and women. Some were drilling rocks others were removing earth, filling the cavities and carrying load. Mr B. H. Chowdhary, assistant engineer who was supervising their work, told me they came from Ajmer, Udaipur, Bhynsorgarh and other places, although the skilled labour came from Saurashtra and Madhya Pradesh. An unskilled male labourer got Rs. 2 per day while a woman worker was paid Rs. 1.50. Skilled labourers earned much more—Rs. 5 a day.

The harder jobs were of course done by the men, and the women mostly carried load. I don't know whether they are conscious that they also provide colour to the landscape. Red and blue, yellow and green, in spots and stripes—typical Rajasthani dress fluttered in the air as they moved to and fro, with the veil drawn over their faces.

As I looked at the workers I remembered the advice that our Prime Minister frequently gives to engineers —that they must explain to the

(Continued on page 25)

THEY ARE GOING

THEY ARE GOING

and all the wild animals will be gone in ten years if we don't wake up

A repentant hunter pleads for preserving what he used to kill

YUVRAJ DIGVIJAY SINH
OF WANKANER



A wild buffalo

I HAVE been a *shikari* for the greater part of my life. A spirit of adventure possessed me early, and I have gone about collecting trophies of India's rich fauna. Thirty-five different species of big game are in my bag. But I have now stopped this bloody business. A feeling of guilt rankles me.

This sudden change in my ways came not because of any religious compunction or a traditional fear of sin. This is how it occurred. Some time ago, when I was shooting panthers in Saurashtra, I came to learn that not more than 250 creatures of this species were left in this whole region inhabited by five million men. Suddenly the question flashed through my mind whether my love for sport had not led me into committing a crime against nature. If five million men could live in an area in peace, could their civilised conscience not tolerate the existence of a mere 250 panthers?

From a hunter of wild animals I have now turned a photographer of wild animals. I have had my fill of blood. I now have come to believe that every civilised man has a duty towards his fellow-creatures.



A little Cheetal, one of the loveliest denizens of India

IT is amazing how a vast country like India, famed in epics and legends for its beautiful forests and wild animals, is getting depleted of its natural wealth. Nearly 90 per cent of the herbivorous wild animals and about 75 per cent of the carnivorous have disappeared along with countless stately and beautiful trees in our forests. Perhaps not many people in our country know that most of this havoc has taken place since 1947. This is in spite of the fact that game laws and regulations have been made more stringent by our Government. We now have a Wild Life Preservation Board with branches all over the country to prevent the extinction of the animal species inhabiting the forests.

As I see it, there are a number of reasons why in spite of legislation

and game rules we are unable to prevent the stealthy massacre of wild animals practically everywhere. I shall adduce some reasons based on my personal observation, and it is still possible that, with a measure of enlightened self-criticism and love for the fast disappearing fauna of our country, we can preserve what little remains.

First of all, there is a certain lack of appreciation and interest among the officials in charge of wild life preservation, and even where interest exists, there is not enough co-ordination between the various departments of the Government. In their new-found sense of democratic rights, the people in the villages, particularly in tribal areas, have lost their fear of the law, and poachers merrily go about their business. There is a good deal of illicit grazing, illicit wood-felling and grass-cutting and killing of wild animals for food or for their skin. Most of these people, being uneducated, do not have the feeling that wild life is a national asset. With our expanding population, we are cutting down forests for cultivation, forgetting all the time that the denudation of forests will lead to large-scale erosion and enhance the damage from floods during the monsoons.

LET me give some striking examples of what our people have done to some well-known species of wild animals. The black buck is a very Indian antelope with long spiral horns and a black-and-white coat. You must see one in its natural habitat to appreciate what a wonderful vision it is. It was once the commonest wild animal in India, but now not more than one per cent of the original number survives. At the rate at which they are disappearing, I am afraid, there will be none left after 15 or 20 years except in some carefully guarded preserves. Argentina has imported some of them for its own forests. It will be small consolation for us that when, some time in future, none are left in India, the species will continue to multiply in Argentina.

Then take a more striking example, the lion. In the Mughal days, these stately beasts roamed the whole of north India. In 1955, hardly 250 of them were found alive in the tiny 700 square miles of Gir forests. Since that day cattle-breeders have poisoned at least 150 of them, and today we have barely 100 lions left in the world outside Africa.

So it is with crocodiles, which are fast disappearing, thanks to greedy collectors of crocodile skins. We may not have succeeded in controlling the dacoit menace in Madhya Pradesh, but we have managed to kill off most of the deer, pig, antelope and gazelle of that region. How many rhinoceros, wild buffalo, Kashmir stag and swamp deer and Markhor are left in India now? They are hardly enough to fill half the number of zoos in the world. A vast area of 4,000 square miles in the Aravalli Range of hills, all the way from Ajmer to Idar, contained 150 tigers in 1957. We cannot count more than ten today. In Himachal Pradesh, musk deer roamed freely in *nullahs* at an elevation of 7,000 to 12,000 feet. In recent years, so many of them have been ensnared and killed that I am afraid there will be no musk deer left in India within a few years. The famous ibex of Kashmir, Kangra and Himachal Pradesh is almost nearing extinction, thanks to the weapon licences freely issued to the local shepherds.

So the examples can be multiplied. The Chital, now introduced into New Zealand and Argentina, the barking deer, introduced in England, the wild boar and pigs—all these would speak to you with tears if they only had the power. By removing the cover which wild life had enjoyed for countless centuries we have pronounced a sentence of death on species after species. The few national parks, preserve forests and sanctuaries that we now have provide the only exception.

The pity of it is that the people living on the fringes of forests are poor and uneducated, and do not have a sense of pride in what nature and man have bequeathed to them. Forest wealth is obviously nobody's wealth and their one predominant instinct has been to grab and kill while they can. It is something like pulling down your house because you need fuel, or doing away with an ailing grandmother or grandfather because you cannot maintain them. We have so many domestic cattle—some useful and many useless—that they are let loose to graze in the open grasslands belonging to the forest areas with the result that the



A Gir lion stands over his kill



The famed black buck which is fast dying out

herbivorous wild life has very little to graze upon.

WHO kills these animals which we now want so much to protect, and how? The loss of wild life has been particularly large and tragic since we became an independent, sovereign country. It might surprise you to know that powerful weapons have taken a much smaller toll of wild life compared with the cruder, less efficient muzzle-loaders. A powerful weapon could kill, say, five lives on a Sunday, but a thousand muzzle-loaders could account for many more daily.

These cruder guns are owned by a large number of people who have been given licences in the name of crop protection. But even more than protecting their crops, the licence-holders are poaching on wild life. I do not doubt their need for weapons—but, pardon me, they have weapons only for protecting the crops and not to kill. Supposing the licensing authorities sawed off the barrels of these muzzle-loaders, they would still be able to make a loud enough noise to scare away the unwelcome intruders. I would strongly suggest the banning of possession of guns like the 12-bore and 20-bore LG, SG, SSG, BB and No. 1 shots by the licence-holders even if this costs a few votes to some political party. Fines and other punishments for poaching could surely be heavier and more exemplary, and reward for the discovery of the criminal more handsome.

The departments in charge of preserving forests and wild life should be empowered to hold their own courts with their own judges, and these courts should be located in every *taluka* where poaching is apprehended. We need to give the same priority for wild life preservation as we do for food protection in our Five Year Plans. This would call for an intensive publicity campaign in the rural and tribal areas designed to instil in the people a genuine sense of pride in our rich and varied flora and fauna. We might also export, for handsome monetary returns, specimens of our fauna to other countries where climate and man are favourably disposed to their survival. Let these animals live and thrive elsewhere, if we cannot give them a safe home.

Man is more ruthless than the so-called cruel beasts. But, with all his knowledge of the sciences, he cannot revive the Dodo. We shall not be able to revive the Gir lion or the black buck or the rhinoceros if we let any of them become extinct. We shall not interfere with nature beyond a limit. That should be a solemn resolution. A monarch of Britain once said: "The wild life of today is ours to dispose of as we please. We have it in trust. We must account for it to those who come after". It is time we made everyone in India say this to himself.

In a growing democracy, many years' efforts will be needed before the people at large can be convinced of the wisdom of certain measures, and before they can adopt new ways through trial and error. But in the case of wild life we cannot afford to be complacent. At the present rate, within a decade there will be no wild life left in the country unless some stern measures are introduced, even if a few people will think them irksome and undemocratic.

YOJANA

DECEMBER 10, 1961

PUBLIC ENTERPRISES

THE dictates of our Constitution and the logic of our economic situation require the public sector to play an increasingly important part in our industrial development. A high rate of growth has to be secured with the utmost speed, and the pattern of industry so directed that the economy will soon be self-generating. At the same time, to ensure steady progress towards the socialist goal, concentration of economic power in the hands of small numbers of individuals and businesses has to be guarded against. It is for these reasons that the public sector has to grow both absolutely and in comparison with the private sector.

With its strategic importance, the public sector has to fulfil what has not even been earlier attempted in the country—the management of a large variety of basic industries. It is also expected to contribute materially to the country's resources for the Third Plan. All these require that the public sector should be efficient, progressive in its approach to science and technology and able to ensure the well-being of its workers. The efficient functioning of enterprises depends on several factors. Important among them are: one, more power as well as responsibility for the managers; two, better training of the higher cadres as well as of workers; three, streamlining of rules to enable prompter decisions and delegation of authority; and, four, systematic advance planning. If we do not have enough managerial staff of the right quality, the result will be low output, high costs, high wastage, bottlenecks and breakdowns.

The Third Plan report has made far-reaching suggestions for improvement in each of these directions. Its specific proposals relate to: (1) the manner in which these enterprises should be accountable to Parliament and to the people, (2) the nature and functions of the boards of directors, (3) the powers of the general managers and financial advisers, (4) the building up of management cadres through proper selection and careful training, (5) incentives to workers and supervisors, (6) the institution of norms and goals and subgoals and (7) the formation of planning cells and research units.

The precise manner in which Parliament should exercise supervision over State-owned corporations and companies without interfering in their day-to-day activities was studied by a committee of parliamentarians. This committee, which was presided over by Mr Krishna Menon, was concerned with the problem of reconciling the apparent conflict between efficiency and accountability. It was of the view that public concerns should be enabled to stand on their own legs and given enough flexibility and initiative, with, of course, safeguards against mismanagement and laxity. It also drew pointed attention to the fact that if the concerns were tied up in procedures and inquiries became *inquisitorial*, production and quality would suffer and the concerns would be prevented from adding to national revenues.

Most of the suggestions of the committee have now been accepted by Government. Legislation has been brought forward to constitute a committee of Parliament in regard to State enterprises. In addition several measures are being taken to invest boards of management with more effective powers.

Giving more initiative to the men really in charge of an undertaking is only one of several ways of making it work better. As the Third Plan has pointed out, it is not enough for an enterprise to operate efficiently and fulfil its targets. It must assume responsibility for continuously improving its performance. Its management should not be content merely to carry out plans approved by Government but must, in fact, be responsible for preparing plans for its own further development. What is equally important, state companies must do their utmost to raise the needed money from their own resources.

FOR ADULTS ONLY

HEAD of one of the world's great seats of learning, Dr Pusey of Harvard did right in exploring the present functions of higher education in his address to the annual convocation of Delhi University. He drew attention to the three main problems of a modern university—relations between the Government and itself, the pressure of numbers and the need to bring together the Two Cultures, technological and humanistic. As Dr Pusey pointed out, a university, while producing the administrators, scientists, engineers, leaders and scholars a country needed, had a duty above and beyond the utilitarian, a duty to truth itself, and to world harmony and peace.

At the outset of the address, Dr Pusey made a remark which was not widely reported in the newspapers. A university, he said, became what its students expected of it. What do our students expect of our universities? Hard to tell. A glance at the figures in fancy dress assembled at the convocation of any of our universities would show that most of them are far too young to know what they want. A major reform in our education should be to raise the age of our college-goers. Middle-class parents must get rid of the pernicious pride they take in rushing their children through high examinations at a tender age. In the advanced countries, the physical and mental age of college students is a couple of years higher than in ours. Only when we have young men and young women at college and not mere boys and girls can we expect more responsibility from themselves and from teachers. Another major difference between higher education here and elsewhere is the continuing interest that alumni take throughout life in their old college and university. In India this is restricted to paying a casual subscription and sending in their vote by post when pestered by candidates seeking election to the court or senate of the university. A life-long attachment to a university can develop only when the years spent there have been really fruitful and formative. Children who will be lost when on their own are little likely to grasp the opportunity that a university provides for development of intellect, imagination and conscience.

The Gate To Socialism

EDUCATION

Rs. 135,00,00,000 for Scholarships during Third Plan

SHRIMAN NARAYAN, Member, Planning Commission

IT is now admitted on all hands that the ultimate success of economic planning in the country would depend not merely on financial outlays and physical targets for agriculture, industry, power, transport and communications but on the quality and efficiency of the human material in the form of honest and well-trained technical personnel for executing various projects and programmes.

The Third Five Year Plan has repeatedly emphasised that much more important than investment in goods is investment in man. From this point of view, educational programmes, and more specially technical training, have been given a high priority in the Third Plan. As against an outlay of Rs. 153 crore in the First Plan and Rs. 256 crore in the Second Plan, the total provision for education in the Third Five Year Plan will be of the order of Rs. 560 crore. In addition, Rs. 37 crore will be available under Community Development programmes and Rs. 42 crore under the programmes for the welfare of Backward Classes.

Thus the total outlay on education during the next five years will be about Rs. 640 crore.

In the sphere of technical education Rs. 140 crore will be spent on schemes of engineering and technology. The annual admissions to degree courses in engineering and technology will increase from about 14,000 to about 19,000 by the end of the Third Plan. In respect of diploma courses the annual intake will be stepped up from about 25,500 to 37,400 by 1965-66. In the field of craftsmen training, the intake of the industrial training institutes will go up in the course of the Third Plan from 42,000 to 100,000. Three new craftsmen's training institutes are being set up during the Third Plan period to meet the demand for trained instructors.

Equality Through Education

IN order to give adequate facilities for technical studies to poor but deserving students, the Government of India has decided to award a large number of scholarships, more specially in technical and vocational education. In the field of technical education it is expected that as against 6,000 scholarships at the present level, about 32,000 students will be receiving such scholarships by the end of the Third Plan period. The total amount which will be spent by the Centre and the State Governments during the next five years on scholarships for poor but bright students at the secondary and university stages will be of the order of Rs. 135 crore, including the scholarships which are being given at present by the Secondary Education Boards as well as the University Grants Commission. It is felt that without a provision for such scholarships it would not be possible to provide equality of opportunities in the sphere of education and without such facilities in the educational sphere all talk about establishing a socialist pattern of society in India woutd be meaningless.

Status of Teachers

IT is also quite evident that the present system of education in the country cannot be improved without visibly raising the social and economic status of the teaching profession. From this point of view the Centre and the State Governments have made a provision of about Rs. 177 crore for improving the salary grades of teachers at the primary, secondary and university levels. In addition, special facilities will be provided for awarding merit scholarships to the children of elementary and secondary school teachers.

Above all, systematic attempts will be made to bring about and strengthen the forces of national integration and social cohesion through necessary changes in the educational system. It must be admitted that an atmosphere for national unity and integration cannot be achieved merely by teaching our children several languages and by giving them text-books of history and social science which will contain appeals for national solidarity. Ultimately, real national integration could be achieved only if we are able to cultivate broad minds and large hearts in our young men and women so that they are able to feel one with their fellow countrymen on the cultural, emotional and mental planes.

Our ancient saints and *rishis* had no occasion to move from place to place on account of difficulty in transport and communications. They did not know many languages either, but they could dream not only of an all-Indian unity but also of the world citizenship. They could do all this because of broad-mindedness and large-heartedness which was instilled in them by great teachers from the very beginning.

In short, the problem of national integration cannot be solved in an artificial and mechanical fashion. It can be resolved only through the active interest of national leaders and national teachers who would think not only in terms of the nation but also in terms of world peace and brotherhood. This would be feasible only through a cultural and spiritual approach against the background of India's ancient heritage and traditions.

Mrs. Kusum Nair's "Blossoms In The Dust" (Duckworth, Pp. 201, 21 shillings) is one of the more challenging books of the recent years assessing the direction and content of our development plans. Feeling that a detailed assessment of the points made by the author would be of help to our readers, we publish two reviews of the book. The first is by Mr G. D. Khosla, Chief Justice of the Punjab High Court, and the second is by Mr J. P. Chaturvedi, well-known journalist.

Two Reviews

Of A Topical Book

BLOSSOMS in the DUST

Keen, Frank and Objective Inquiry, says G.D. Khosla

KUSUM NAIR was commissioned by the Government of India to prepare a factual report on the impact of our Five Year Plans on the rural population of India and the impact which schemes of village uplift had made on the attitudes and social outlook of the people. An unfortunate quarrel over what Mrs. Nair thought was a question of writer's integrity brought the assignment to an abrupt end, but she continued her work and the result is a most happy one. *Blossoms in the Dust* is a stimulating, though not a little depressing, account of what is happening in the villages of India and what changes have been brought about by measures of agrarian reform and Community Development projects.

The final verdict, alas, is *plus ca change plus c'est la meme chose.* The people of the Punjab are as self-reliant, enterprising and vigorous as before, and if they have bettered their lot and turned the grain deficit area of East Punjab into a surplus region, it is due mainly to their own tradition of adaptability and self-help rather than to anything which the government has done. Kerala has few slums, and a high percentage of literacy, but it was the same before Independence. The Eastern districts of Uttar Pradesh and Bihar are afflicted with what seems the incurable malady of abject poverty. The abolition of the Zamindari system has not improved matters. On the other hand, the lot of the peasants is worse because the landless people cannot get any land now, for they cannot pay the price of *bhoomidari* rights. Previously the Zamindars gave them some land to cultivate. The irrigation channels and reservoirs are silted up. These used to be maintained by the Zamindars—"now it is the government's responsibility, but the government simply passes orders. Nothing gets done." The Harijans of Basti district still eat grains collected from animal excreta, and accept the practice as something ordained by fate. The carpet weavers are paid no more than twentyfive to fifty *naye Paise* for slaving a whole day, despite the high prices fetched by their handiwork in spectacular handicraft emporiums and the export drives. Millions of our people eat only one meal a day and that, too, a poor unsubstantial one. There is no real desire to improve one's lot, to get up and do things and to give a fair chance to the so-called betterment schemes. There are, of course, exceptions, for example, the Punjabi Jat, the inhabitants of Kaira in Gujarat State, the orchard-owners of Kotgarh in Himachal and a few others. But, alas, these exceptions are too few and by far the vast majority of our population lies wallowing in the slough of tradition and superstition.

WHAT is the reason for this resistance to change? Is it merely a matter of reluctance to snap out of old habits and attitudes or is there lack of proper guidance? Fourteen years is but a brief moment in the life of a nation, but there is a universal sense of disappointment if not of frustration at the measure of achievement. More, much more, could have been achieved. Mrs Nair says, and few will disagree with her, that there should be a closer and more thorough study of social outlook, old established habits and attitudes and the corrective should be applied at the source by educating the people to look beyond the narrow confines of tradition and think for themselves instead of accepting the readymade wisdom of their forefathers. It is only then that rural betterment schemes and five-year plans can be properly appraised and implemented. It needs a great deal of patience, ingenuity and hard work to shake the hide-bound villager out of himself, but the effort must be made and continued till it succeeds. Our planners appear to think that if opportunities are provided and funds are made available, the problems of poverty and unemployment will be solved. Mrs Nair's experience shows that this presumption is not justified.

THE book is well written and is easy to read. It is not cluttered up with statistics and dull figures, though a place for them might have been found in an index at the end. There are facts galore and they are

stated by the people Mrs Nair interviewed in their own words. The stories ring true and carry conviction. Here, for instance, is the report of an interview with Balappa, a landless agricultural labourer of Mysore, who returned from work at noon and sat reclining against the wall of his hut smoking a *bidi:*

"How is it you are back so early? Are you not going to work for the rest of the day?"

"No", is the brief reply.

"Why?"

"I am tired".

He is a young man; has a wife and a child and one cow.

"How much have you been paid for half a day's work?"

"One and a half seers of *jowar.*"

"But are you able to get work all the year round that you can afford to take it so easy?" I persist.

"No".

"Then what do you do when you have no work?"

"Sit at home and borrow and eat. What else can I do?"

"Why don't you work for the whole day when work is available and save for lean times?" I ask again, unable to restrain myself from offering gratuitous advice.

"Oh, I have to get grass for my cow. If I work in the afternoon as well, when will I get the grass for the cow?" he says, throwing away the still smoking stump of the *bidi* with a gesture of dismissing the debate.

IT is surprising that such a painstaking and accurate observer should have blamed the new forest laws for the declining prosperity of Gaddis in Himachal Pradesh. The fact is that the Gaddis are taking to more lucrative professions, and indiscriminate, uncontrolled grazing has caused extensive erosion in the hill areas and the consequent destruction of grazing grounds. This circumstance is to a large extent responsible for the inordinate floods of recent years. In West Pakistan, President Ayub solved a similar problem by applying the drastic remedy of driving large flocks of sheep and goats out of his country and pushing them into Indian territory, thus saving his own hilly areas from the ruthless depredation of these animals.

It is to be hoped that *Blossoms in the Dust* will be read by the tetchy officials of a government department who quarrelled with its author and that they will benefit by the frank and objective reporting of a keen and honest investigator.

Sweeping Generalisations On Limited Observation, says J.P. Chaturvedi

'There is Another Side'

THIS interesting book of 201 pages, neatly printed, bound and illustrated, introduces a new type of evaluation of the progress made in India since Independence. It is a study of the human element in our Plans. The book is literary as well as journalistic, literary in style and diction, and journalistic in content. It has its own emphasis and slant. It is a study of the impromptu reactions of some select villagers in some select villages of practically most of the States in India. As the author has said at the end, the book gives only a few glimpses really of the conditions in which some of the peasant communities live and work and of those of their attitudes, beliefs and aspirations". She could meet "only a small portion" in this volume.

The book is thus no substitute for a scientific survey of the attitudes of the Indian people, much less of their development. It is only one side of the medal, and obviously there is another side too.

IN spite of the fact that the author's "travels and contacts with the village communities" did not give her "any sense of pessimism or defeatism", the book gives a somewhat dismal picture of our rural society. The very title of the book suggests it.

There are graphic pen-pictures of the people of the country, some of them encouraging and more of them discouraging. Mrs. Nair abounds in praise for the uprooted Punjabi or the uprooted Muslim of Mymensingh, now in the Brahmaputra valley of Assam. She is also charmed by the self-reliance of the Gujarat Patidar, whether he draws considerable money from East Africa or not, as well as the enterprise of the Himachal apple-grower, Sadgop of West Bengal or the Abor tribal of NEFA. But to her they are the exceptions. As a rule she is disgusted with the Indian farmer whether he comes from the now rich Mahanadi delta, or from the paddy-fields of Tanjore, whether he is a Bagri of Rajasthan, Bhadralok of Bengal or even a Gaddi of Himachal Pradesh. She has no word of praise for the prosperous Jats of western U.P., the Lodhis, Kunbis, Ahirs and other agricultural castes of Northern India, the Nimaris or the Vidarbha peasants who grow white gold in the form of cotton. Among the hardy and tough Maharashtrians she looks only at the fishermen of Ratnagiri.

I do not dispute the author's statement that "not a single character, situation or the statement in the whole book is fictitious, contrived, exaggerated or for that matter, understated". But I find a basic mistake in the book and that is of sweeping generalisation based upon stray observations of stray situations. Completely forgetting that it was only after 1947 that it became possible to bring out daily newspapers in Rajasthan and that the entire older generation of Rajasthan had practically no opportunity to go to school, she jumps to all-India conclusions. She found in a Kalwad village that no one read a newspaper and she comments: "It is not only in the sandy tract of Rajasthan, however, that there is still meagre communication of ideas and information. Barring the small population like Kerala, absence of communication is a conspicuous feature of most

of the rural landscape anywhere in India, despite the tremendous improvement of late in the means and modes of transport". This statement is apt to give a wrong impression, for it is a fact that a large number of Indian language newspapers are read in Indian villages. Even when it is not possible for villagers to buy many copies, every copy of a newspaper arriving in a village is read by a host of people. Mrs. Nair found in a village that none knew about the Nagpur Congress. She inquired the reason and was told that nobody read the newspapers. But if Mrs. Nair were to put the same question to educated city-dwellers she would have found them ignorant of (Nagpur apart) so well-advertised an event as the National Integration Conference. Mrs. Nair's own account of NEFA villagers shows us that they have heard of Congress Raj and that they want to see Jawaharlal Nehru. These are the same Abor people who still do not have a road to Dibrugarh, who till fifteen years ago had no touch with even British administrators. Ideas have moved in India in spite of lack of transport.

MRS. Nair's appreciation of some of our people is unduly harsh. She has some fixed concepts, one of them being that people eat rice because it carries status. She is angry with paddygrowers and repeatedly asks why they do not grow sugarcane. Similarly when she sees the Bagris of the Ganga Canal area in Rajasthan eating wheat she is equally hard on them. Wheat and rice are not only the richest Indian foods; they bring in the largest income to the peasant among all foodgrains. Only those people can afford to grow cash crops who have some reserve income for their daily food necessities. Easy money is likely to be spent, while the produce of one's field can be preserved for the rainy day. For growing cash crops you have to depend on the vagaries not only of nature but of the irrigation system and now of excise staff also. Therefore if peasants who have nothing to hold on to, in case anything misfires, depend on cereals and cultivate the most profit-giving among them, they are not following an unprogressive economy.

Mrs. Nair's appreciation of the Indian mind is also based upon some preconceived notions of what constitutes happiness. When a person appears shirtless she imagines he is poor. About the Padapanavayal village which is irrigated by the Mettur Project, she writes: "The peasants here also cultivate paddy extensively, and though they might not have a shirt to wear they do eat rice". She has such a shirt-mania that she has tried to describe about two dozen people as shirtless although it does not follow that all of them are necessarily poor or despicable. She herself found Narayanamurti, the richest agriculturist of Kerala, owning 2,000 acres of land, sitting shirtless. Similarly, if she found a Bagri woman in Rajasthan wearing a skirt of twenty-five yards of cloth, costly ivory bangles and rich jewellery, she does not realize that this expenditure was sustained by agricultural income and was the result of prosperity. When told that Bagris now give even jeeps and tractors as dowry, she treats them with contempt as persons whose "techniques of cultivation are traditional and so are the pattern of consumption". She despises them because "they will not drive the tractors themselves". She makes no allowance for the fact, when she compares them with immigrant Punjabi young men who charm her, that these people have seen a machine for the first time. Her appreciation for Narendra Singh is unbounded because he has a house of brick, and his living room has a carpet, double curtains and a sofa set. Possibly when she sees the second generation of new Rajasthanis she may have to change her views.

It is true that in India people have been taught by ages to be satisfied, but that does not mean that they deny themselves opportunities of becoming more prosperous. The Indian peasant has been taking advantage of modern techniques when it has suited him and is within his competence. If a peasant in Tanjore does not want more land than two or three acres, it is because first he knows that land is costly there and is not within easy reach. An acre of paddy-land in Tanjore is, in money value, worth ten acres of many kinds of lands in U.P. As the author herself points out, an acre under paddy gives fifteen bags of produce, which when translated into money, comes to double the average family income in Madras. One must not think that there is no demand for land. Why are land prices in the irrigated areas of U.P. going up so rapidly if it were not for the fact that the peasants want more and more of land? In my own village the value of land after irrigation has more than doubled. This is due to the Matatila irrigation project although that scheme has not been very wisely executed. The demand on the co-operative seed stores is another example of the value our peasantry attaches to improved seeds.

IT is unfortunate that Mrs. Nair gives no credit to the developmental work even where it is due. It is not hinted that the picture of the villages in Kaira district in Gujarat would not have been so impressive if the State had not provided electricity. The apple-growers of Kotgarh would not have the same brisk business if the Indo-Tibetan road had not been constructed. There is great poverty in India and a great deal of literature has been written about it. While adding to the stock, the book does not attempt to find out the difference in the conditions in India today and India fifteen years ago. I am not convinced that the average Indian peasant does not want improvement. I am also unable to agree that, as there are no common values about the developmental work, therefore, the central purpose of reforms has been defeated. However, the author's views are provocative, and there should be a thorough and scientific examination of problems. By focusing our attention on them, Mrs. Nair has done us a service. My only regret is that the book has been written with an eye to the foreign reader and it will give them such a disappointing picture of India specially of its Brahmins, Kshatriyas and Vaishyas.

To inculcate a spirit of invention among independent workers, artisans and technicians, the Inventions Promotion Board, Ministry of Commerce and Industry has announced the award of 19 cash prizes ranging from Rs. 50 to Rs. 2,500. The Inventions Promotion Board was set up in 1959 to promote new ideas and inventions through adequate technical and financial assistance.

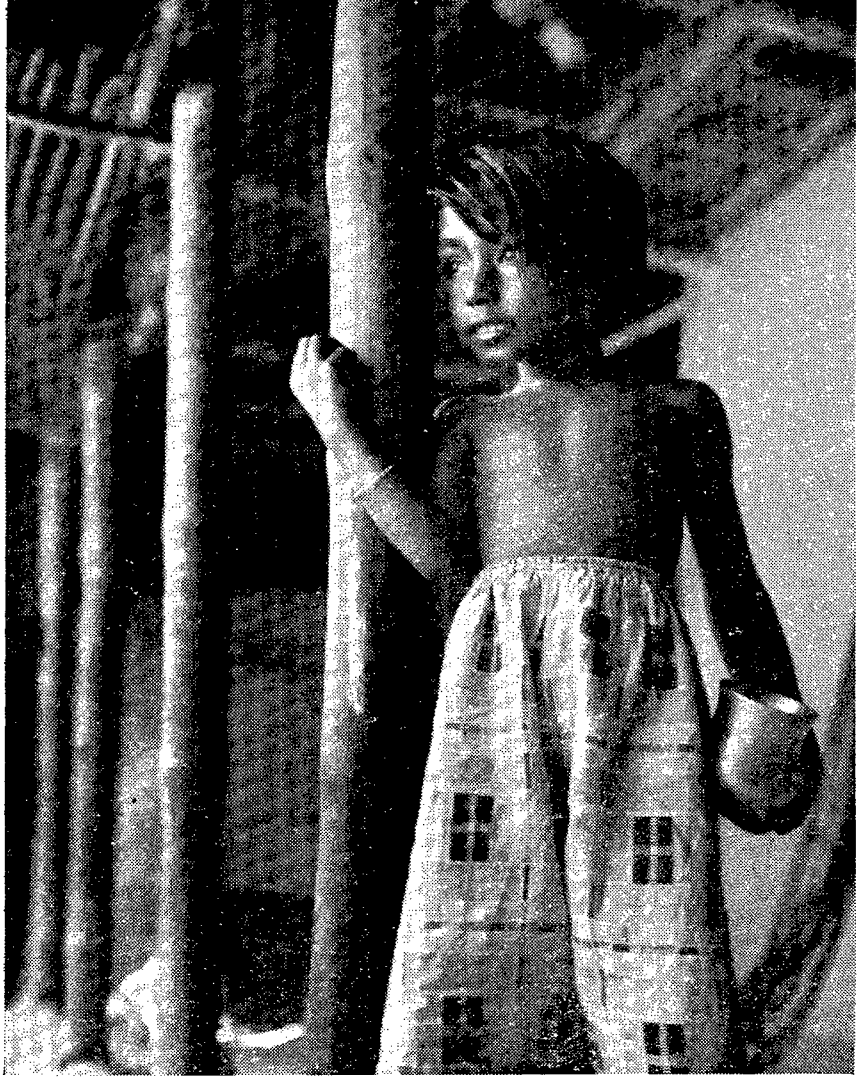


HAMARA HINDUSTAN

Young Eyes, Haunting

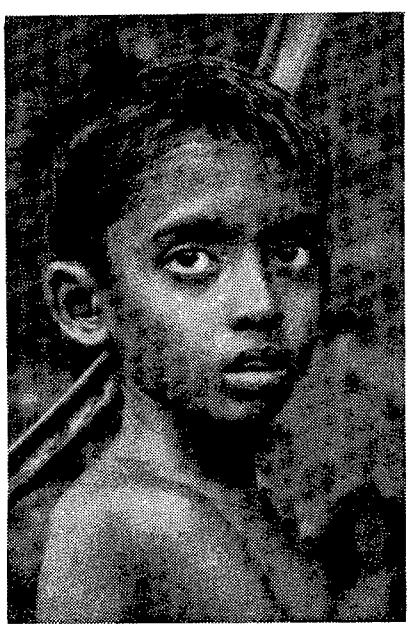
Overleaf





THREE days of walking in rural Bengal.
except where the buses and jeeps spe
leaping from tree to tree and binding them
painted with the mud brought by Mother
Puja over, the villagers get ready for another.
The dogs unaccountably silent. In the eveni
jute in the ponds, pockmarks on the land's
or a meagre livelihood for another year. Me
off the reed. Women walk silently with gou
they squat in groups and do not even mumbl
newly painted. They rest on lumps of earth
cur sleeps, or a chicken hops or a few idols s
a few of the minor, dolls left over from Durga
too. In another corner a creeper rises, spread
roof. Outside the door the guava tree is wit
hums a lullaby.





Eyes which
are the
drip of
monsoon rain

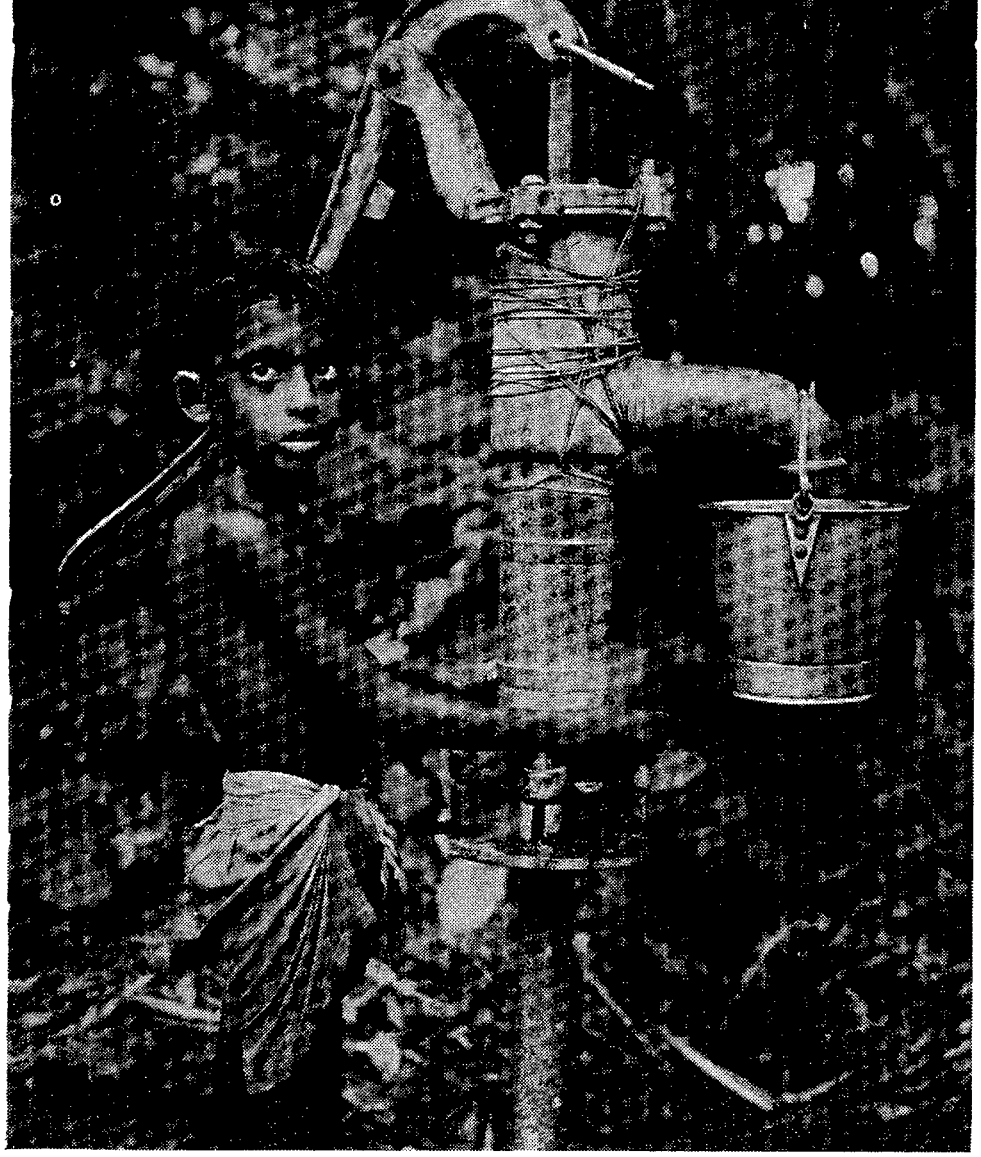
and the dust is down,
Green everywhere; creepers
one family. Huts newly
om the far-off hills. One
a stillness even in mornings.
irping of cicadas. Stink of
Stink which means money,
ip-deep, combing the fibre
eir heads. Inside the huts
conical grain-holds are also
the space between them a
n a corner of the courtyard
d a few dried-up marigolds
ump leaves on the thatched
t. The bamboo sways and
ientary continued overleaf)

Eyes which know there is something unknown











BENGAL. We have gone there before, but why do we see better this time? The reason is simple—the miracle of Satyajit Ray. True is the proverb which says the poet sees more than the sun. In this man's moving shadows. India understands Bengal better.

LUSH and lean; lush and lean. Why should people be so bamboo-lean, jute-lean, snake-lean when the trees and bushes, the clumps and clusters, the creepers and grasses are so clamant and copious? More sunken cheeks here than anywhere else on earth. Lean bodies and sunken cheeks. To grow up here must be to grow desperate. In the deep-set eyes piercing through the creased faces of the elders there is hardly a glint, only the imprint of a battle lost long ago. But the children don't know it yet. They suspect there is something in store for them, something not very merry, judged by what goes on around them, but something unknown and mysterious; and their eyes widen.

AND what eyes, theirs! Grave eyes, dark eyes; the instinct of centuries held in a little iris. Eyes which say that the poetry of the earth is never dead. Eyes which are the drip of monsoon rain.

THESE children aren't a crowd as they would be in Punjab. They aren't a giggle as urchins would be in Tamil Nad. Here each is apart, withholding something, not losing it in a general hurrah. How sparing they are in conversation! Is father at home? Uh. Did it rain here the day before? Uh. Is this your brother? Uh. Not even a shake of the head. (And as they grow up where do they learn all those jerky gestures?)

SOMEWHERE Chekhov had said that intense eyes proclaim a wasting of the body. He should know. If these young eyes of Bengal betoken undernourishment they announce the ironic triumph of poverty.

SEE Bengal with Satyajit's eyes, and Bengal's eyes will haunt you.

Photographs by
T. S. NAGARAJAN

FACTS ABOUT SMALL INDUSTRIES

QUESTIONS from Mr. Ramnik Patel, Walia's Khadki Lokhand Bazar, Bhavnagar (Gujarat).

1. Could you kindly furnish year-wise statistical information on the following points regarding small-scale industries for the period 1950-51 to 1960-61—(1) number of industrial units, (2) number of units registered with State Governments or other registration authorities, (3) employment provided, (4) production of certain organised industries, and (5) contribution to national income?
2. What are the outlays and investment in the public and private sectors for the development of small-scale industries in the three Plans?
3. What are the important reports and research studies relating to small-scale industries?

ANSWER 1. Data on small-scale industries are strewn over a number of registers and documents and are not available at one place in a consolidated manner. Surveys made so far were restricted to certain regions or certain aspects of small-scale industries. Efforts are being made to collect comprehensive data. At the instance of Development Commissioner for Small Scale Industries two questions with this view were included in the questionnaire of 1961 Census. The information collected in the Census is under scrutiny and compilation. A comprehensive survey is also being conducted by the Statistical Department of the Government of India on behalf of the Development Commissioner for Small Scale Industries. The results of the survery are expected to be available by the end of 1962-63.

ANSWER 2. During the First Plan period the total expenditure on village and small-scale industries amounted to Rs. 31.2 crore as against an allocation of Rs. 42.11 crore. The Second Plan had provided Rs. 200 crore, of which it is estimated that Rs. 180 crore have been actually spent. It should also be noted that apart from the outlay under the head "Village and Small-Scale Industries", expenditure was incurred on these industries as part of schemes for rehabilitation of displaced persons, improvement of backward classess and so on. The Third Plan has allocated a sum of Rs. 264 crore in the public sector for the development of village and small scale industries, besides Rs. 20 crore for the same purpose in Community Development areas and under schemes for the uplift of backward classes. In addition, it is expected that private investment in village and small-scale industries during the Third Plan period would amount to Rs. 275 crore.

ANSWER 3. The number of reports and research studies on small-scale industries is very large. These studies are of two kinds—by different regions and by industries. These were conducted by various

YOU ASK US

agencies including the Development Commissioner for Small-Scale Industries and the Research Programmes Committee of the Planning Commission. However, the names of some latest reports are given below :

(1) International Labour Organisation's Report on Technical Problems of Small-Scale Industries, 1961—Report on India; I.L.O., Mandi House, New Delhi.

(2) Report of the Proceedings of the Seminar on Financing of Small-Scale Industries in India; Administrative Officer, Economic Department, Reserve Bank of India, Bombay-1;

(3) Report of the Karve Committee on Village and Small Industries; Manager of Publications, Delhi 6;

(4) Report on Progress of Small Scale Industries (India) published by the ECAFE Conference on Industrial Estates, Madras, 1961.

QUOTATION BOX

I am horrified at the way we continue to construct our buildings, hospitals, schools, colleges in as expensive a manner as it is possible to make them. Even modern methods of construction apparently have not quite seeped into our Public Works Department. That is not the fault of PWD or the men in charge but of rules made in some remote Vedic age.

—Prime Minister Nehru

India has as many A.D.C.s and personal assistants as America has secretaries and like the secretaries, the A.D.C.s and P.A.s really run the country.

—Ved Mehta in "Walking the Indian Streets"

On a variety of grounds it would be legitimate to come to the conclusion that the state of our economy in 1951 was about the same as that of Japan at the turn of the century or of Russia about the same period ....or of Germany in 1850's. Seen against the background, our current rate of progress is by no means unsatisfactory.

—Mr H.V.R. Iengar

During a recent visit to Cachar in Assam....I learnt that unrestricted slaughter of elephants on a commercial scale is being practised in the district. The Lusai people eat elephant meat and elephant biltong fetches Rs. 2 a seer at Aijal. Consequently Lusai hunting parties are constantly on the prowl after elephants... A person recently back from a trek in the Mizo Hills said that in many villages he saw elephants' trunks being dried on open fires.

—From a letter in 'The Statesman'

The prize of Rs 1 lakh announced about five years ago for the most suitable hand-spinning set has gone unawarded.

—From a report presented to Lok Sabha

SIDE TRACK

Three Questions To Our Scientists

RITCHIE Calder, the celebrated science writer (and now Professor), says that he puts three questions to the scientists he meets: (1) What are you doing ? (2) How are you doing it ? (3) Why are you doing it ? It is his view that the scientist who can not explain what he is doing does not really know what he is doing, and, by implication, it wouldn't matter much if he gave up doing it.

After a tour of India, Professor Calder says that he has had more ready responses to the "what ?", the "how ?" and the "why ?" here than he usually gets. This is gratifying. One reason may be, as he has put it, that in a developing country, there are urgencies and purposes. But Professor Calder must have been particularly lucky in the scientific people he met.

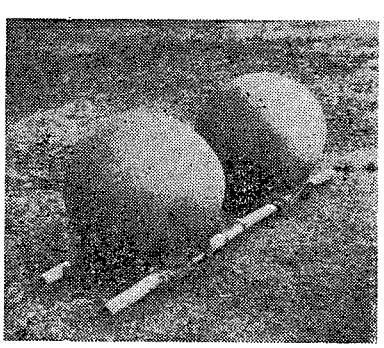
This is not to doubt that we have scientists wholly devoted to their work and articulate about it. But wouldn't some of our own scientists want to ask other scientists—especially their seniors—*what* they are doing? As regards the younger scientists, especially in the universities, any discussion of what they are doing soon turns to a description of how much of routine lecturing work they are compelled to do and how their research suffers. Put the same question to Ph. D students. You will be startled at the answers. *Yojana* knows of young 'research' workers who do not know of the existence of Insdoc. They and their guides are often years behind the latest work in their field, with the result that what has long ago been found is 'discovered' again in our country.

Scientific knowledge is expanding at a terrific pace. In the words of an American writer, science has overwhelmed the scientists. "There are simply too may scientific reports and publications for anyone to keep up with". Even with electronic aids, for example, the Americans can't translate Russian scientific documents fast enough. When the first Sputnik was launched the Americans could not track it, even though the Russians had published the frequencies four months in advance.

To have to run fast to catch up with the latest or to be outdated even as the findings some piece of research are published is the specialist's problem. But the work of scientists poses another type of problem for the non-scientist. It is daily becoming more essential that the non-scientist—politician, administrator, business executive, banker and even the average parent—should know more of what the scientists are up to. In our country, at any rate, this is a branch of information sadly neglected. We need Ritchie Calders of our own.

PLAN QUIZ

1. What are the amounts allocated to the University Grants Commission for higher education in the Second and Third Plans?
2. What is the proportion of teachers to students at present at the university level?
3. What are the main features of the Beas Project? What benefits will ensue from the Project?
4. What would be the annual production of food grains and cloth at the end of the Third Plan?
5. What is the picture shown below?



(*Answers on page 21*)



IGNORAMAN

Wants to Know

Why Things Don't START

In The Country, But Are INAUGURATED

HELPING TEACHERS AND THEIR CHILDREN

Four hundred and sixty-three students have been selected from the different States and Union Territories for the award of post-matriculation scholarships under the Merit Scholarships Scheme for the children of primary and secondary school teachers for the year 1961-62. The names of those selected from Jammu and Kashmir and Rajasthan are yet to be announced. The amount of scholarship which is Rs. 50 for intermediate studies and Rs. 100 for engineering studies, will be paid in the current academic year.

It was decided to award 500 scholarships to the children of the primary and secondary school teachers, during the Third Plan period, as a token of recognition of their services.

BETTER SALE OF GOVERNMENT PUBLICATIONS

A Corporation Suggested

N. K. GOIL, Institute of Economic Growth, Delhi

EFFECTIVE and up-to-date social studies are almost impossible without reference to the data collected and published by the governments. It is, therefore, obligatory on the part of libraries to have a collection of all relevant government publications. But their acquisition is rendered difficult by the following factors:

1. Irrational price policy;
2. Time-lag between the printing of the publication and its release for sale; and
3. Lack of dependable bibliographical services.

A study of the prices for two serial publications meant for sale indicates that the Government of India does not pursue a rational price policy. The following data show the position:

Name of the Publication	Year of Publication	Number of Pages	Price
Large Industrial Establishments in India	1951	384	Not Available
	1952	376	32.00
	1953	446	35.00
	1954	461	70.50
	1955	423	61.00
	1956	414	75.50
	1957	443	63.00
Census of Indian Manufactures	1951	526	31.50
	1952	538	25.50
	1953	663	59.50
	1954	713	24.00
	1955	716	24.50
	1956	496	24.50
	1957	702	52.50

If a graph is prepared incorporating these data, it will be a zigzag one. One cannot even hazard a guess why the price of *Large Industrial Establishments* should have gone up by 100 per cent while the increase in the number of pages is less than 25 per cent. Was it due to the rise in the cost of paper or wages for labour?

This fluctuating price policy prohibits the completion of the sets of various government publications in many libraries. If the libraries try to complete the sets, they have to forgo the acquisition of other publications. This is undesirable.

TIME-LAG

The time-lag between the printing of a publication and its release for sale is unreasonably large. For example, as regards reports of committees and commissions and serials, the department responsible for their publication usually first sends complimentary copies to Cabinet Ministers, M.P.s and other dignitaries. The Manager of Publications is later directed to put the remaining copies on sale. This accounts for the delay. There have been instances when publications were not put on sale even six months after complimentary copies had been distributed.

This lag causes inconvenience to research workers and the general public. Further, there is a category of government publications which is never made available to the general public. Such publications are 'for official use only'. They contain a good deal of useful information, which is not likely to be available elsewhere. Perhaps it is unfair to deprive genuine users of the benefit of such publications. The Government has unnecessarily created a privileged class of users for such publications violating the spirit of a democratic set-up.

Dependable bibliographical sources are a prerequisite of the acquisition of any type of publications. The use of the word 'dependable' indicates that we have some bibliographical sources even at present. The sale of the Central Government publications is being looked after mainly by the three offices mentioned in the first part of the article, namely the Manager of Publications, the Director of the Publications Division and the Lok Sabha Secretariat. The Manager of Publications issues a monthly list of publications for sale. But the time lag in bringing out this monthly list is so large that often the publications go out of print before one comes to know about them. The Lok Sabha Secretariat and the Publications Division of the Ministry of Information and Broadcasting have no arrangements for a regular trade catalogue.

Another bibliographical source is the *Indian National Bibliography*—a quarterly journal. It systematically lists all the government publications which are deposited with the National Library under the Delivery of Books Act. But it does not list such publications as are meant 'for official use only'. Again, the usual delay in bringing out this bibliography comes in the way of acquisition of many publications by libraries.

As for the State Government publications, the less said the better. I know a case in which the office of a State Superintendent of Printing and Stationery refused to supply a quarterly periodical except against V.P.P. In spite of the protracted correspondence, the office did not agree to supply the journal against annual subscription though we were prepared to pay the money in advance. Many publications cannot be had even after six months of sending the money.

The present organisational set-up needs complete overhauling to ensure the acquisition of government publications in time and at reasonable prices. Since Independence the Government is expanding its activities day by day. At present there is no field where it has not taken upon itself the responsibility of either direct control or general regulation. This situation means that there will be an ever-increasing number of publications to apprise the public about the activities of the various organs of Government.

SOME SUGGESTIONS

In this connection it will be worth while to consider the following suggestions:

1. A semi-government autonomous corporation should be set up to look after the printing, publishing and sales organisation of all the Central Government publications. The corporation should have branches in all the States.
2. The Stationery Department, which at present is part of a combined office of Printing and Stationery, should be separated forthwith. The clubbing of printing with stationery has done much harm. If the printing and publishing work of government publications is organised on sound business principles, the erratic manner of pricing many Government publications may be checked.
3. A chain of depository libraries should be established for all government publications including even those marked 'for official use only'. These depository libraries should be in addition to those privileged to receive books under the Delivery of Books Act. Further, these depository libraries should be set up only in such universities and institutions which are prepared to undertake the responsibility of bringing out, at least once a year, the author and subject catalogue for all the publications received under this scheme.

In countries like Britain and the United States, any paper presented to the House of Commons or the Congress is simultaneously available for general sale. In India this happens only in exceptional cases; for example, the final report of the Second Pay Commission. The department responsible should see that the copies of all the publications brought out by them are also made available to the general public on the very day they are released. The present practice of sending copies of Government publications only to dignitaries should be stopped forthwith. For instance, the *Provisional Population Totals of the 1961 Census* were distributed to some selected persons in April, 1961. But copies of it could not be bought even in August, 1961.

The first part of this article was published in Yojana, November 26, 1961.

YOJANA ESSAY Competition

Rs. 250 in Prizes

For the fifth year in succession *Yojana* is conducting an essay competition to promote clearer thinking among our students in regard to the basic problems of planned development.

The competition is open to all college students.

Subjects

One of the following:

1. Economic integration as basis for national integration.
2. Role of public enterprises in India's economic development.
3. Lessons of ten years of planning in India.
4. Education and economic development.
5. Ways of modernising Indian agriculture.
6. Mobilising people's effort for the Plan.

Prizes

Four prizes will be awardad as follows:

1. Best Essay in English by undergraduate student—Rs. 50.
2. Best Essay in Hindi by undergraduate student—Rs. 50.
3. Best Essay in English by student in Master's Degree classes—Rs. 75.
4. Best Essay in Hindi by student in Master's Degree classes—Rs. 75.

Length and Language

Essays may be submitted in either English or Hindi. They must not exceed 1,200 words.

Last Date

Entries should reach Chief Editor, "Yojana", Yojana Bhavan, Parliament Street, New Delhi-1, by January 31, 1962.

Certificate

Each entry must be countersigned by the head of the institution where the candidate is studying.

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AL-689

AS THE PLAN MOVES

METTUR TUNNEL SCHEME



A view of the Mettur reservoir from where the waters will be taken through a concrete tunnel to a tank for generating power

THE Soviet Union has agreed to provide equipment and technical personnel for executing the Mettur tunnel scheme in Madras and accept payment for the equipment in non-convertible rupees. Excavation work is in progress in pressure tunnel, gorge shaft, power-house and transformer yard. Tenders have been called for gates and screens, penstocks, vent and drain pipes, while those already received for other machinery are being examined.

The Mettur Tunnel power project envisages the utilisation of the discharge of 20,000 cusecs from the Mettur Reservoir during irrigation period by installing four units each of 50,000 kW. It is proposed to divert the irrigation discharge through a 1,375-feet long concrete tunnel terminating in a surge tank from where the penstocks will be taken off to the generating units in the power house.

I.D.A. LOAN FOR 3 PROJECTS

TO help three projects, one each in Orissa, Gujarat and Punjab, the International Development Association (IDA) has given a loan to India totalling $ 22.5 million (about Rs 11 crore). The loan, which will be interest-free, is repayable in foreign exchange over a term of 50 years, repayment starting after a ten-year grace period.

The Salandi project in Orissa for which $ 8 million (Rs 3.4 crore) have been granted includes the building of a dam on the Salandi river, a 45-mile long main canal and about 450 miles of distributing channels. On completion it will irrigate 225,000 acres of land. The Shetrunji project in Gujarat for which $ 4.5 million (Rs 2.16 crore) have been provided will irrigate 86,000 acres of land after 94-mile-long main canal and distribution channels are completed. The dam on the river Shetrunji has already been built. The third loan of $ 10 million (Rs 4.8 crore) will help the Punjab project of flood protection and surface drainage of about eight million acres of land. It includes construction of 17 miles of embankment along rivers as well as excavation of 2,000 miles for extensive drainage work.

MORE MILK FOR BOMBAY

THE Worli dairy, the second under Maharashtra's Greater Bombay Milk Scheme, has gone into production. It has been built at a cost of Rs 3 crore of which Rs 79 lakh were contributed by UNICEF.

In its first stage it will handle up to 4,000 maunds of milk per day and in the second, 8,000 to 10,000 maunds daily at the rate of 1,200 maunds per hour against 5,500 maunds handled daily at Aarey. Besides supplying toned milk to low-income groups it will also distribute whole buffalo milk and toned milk for domestic consumption at cheaper rates. The second stage of the development of the project, to be located at Aarey, will have a provision for a by-product plant for making use of surplus or returned milk, if any.

ANSWERS TO QUIZ

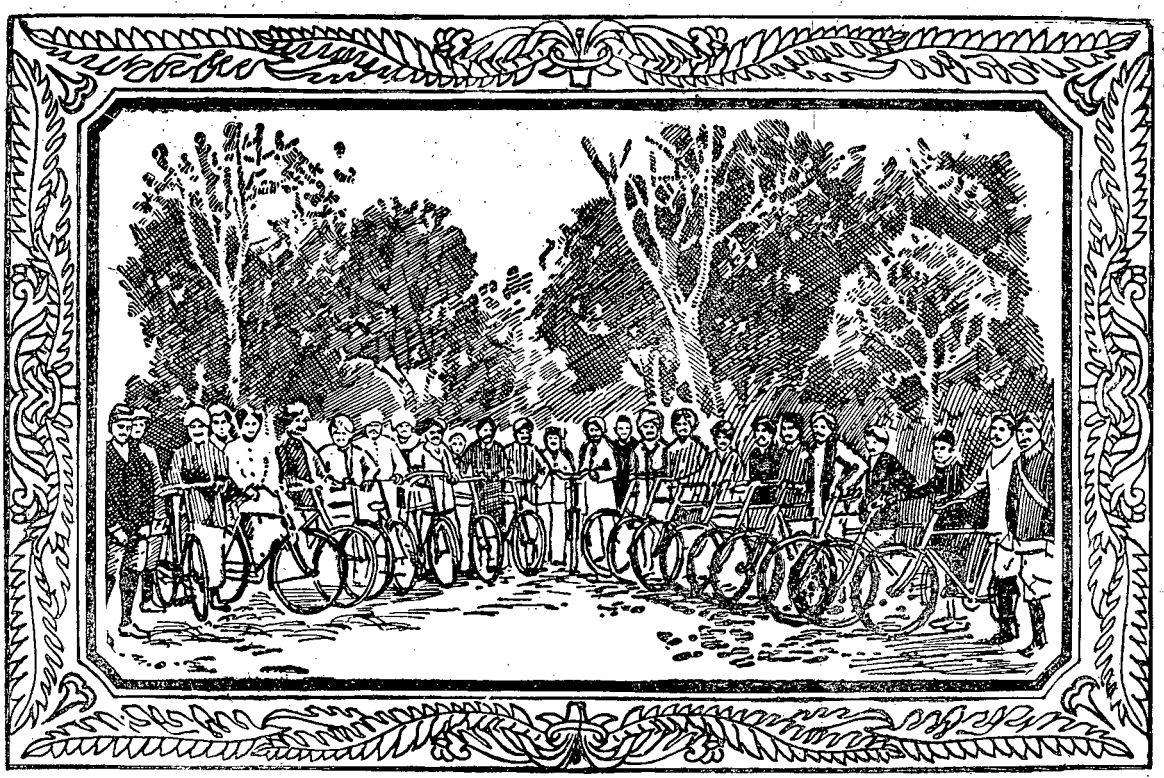
1. The Second Plan had allocated a sum of Rs. 19 crore, while the Third Plan has earmarked Rs. 37 crore i.e. over 7 per cent of the total outlay on education.

2. At present the ratio of teachers to students at the university level is 1 : 17, after the increase in the strength of these teachers from 37,000 to 49,000 during the Second Plan period.

3. The Beas Project, Unit No. 1, comprises a straight gravity concrete dam at Pandoh, tunnels connecting the Beas with the Suketi valley and the Sutlej, and a power house on the Sutlej at village Dehar, all in the Punjab. The project is expected to be completed by 1970 at a cost of Rs. 99.65 crore. The benefits are: (1) irrigation of about 8 lakh acres and (2) generation of 391 mw. of power at 100 per cent load factor.

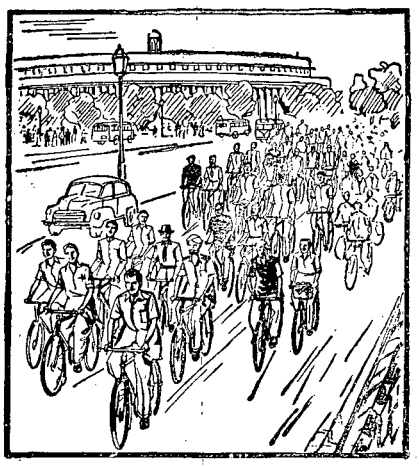
4. Ten crore tons of food grains and 930 crore yards of cloth including 350 crore yards of handmade cloth.

5. An improvised float made out of empty earthen pots for rescue work. It has been designed by the Central Emergency Relief Training Institute, Nagpur. Similar floats can also be made of empty kerosene tins, rubber jackets, etc. Traditional floats made out of gourds are still in use in some rural areas.



Above is a drawing from an interesting old photograph taken in 1899, showing the members of the Dharwar Cycle Club gathered for a meet. This club was started by an enterprising dealer, Rao Saheb Trilochanlal, to popularise cycling shortly after Dunlop brought, in 1898, the first pneumatic tyres to India, and shod the wheels for the first few hesitant cyclists.

Contrast this with our artist's sketch of Parliament Street, New Delhi, on an office day—symbolic of the phenomenal growth of cycling in this country.



It is a satisfying thought that, beginning with those pioneering days more than sixty years ago, Dunlop has contributed not a little to the progress of the bicycle in this country.

DUNLOP

DCTC-22A

BLACK GRAM, TOBACCO AND ARECANUT

I.C.A.R. Agricultural

FARMING NOTES

Information Service

Hints On Dry Season Cultivation

THE north-east monsoon has come to an end and the southern region is expected to have dry season for the next three months. This is the time for sowing black gram and few other pulses in Tamil Nadu.

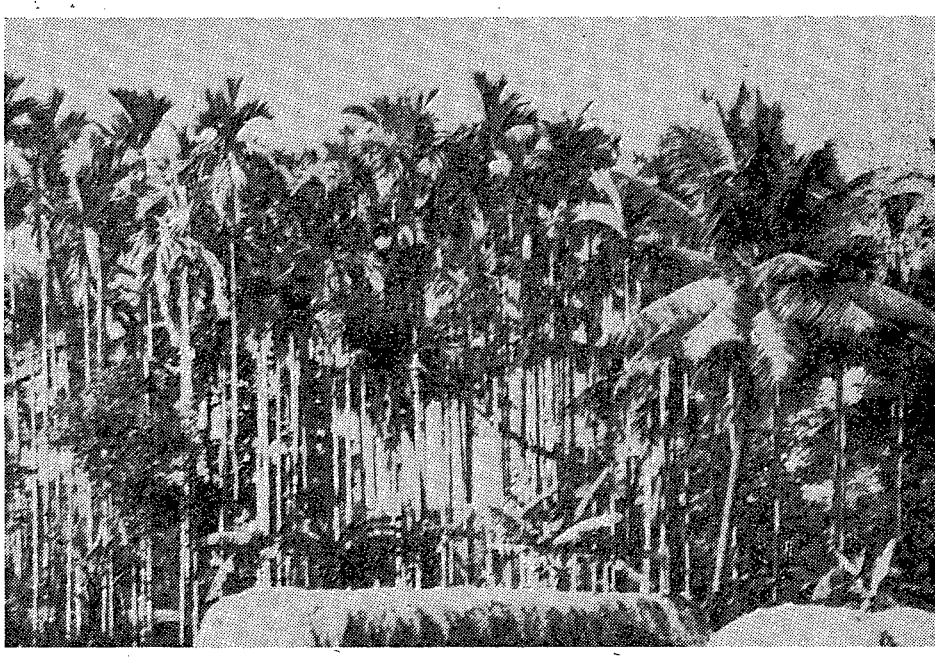
Black gram is popular in the South because it is the main ingredient for the popular dishes of 'Idli' and 'Dosa'. It grows in dry and wet lands and the area under this crop is estimated to be 1,43,910 acres in South India. Seedbed is prepared generally rough but a deep tilth is favourable. Usually 12 to 16 seers of seeds are sown per acre. They do not react favourably to fertiliser treatment.

This is also the time when the flue-cured tobacco crop shows a rapid growth. Inter-culture operations are to be started during this month. Weeds have to be removed. The root parasite of tobacco known as Malle makes its appearance during this month and arrests the growth of plants. The affected leaves should be removed as early as possible. This is also time for light irrigation which helps a steady growth.

Preparing Seedbeds

Harvesting of ripe arecanuts is one of the important items of work during this month. Selection and marking of mother palms for seeds is done and collection of tree-ripe seed arecanuts will also be made now. Preparation of sowing pits, seedbeds and nursery beds is also to be made. Seeds may be sown preferably in narrow and long trenches and covered on the top with sand. The surface should be mulched with dry grass or straw and irrigated daily. Wherever necessary, temporary pandals must be erected.

Artificial shade should be provided both to the secondary nursery beds and freshly planted seedlings on the southern and western sides in the main garden. Mites which are likely to infest the plants now can b effectively controlled by spraying the under surfaces of leaves with wettable sulphur solution (450 gms. in 68 litres of water).



A cluster of tall arecanut palms.

In South Kanara and parts of Kerala, the harvested nuts are dried in the sun for 40 to 45 days. In Assam, the mature and ripe nuts are consumed as raw nuts and the surplus, either sun dried for the preparation of *Supari*, water cured in earthen pots to make *Moja Supari* or cured in running water for the preparation of *Kwai Seob*.

Deep Ploughing

AFTER rainy season, deep ploughing should be introduced in the dry farming areas to conserve rain water in the soil. Deep ploughing breaks up the hard sub-soil pan. In the dry, rain-fed areas it softens the layers of soil and allows the rain-water to be readily absorbed and stored for the use of the crops subsequently grown. Deep ploughing reduces the need for the application of artificial fertilisers and trace elements essential for plant growth. It also softens the deeper layers of the soil where the insect, fungi and bacteria supplying humus in the soil generally work. It gives bacteria the air required for their existence. They may become more effective in converting the vegetable matter of the soil into humus. The moisture reserves of the soil and the supply of air are increased by deep tillage. As a result the root of the plant goes deeper and utilises the moisture and nutrients more efficiently, thus increasing the vigour and growth of plants. This also help in increasing the crop yield.

Weeds play havoc with soil moisture. In the dry farming areas where maximum soil moisture received during the rainy season has to be essentially conserved for use by the subsequent rabi crops like wheat, barley, gram, oilseed etc., deep ploughing with furrow turning is the most effective method for destroying them.

DESIGN...
for finest performance

Of all aspects of industrial endeavour the most intriguing is thermo-dynamics, for it is this medium that provides industry with its greatest power—steam. Therefore, wherever high pressure steam-raising plant is used, there is a story...a story of experience, analysis and design.

Varying Conditions

Wherever new steam-raising plant is to be installed, either for generating power or in industry, it is essential that skilled investigation and analysis be carried out to ensure that the plant is *tailor-made* to give optimum performance under varying *local* conditions and requirements.

Fuel

Having established the purpose for which the steam power created will be required, it is necessary for the design engineer to identify the type of fuel to be used, either oil, gas or coal. Coal is by far the most widely used fuel, but its thermal content varies and it is therefore necessary to make an analysis to establish the percentage of principal heat-producing elements present. The thermal content of fuel has an important bearing on the designing of the kind of plant to be installed. Generally low-grade coal is used with anything up to 50% ash content. It should be remembered that steam must be raised as economically as possible.

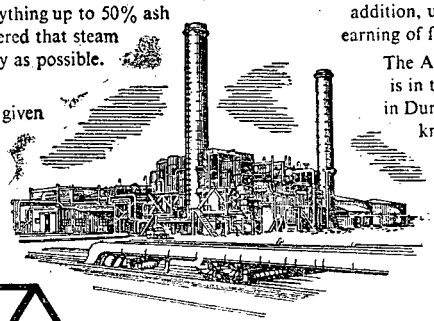
Waste fuel

Particular attention has to be given to industries that wish to use waste material as fuel. For instance, the sugar industry absorbs vast quantities of waste material in the form of bagasse for fuel; again in the pulp and paper industry it is now the practice to combine the processes of chemical recovery and steam raising by burning the 'black liquor' from the digestors in a special type of boiler unit. Of course, these industries cannot keep their steam-raising plant functioning entirely on waste materials. So, in their designing and planning, the technicians and design engineers must allow for varying fuels to be used and at the same time achieve optimum performance.

Powerful Ally

The new and powerful industrial group of ACC-Vickers-Babcock Ltd., with its vast resources of technical knowledge and the rich, wide experience of its partners, will undoubtedly prove a powerful ally in achieving the high target set by the government for the installation of boiler and thermal power plant during the third Five-Year Plan. AVB will be able to draw on the finest engineering minds to study, design and draw up plans that will *tailor-make* not only vital steam-raising plant but also heavy mining and cement-making machinery which will help meet the exigencies of industrial expansion and, in addition, ultimately contribute towards the earning of foreign exchange through export.

The AVB industrial plant at Durgapur is in the final stages of erection. Here, in Durgapur, all the advanced technical knowledge of AVB will be utilised to the fullest extent to ensure that each project is designed for the finest possible performance.



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CHAMBAL

(*Continued from Page 4*)

workers the significance of what they are doing. I decided to quiz a few workers to find out whether they knew they were working for a project of national importance. I asked Dapo, but she knew nothing about the scheme. How old was she? Eighty, she replied. No, about 70, corrected another. He was Varda Singh, her son. With him were Devi, his wife, and Rup Singh, his brother. They came from Ajmer, where they owned some agricultural land. Why did he allow his old mother to work? No answer. Why had the entire family come away? There were no irrigation facilities, in their village.

We were on the top of another hill, about four miles from the site of the main dam. In the distance was the Bhynsorgarh Castle which Tod describes as the "most romantically situated upon the extreme point of a ridge" while further down the valley flowed the Padjhar nullah where, Tod observes "nature is in her grandest attire". Mr Chowdhary told me that the power dam (or the Saddle dam as it is called) would be built at this spot. He pointed in another direction where the river flowed down a natural slope between the main dam and the confluence with the nullah, known as the Chulia Falls. The power-house was to be located below the Saddle dam as an additional head would be gained by making use of the natural falls. This power-house would have four units of 32,000 kW each.

I looked at the Padjhar village situated on the other side of the hill. I had also heard of Matasara, Pepulda, Borkheora, and Kuakhora. After a few years these and 65 more villages will be things of the past. They will be buried under the waters of another lake.

YES, the Chambal has been tamed. If you pay a visit to the valley after a few years you will notice a remarkable change : new villages, dams and power-houses or, should I say, temples of a new generation where the presiding deity will be not the image of any god or goddess but the living, common man.

NEXT ISSUE

UP AND DOWN THE HOOGHLY

★

PLANNING IN YUGOSLAVIA AND INDIA

Tarlok Singh

★

SPOTLIGHT ON BOY INVENTOR

★

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Prof. N. R. Malkani

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OVER TO YOU

UNFAIR TO ENGINEERS

THIS refers to your leading article "Fitters and Whippers" (*Yojana*, November 12, 1961). The conclusion you have drawn is not happy. You have presented a one-sided picture which leaves a misconception in the minds of readers.

It would be no exaggeration to say that what we have achieved so far through our Five Year Plans, of which we are proud, is due to the hard toil of the engineer and the technologist. This does not mean that the services of others have been neglibigle. Many major and costly schemes have been successfully handled by our engineers and the people are reaping the benefits and will continue to do so in the years to come. It is, therefore, difficult to understand how you can brand an engineer as useless to man an undertaking. It is pertinent to point out in this connection that it is the engineer who shoulders the greatest responsibility in the country and not the administrator who is given special privileges in India. A study of the conditions prevailing in advanced countries like America and Russia will remove some of the misconceptions prevailing in our country.

An engineer who can build an undertaking can run it also, but it is difficult to understand how an administrator can manage it without the help of an engineer. Today our engineers are not treated on par with administrators and the new slogan that the former is unfit is only to make the scope wider for the latter. In the interest of the country this anomaly should be removed as early as possible.

It is not my contention that the engineer alone is competent to manage an undertaking. What I would like to impress is that the engineer, or for that matter any technical man, can manage a technical undertaking without the help of an administrator.

Siraguppta (Mysore State) R. CHIKKANNA

[Reader Chikkanna has drawn a wrong inference from the editorial published in *Yojana* of Novembr 12. What we said was that the combination of qualities needed for presiding over great industrial undertakings was so rare that we should welcome it wherever it was found. The head of a public enterprise could now be an engineer; at another time an actuary; at one place a lawyer; elsewhere a military man or civil servant. Our public enterprises need the skills of all these. We quoted Professor Paul Appleby in support of the view that the ability to run great industrial houses was the monopoly of no single profession.—*Editor*]

CO-OPS NEED BETTER DEAL

It seems to me that the Deposit Insurance Scheme does not afford the protection its avowed object seeks to provide to deposits held in cooperative banks and societies. Is it not discriminatory? Does this not affect the flow of deposits into co-operative banks?

How could anyone reasonably expect co-operatives to realise the high targets set for them in the Third Plan in respect of short and medium-term finance to agriculture when they are thus handicapped? Even as it is, co-operative banks have to face increasing competition from commercial banks, L.I.C., the Small Savings Campaign, Government loans and what-not.

The co-operative banking sector might not be so well organised as commercial banks. But then the Reserve Bank of India is there exercising some measure of control over these banks in addition to that exercised by co-operative departments. Therefore, it might not be impossible to work the Scheme through the Reserve Bank of India so far as co-operative central banks and apex banks are concerned. I hope the authorities will act immediately and remove this discrimination and thus not shake the growing confidence of the public in co-operative banks. Of course there may be some legal impediments but it should not be difficult to overcome them through suitable legislation.

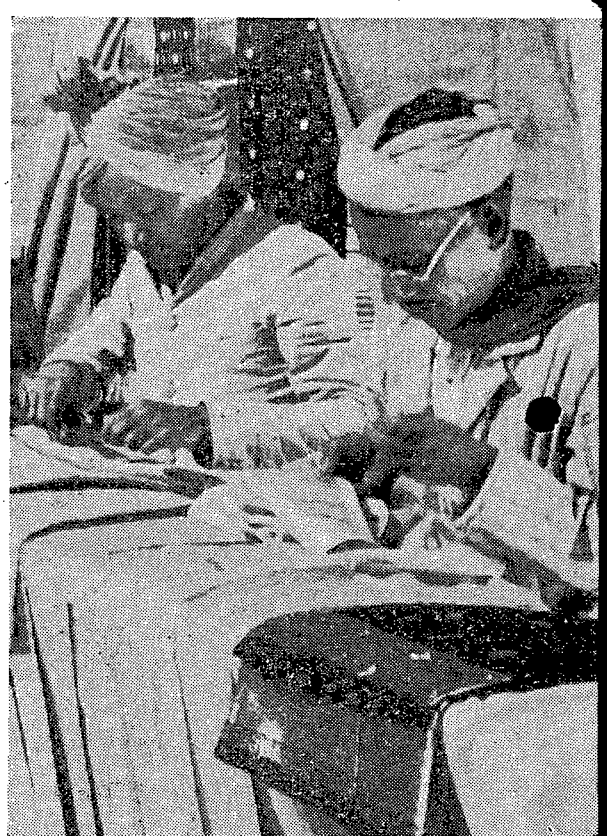
Waltair R. SRINIVASAN

AMONGST the well-known, traditional cottage industries of Madhya Pradesh is handloom-weaving. The handloom products of the State, assisted by hand printing and dyeing, offer buyers everywhere some of the best material in taste and quality. Among this wide range of fabrics, the saris of Chanderi have a place all their own.

The specialities of the Chanderi saris are that they are fine in texture, resplendent in their colour schemes, and elaborately *jari*-brocaded.

Chanderi, the abode of such delicate workmanship, is a small town situated in a hill-girt valley in Guna district. It is approached by a 21-mile-long, fair-weather road from Lalitpur station on the Central Railway in Madhya Pradesh. The present population of the town is 7,000. Of them, more than a thousand are weavers, although only 800 are actively engaged in weaving. The working looms are estimated to number 650, of which 150 are fly-shutters.

CHANDERI claims the honour of being the legendary capital of Raja Shishupal of the *Mahabharata*.



Famous Today

Famous Many Centuries Ago

PRIDE OF PLACE



Saris of Chanderi

Feature by

Courtesy of Government of Madhya Pradesh

In recorded history, it was a seat of the Chandelas and a principal fort of the Mughals. Even in the fourteenth century, Chanderi had been noted for its fine-count spinning and weaving, reaching the pinnacle of its glory in the sixteenth and seventeenth centuries. Its fabrics enjoyed the patronage of Mughal nobility. It was well-known that one could read four folds of a book through this fabric.

With the unsettled political conditions in the country, Chanderi suffered a setback. The introduction of machine textiles during the British days dealt a severe blow to the handloom industry as a whole. It was only in the end of nineteenth century that the Chanderi fabrics regained some of their glory with the help of the rulers of Gwalior. The present-day weavers thus inherit a centuries-old tradition.

These weavers—at times three generations working together—produce the cloth in their own cottages. Yarn of 80 to 200 counts is used in the weft on silk warp of 13-15 deniers. This mixture of silk with cotton gives the fabric a softness of touch unmatched by any other product in the Indian market. The use of grey silk as warp with coloured weft lends the fabric unusual pastel shades and soft colour combinations. However, saris of the brightest hue are also made. Floral decorations in the body and beautiful, oriental designs in gold thread in the *pallavas* and borders further add to the gorgeous effect.



Newer designs are being introduced in Chanderi without sacrificing the original patterns. To improve the quality and to bring about standardisation of production, the Madhya Pradesh Government exercises strict quality control in regard to the silk and zari used. The Government also advances loans to the weavers through the newly organised weavers' co-operative society and markets the products through its emporia and depots. On the technical side, fly-shutter looms with dobbies and jacquards are being introduced, and the primitive street warping is being replaced by vertical mill warping.

The pleasure is ours

Telegrams: "ESSAARMMS"

Telephone: 8231

S. R. M. S. Tourist Service

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Date 23.6.1961.

Ref: No. 5368/60-61.

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It is a pleasure to own a Leyland bus, to experience its economy, its great strength and its smooth run over all types of roads. It is a pleasure too to talk about it to others.

Yours faithfully
for S R M S
M.V. Chikkhanna
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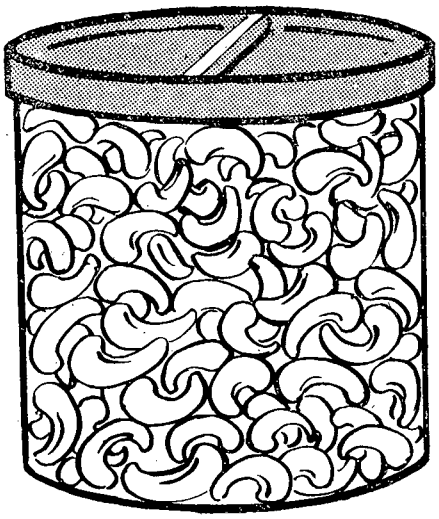
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GRAPHIC GLIMPSE

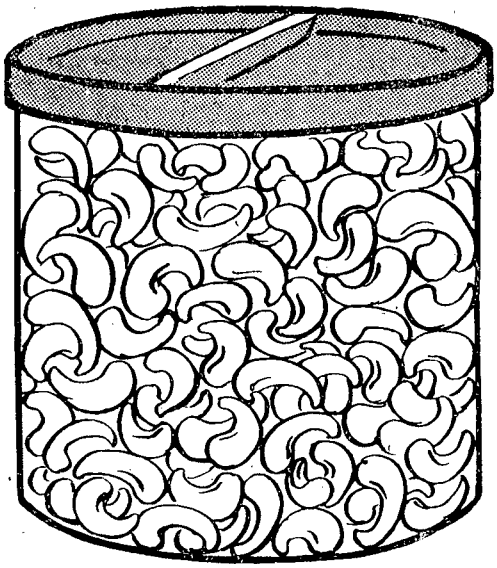
MUCH MONEY IN THIS NUT



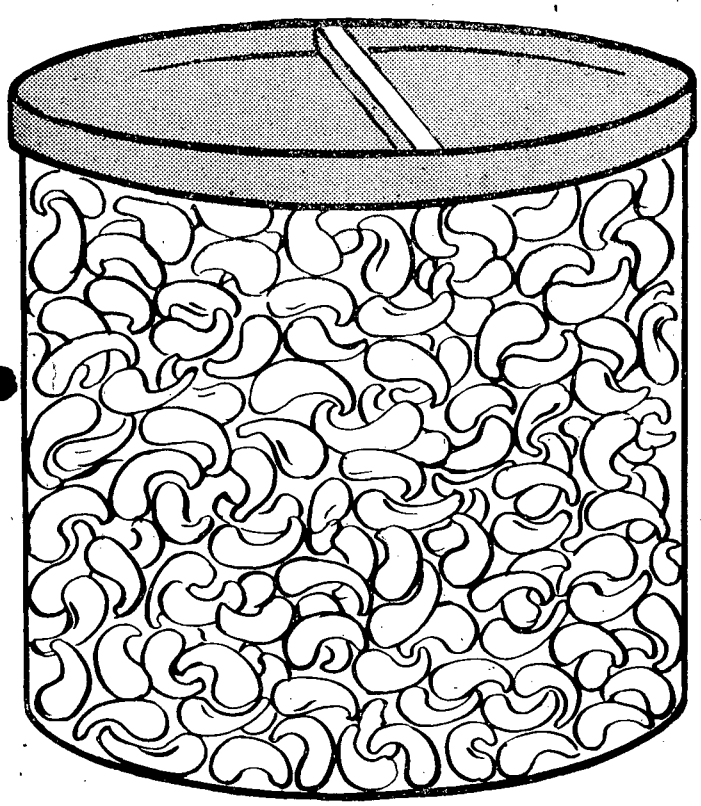
1955-56—60,000 Tons

"The next time you munch a cashewnut," the Director of Export Promotion tells us, "remember that it can be exported."

Cashew may be just nuts to all of us, but to the country, cashew means dollars. In 1960 alone we earned as much as Rs. 18.4 crore from cashew exports.



1960-61—73,000 Tons



1965-66—150,000 Tons

Not all the cashew we export, however, is grown here. Till a few years ago the bulk of it came here from Africa for being processed. The monopoly we enjoyed in processing has now gone. Domestic production, therefore, has been encouraged. Several promotional measures have been taken on the advice of the Spices Enquiry Committee. The production, which was 60,000 tons in 1955-56 rose to 73,000 tons in 1960-61. This is to be more than doubled during The Third Plan, the 1965-66 target being set at 150,000 tons.

Regd. No. D. 876

YOJANA

YOJANA seeks to carry the message of the Plan to all sections of the people. It tells the story of our progress, points out the shortcomings and stimulates an open debate on problems of economic and social development. It endeavours to increase mutual understanding among our States and regions.

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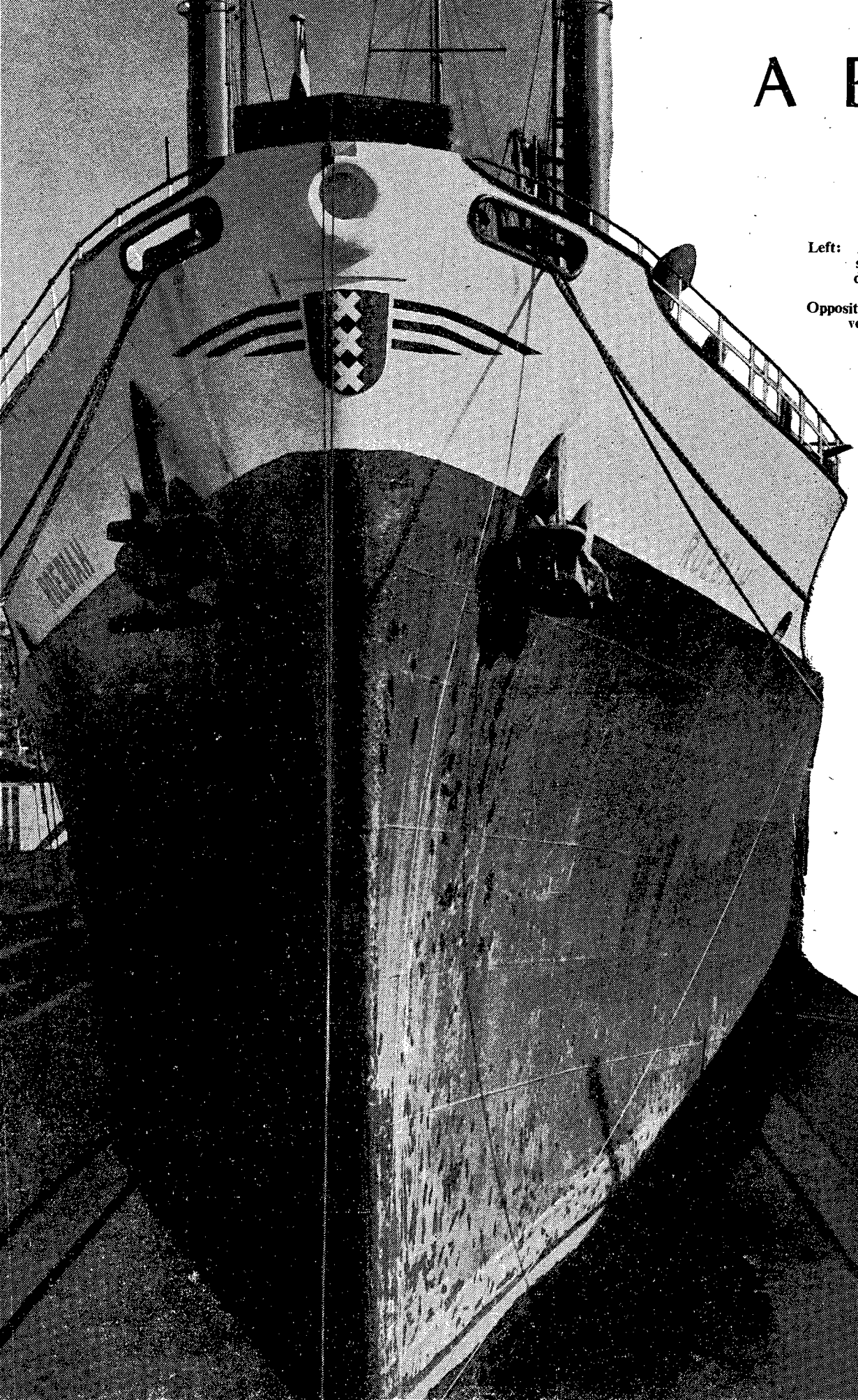
PORT IN SEARCH OF A RIVER

Pages 1—4

ESSAY COMPETITION ANNOUNCEMENT : Page 18

25 NAYE PAISE

A BRAV



Left: A visiting ship being serviced in the dry dock.

Opposite page: Human conveyor-belt of tea chests.

BATTLE BY CALCUTTA PORT

To Save Hooghly From Silt and Move More Goods

ALMOST every city of the world wants more houses, schools, hospitals, playfields, roads, buses, lights, taps and drains. But few experience so staggering a combination of all these as Calcutta.

Sooner or later a determined and co-ordinated battle will be mounted on these problems. The need for a Greater Calcutta Plan has generally been recognised and studies have in fact begun.

This naturally would take some time ; but there is one thing which *cannot wait*, and that is the fight to save Calcutta Port.

We put many questions about the river and the port to a person greatly concerned with both—Mr. K. Mitter, Chairman of the Commissioners of the Calcutta Port Trust.

Mr. Mitter does not appear a man

It is the river which gave birth to Calcutta. When the British sought permission from the Nawab of Bengal to set up trading posts, he asked them to choose some spot on the Hooghly and on an August afternoon in 1690, an agent of the company, Job Charnock, halted at the village of Sootanooty. This village, with Kalikata and Gobindapore, grew to be Calcutta.

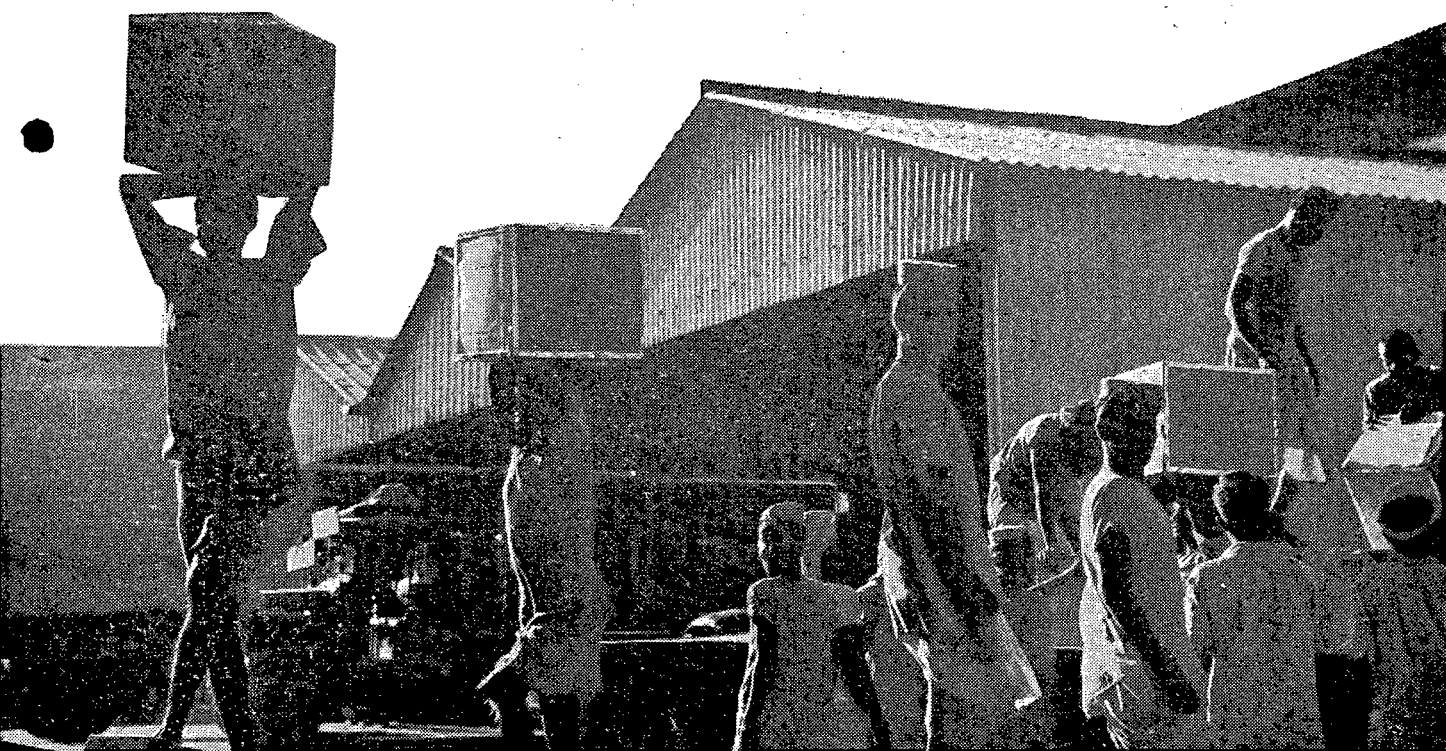
And Calcutta grew up by the river. Not only is it situated by the Hooghly, but its very life depends on it. At the source of its palaces and homes of learning, its grandeur and culture is trade. If it were not for the ships that brought goods and took goods, Calcutta would not have grown to be the metropolis it is.

Even today Calcutta lives by the river. Not many people might realise it, but more than 400,000 workers depend directly on the river and the port for their livelihood. If the members of their families are also counted, nearly a third of Calcutta gets its wages from the river.

But something has been happening to the Hooghly. There is an illness it ails from, and those who are responsible for the well-being of Calcutta and of Bengal are worried. And because of the extraordinary importance of Calcutta for the whole of our national life, people elsewhere are worried.

The illness is siltation. Silt comes down from the north and silt is pushed up from the south and this silt is choking up the port, choking up the city.

Of the numerous problems which Calcutta—virtually a human pressure cooker—faces, the problem of the river is among the most important.



whom small problems can shake, and even such a huge problem as that of the Hooghly has only served to stir up the fight in him.

Patiently he explained the importance of his port to the nation's economy. Apart from the large industrial complex which it serves and keeps alive, the Calcutta Port is still the country's leading port, accounting for 45 per cent of the dry cargo imports and 40 per cent of the exports. (If the reference books show Bombay as being ahead of Calcutta, that is only because the gross figures of Bombay include oil.)

And Calcutta's hinterland is the most important in the country—the whole of the steel area, the coal area, the minerals area, the jute area, and the tea area. Bengal, Orissa, Bihar, Uttar Pradesh, Madhya Pradesh, Assam are all served by Calcutta, as are Nepal, Bhutan and Sikkim.

"And we are fully equipped to handle all this trade except for—".

"For?"

"Except for the river—which has deteriorated at an alarming rate in the last ten years."

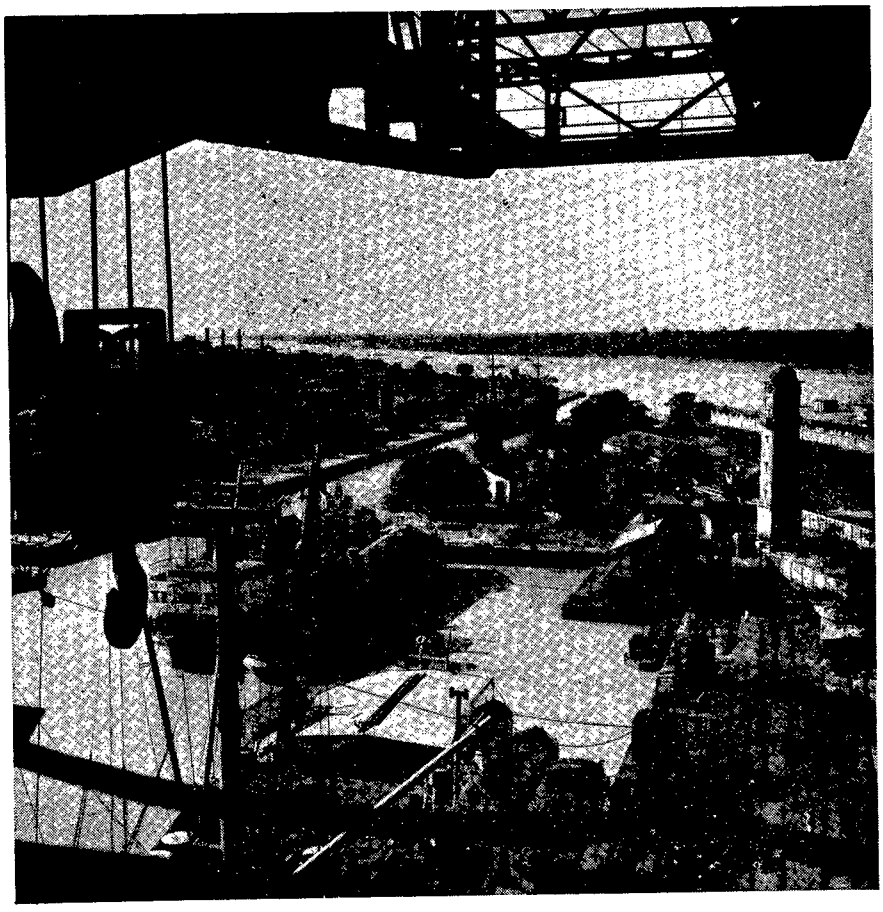
"Why only the last ten years?"

"I wish I knew...I wish anybody knew."

"In what way has it deteriorated?"

IN THIS ISSUE

Calcutta Port's Battle —By The Editor	1
Planning in India and Yugoslavia —Tarlok Singh	5
Editorials	8
Industries in Villages —N.R. Malkani, M.P.	9
As The Plan Moves	13
An Hour With A Boy Inventor —Pictorial Feature	14
Side Track	16
Kusumavati Deshpande —Cultural Heritage: P.Y. Deshpande	17
Yojana Essay Competition	18
Farming Notes	19
Role of Government in Development —Dr. K.S. Gill	21
Krishna Dolls of Mysore —Pride of Place	25
Over To You	27
Graphic Glimpse	cover iv
Our Cover: A ship along the Hooghly seen from Strand Road, Calcutta.	



A portion of Calcutta Port seen from the top of the 200-ton crane at the King George's Dock

Mr. Mitter points to the map on the wall and says: "You will see that Hooghly is one of the outlets through which the Bhagirathi, or the Ganga, flows into the sea. About a hundred and fifty miles above the city of Calcutta, the Hooghly branches off from the parent river, and a hundred miles below the city it joins the Bay of Bengal. But, in the last ten years, the Hooghly has begun to be cut off from the parent river for eight months in the year. While the river has been unkind, the tides have been remorseless: they keep pushing the silt up the river. Unless we have headwater supply the silt won't be flushed out. Hence the importance of the Farakka Barrage. If that is built, the waters of the Ganga will again flow down the Hooghly the year round. Without Farakka we shall only be fighting a losing battle against Nature, despite all our effort in which no costs have been spared."

"There must be other ports in the world experiencing similar difficulties. Are we benefiting from their experience?"

"There is some amount of siltation in every port—but nowhere is it as bad as here. Two rivers which carry vast amounts of silt are the Mississippi and the Yangtse, but neither New Orleans nor Shanghai is endangered to the same degree as Calcutta, because the rivers that bring the silt there also flush it away. The trouble with us is that the Hooghly has ceased to be a river. It has become a creek. And that makes Calcutta the world's trickiest port. I am sure there is no port official in the world who would exchange places with me. What we want is a river again."

"Apart from depending on Farakka, what are you doing on your own?"

"Everything that we can, without sparing cost or effort. We dredge the river round the clock, and we have projects to train the river. Our dredging fleet includes some of the largest vessels that any port has."

Again with the help of the map

THESE 400,000 GET A LIVING FROM THE PORT

Employees of the Port Commissioners	**42,000**
Workers under the Dock Labour Board	**19,000**
Men working in Depots	
Kidderpore	**50,500**
Howrah	**30,000**
Northern Section	**32,500**
King George Dock	**50,000**
Budge Budge	**3,500**
Jetty Warehouses	**5,000**
East Siding	**6,500**
West Siding	**21,000**
Kantapukur	**3,500**
Stevedore employees	**3,500**
Employees of Steamer Agents	**4,800**
Employees of Clearing Agents	**6,000**
Coopers	**400**
Lorry drivers and attendants	**16,000**
Men working in Hide Sheds	**12,000**
Workers in lighters	**24,000**
Employees of river steam companies	**20,000**
Contractors' employees	**15,000**
Workers at Wharves	**25,000**
Customs employees	**3,000**
Such employees of Import-Export Office, Coal Controller's Office, Jute Mills' Association etc. as are connected with Port work	**10,000**

This figure, it must be remembered, does not include employees in commercial houses, shops and industries which also depend on the traffic passing through the port.

Figures from Mr. D.K. Guha, Deputy Traffic Manager, Calcutta Port.

Mr. Mitter explained what was being attempted and achieved through dredging. To come up to Calcutta from the Bay, ships have to travel 126 miles. But the river does not run straight over these 126 miles. It pursues a snake-like course. Bends in the river impose a natural limitation on the size of ships going up to Calcutta. The maximum length of a ship that can come up to Calcutta is 560 feet—but because of further blocking up, nowadays a length of 510 feet is about the maximum.

As explained by Mr. Mitter, bends are not the only bother that ships have to face. There are two others—bars and bores. There are many bars or mounds between the mouth of the Hooghly and the port, which act like road blocks, as it were. The channels next to the bars determine the draught (or the depth to which a ship sinks in water) of the visiting vessels. Till 1948 ships with a draught of 28 feet could steam up to Calcutta. Now, because of the silting, the draught has been reduced to 21 feet and, in summer, only 18 feet. This means that ships cannot come to Calcutta or go from Calcutta fully laden. Bores, that is, tidal floods which rush up the mouths of rivers, are a danger to standing ships. They occur mostly in spring, and as a result freight capacity is lost when it is most needed. Fortunately, the docks themselves are free from the action of bores.

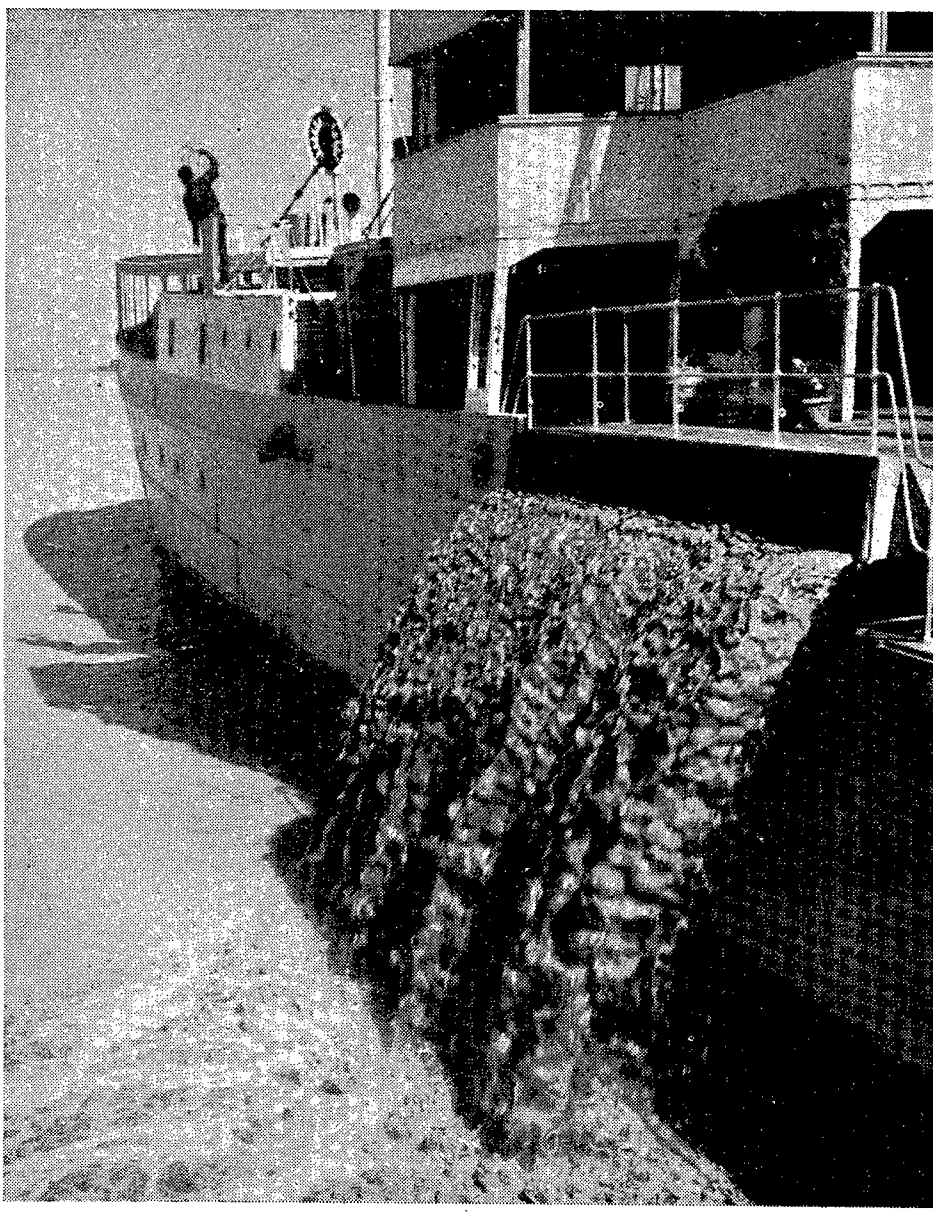
By dredging, silt is removed from the bed of the docks and all along the path used by ships particularly near the channels next to the bars, so that ships can move up and down. Besides, the river is "trained" at many points by building walls or cutting off land so that the flood and ebb flow along the same axis. By training the river, it will be possible to prevent too frequent a change in the depths at various points.

* * *

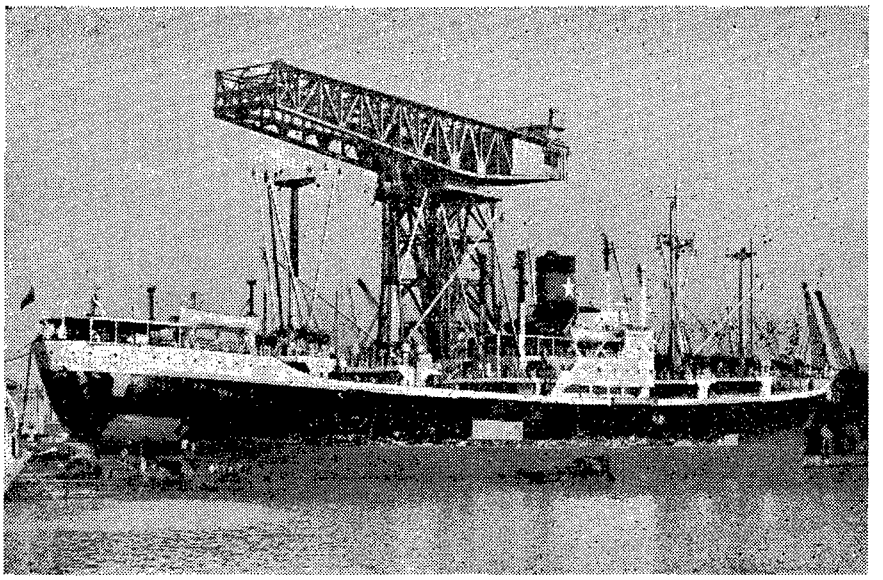
Even with the building of Farakka, round-the-clock dredging and training works, some of Calcutta Port's handicaps will continue, because of the nature of the river and because Calcutta is a tidal port. The bends set a limit to the size of the ships that can call, but the ships that are now being built grow bigger and bigger in size because of trade considerations.

How are these two factors being reconciled ?

By building an auxiliary port at Haldia, 56 miles below Calcutta. Haldia is so situated that the larger ships can berth there. It has 29 feet



The dredger *Jalengi* at work discharging silt in a pocket of the Hooghly.



Bulk cargo mover—the 200-ton crane, its base hidden by a ship

of water throughout the year and 32 feet for nearly half the year.

Haldia will relieve Calcutta of its burden in several ways. It will ultimately take over the work of loading and unloading bulk cargoes. The coastal trade in coal, the export of ore, the import of food grains can all be done from Haldia and it would even be possible to situate a refinery there. The present disadvantage that shipping in Calcutta has—that the freight space cannot be fully made use of—will be overcome.

The Haldia scheme will cost Rs. 25 crore in all, of which Rs. 7 crore will be spent during the Third Plan. Acquisition will start soon and construction will begin in about two years. But already for four or five months every winter since 1959 an anchorage has been worked at Haldia.

Mr. Mitter had told us at the outset that except for the river his Port was capable of taking on any challenge that the country's further development might pose. We asked him to comment on this at a little greater length. He explained how the dock facilities had been strengthened and extended during the Second Plan, how a battery of electric cranes had been added (including the giant 200-ton crane), and how equipment had been installed to handle ores and coal. Several new warehouses had been built, and these had been welcomed by the trade. As a result the Port would be able to handle 18 million tons of cargo by 1965-66, compared to the 10 million tons that passed through the Port in 1959-60. The Port authorities had also gone all out to attract industries by offering land, siding facilities and power.

"But isn't it one of the complaints of shippers that Calcutta Port's charges are high ?" we asked.

Mr. Mitter pulled his cigar out of his mouth. The shipping people, he said, would prefer Calcutta to other ports, say, Bombay, because Calcutta offered two-way traffic. But this advantage had been nullified partly because ships could not touch or leave Calcutta fully laden. The charges could be lowered if there was no idle freight space. Furthermore, the task of maintaining 120 miles of river in good shape added to costs. Ninety craft were maintained for the purpose and 42 highly paid pilots engaged. If, as in some other countries—U.S.A., Japan and Holland—the maintaining of the navigational approaches along the coast was the duty of Government, the Port could levy lower charges he asserted.

* * *

"And now see things for yourselves", Mr. Mitter said, and leaving him to his files in his small nineteenth-century room, in what must be one of Calcutta's most crowded office buildings, we went to dock after dock and warehouse after warehouse. Another day we spent up and down the Hooghly.

Riding the *Jyoti* we chugged down the river which looked sluggish like a python. And pilot Pant, veteran sailor of the open seas, kept showing us numerous green

(*Continued on page 7*)

CALCUTTA PORT

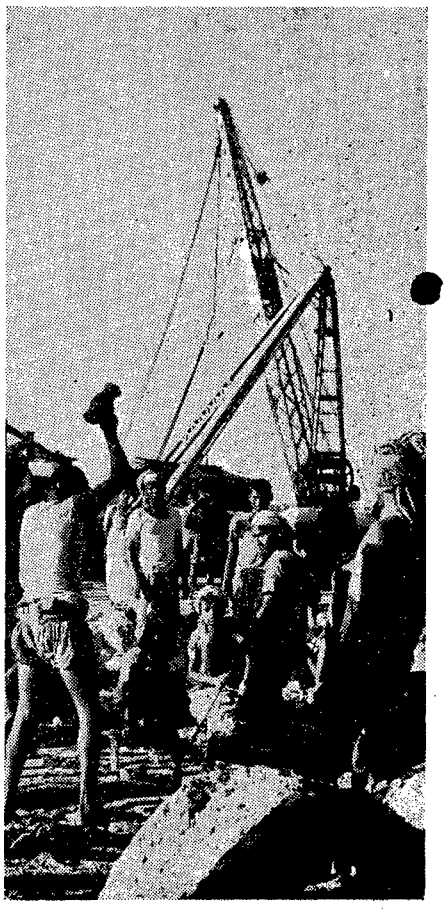
3rd PLAN ALLOCATION

Rs. 34.51 crore

The new schemes in the Third Plan include the buying of two suction dredgers, two grab dredgers, an estuarine dredger, two pilot vessels, a light vessel, four dock tugs, five hopper barges, a survey vessel and three launches; renewal of a bridge; improvement of the Balari channel; installation of a pumping plant in Kidderpore dock, extension of King George's dock; the start of work on Haldia (Rs. 7 crore); survey and research (estimated to cost nearly Rs. 1 crore) and staff housing (which alone involves Rs. 1.5 crore).

In addition, schemes adding up to more than Rs. 7 crore, which include buying of more vessels and floating cranes, training work at Fulta Point and expansion of the tea warehouse, have been carried forward from the Second Plan.

Port labourers repair a berth at the King George's Dock



PLANNING IN YUGOSLAVIA AND INDIA

Valuable Lessons in Approach to Common Problems

TARLOK SINGH

IN most countries the basic institutions and patterns of growth are established during comparatively short periods, seldom exceeding a decade or two. The unique combination of circumstances—political, economic and social—comes as an event in history, does its work and passes, leaving to those who follow the task of consolidation and further development. The years since the end of the second world war have been such an epoch both for Yugoslavia and for India. The two countries present much that is dissimilar, yet they have been drawn towards each other and confront some common problems, and each can profit from the other's experience.

In considering any two countries it is necessary to remember that the approach to development which they adopt is itself a product of their history, institutions and inherent conditions. In this sense, there is a large area over which valid comparison between the plans and planning methods of different countries may not be possible. However, points of mutual interest are easily discovered if one goes beyond the appearances to the underlying purposes of development and the problems which each country has resolved for itself. Economic and social development in Yugoslavia has been marked by such innovation and courage that its results have attracted widespread attention and are of particular interest to countries like India.

Special Combination

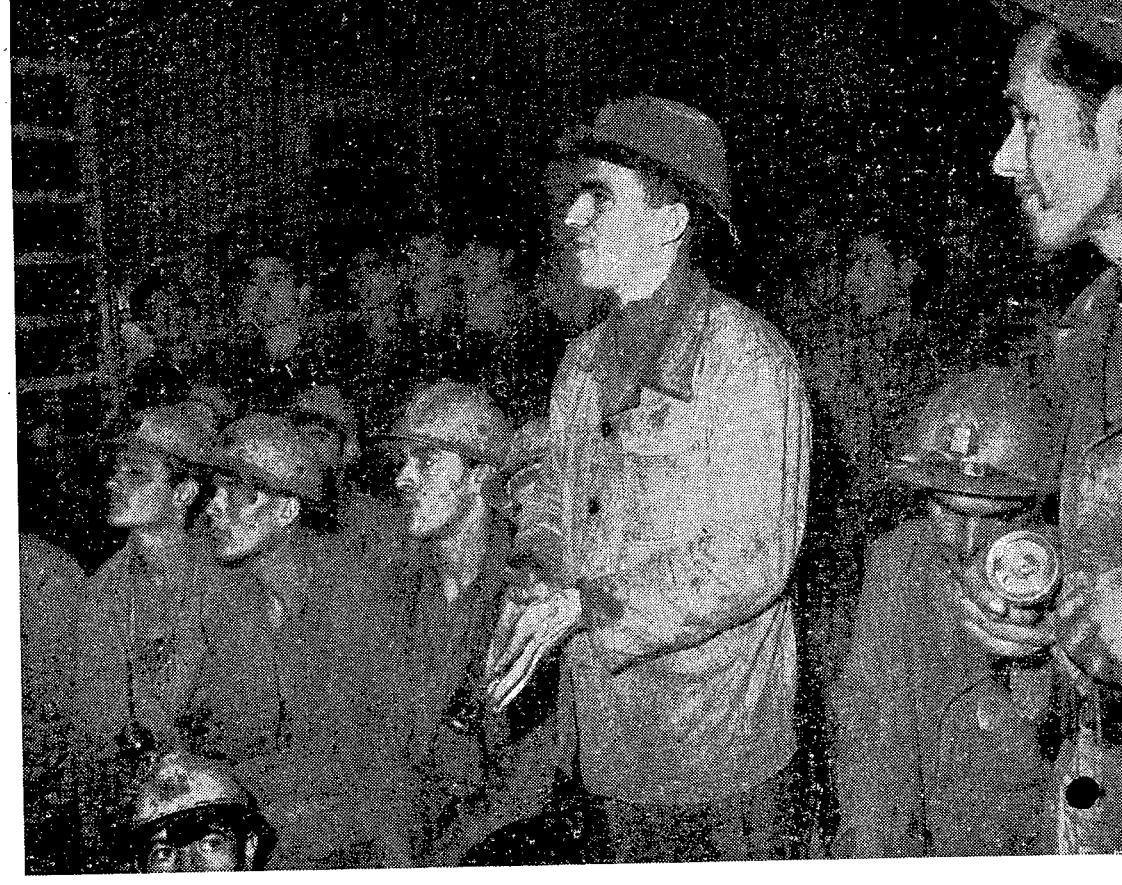
In common with countries in Eastern Europe, immediately after the close of the second world war, Yugoslavia was able to take measures for the nationalisation of industry and trade and control over the economy, such as enabled it to step up gross public investment in the economy to 26.5 per cent of the national product. This included 22.5 per cent investment in basic funds and 4 per cent in working capital. However, what lends significance to Yugoslavia's experience is the series of new policies and adaptations which came after this period. They have altered the character of the economy and the social structure in a fundamental sense and given increasing satisfaction to the people without affecting the rate of investment or the rate of economic growth. Indeed, on these two tests, Yugoslavia's performance has been outstanding. During the period 1953-56 the gross public investment as a proportion of the national product accounted for 29.7 per cent and 29.4 per cent respectively, which included investment in working capital at 6.4 per cent and 7.4 per cent. There were setbacks during the first period of planning and national income rose only by 1.9 per cent per annum. However, during the second period it rose by 8.4 per cent, and in the third period the targets were overfulfilled and national income went up by 13 per cent per annum. The current plan of Yugoslavia (for the period 1961-65) provides for investment at 12.8 per cent per annum and for an average annual increase in national income of 11.3 per cent. The socialist sector, which accounted in 1960 for 76 per cent of the economy, is expected to increase by 1965 to 84 per cent. The combination of a strong and growing socialist sector in the economy with extensive decentralisation and self-government at the local level and in financial and economic organisations has no parallel elsewhere and merits careful study by other countries.

Planning Techniques

In the very beginning of planning the Federal Statistical Office in Yugoslavia hastened to put the country's statistical system on a sound footing, This has enabled the Federal Planning Board to bring about steady improvement in the techniques of planning, to establish correct proportions in the development of different sectors of the economy, and to reduce the volume of administrative work undertaken by the planning organisations at the national level and in the Republics. While providing for an increasing degree of decentralisation in management, the planning authorities have kept a constant watch on all vital points within the economy. From the aspect of formal planning these achievements are of great interest to India. Another aspect of equal interest to planners is the conception of long-term economic development which became an important feature of planning in Yugoslavia several years ago and has now taken the form of a systematic 20-year plan extending to 1980. This plan is broken down into four five-year periods, provides for an average rate of growth of more than 9 per cent per year, and is based on detailed studies and projections for every sector of the economy and for different regions within the country. In India too efforts are being made in these directions and there is much to learn from the practices evolved by Yugoslavia.

Progress In Agriculture

As distinguished from several other countries with planned economies, Yugoslavia has succeeded both in



From a meeting of the Workers' Council in the Rasa Coal Mines near Pula in Croatia. The meeting was convened to discuss the shifting of some miners. Workers' Councils in Yugoslavia have an important voice in the management of industries.

creating the means for industrial expansion through the growth of a socialised sector and in developing incentives and facilities for increasing agricultural production through a combination of private, co-operative and State institutions. In retrospect, this second aspect is of even greater significance than the first. In agriculture the early years did not show much success, but between 1956 and 1959 the agricultural economy advanced on all fronts, including crop farming, fruit growing and stock breeding, and the index of agricultural production rose by 69 per cent. While there was a slight setback in 1960, the current five-year plan provides for a total increase of 42 per cent. Yugoslavia's achievement in agriculture has come about through meticulous attention to improvement of agricultural practices, adoption of better varieties of crops, extended use of fertilisers, organisation of farmers in general agricultural co-operatives which provide supplies and credit as well as farm extension services, well-managed State farms and the wider use of machinery.

It is a matter of no small interest that between 1953 and 1960 the population living in villages should have come down from 75 per cent of the total population to about 66 per cent. Rural under-employment has been by no means eliminated, but its total incidence is being steadily reduced and, while the agricultural labour force has remained more or less constant, the non-agricultural labour force has increased in recent years at an average rate of 7 to 9 per cent per annum. The co-operative movement, which has a long tradition in Yugoslavia, has attained great vitality through the growth of the economy and the strengthening of the socialised sector in industry and trade. The movement not only provides economic services, but has also a growing share in the provision of cultural and social amenities.

Regional Growth

Economic planning in Yugoslavia has been conceived not only as an instrument of material advance but also as a means for the economic integration of the country. The plans of the Republics in Yugoslavia do not perhaps have the wide scope and distinctive character of the plans of States in India. They may be described more correctly as segments rather than as complementary but essentially autonomous elements in the country's development plan. However, this is made up by the great attention given to under-developed regions. Various parts of Yugoslavia differ widely in levels of development and well-being, *per capita* 'social product' varying from around Rs. 2,900 per year in the most advanced regions to about Rs. 800 in the least advanced regions as compared to the average of about Rs. 1,600 for the country as a whole. Elaborate statistical and analytical measures have been devised for the comparative studies of progress in different parts of the country, and both the Federal plan and the plans of the Republics are informed by a deep concern to ensure more rapid growth in the less developed regions. Thus, over a period of twelve years (1948-60), as against an average annual rate of growth in industry of 10.7 per cent in the country as a whole, Republics like Bosnia and Hercegovina have advanced at 13 per cent per annum, and a region like Montenegro, rich in resources but long neglected, at about 17 per cent per annum. Yugoslavia's plan provides for a special Federal Fund for the development of under-developed regions, and allotments from it are made at lower rates of interest and are repayable over longer periods than those from

the general investment funds. Efforts are also made to provide in various ways to reduce the cost of development and to enable the under-developed areas to obtain a large measure of support from the general investment funds. A rapidly growing economy has of course the means at its disposal to ensure more speedy advance for its under-developed regions, but this aspect has not always received the attention which Yugoslav planning has given to it.

Democratic Institutions

A striking development in Yugoslavia, which has a close parallel in the efforts now being made in India to develop democratic institutions at the district, block and village level, is the growth in the economic and other functions of the commune. A commune ranges in population from 5,000 to 50,000 and groups of villages, individual towns or a town along with its surrounding villages may have the status of a commune. Within its area the commune exercises large and even increasing functions. The underlying concept is that through the commune the local community governs itself, plans its own development and strives for the welfare of the people as a whole. The nature of decentralisation of administrative and economic functions which can take place in a parliamentary democracy will necessarily differ from that feasible in a communist or collectivist society and in a country like India economic democracy at the district and block level could hardly succeed without adequate support and guidance from State Governments and State legislatures. Nevertheless, there are important lessons to be learnt from Yugoslavia's progress in the development of local community organisations, specially in the field of economic and industrial enterprises. The development of industries in small towns and rural areas will call for a great deal of initiative from popular organs of government at the local level, and it is important to give to them the resources and the personnel to bring about the balanced and diversified development of the local economy in harmony with the wider needs of regional and national development.

It is never easy to grasp the inner working of institutions in other countries, for modes of thought and expression differ greatly and there are barriers of language. One can at best attempt to put one's finger at a few points where others may have found answers to problems of which we have experience in our own country and which we are ourselves trying to resolve. Nevertheless, as different countries go forward elements of common interest become more numerous and there is an ever-growing pool of knowledge and understanding upon which all can draw. It is from this aspect that an attempt has been made in this short article to touch upon a few features of the planned development of Yugoslavia which deserve to be followed closely by students in India and in other less developed countries.

Hooghly Story

(*Continued from page 4*)

buoys which marked the graves of ships which had been swallowed up by the Hooghly. At a point below Garden Reach, where the river appeared grandly wide, we learnt that nearly 600 feet of this stretch had only two feet of water.

After an hour's cruise we boarded the dredger *Jalengi* which was busy sucking in the slush from the river bed. The tide turned, and the laden *Jalengi* traversed some distance to disgorge the silt. "Where do you dump it ?" we asked, and the skipper, Capt. Malcolm Singh, told us how dredging consisted in scooping the silt out of the main course and dumping it in pockets of the river from where it would be washed on to land. (The Port will soon acquire dredgers which could dump the silt directly on land, but there was in fact little land along the Hooghly which could be so used for dumping.) Dredging, Capt. Singh added, is only a minor truce with the river.

These dredgers work long sessions and have little rest. Last year, for example, 11 million tons of silt were dredged at a cost of nearly a crore a rupees.

We got off at Fulta Point, where nine million cubic yards of land have been dug out in order to minimise the guile of the river.

Motoring back to Calcutta we had a look at how the docks are handling trade which has changed in pattern and grown in volume. Workers at many places were busy strengthening the quays. There stood Sheer Legs (not Marlene Dietrich but a 100-ton crane which was just like a mammoth tripod). We saw many newly built warehouses designed for quicker handling of goods. At the tea warehouse, human conveyor belts of bobbing heads and dancing feet moved the standard-sized chests from lorry to godown and godown to lorry. A little away was the new coal loading plant, waiting to show off its efficiency. Ships of all countries and a variety of flags were taking in or unloading cargo at the various berths. Presiding over them was the 200-ton crane, nimble like a joyous circus elephant tucking in or rolling out its trunk. It was placing huge sections of steel plants or the bellies of turbines neatly on flatcars. From atop it one could look down the chimneys of ships and survey the green-and-silver city that is Calcutta.

During two days of dock-hopping, we saw and talked to scores and scores of supervisors and managers at work. Surprisingly most of them were young men. Surprisingly also, there was no grumbling, no blaming of the 'men above'. People will not believe that such a thing is possible in Calcutta of all places! We had the evidence of our own eyes of alert men working as a team, from Chairman down to a small nut, determined to win.

A report by the *Editor*

To mark REPUBLIC DAY
and the start of
the sixth year of *YOJANA*

A SPECIAL ISSUE

will be brought out on
January 26, 1962

The issue will consist of 64 pages with a three-colour cover and will be priced at 50 nP.

Regular subscribers will get the issue without extra charge.

YOJANA

Yojana seeks to carry the message of the Plan to all sections of the people and to promote a more earnest discussion of problems of social and economic development. It is issued every fortnight in two separate editions, English and Hindi.

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EMPLOYMENT TARGETS

THE Plan is the instrument for achieving the social goals of our nation that have been set out in the Constitution. The Plan programmes for enlarging employment derive from the constitutional guarantee of a right to work.

When the economy as a whole expands and moves to a higher plane, more jobs are created. The very process of modernisation, however, throws people out of traditional jobs. Again, in our country, extreme dependence on agriculture, the scarcity of land, and the rapid growth of population have all resulted in a rapid increase of unemployment—both open and hidden.

The work of the Plan is to bring about positive and quick improvement in the situation. Its approach has been summed up by the Minister for Planning in a recent broadcast. As the main cause of unemployment in our country is backwardness, the main answer is intensive development. For jobs to be created, investment is needed. In the last ten years, the investment has been around Rs. 9,900 crore, which has led to new employment opportunities of the order of 14 million. In the next fifteen years the investment is expected to be about Rs. 53,000 crore, which should lead to gainful employment for all.

The size of investment alone, however, does not contain the whole answer. Different kinds of jobs need different amounts of investment. The choice of programmes, therefore, is of equal importance. They must be such as will employ the maximum labour. Some might feel that for any given volume of money invested, the steel industry offers a comparatively small employment quotient. But it has to be remembered that unless we build up a steel industry today, we cannot build up other industries tomorrow. That is, although the steel industry does not have a large employment potential directly, it indirectly and inevitably ensures more jobs for people. The basic industries have to be built up because there will be no growth without them. As for the other industries, our policy is to use the maximum amount of labour and not to go in for labour-saving machinery merely because of the fascination that they are most 'modern', that is, most labour-saving. The importance given in our country to the smaller, decentralised industries also springs from this desire to find employment for more people.

To expand production and employment we require investment. But population has been increasing without investment. The growth in our numbers has been far greater than earlier forecasts. It is not enough to leave it entirely to the development process to find jobs for all who join the labour force. The developmental investment in the Third Plan is estimated to yield 14 million jobs. But actually 17 million people will come of working age in the next five years. It would be very wrong to leave them to fend for themselves. Such urgent problems need urgent solutions. The rural works programme has been devised to provide at least partial employment to two and a half million people. A point to note about this programme is that it has not been drawn up merely to provide employment; it also builds up our agricultural assets.

While the programme meets immediate needs, it must again be emphasised that the lasting remedy consists in speeding up the rate of growth of our economy. In this there can be no short cuts and no sliding.

OUR PATRIMONY

FOR those who think history is bunk, archaeology is junk. But there are others, like Keats, to whom a pot used by an unknown Greek householder is a 'silent form that dost tease us out of thought as doth eternity.' For a few others who dig up whole empires, archaeology is evidence of the impermanence of things. A stone, a seal, a bangle, a pipe, a clay-cart, a stone-woman, a lion-head, a fluted pillar, a temple, a tomb—all these record the lives that men lived, the fights they fought, the dreams they dreamt, the power and the glory they yearned for. Monuments have many uses, the least important of which is that they bring in tourists. Being the material on which history and pre-history are built, archaeological remains help us to know more of ourselves. Out of the past is the future born. Sculpture and architecture, in particular, provide us with an identity and a core around which national sentiment can crystallise itself. In our country, in particular, they are a visible demonstration of how, in the words of Prof. Childe, several cultures have merged into one culture.

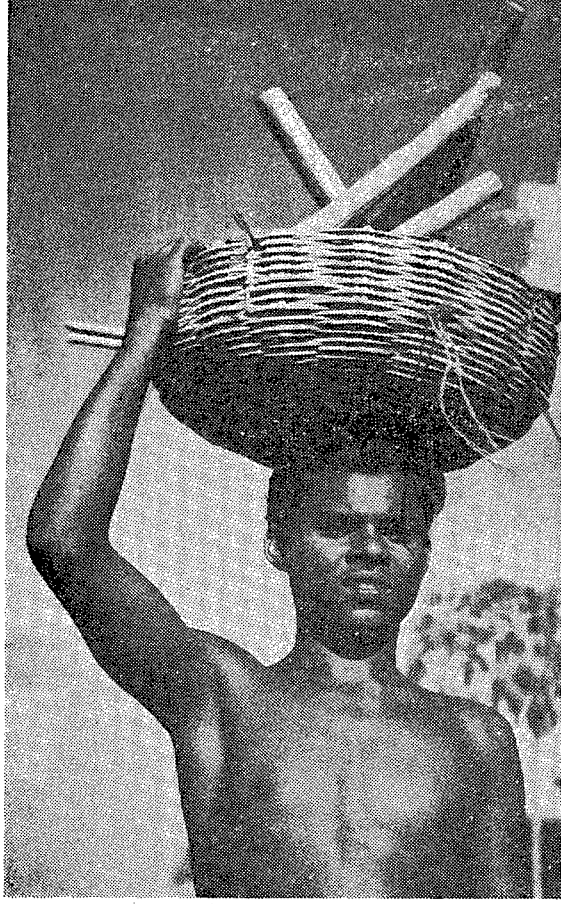
It is of the utmost importance, therefore, that we should treasure these possessions. He who does not reverence his forebears has no future. If we cannot care for the Qutb Minar and the Chitor Tower, we cannot take good care of our Bhakras and Bhilais. These thoughts are pertinent on the centenary of the Archaeological Department. This Department has had the privilege of nurturing some of the foremost scholars of the world, as a result of whose work in the last few decades, more is known today of man's journey on this planet. Our archaeologists have many more mysteries to resolve—and light is seeping into what were the dark spaces of our history, such as what happened between Mohenjo-daro and the Vedic age. The pace of work of our Archaeological Survey gives us hope to believe that we do not have to wait for the second centenary before the riddles have been answered.

The flow into cities can be reversed only if we build up

INDUSTRIES IN VILLAGES

The challenge is to work an integrated scheme which will create more employment outside agriculture—and thus make 'Back to Villages' possible

Prof. N. R. MALKANI, M. P.



Making implements and tools needed for agricultural labour is one of the village industries.

"RURAL industrialisation" appears to me to be a comparatively new term in our economic vocabulary. Somewhere in the 'twenties of this century Gandhiji gave us the idea that village industries, more especially hand-spinning and its connected processes, should be encouraged for supplementing the livelihood of the underemployed. During the last few years we have coined the the expression "agro-industrial economy", as a new pattern of development in which agriculture and a few processing industries are intertwined at the village level.



A village blacksmith makes domestic hardware.

Heretofore the accent had been on production for local use so as to eliminate wider markets and to introduce a modern type of barter with money as a minor medium for exchange. We are now thinking in terms of a broader as well as a higher pattern of national economy and at various levels of production as well as consumption beyond the mere village unit. The notion includes a district production plan and, maybe, even a consumption plan. It involves larger exchanges of surpluses, and production is to be helped by modern techniques of production and organisation, accommodating both manual skills and mechanical devices. Rural industrialisation of this type would become a vital and integral part of the national economy, in name and also in reality. The village will continue to provide the broad agricultural base for industry, but will, at the same time, industrialise itself. The slogan "Back to the Villages" will have to be interpreted not as "Back to the Land" but as taking to villages a little bit of the town and linking agriculture and industry in the interests of a wider national economy.

Several factors have contributed to this transformation of the original idea of village industries as merely supplementary industries to agriculture. The first is the growth and distribution of our population, which have presented a challenge to our national plans. Population has grown faster than we expected—at the rate of 2.2 per cent. Some 438 million now, it is expected to shoot up to 492 million in 1966, 555 million in 1971 and 625 million in 1976.

As disquieting as the growth in total numbers is the growth in urban population. The population of towns increased by 10.6 million between 1931 and 1941 and by 18.1 million between 1941 and 1951. Between 1951 and 1961 it has risen from 61.8 million to 77.8 million—a rise of 25 per cent. According to the 1961 Census, the number of cities with a population of more than one lakh, has risen from 75 to 115, accounting for 43 per cent of the total urban population. There has been a 40 per cent increase in the population of towns having 20,000 people and more.

Delhi is a symptom of a disease that may be called Western. Its population was 5 lakh in the 'thirties and is more than 26 lakh after thirty years. So we are having urbanisation with tears, considering the lack of housing, the multiplication of slums, and the psychological ills that city dwelling brings about. The heavy overhead costs of water-supply, drainage, sanitation, roads and lighting are being considered a normal cost of urban industrialisation. The financial provisions under these heads for urban and rural areas show such tremendous disparities that one would think that we are out to abolish the village and merge it with the town and the town with the city.

RIGHT ORGANISATION

This onward rush of population to urban areas is significant of a disease that is deepening—the vast unemployment and under-employment in rural areas. For several years now we have been hearing the cry of "diversification of occupation" in rural areas. There is a strong undercurrent of doubt, however, about the trend of our industrialisation. It is urgent, therefore, that the correct significance of "rural industrialisation" should be grasped.

I think that rural industrialisation should primarily provide at various levels—the village, the block, and the district—ample employment opportunities *outside agriculture*, and thus reverse the shift of population to towns. Fortunately, through years of groping, we have discovered what types of industrial organisation will easily fit in at these levels. For instance, I would locate Khadi and village industries at the village circle level, where power is not available but raw materials are in plenty. The artisan is there but he lacks skill, lacks finance, lacks organisation for marketing and is declining in the midst of a series of disincentives. We have a list of eleven village industries but four or five of them are important, at this level, namely weaving and spinning, tanning, oil-pressing, rice-husking, and grinding of grains. The recently formulated Gram Ekai scheme will endeavour to remove disincentives and lay a firm basis of industry at the village level. But the village has also other kinds of artisans like smiths, carpenters, masons and brick-makers. They need a common service centre, which could impart training and give a variety of technical services, midway between the village and the block. Such a centre can cover a population of 20,000 to 30,000. It is this kind of artisan who can be made to become more machine-minded and yet improve his manual skills to meet the growing needs of prospering villagers.

Above these service centres would be the block with a town having "a cluster of rural industries", due to natural advantages to good communications and supply of power. Techniques would be mostly mechanical with arrangements for making spare parts and offering small repairs. All the simpler agricultural implements would be manufactured here as also all the new tools for village industries. The cluster-type town would take the machine to rural areas and give rural people the feel of the machine.

Higher up the scale, between the block and the district, there would be the rural industrial estate at the rate of one or two estates per district, but located in a town of a population of 50,000 and under. The estate would look more towards the rural area but would not ignore the adjacent urban areas. It would undertake the manufacture not of tools but of machines needed in rural areas. These might be machines for weaving cloth, pressing oil, chopping grass, moulding bricks, sawing wood, making pumps and so on. But it might also undertake the making of goods for the town, or components for large or medium industries at the district level. Such industries complplete our picture of rural industrialisation. There must be at least one such for every 10 or 12 lakh population.

All these levels must be so integrated that each would need and support the other. The effect of the set-up would be to serve as various effective 'checkposts' against people migrating to larger urban areas by giving adequate additional employment in occupations essentially meeting the wants of rural people. Such a set-up for rural industrialisation would be one of the greatest achievements of the Third Plan and remove the term 'industrialisation' from the field of controversy and apprehension.

'GRAM EKAI' IDEA

The Third Plan has advanced to the good in one direction, lessons having been learnt from experiments launched earlier. Most of the 25 'pilot projects' started by the Community Development Ministry have served as examples of how not to start them, according to the Mishra Study Team. Even the 'Intensive Area Schemes', intended to give fuller employment in a very limited area, have remained isolated patches of progress, making no impact on the vast-surrounding areas. The Khadi Commission has now a bolder programme of starting at least 3,000 Gram Ekais, one in a village circle with a population of 6,000 persons. To my mind there should be 5,000 'Common Service Centres' for rural artisans, one for each block headquarters (with less than 20,000 population). Likewise there should probably be one rural estate for each district or two in a *mandi*, manufacturing town with a population of less than 50,000.

It has now become clear that nothing less than such a massive network spread over the whole country, covering each district and almost each block in an integrated and inter-dependent manner, can make an impact on the fast deteriorating situation. Thepresent separation between village industries on the one hand and small-scale industries on the other must go. This separation works to the great detriment of village industries, which continue to be regarded as medieval and out of date. To my mind the chief characteristics of such industries are that their raw materials are local and that they mainly employ manual skills. The first is an advantage but the second is considered a grave handicap. From the mechanical point of view production per head is low, but from the human point of view production by hand is important, when so many hands are idle. But by linking village industries with small-scale industries in an integrated way, this mechanical disadvantage can be considerably reduced. The Ambar Charkha has shown the way of rapid and continuous mechanical improvement in the sphere of cloth and it is now possible to integrate it with small-scale industry.

NOT AS A POOR RELATION

The same can happen to other village industries. Important mechanical improvements can be introduced in the techniques of almost all village industries, while continuing the use of manual skills.

At present the village industry has a tragic struggle for survival and lives like a poor old relative of big industry ; the 'small' industry is in cities and big towns, looking wistfully towards big industry for compassionate patronage. This depressing picture must change, as it is hoped it will during the Third Plan.

In this connection a term has been used which has been controversial. In explaining his ideas of a new rural order, Gandhiji said that villages should be 'self-sufficient' with regard to their essential needs of food, clothing, shelter, education and health. This self-sufficiency should not be interpreted in a narrow sense. The Gram Ekai scheme has understood it in a wider sense and contemplates self-sufficiency for a circle of villages with a population of 6,000. I would take the liberty of extending the idea so as to cover a population of 10,000 to 20,000 as a market for each Gram Ekai. The cluster-type township in each block may correspondingly cater for the population of a block or town ; the industrial estate will have larger coverage for a market, extending to the district. The larger industries in the district will generally look after the needs of the blocks and their villages first before any surpluses are spared for areas outside the district. Linked in this manner, the modern industries will not disrupt, as they have been doing, all the smaller and village industries below them but integrate and vitalise them for the overall service of the district.

The Second Plan spoke of devising a policy of 'common production programmes' for village, small and large industries. This was a euphemism for the helpless absorption of the village and the dependence of small industry on big industry. The time has come when spheres of production must be 'demarcated' and then 'reserved' for each type of industry, while paying the most serious attention to the base of all industry, namely, village industry. There is reason to believe that if essential consumer goods, of various grades, are mainly allocated to the district, so as to make it self-sufficient, the national economy will be strengthened and the national income may rise from 5 per cent annual increase to somewhere near 8 per cent. In the interests of such rapid growth it is incumbent that our economy must take in its sweep the whole rural area for industrialisation and not merely the urban fragment. We might make a beginning by abolishing the various sectional all-India boards and in their place establish one autonomous and well provided board which will take each district as the unit for its operation. Such a change will be spectacular, and may lead us to development even more spectacular.

The Rare Earths Limited, Bombay, a State-owned enterprise, made a profit of Rs. 5.12 lakh during 1960-61 as against a profit of Rs. 93, 187 in the previous year.

During 1960-61, the Bharat Electronics Limited, Bangalore, also made a net profit of Rs. 11.85 lakh compared to a profit of Rs. 7 lakh in 1959-60.

QUOTATION BOX

We find ourselves faced today with problems of language, caste, religion and party. At present they divide us. We can, however, grow strong if we utilise these carefully and efficiently. What would a man lose if he learns more than one language?... The Delhi Conference (on national integration) decided that everybody must learn three languages. The mother language will serve as the right eye, the national medium, Hindi, will serve as the left eye ; and a third eye, I would like Lord Shankar's, the eye of knowledge. This is Sanskrit. None in India can do without Sanskrit. Those whose eyesight is not normal take to glasses. English will serve that purpose.

—Acharya Vinoba Bhave

* * *

Our younger generation in science and technology is a very promising one and gives me more hope than anything else in India.

—Prime Minister Nehru

* * *

The Indian footballer, unlike a Russian, Hungarian, German or even an Indonesian footballer, treats the goal as a needless distraction. It accounts to a large extent for the fripperies of midfield play and their elaborate dribbling bouts.

—Vernon L. Ram in "The Indian Express"

* *

I only hope that some time in the future we won't have to go abroad to learn our own Dhrupads.

—Ustad Nasir Moinuddin Dagar

* * *

Major Yuri Gagarin, who went up the Qutab today, said climbing the tower would be a good exercise for future astronauts—especially for their lungs.

—A Report in Hindustan Times

* * *

India's rate of economic growth could be 50 per cent higher than at present.

—Mr. G. D. Birla

* * *

I have heard many Indians in Indonesia (most of these are hardly educated) telling Indonesians that it was their forefathers who brought culture to Indonesians and before that Indonesians had been living in woods. Our universities do not teach about modern South-East Asia.

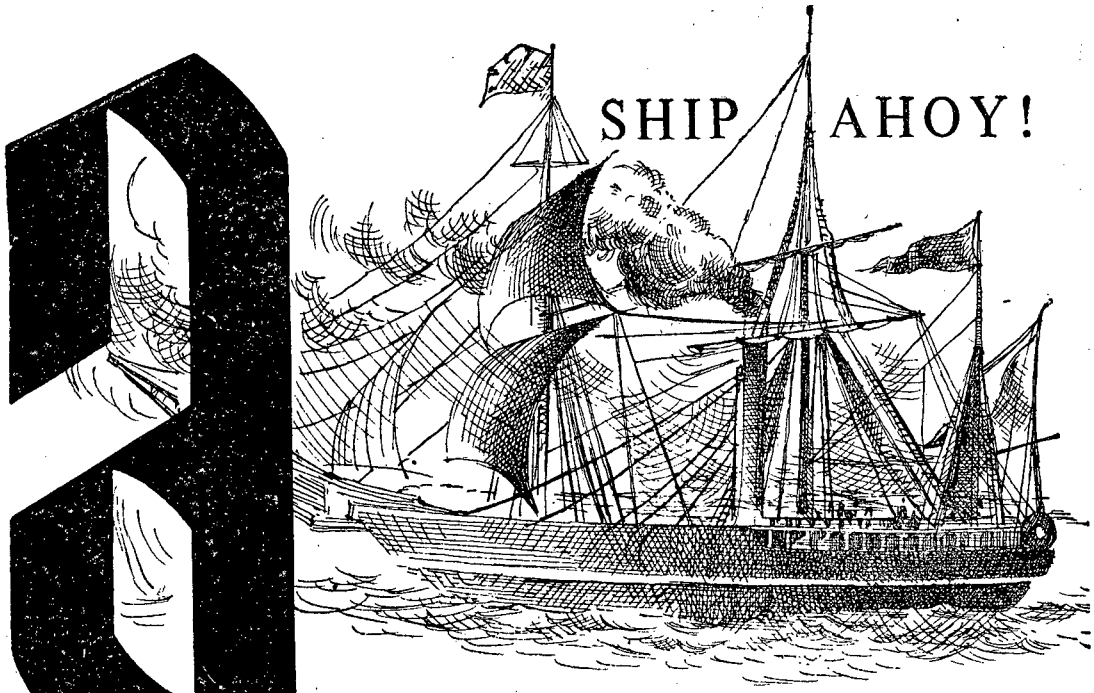
—A Letter in The Statesman

* * *

The change has here been so distinct and rapid as to resemble a film of a familiar process being projected at three times the normal speed.

—The Economist, London, in a survey of Pakistan.

SHIP AHOY!



historic voyage ended as the steamship "Enterprise" reached Calcutta on 9th December, 1825. The first steam-powered vessel to make the England-India run, the 500-ton "Enterprise" won a cash prize of Rs. 100,000 offered by Calcutta's trading community for this truly pioneering achievement. Her captain on the hazardous voyage round 'the Cape' was James Henry Johnson, Commander, Royal Navy, and a hero of Trafalgar.

Though the "Enterprise" was the first ocean-going, partly steam-propelled ship to arrive at any Indian port, small steam-powered craft were being built in Calcutta as early as 1823.

Among the oldest and best known marine and general engineering firms in the country, a privately-owned concern known as Reid & Company's Hooghly Dock (founded 1819), the forerunner of The Hooghly Docking & Engineering Company Limited, was already flourishing before the introduction of steam to India.

The 'Hooghly Docks' are a part of the vast industrial and engineering organisation of Martin Burn Ltd., an organisation which is playing an important role in India's industrial progress.



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Another Bridge Across Ganga

ANOTHER major bridge now spans the First River of the country, the Ganga.

This bridge is at Garhmukteshwar, the holy town a few miles downstream from Hardwar.

The Garhmukteshwar bridge is 2,308 feet long with a roadway 34 feet in width. It provides the missing link in the national highway connecting Calcutta and Delhi via Moradabad and Lucknow.

The bridge has reduced the distance between Delhi and Lucknow by 30 miles and made all-weather traffic possible between the western and north-western areas of U.P. This used to be suspended during the monsoon months.

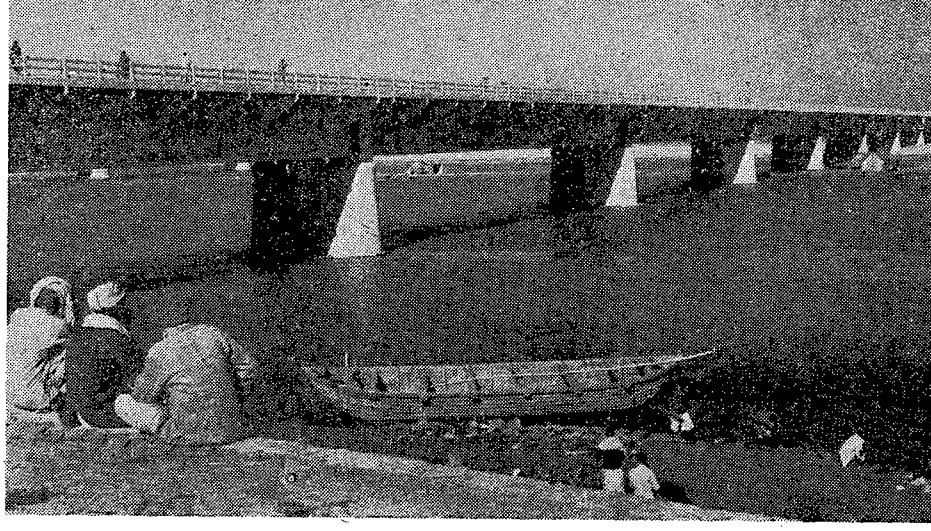
The project, which includes the building of three small bridges over streams besides the large bridge over the Ganga, was completed in three years at a cost of Rs. 1.15 crore.

THREE STEEL PLANTS EARN Rs. 44 CRORE

THE report of the Hindustan Steel Limited for the year 1960-61 reveals that the Bhilai Project made a profit of Rs. 1.53 crore during the year, while the Rourkela and Durgapur Projects reported losses of Rs. 1.56 crore and Rs. 71.18 lakh. The apparent total loss of Rs. 74.34 lakh may even turn into a profit after the fixation of retention prices on the basis of recommendations by the Tariff Commission.

The gross sales of the three projects amounted to Rs. 44.22 crore including Rs. 3.25 crore payable to the Iron and Steel Controller as credit to the Steel Equalisation Fund.

Orders were booked for the export of 437,818 tons of pig iron and steel products, valued at Rs. 12.8 crore. Of this, 139,843 tons, valued at Rs. 4.4 crore, were shipped during the year. The buyers included Japan, Italy, U.K., U.S.A., West Germany and Pakistan.



The New Bridge at Garhmukteshwar

Bhakra Power-House In Full Swing

AS THE PLAN MOVES

THE fifth and last unit of the Left Bank Power-house of Bhakra was switched on by the Prime Minister on December 10. The first was commissioned last year and the other three at intervals of three months.

Now in full use, the Power-house, one of the largest in the world, has a capacity of 450,000 kW.

The Bhakra-Nangal Project has two other power-houses, those at Ganguwal and Kotla, which have been functioning since 1955 and 1956. Another is being built on the right bank at Bhakra, and is expected to be ready by the end of the Third Plan.

With the commissioning of the fifth unit of the Left Bank Power-house, the present installed capacity of the Project has reached 575,000 kW, enough to electrify seven cities as big as Delhi.

With the availability of Bhakra Project power, the number of factories in the Punjab has already gone up from 800 in 1947 to 3,500 and their annual production has increased to Rs. 100 crore. The agricultural income has risen to Rs. 400 crore.

The Left Bank Power-house is served by five steel penstocks (or pipes) which are 15 feet in diameter and 650 feet in length. The power-house itself, although dwarfed by the dam which has touched its maximum height of 740 feet at several points, is 161 feet high.

PANCHAYATI RAJ COMES TO U.P.

PANCHAYATI RAJ was launched in Uttar Pradesh on December 3. With this, more than half the country now has a system under which the villagers manage their own affairs, through village councils, Panchayat Samitis and Zila Parishads.

U.P. thus joins the ranks of Rajasthan, Andhra Pradesh, Madras, Mysore, Assam and Orissa which have already established Panchayati Raj.

BRIGHT SPOT

All people above the age of 65 will begin getting an old-age pension of Rs. 20 a month in Madras State. This scheme has been included in the State's interim budget for 1962-63.

The age-limit will be brought down to 60 in the case of those who have lost their sight, speech or limbs, and lepers. Professional beggars will be excluded.

District collectors will administer the scheme.

AN HO



Photographs by T. S. NAGARAJAN

"put lots of electricity, the motor will run"

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UR WITH A BOY
NVENTOR

more recently-built areas of Delhi there is a fifteen-year old boy
bhas Chandna. He comes from a home which is neither too rich
a home in which the will to make good is strong. Subhas was in
month, having won an award from the Inventions Promotion Board.

traption which won for Subhas this award is an 'electro-timer'. It
ion of two time-pieces joined together by some wires. It is linked
set. When the alarm of one of the time-pieces rings, the radio set
. When, after any given interval, the bell of the other time-piece
o stops working.

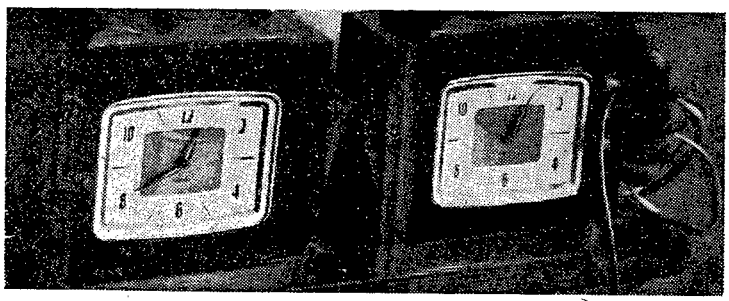
duced Subhas to put together this mechanism? His interest in
mes, in particular the radio newsreel which is on the air twice a
m.

seven-thirty and nine is the time when a good student should be
Preparing for the higher secondary examination, which he is to
Subhas naturally cannot be expected to be an evening listener.
e newsreel and does not want to miss the voices of interesting
counts of notable events.

piece is both the monitor and friend of the student. Subhas
ther he could not make his time-piece help him in listening to the
nly the newsreel. He could thus have what he wanted, and not
did not. So his mind and fingers began to work, and the electro-
to being.

of the Inventions Promotion Board, he sent his model to them.
d it, liked it, and gave Subhas a silver medal to encourage him to
r things. Subhas indeed is dreaming of them. He is interested
and wonders whether it will not be possible to have cars which
etrol. "If we can put a lot of electricity, the motor should run"

ol to hich Subhas goes, the Shaktinagar School, is justly proud
uple of engineering students have also written to say they would
e him in their midst.



na







Top : Oh yes, studies come first;

Middle : But I like the radio newsreel;

Bottom: Of course I was happy when the award was announced.

SIDE TRACK

Best-Sellers

SAYS an Indian novelist that the *Bhagavad Gita* and the *Kamasutra* are the best-selling Indian books. We have no statistics about Vatsyayana's treatise, but how many know that one press alone,—the Gita Press of Gorakhpur—has so far printed 91,07,250 copies of the *Gita* ?

The Gita Press has many other best-sellers to its credit. According to an article in Unesco's *Information Bulletin on Reading Materials*, the publishing house has also printed 3,210,000 copies of *Ramacharita Manas* and more than 23 million copies of collections of saints' songs. And all this in 32 years.

Fluffy Delight

"THE livers of animals receiving the rice-show parenchymal damage of a mild protein deficiency type, while the livers of animals receiving idli or idli fortified with Bengal gram and Indian multipurpose food are quite normal. The livers of rats receiving diets based on idli..."

Rats and idlis : what an unusual combination. But the writers of scientific notes rarely have a sense of the ridiculous. Think of rats 'receiving' a diet !

But the note brings out an important fact—that idlis are a very nutritive food. Of the southern foods that have conquered palates up north or in the west, the idli is not yet as popular as the dosa, but the idli—as we have just seen—is nourishing.

"How do you get your proteins?" the southerner is frequently asked, especially if he is a vegetarian. The answer is simple—idli, vadai, thair vadai, kosambari, usli, and other such mouth-watering things. The important thing about idli is that it is not wholly rice, but is partly black gram. Also, it is a paste that is allowed to ferment. After fermenting it is steam-cooked. Every process, thus, is what the doctor would approve. Small wonder that the hospitals in Madras prescribe idlis to their patients in preference to bread slices.

Brave Daughter

IN no department of Indian life has the Gandhian impact been felt more than in the liberation of women. Naturally and without fuss women have begun to play an important part in our politics. Panchayati Raj has carried this further and shown that what is true of the towns is true of the villages. In hundreds of our villages women have been elected to the Panchayats. In some they are even Sarpanchas.

PLAN QUIZ

1. The workers employed in the organised industries in India now number (a) 79 lakh (b) 35 lakh (c) 102 lakh.
2. What are the amounts spent and allocated in the three Plans for the education and welfare of the handicapped?
3. How many residential units did the Government build for the resettlement of displaced persons from the western region? What is the total cost for constructing them?
4. The Girna Project is situated in (a) Gujarat (b) Bihar (c) Maharashtra.
5. What does the picture below show?

(Answers on page 19)





IGNORAMAN

Wants to Know
If Conquest Of
INNER SPACE
Isn't More Urgent
Than Conquest of
OUTER SPACE

The devotion with which these women have been carrying out their duties is exemplified by the story of Bibi Resham Kaur. She was elected Sarpanch of Bahupur in the Bhogpur block of Jullundur district, after a dramatic tussle in which she defeated her own father-in-law, an old-style landlord who was used to power but not to the idea of service. Defeat at the hands of his own daughter-in-law so enraged him that he disinherited his son for the fault of being the husband of the victorious candidate.

Undaunted, Resham Kaur went ahead with the good work of making the village a better place. Under her leadership a three-mile-long road was built, linking the village with the Jullundur-Pathankot highway. The villagers gladly offered 'shramdan' to build the road, and students of the nearby Rojhari High School also joined in. With the support of the villagers she settled many disputes. In one she came face to face with her own father-in-law, but, with the courage that her fellow-citizens had come to expect of her, she upheld the honour of the village.

In appreciation of her steadfastness, and to compensate her for the loss of property, Resham Kaur has been awarded Rs. 5,000 by the Punjab Government.



KUSUMAVATI DESHPANDE

A Moulder of Literary Taste

P. Y. DESHPANDE

THE place of woman in the cultural heritage of India is a matter of some controversy. On the one hand, we find highly enlightened women in the *Upanishads* discoursing about the nature of *Atma* and *Brahma* in relation to the destiny of man in this mysterious universe; and, on the other, we find women and *shudras* bracketed together as being unworthy of even listening to the Vedas being recited by the Brahmins. Again, in later *smritis*, we find statements to the effect that where women are worshipped the gods themselves come down to rejoice; and also statements to the effect that women do not deserve any kind of freedom.

It is this latter view that seems to have held the field for centuries past resulting in the unprecedented decadence of the Vedic Hindu society.

Since the dawn of this century, however, Maharashtra witnessed a powerful social upheaval for the emancipation of women and the downtrodden. Ranade, Agarkar, Gokhale, Jyotiba Fuley and Karve were the pioneers of this great social transformation. But politics soon came to dominate the Indian scene so much that social reformers, educationists, writers, artists and even philosophers were relegated to the backwaters of this gigantic social upheaval. Even today, after more than a decade of Independence, politics still dominates the social scene, and, consequently, even the tallest figures in the field of art, literature and culture fail to evoke that response from the mass-mind which political and cultural demagogues are capable of capturing and monopolising. Such a state of affairs

BEAUTY & FAITH

If the greatness of works whose greatness is beyond dispute cannot be assessed by the accepted tenets of literary criticism, the tenets are either wrong or inadequate. The values of life must also be accommodated along with the values of beauty in any code of criticism to make it fully competent for its task.

In fact, beauty itself is one of the values of life. It is unreasonable to create by our own notions an opposition between beauty and values of life. Several emotional and intellectual difficulties crop up once beauty is divorced from values of life...

Similarly, in the process of critical appreciation, beauty is not the only value although, no doubt, it is the primary and essential one. In order to analyse the emotional content of a literary work, it is also necessary to consider the psychological and social values and, lastly, also to accept the criterion of universal values of life. These are the three steps of the ladder of criticism. Aesthetics might be content to stay on at the first step, but not so criticism. If criticism also betrays the same tendency as aesthetics, it might result in a limited, narrow literary outlook and might affect the creative process.

—Extract from presidential address at Bombay and Suburban Marathi Literary Conference, 1958.

* * *

The problem that confronts us today is neither of technical development nor of power of expression. The abstruseness, artificiality, unease and obscenity in contemporary literature are the symptoms of a deep-rooted malady... Aestheticism can produce only bits of art. Mere aesthetical criticism becomes mechanical...

We need not go to any foreign art critic to break open the blockade of a narrow aesthetic. If we take a glimpse back, we shall notice the lofty peaks and high plateaux of Marathi literature and our critical vision will become clear... In every classic work the creative genius has been searching for some higher faith beyond the description of momentary shades of human nature. It does not wallow in mere patterns of form and rhythm...It unfolds the universe for others to see through its own eyes and also takes them beyond. This is the implication of Abhinavagupta's statement that poetry pervades the universe as well as transcends it.

—Extract from presidential address at Marathi Literary Conference, 1961.

constitutes a sad commentary on the immaturity of our modern socio-political leadership which pretends to regain the lost glamour of our rich cultural heritage.

Shrimati Kusumavati Deshpande, who died on November 17, was one of the tallest figures in the field of Marathi literature. She began her career as a teacher of English literature in the Morris College, Nagpur, now renamed as Nagpur Mahavidyalaya. Countless students who studied in that college during her tenure as a professor for over twenty-five years, still remember her as one who gave them a new insight into great literature.

Four years ago she became the Chief Producer of Programmes for Women and Childern of All India Radio, first at Nagpur and soon after at New Delhi. Her record of service in this new field was as meritorious as her professorship.

SENSITIVE CRITIC

But this was by no means the dominant part of the personality of Kusumavati Deshpande. She devoted her energies towards establishing new standards in Marathi literature based on new values of life. Her short stories, lively pen-portraits and reflective short essays made an impact on the reading public because of their compassionate catholicity and freshness of style.

Her major contribution was the *History of Marathi Novel* which has come to be regarded as a monumental work, both for its handling of historical details and for its broad, integrated outlook on life and literature. This work caught the spirit of the modern age and lifted literary criticism out of the realm of personal likes and dislikes. Her critical essays published under the significant title of *Pasang*, meaning a very delicate and sensitive balance, further enriched, both in width and depth, the norms of literary criticism.

To point out what is significant in modern literature and, in the process, distinguish between true value and mere popularity was no easy task. It needed courage and intellect. It needed industry and insight. It needed the art of persuasion coupled with strength of conviction. And, above all, it needed poise of mind and balance of judgment.

Kusumavati was poise and balance personified with a charm and grace that left friends and others alike wondering. Dignity and delicacy gave her personality a significance that may well be described as the essence of Indian womanhood.

She was unanimously elected to preside over the forty-third Marathi Sahitya Sammelan held at Gwalior in the last week of October this year. She was the first woman to be elected to this highest honour in Marathi literary field. Her presidential address and her concluding speech left such a deep impress on the minds of students of literature that her sudden demise, only two weeks after the conference, came as a blow.

Yojana Essay Competition

Rs. 250 IN PRIZES

For the fifth year in succession, *Yojana* is conducting an essay competition to promote clearer thinking among our students in regard to the basic problems of planned development. The competition is open to all college students.

Subjects

One of the following:

1. Economic integration as basis for national integration.
2. Role of public enterprises in India's economic development.
3. Lessons of ten years of planning in India.
4. Education and economic development.
5. Ways of modernising Indian agriculture.
6. Mobilising people's effort for the Plan.

Length and Language

Essays may be submitted in either English or Hindi. They must not exceed 1,200 words.

Prizes

Four prizes will be awarded as follows:

1. Best Essay in English by under-graduate student—Rs. 50.
2. Best Essay in Hindi by undergraduate student—Rs. 50.
3. Best Essay in English by student in Master's Degree classes—Rs. 75.
4. Best Essay in Hindi by student in Master's Degree classes—Rs. 75.

Last Date

Entries should reach Chief Editor, "Yojana", Yojana Bhavan, Parliament Street, New Delhi-1, by January 31, 1962.

Each entry must be countersigned by the head of the institution where the candidate is studying.

MADRAS MAKES A START WITH HYBRID JOWAR

THIS is winter. Harvesting has begun and is expected to continue till the end of next month. Part of the harvest is to be kept apart for use as seeds next year. Since improved seeds play an important part in increasing the yield of crop, it is time we took more care in selecting them.

There are thousands of *cholam* plants in a field. Not all of them look alike. Some are good, others are bad, though they are mixed together. If the poor plants are eliminated and substituted by good ones, the yield will naturally go up. If, again, only a few good plants are chosen and the seeds from them sown next year, an improvement in yield will follow. This is generally the principle of selection—one method of evolving new strains. Another method is the pure line-selection by which individual plants or pure lines are selected. Hybridisation is yet another method of evolving new, better-quality strains or such types as will be resistant to disease or drought.



Harvesting jowar: poor plants being eliminated from a field in Madras

Latest Development

ONE of the important developments in recent times in agriculture is the exploitation of hybrid vigour. The seeds produced by cross-breeding two in-bred lines or two distinct varieties yield an unusually good and vigorous crop. This unusual vigour of the hybrid progeny is called hybrid vigour. The hybrid corn evolved in this manner in America several decades ago is famous the world over. In Madras, hybrid *cumbu* has become popular among farmers (See *Yojana*, June 11, 1961).

Madras has produced hybrid *cholam* (Jowar). Recent researches at Coimbatore have proved the possibilities of increasing the production of both *cholam* grain and straw in this manner. Many hybrids have been produced by using the American parent M. S. Kafir 60. Last year the performance of hybrid *cholam* was compared with our best strain Co. 18. Hybrid *cholam* Texas 610 gave 2,775 lb. per acre compared to 2,290 lb. per acre from Co. 18. Several types of hybrids are under trial and are found quite successful. Small quantities of seeds are available for trial by interested farmers.

Four Maize Varieties

THOUGH maize is not widely cultivated in Madras, we may look forward to its extended cultivation in certain favoured localities. Some good imported types thrive well in India and give very good yields, even up to 3,000 lb. per acre. A trial with hybrid corn conducted under PIRRCOM (Project of Intensive Regional Research on Cotton Oilseeds and Millets) on a plot at the Indian Agricultural Research Institute, Pusa, has shown promising results. The cobs are splendid and fully filled. The following four hybrids have been released by the Indian Council of Agricultural Research, namely, Ganga Hybrid Makka Number 1 and Number 101, Ranjit Hybrid Makka and Deccan Hybrid Makka. Small quantities of seeds are available. If you are interested you may enquire from your nearest Extension Officer.

ANSWERS TO QUIZ

1. (b) The number of those employed in the organised industries stood at 35 lakh in 1960 compared to 29.6 lakh in 1950.
2. During the First Plan period, the expenditure amounted to Rs. 2.38 lakh while during the Second Plan period Rs. 63.34 lakh were spent. The Third Plan has provided Rs. 150 lakh.
3. A total of 2,21,110 residential units have been built for displaced persons. Delhi, with 59,000, stands first in this respect. Next comes Punjab with 50,000 units, Maharashtra and Gujarat together with 49,000 units and U.P. with 27,959 units. The total cost on the housing schemes amounted to Rs. 58 crore.
4. (c) The Girna Project is in Maharashtra. It comprises a storage dam at Panzan in Nasik district, two weirs at Jamda and Dahigaon, remodelling and extension af Jamda left bank canal system and another left bank canal from Dahigaon weir. Costing Rs. 12.55 crore, the project will irrigate 142,100 acres of land in the area. Work was started in 1960 and is expected to be completed in 1963.
5. A village artisan of Mirzapur, Uttar Pradesh, holds a mass of lac near an oven to soften and flatten it into thinner sheets.

THE DAY BREAKS BRIGHTER TOMORROW

BEARING TOMORROW'S JOY: the strength
in four hundred million limbs.
Today's work. Today's patience.
Burden borne, feet firmly on the ground.
Tomorrow...a little less of care, a little more of joy.

And for HINDUSTAN LEVER, too,
tomorrow begins today.
In the research laboratory, in the factory and office.
Work, patience, care.
To serve tomorrow's homes and the nation's needs
with products that grow better and better.



TODAY AND TOMORROW...
HINDUSTAN LEVER SERVES THE HOME
WITH SOAPS, FOODS, TOILET PREPARATIONS

PR. 35-X52

The Prime Mover of Progress

ROLE OF GOVERNMENT IN OUR ECONOMIC DEVELOPMENT

—DR. K. S. GILL—

This was given as a talk by Dr. Gill at the Administrative Staff College, Hyderabad, on November 24. Dr. Gill is Director of the Public Enterprises Division of the Planning Commission. The views expressed here, however, are entirely his own and do not in any way commit the Planning Commission.

SINCE Independence, especially following the initiation of planning, Government has played a leading role in India's economic development. This is as it should be in a developing country. There has been growing understanding and appreciation of this role, lately even in quarters where, not long ago, planning was taboo. The recent Asian Planners' Conference in Delhi, sponsored by the ECAFE, was, indeed, a refreshing experience. The need for planning and for the Government to play an active role in development was the common theme of the various papers prepared by the ECAFE Secretariat and of the discussions at the Conference. Not everybody, however, is agreed as to the scope and significance of this role. I would take the opportunity to invite your attention to some aspects of the Indian experience on the subject.

The role of Government in India has derived from the nature of the development process. The core of this process is formation and utilisation of real capital, that is, creation and utilisation of additional facilities for manufacturing, mining, power, transport, communications, agriculture, irrigation, education, health, recreation, and so on. Utilisation is secondary to creation in the sense that a facility can be utilised only after it has been created. While utilisation of existing capacity is important and should always have high priority, only massive creation of new facilities can help India to overcome the state of underdevelopment. As new facilities are created through capital formation, investment emerges as the key link in the development process. Even utilisation is, often, primarily a matter of some balancing investment in a sector that might have lagged behind the overall growth of the economy.

A Structural Change

AT the time of Independence, India had a very low rate of investment, only about 5 per cent of national income. At this rate, national income would barely keep pace, if at all, with the present rate of growth of population. The key problem, therefore, was how to step-up the rate of investment. The decade of planned development has registered considerable progress in this direction. The rate of investment has arisen from 5 per cent in 1950-51 to 11 per cent in 1960-61. In the Third Plan, it has been envisaged to rise further to 14-15 per cent in 1965-66, 17-18 per cent in 1970-71 and 19-20 per cent in 1975-76. In bringing about this step-up in the rate of investment, the role of Government has been, and would be, of strategic importance.

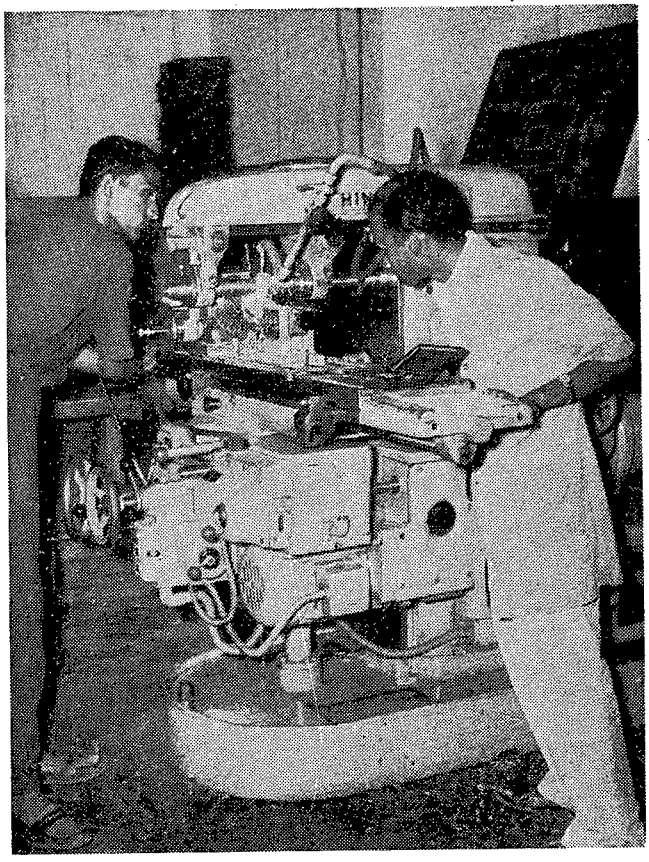
In India, the step-up in the rate of investment has involved a change in the *structure* of investment. In pre-Independence India, when the rate of investment was around 5 per cent, the proportion going into modern industry, particularly key and basic industries, was insignificant; indeed, this was the basic cause of her economic stagnation. But that pattern of investment is inconsistent with higher rates of capital formation. In India, with very poor availability of arable land *per capita*, it is impossible fruitfully to absorb investment at anything like 15 to 20 per cent of national income, year after year, without embarking on industrialisation. The development process is sometimes described as capitalisation. It is obvious that in India's case capitalisation in adequate measure necessarily involves industrialisation. The sort of change in the structure of investment in favour of modern industry which planning is seeking to effect in India is, in fact, inherent in the step-up of investment.

In India, just as adequate capitalisation necessarily involves industrialisation, adequate industrialisation must have, as its core, creation and expansion of heavy industry, comprising metal, engineering, petroleum, chemical, cement, and other industries. For, there is no other way in which India can possibly meet her requirements of metal, machinery and building materials arising out of a high rate of gross capital formation, and of consumer goods and services arising, with rise in *per capita* income, out of modern consumption patterns.

The Problem of Markets

THE key task of Indian development, therefore, has been how to promote investment in modern, particularly heavy industry. India has adequate natural resources for this. But a major difficulty arises from the very large scale of production and investment and the high level of skill involved. It would be uneconomical to set up modern industrial plants except of large enough scale required by modern technology. In other words, the market has to be wide enough for the purpose. How serious a cons-

traint on industrial development can a limited market be was brought home forcefully by the agenda papers and the deliberations of the recent Asian Planners' Conference. Most Asian countries have natural resources for the development of modern industry but, in many lines their internal market is not large enough to promote the establishment of even one optimum-sized plant. Their first problem, therefore, is to overcome this barrier. It was suggested to the Conference that the only solution of the problem lay in regional economic co-operation tending in the direction of a common market and integrated planning. But, when the countries concerned



Apart from investment in public enterprises, Government provides facilities for industrial training.

are so diverse politically and when their economies have at present very limited complementarity, regional economic co-operation is easier said than done. In any case, the relief expected of it is yet way off.

In India, the problem has been successfully solved. One of the outstanding achievements of Governmental leadership, one in which administrative machinery has played its due part, has been that in the years following Independence, the country has been knit, step by step, into a single unified market. This process of what may be called market widening, has ensured that even though *per capita* purchasing power remains low, the pooling of demands of hundreds of millions of people makes it, in the aggregate, large enough to meet the requirements of technologically optimal plants in most branches of industry. The way has thus been made clear for the development of metal, engineering, oil, chemical, building materials and other industries which, in consequence, have made rapid strides.

This has had its impact even on foreign business investments in India. Whereas previously, in keeping with the general pattern observed in underdeveloped countries, these investments were confined very largely to extractive or simple processing industries for export, the lure of a wide and expanding market together with other measures taken by the Government has caused fresh inflow to be channelled mostly into manufacturing. The creation of a unified market that makes up in extent what it lacks in depth has made industrial development almost inevitable. I would go so far as to say that it is not possible for anyone today to halt the industrial advance unless he first strikes at this great achievement. However, the fate of Congo should be a grim reminder of what could have been, had not the problem of national integration been solved with enough tact and wisdom.

Market widening is being followed by what may be called market deepening, thus making the conditions ever more favourable for development. Investment in one field creates demand for the products of other industries. The demand for investment goods is created directly, and that for consumption goods and raw materials, in consequence of production and income generation that follows. Government investment in key sectors, together with private investment on a wide front, both made possible by the initial market widening, in turn, are further enlarging the market all the time.

Basic Investment

The Government has contributed to investment step-up directly by expanding its investment in different fields, mostly outside the competence of, or unattractive to, private enterprise. Not only has Government investment in the traditional fields like transport and communications, irrigation and power, health and education, been expanded, but, since the Second Plan, there has been large Government investment in key and basic industries. The construction in just five years of three steel plants, each with a capacity of a million ingot tons a year and the creation of truly Indian petroleum industry are an outstanding Government contribution to economic development. In the Third Plan, further progress is to be made in steel, oil and coal; in addition, a fresh major step forward in economic development has been planned by providing for the construction of heavy, metallurgical, mining and electrical machinery plants of size and scope, the like of which only a few countries in the world have. With the completion of these plants, India would have gone a long way towards building up her capacity to

make further progress in vital fields like iron and steel, coal and power through mainly domestic resources.

Stimulation of Private Sector

EQUALLY important is the role that Government has played in stimulating private investment. I have already referred to the creation of a wide market that has provided very favourable conditions for industrial investments. I would mention a few other important stimulants briefly.

Post-war experience in the West shows that private enterprise comes into own only when the economy is freed of the Keynesian bugbear: inadequacy of aggregate demand. The performance of West European and North American economies in the 'fifties has been in marked contrast to that of the depressed 'thirties. The most important factor accounting for the difference has been the state of aggregate demand in these countries in the two periods. The Indian economy is fully insured against such inadequacies. The size of the public sector provides the Government enough outlets for socially useful spending to compensate for any inadequacy of private spending. The Government has thus ensured that so far as demand is concerned, the economy never need mark time, much less have a setback. This has greatly reduced the risks of investment.

Much of Government investment goes into creating the so-called overheads—irrigation and power, transport and communications, education and health, research and training, and other such facilities which are necessary for growth of private investment but which private enterprise does not find attractive enough. The position in regard to the overheads may not be entirely satisfactory, but it may be noted that the difficulties have arisen on account of rapidly growing demands for these facilities. In other words, these are in a sense reflective of the success of Government's efforts to impart buoyancy to the private sector.

Truth about Transport

SOME of the present difficulties in regard to transport and power might perhaps have been avoidable through better planning, organisation and implementation, but not all the criticism that is sometimes offered on the point is fair or informed enough. The shortages, for instance, are often attributed to inadequate financial allocation. But how should larger provision be made for power and transport and communications? Should this be done at the expense of some other sector? But I have yet to come across someone who would specify the sector where the cut might have been applied. If no other allocations can be cut, the provision for power and transport can be increased only by increasing the size of the Plan. But, simultaneously, the criticism is offered that the Plan is over-ambitious and would overstrain the economy. Surely, the planners should be forgiven if they are unable to do the impossible! The fault is that of mathematics, not so much theirs.



It is not in industry alone but in agriculture also that the Government has to take the initiative

Moreover, larger total allocation alone is not enough. There is also the problem of foreign exchange for the import of plant, equipment and materials. A further difficulty arises from the fact that the additional capacity needs to be created anywhere, but at the precise point where the additional demand would arise. In other words, supply has to be brought into balance with demand line by line, and power system by system. This means that the demand has to be *precisely* planned and estimated at each location. This would require a sort of rigid physical planning which we neither have, nor envisage. The alternative to avoiding shortages completely would be to have surplus capacity everywhere so that demand can be met, no matter where it arises. With our present resources, we just cannot create this amount of surplus capacity; nor would it be economical to do so. It would be only fair if criticism for power and transport shortages is somewhat tempered by considerations of these limitations.

Buoyancy of Economy

GOVERNMENT investment in industry is complementary to private investment and so stimulates the latter. The public sector steel plants provide the much needed pig iron and steel to innumerable private foundries, construction sites and engineering units. Government investment in oil would provide petroleum products largely to private vehicles. Government investment in heavy machinery plants will increase its capacity to expand output of coal, power, steel, etc., so badly needed by the private sector.

Institutions—public, co-operative and private—have been created to channel Government funds into private investment wherever necessary. A part of the growing resources of the Life Insurance Corporation is being channelled into private industry and house-building. The freshly accruing resources of the commercial banking system have, for the last two years, been channelled, by the large, into the private sector. Indeed, the commercial banks have heavily disinvested in Govern-

ment securities to be able to meet the growing private demand for bank credit.

Steps have been taken for promoting the inflow of private capital into the private sector and to ensure that foreign business investment proceeds as a rule, in association with Indian enterprise rather than by itself. This has gone a long way towards overcoming the handicap which Indian business suffers on account of lack of technical knowhow and the shortage of foreign exchange. Collaboration arrangements between foreign and Indian business for industrial development now run into several hundreds a year.

Setting up of industrial estates, creation of industrial areas in the suburbs of big towns, reform of stock exchanges and company managements, and fiscal concessions on new investment are some of the other Government measures that may be mentioned.

I have not mentioned the high degree of internal security which is very vital for private as for public investment. For all of us so much take it for granted that no comment is considered necessary.

If the proof of the pudding is in the eating, business has never had it so good as today ! That the first decade of planning has been climaxed by the unprecedented buoyancy of private enterprise bears further testimony to the success of Government's role in promoting economic development.

Prudent Management

THERE is an aspect of this role to which, next, I would invite your particular attention. The development process tends to generate imbalances and disequilibria. The Government has to play a leading role in restraining and smoothening out these disproportions. In the absence of proper and effective Governmental action, imbalances would be of proportions that would seriously hamper development. I would mention a few of these disequilibria by way of illustration.

Most people are aware of the serious imbalance in the balance of payments, i.e., between current requirements and earnings of foreign exchange. The imbalance is largely attributable to demands created by development. The problem requires two-fold action. The first is to ration the available supplies of foreign exchange rigidly, with a proper sense of priority. It can be confidently said that this is now being done with an efficiency that should be a model for underdeveloped countries.

The second remedy is to add to the available supplies of foreign exchange through capital imports. The Government has really played an outstanding role in this. The Third Plan envisages gross capital inflow of Rs. 3,200 crore as against the total export earnings of Rs. 3,750 crore. Of the total of Rs. 3,200 crore only about Rs. 300 crore are expected to be attracted by the private sector. The rest has to be attracted and managed by Government. And there is every chance of successfully fulfilling this target.

Use of Foreign Aid

IN assessing the role of capital inflow, we should take into account not only its quantum, but also its character. The capital inflow is being managed in a way that promotes industrialisation. The aid from the Soviet Union has enabled us to obtain plant and equipment and technical knowhow for building up major heavy industry projects (metal, engineering, oil, etc.). In the public sector that should be the envy of any underdeveloped country, nay, even of many developed countries. The inflow of private capital, as mentioned earlier, is now increasingly helping to build modern industry. The U.S. aid in the form of farm surpluses has helped to avoid food crises, maintain the output of vital light industries like cotton textiles, and raise rupee resources for economic development. Suffice it to say that for several years now, the Union Government has annually raised more rupee finance through sale of U. S. farm surpluses than all the State Governments taken together have raised through such a major tax as land revenue. Moreover the aid from the West has helped to build such major heavy industry enterprises as the steel plants at Rourkela and Durgapur and to expand power, transport and communications without which investment in industry would be infructuous.

I would now refer to another major imbalance, that between investment and savings. In a money economy, investment is not conditional on prior saving. Investment can, in the first instance, be financed by newly created or activated money. But the matching saving has some how to come about. If curbs on consumption spending are not available in an adequate measure, inflation does the job in its own inequitable, haphazard and wasteful way. Step-up of investment is, as indicated earlier, the crux of the development process. The first task of Government in a developing country, therefore, is to adopt policies and measures that keep the investment curve all the time looking up. But if this is to be done in a smooth, orderly and equitable way, the Government has to play a leading role in applying the necessary curbs on consumption spending.

Saving Vs Consumption

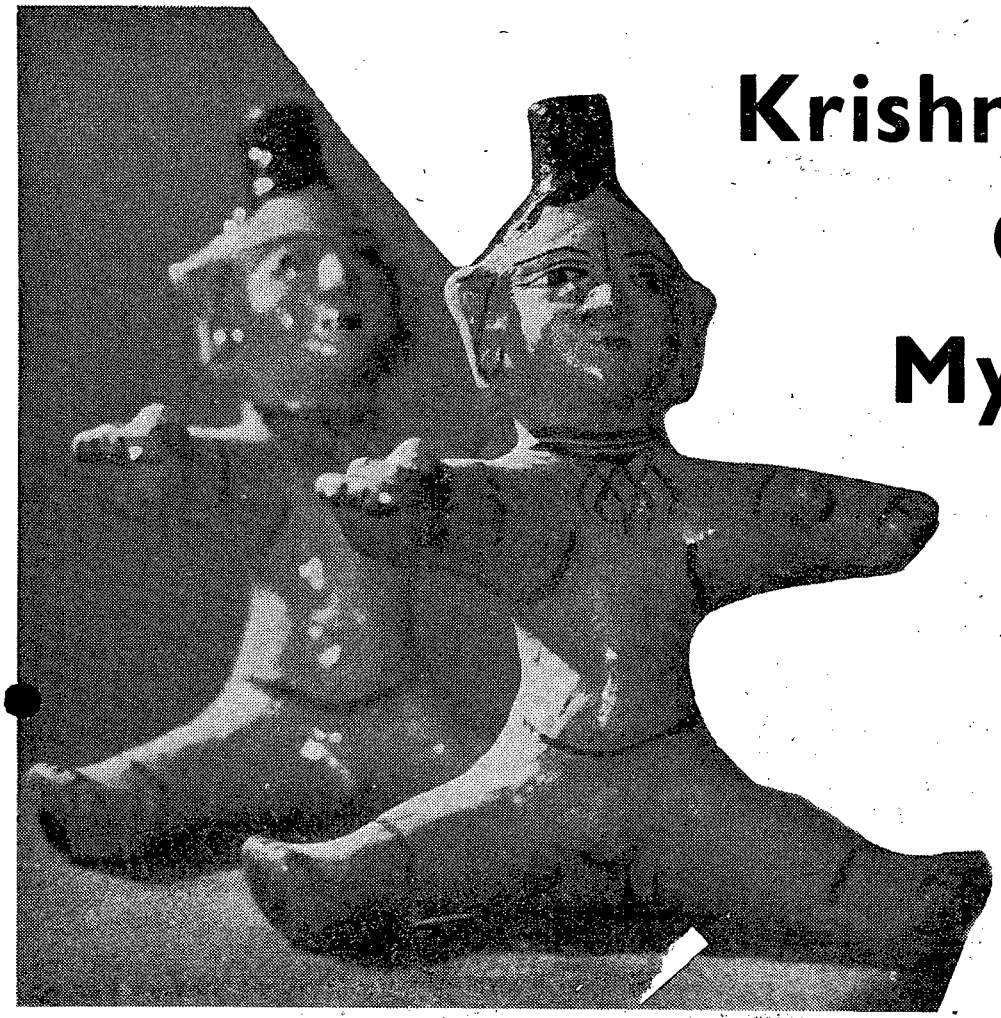
VOLUNTARY restraint on consumption spending, though very welcome, does not go far enough. This is particularly so in a country like India which is so exposed to the demonstration effect of higher living standards in advanced countries as well of the rich within the country. Ever since the initiation of planned development we have been wishing and exorting people to abstain from unnecessary consumption spending. But the plain fact is that this particular wish shows little sign of turning into a horse on which to ride into the ranks of advanced countries.

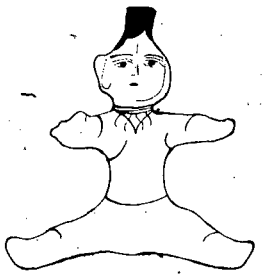
Corporate saving has an element of compulsion enforced by corporate managements. Because of this, the shareholders are likely to undertake less consumption spending than if the entire profits were paid out to them by way of dividends. But the device has a quite limited reach. At present the total of corporate savings is well below even 1 per cent of national income. No conceivable growth of the corporate sector can fill the gap between the desired rate of domestic saving and the likely flow of private voluntary saving.

The fact is that there is no escape from the Government undertaking major responsibility for applying the

(Continued on page 28)

Krishna Dolls Of Mysore





PRIDE OF PLACE

THE word 'Krishna' in Sanskrit means 'dark'. The painters always use blue for Lord Krishna, but the folk craftsmen around the city of Mysore make Krishna dolls which show the young king of pranks in a flaming turmeric-yellow. On a yellow body the eyes and brows and tuft of hair are outlined in shining black. The colour combination would suggest that these folk artists have not seen tigers in vain. A few lines in 'kumkum' red complete the colour scheme.

Yet the bold colours are not the only speciality of these dolls. With outstretched, carry-me type of arms and legs they have an instant appeal for little children and they easily slip into position astride the hips of young girls. Even the children of sophisticated homes have been seen to choose this doll above all the fancy and brittle stuff that are made of celluloid and plastics.

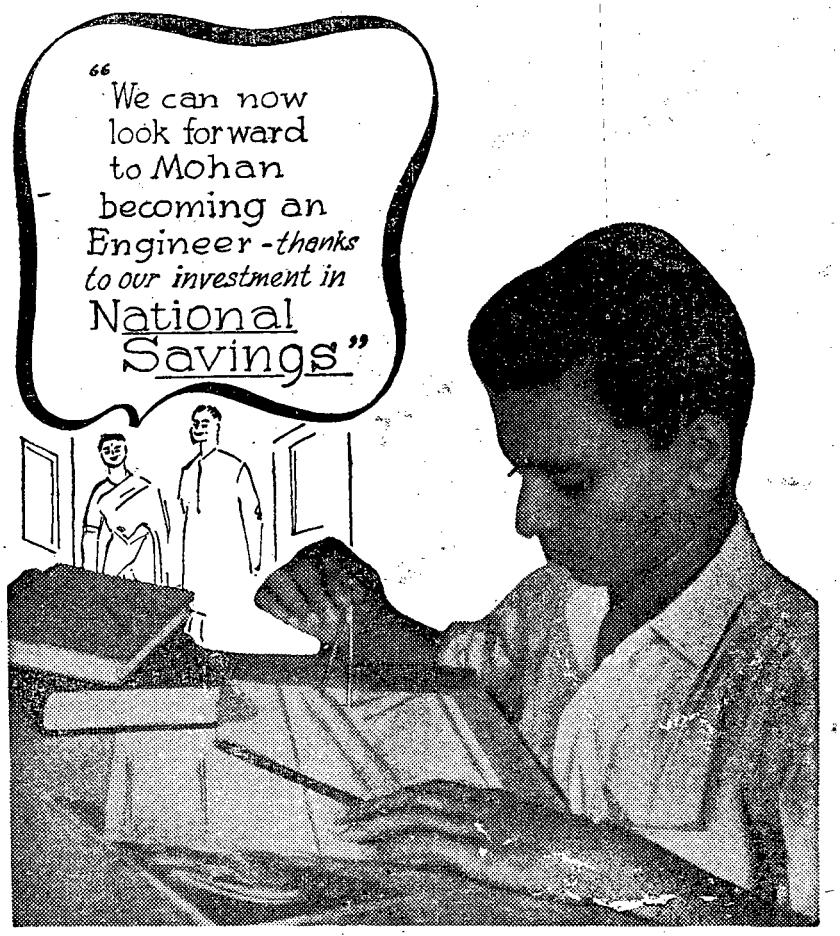
At the core of the doll are sticks of bamboo. These are bandaged over with rags. Upon this foundation is pressed a pulp made of cowdung and cloth bits with a sprinkling of bran or clay. The pulp is easily moulded into the required shape. When dried, the figure is painted with colours mixed in glue. The product is lighter than wood, harder than *papier mache*, and far more durable than clay. Even in the hands of a four-year-old child, a doll lasts for many months.

But like all things, the price of the Krishna dolls is going up. Thirty years ago they were two an anna in village fairs. Now they are two a rupee—and very few seem to buy them. The yellow Krishna with the unmelting ball of butter on his palm may soon be a victim of our technological advance !

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Your children's education, their career, a house of your own, unforeseen illness.... all these can be provided for only out of today's savings.

No less important is to make sure that your savings are wisely invested. Your savings invested in national development are twice blest: they bless you and the nation.

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DA-61/402

OVER TO YOU

NEGLECTED SECTIONS OF LABOUR

WHILE the article 'Work and Welfare in a Changing Society' (*Yojana* November 26) did provide a concise and yet comprehensive survey of the Indian scene, the brief reference to women workers only emphasised that official thinking has not kept pace with social change. It is magnanimous to take note of the significant increase in women clerical workers, but I wonder how long it will take for Government to admit women in increasing numbers to technical and vocational training institutions ! The idea of opening separate training institutions for women is a retrograde step and can only serve as a delaying tactic.

Katpadi — KAMALA RAO

THE article 'Work and Welfare in a Changing Society, would seem to suggest that the present basis of labour policy is to pamper the privileged seven million that work in 'organised industries and services' to the utter neglect of the faceless, voiceless masses that labour on the land and in small industries.

Apart from an occasional Agricultural Labour Enquiry, what specific steps are being taken by Government to improve the living and working conditions of rural labour?

Bombay — D. K. BENDRE

NEED FOR BETTER PLANNING

WHATEVER the view-point from which we examine the present planning system in our country, it is evident that it needs basic changes. It is, therefore, the duty of every citizen to give serious thought to problems of planning for the development of our country. For instance, prior to the Plans, there were no adequate facilities for good education. Although an agricultural country, India had only a few institutions which taught subjects relating to agriculture or otherwise imparted training in agriculture. Such facilities were a basic need of the country. In the Plans a number of agricultural, engineering and other training institutions are being opened ; but they are still inadequate to meet the needs of tomorrow.

The systematic planning of the means of production results in development which, in turn, enables better planning. Hence planning and development are concomitant and form a chain of interaction in the continuous process of planning and development. In the past a very little effort was made to assess and coordinate the scattered needs of our daily life for chalking out a development programme. In this context the spirit of planning relations assumes more importance. In this spirit lies the secret of the success of planning.

The Planning Commission should promote a spirit of family membership between itself and its workers and between the Plan executives and the people. It should consider the methods adopted by field workers who are in direct touch with the people.

Planning is a co-operative effort capable of conferring upon the people collective benefits beyond the dreams of individual avarice. The realisation of these benefits demands that the spirit of planning relations should be based on mutual trust and co-operative effort.

On studying the conditions in the Community Development Block areas which I visited, I do not hesitate to say that, for all the advantages that the country will enjoy, and it could enjoy many more, the methods of assessing and pooling our scattered resources need better organisation.

Mainpuri — PRABHAT CHATURVEDI

MECHANISED FARMING

OUR methods of cultivation have to undergo a radical change not only because they are obsolete and yield poor results compared to modern methods of production, but also because, by tradition, they are emotionally associated with illiteracy and backwardness. An educated young man, although the son of a farmer, fights shy of working in the field side by side with a traditional illiterate labourer. He prefers a clerical job in some office to working in his own field because the income from agriculture is often not sufficient to maintain his idea of a high standard of living. Moreover, an educated clerk enjoys a better social status than a farmer. With the rapid spread of education in the country, more and more educated young men are turning away from villages, and consequently from agriculture, to cities. If the old methods of agriculture continue, a time may come when there will be hardly any person left to till the land. Then how shall we produce our food and other raw materials?

To remove this anomaly between education and old practices in agriculture and to attract more educated persons to the plough and the villages, we must take to modern methods of cultivation immediately. The traditional plough and the pair of bullocks must make way for the tractor.

The use of mechanical implements involves consolidation of small holdings into big farms. But big farms are beyond the means of an individual. Co-operative farming is the solution.

If at all there is any surplus of labour as a result of modernisation of our agriculture, it can be gainfully employed in other ancillary occupations such as cottage industries, poultry farming, pisciculture and dairying. Besides, many agriculturists will get their share of produce from the co-operative farms in which they have invested their lands.

Sakti Ashram (Assam) — JAMINI KUMAR BARUA

(Continued from page 24)

necessary curbs on consumption spending. Surpluses of public enterprise provide one such curb. For, to that extent, national income is withheld from personal consumption spending. Naturally, the larger these surpluses, the less is the need for other curbs. Next, we may mention direct taxation. It seeks to do the job by reducing disposable personal incomes. Thirdly, there is indirect taxation (that is, taxes on goods and services). It restrains purchasing power, as, at each successive round of spending, the factor income received by the producer is lower, relatively to the amount spent by the consumer, by the amount of the tax payable. Finally, we may mention the economy in Government's own non-investment expenditure, that is to say, in public consumption. The above-mentioned restraints on consumption spending reflect themselves in the size of Government saving. At present this saving is insignificant—only about 1 per cent of national income according to a recent Reserve Bank Study—indicating that the curbs are rather quite mild ones. But if rate of saving is to be pushed up to 19-20 per cent by 1975-76, Government saving, (including retained surpluses of public enterprises, will need to be raised to about 8-10 per cent of national income. This order of step-up in the rate of Government saving should, indeed, be a key plank in the grand strategy of the envisaged 15-year plan for attaining a self-reliant economy at an adequate rate of growth.

Taxation and Restraint

I HAVE referred to the key role of taxation as a curb on consumption *spending*. This, however, does not mean that it is taxation which restrains real consumption. Restraint on real consumption and restraint on consumption spending do not necessarily go together. For instance, inflationary restraint on real consumption is associated with increase in consumption spending. The fact is that when an economy is not suffering from deficiency of aggregate demand, real consumption is limited by the availability of goods and services. This availability, in turn, depends primarily on the srtucture of production (that is, the capacity respectively for the output of investment goods and consumption goods and services). Development necessarily means that the structure of production is progressively altered in favour of investment goods by channelling a higher proportion of fresh investment into the investment goods sector. In a developing economy, therefore, the availability of consumption goods and services necessarily grows at a lower rate than national income, except to the extent investment is financed by external assistance. The restraint on consumption inheres in this fact.

Taxation does not determine the total of consumption, but its *distribution* among the various sections of the people. The restraint on consumption inheres in the decision to channel a higher proportion of real resources into the investment goods sector, that is, in the nature of the development process itself. Taxation is only an instrument to *apportion* the incidence of this restraint. If properly conceived, it can do the job much more efficiently, smoothly and equitably than the possible alternatives to it such as inflation. Those whose ideas have not advanced beyond the framework of nineteenth-century thought tend to look upon taxation as little more than picking of pockets. Actually, in the world of today, particularly in the underdeveloped countries, an adequate and progressive tax system is an indispensable social instrument of economic development and social justice.

Benefits to Community

ANOTHER point that needs to be cleared is that Government saving does not necessarily imply Government investment. There is no inevitable link between the two. Should this be considered necessary, it is always possible to channel Government saving into private investment. The banking system, the financial corporations, the co-operative institutions, the repayments due on public debt, and so on provide the Government with enough outlets to put its surpluses, if and when it has to spare, at the disposal of private sector.

A further merit of a high rate of Government saving would be to make it possible to pursue dear money policy (for which otherwise there is a strong case) without accentuating the tendencies to inequality of income distribution. For, to the extent of such saving, the return on capital would accrue to the community as a whole, rather than any particular section of it. The envisaged high rate of domestic saving requires not only that the Government should do a lot of saving itself but also that it should strive to induce or enforce a higher rate of private saving. Spread of banking, popularisation of life insurance, promotion of small savings, introduction of various semi-compulsory and compulsory provident fund schemes and, up to a limit, credit expansion would have to be adopted to that end.

Regional Balance

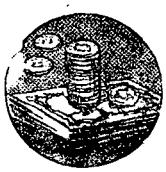
I WOULD refer finally to the imbalance between different regions that development tends to generate. Regions that have the advantage of early start tend to attract more industries on account of the so-called external economies (that is, power, transport, communications, banking, marketing and other facilities) which they afford so that in the absence of Governmental action, the regional imbalances tend to grow. Planning can, however, considerably modify this tendency.

There three imbalances are illustrative enough of the need for corrective action by Government. Planning is a device, *inter alia*, to anticipate, restrain, contain and smooth out these imbalances.

I am fully conscious of the fact that businessmen and the farmers have shown commendable enterprise and that the working men have been coming up very well to the challenge of industrialisation. It, nevertheless, remains true that Government has been, is, and shall be the prime mover in India's economic development.

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WHAT THE PLAN MEANS TO YOU



Rise of Rs. 55
in per capita income



enough food for all



nearly 2 more yards
of cloth



free and compulsory
primary education



improved
health services



14 million more jobs



pure drinking water
for the villages



help implement the Plan through hard work, courage and enterprise for

A Good Life for Everyone

DA-61/448

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Boys and Girls In School

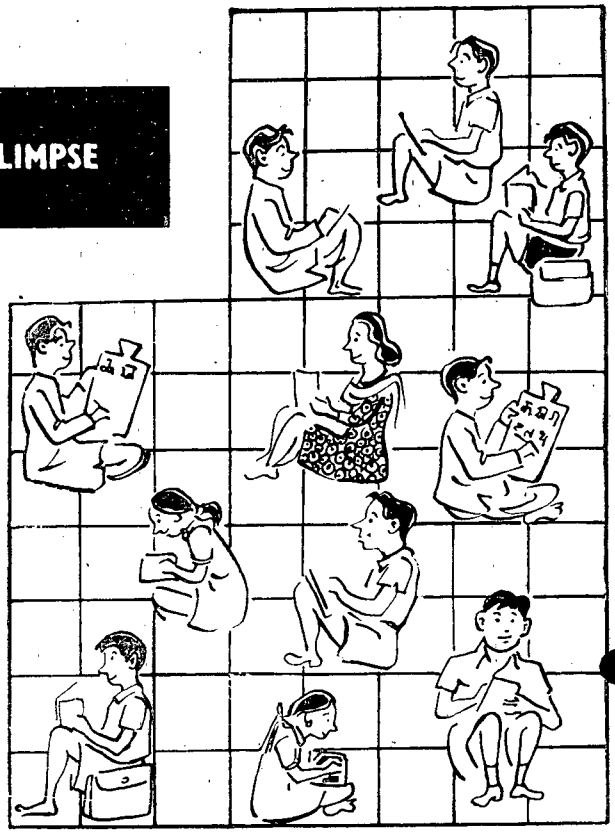
GRAPHIC GLIMPSE

(6-11 AGE GROUP)

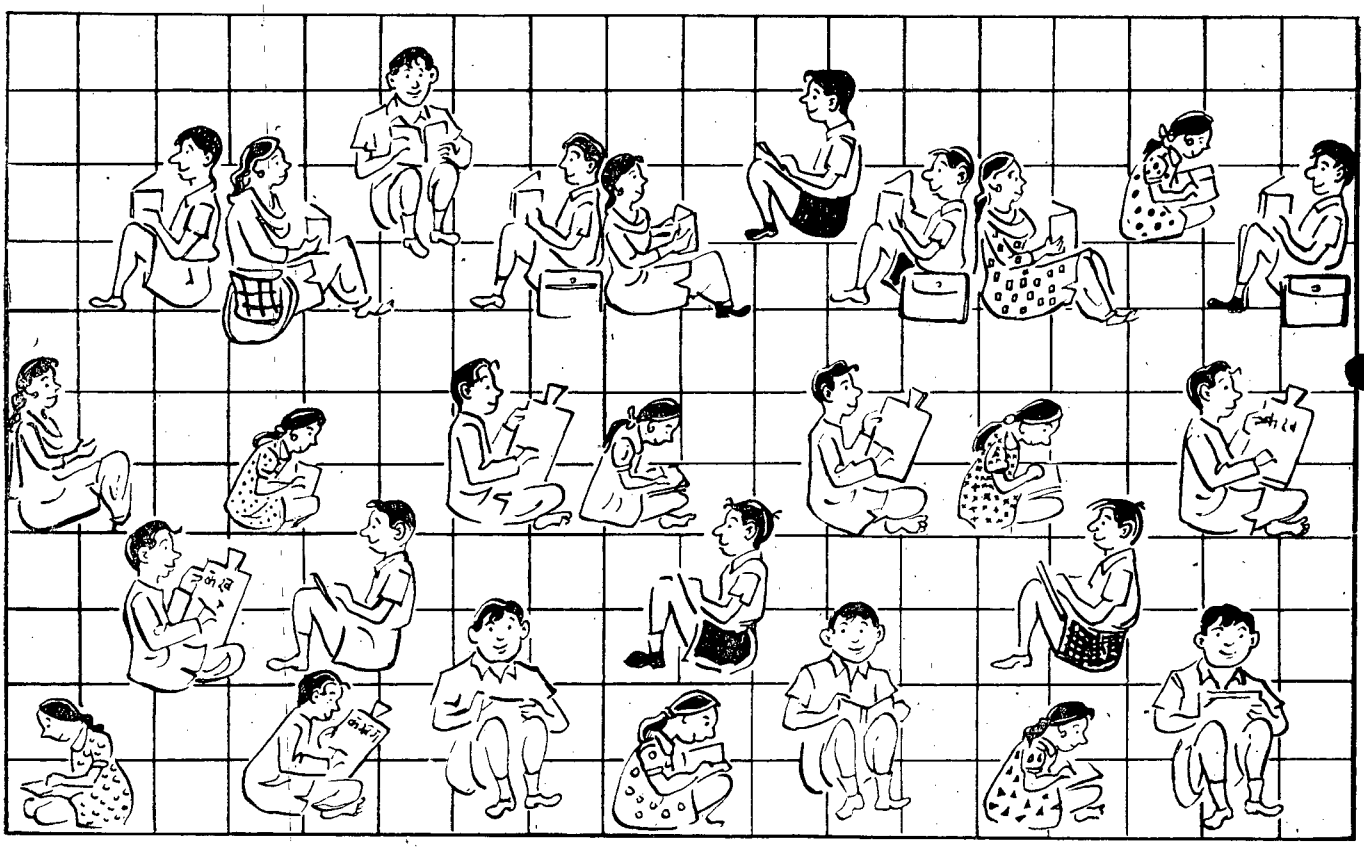
ONE of the most important programmes of the Third Plan is to see that all children between the ages of 6-11 are at school.

In 1950-51, the total number of children at school was 191.5 lakh inciuding 53.8 lakh girls. At the end of the Second Plan, the school population in this age group numbered 343.4 lakh. This worked out to 61.1 per cent of the children in the age group. Among these, 109.6 lakh were girls.

Since traditional families, especially in the villages, are less willing to send girls to school, the goal of universal primary education, it is feared, may not be achieved by 1965-66. Estimates therefore place the school-going population in the 6-11 bracket at 496.4 lakh by the end of the Third Plan. Of this total, 301.2 lakh will be boys and 195.2 lakh will be girls. More than 90 per cent of boys and 61 per cent of girls will thus be at school.



1950—51 137.7 LAKH BOYS 53.8 LAKH GIRLS TOTAL 191.5 LAKH



1965—66 301.2 LAKH BOYS 195.2 LAKH GIRLS TOTAL 496.4 LAKH

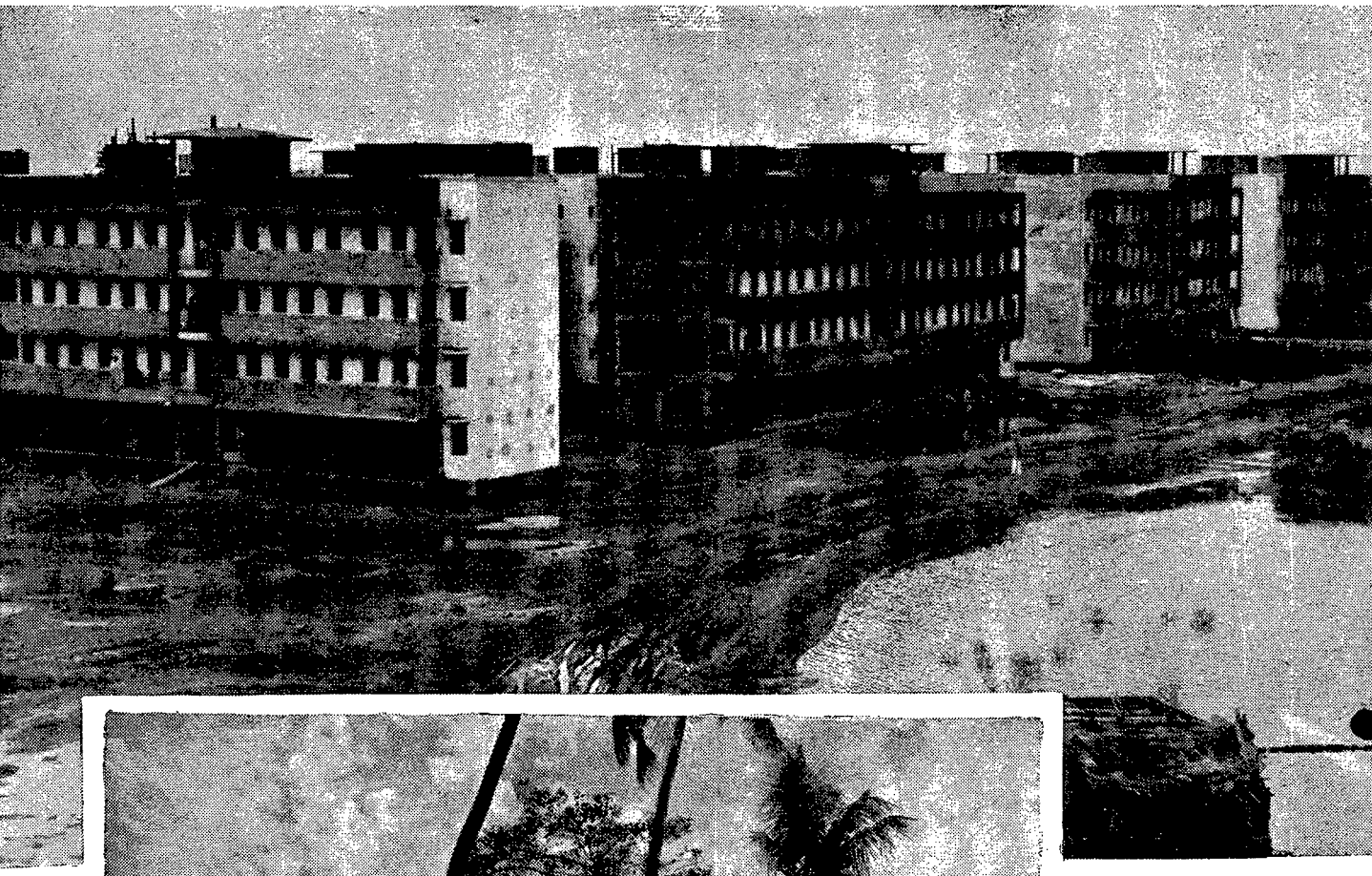
COMMONSENSE ABOUT HOUSING

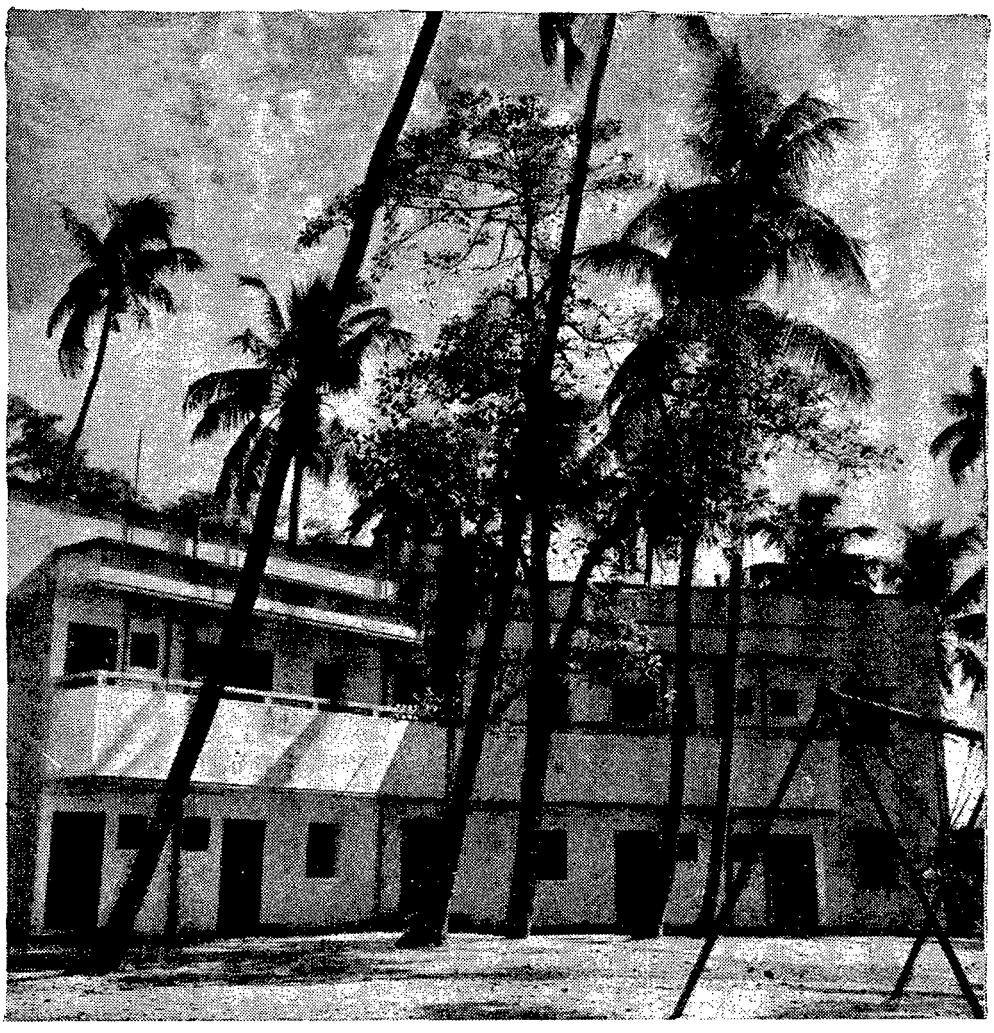
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Modern Homes In Citie

Industrial growth aids slums, but a start has been made to wipe them ou

Top: **Monsoon scene in a housing colony built for industrial workers in Vikhroli, Bombay.**
Bottom: **Some of the houses newly built by the Calcutta Improvement Trust.**

Housing —How Urgent?

An account of what has been done and what remains

C. N. CHITTARANJAN

THE problem of housing in India—urban and rural—is one of the immense size. The comparative neglect of social welfare activity before Independence, the rapid growth of population in recent years and the increasing exodus of people from rural to urban areas have contributed to this situation.

In the words of the Third Plan, "although efforts on an increasing scale have been made in housing during the First and Second Plans, the problem of catching up with the arrears of housing and with the growth of population will continue to present serious difficulty for many years to come".

IT is not in our country alone that housing remains a problem. Some of the most advanced countries of the world, even those that have tackled the problem in a planned manner for several decades, have not yet solved it satisfactorily. Britain, with one-fifteenth of India's land area and less than one-eighth of its population, has been dealing with this problem for a century—and very intensively in the last 40 years. Recognised as enjoying "one of the highest standards of housing in the world," it still has not housed all of its population. To quote a London newspaper's investigator: "A visitor to Britain today will still find overcrowded homes; even acute housing shortages in some areas". This is not to underestimate their achievement in this sphere, especially in view of the fact that British homes suffered severely in the war.

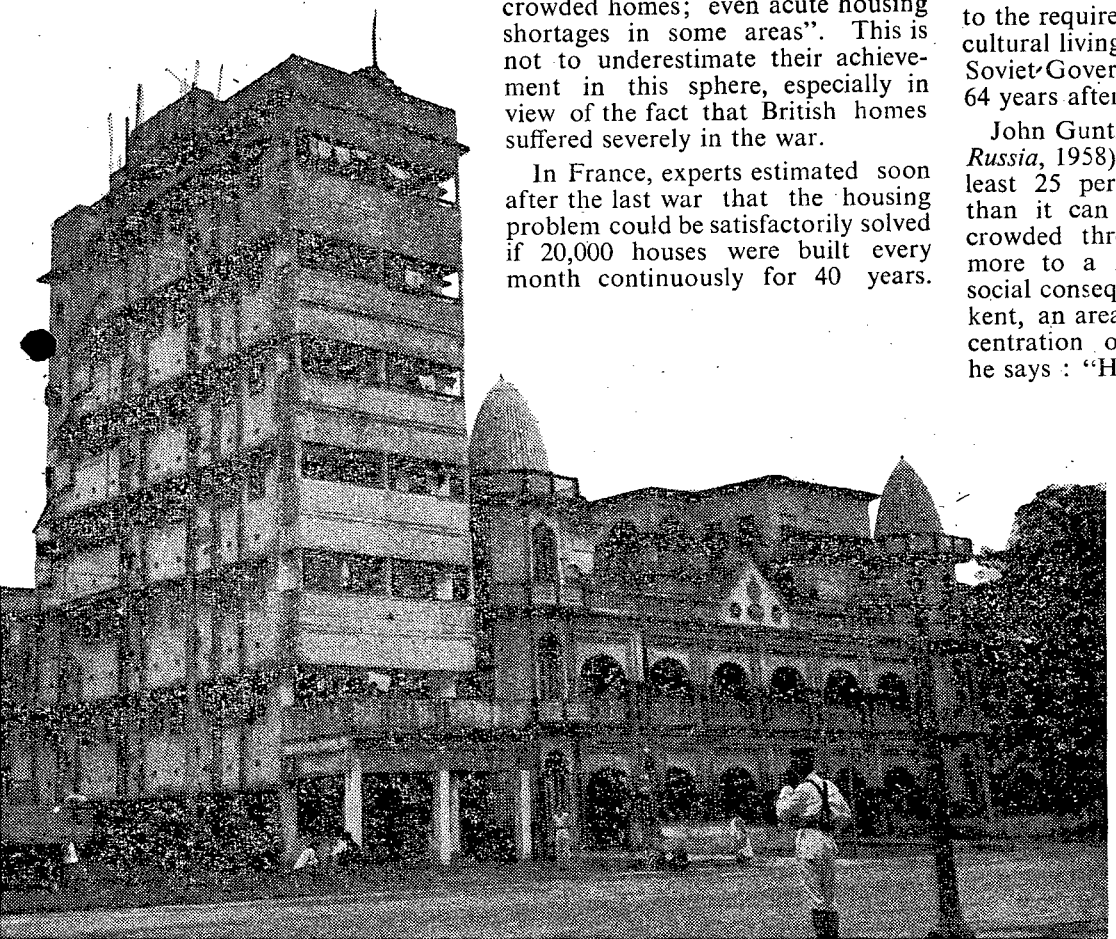
In France, experts estimated soon after the last war that the housing problem could be satisfactorily solved if 20,000 houses were built every month continuously for 40 years. But achievement has not come anywhere near this goal.

In Sweden, which remained neutral in both the World Wars, it was recorded recently that 30 per cent of the population lived in crowded conditions; in the rural areas 66 per cent had no water supply and 93 per cent had no bathroom.

Housing is one of the 'live' issues even in prosperous United States. It was estimated that the number of married couples living with other families rose from 1.43 million in 1930 to 2.86 million in 1947, although there was decline subsequently.

Let us now turn to the Communist countries. In the Soviet Union, 44 years have passed since the Revolution. Except for a brief period during the war, nation-building work has consumed the attention of its leadership. The State has absolute powers. Despite this, however, this is what the Draft 20-year Programme of the Communist Party of the Soviet Union says: "The C.P.S.U. sets the task of solving the most acute problem in the improvement of the well-being of the Soviet people—the housing problem. At the end of the second decade, every family, including newly-weds, will have a comfortable flat conforming to the requirements of hygienic and cultural living". These are what the Soviet Government *hopes* to achieve 64 years after the Revolution.

John Gunther has recorded (*Inside Russia*, 1958) that Moscow "has at least 25 per cent more population than it can hold, and people are crowded three, four, five or even more to a room, with disastrous social consequences". And of Tashkent, an area which has seen a concentration of development activity, he says: "Housing is an extremely



A seven-storey block of flats for middle-class families on Asutosh Mookerjee Road, Calcutta. An example of private sector activity in housing.



A caption in a book entitled "Cities In Flood" dealing with Britain's urban problems, says, "It is seldom realised that to rehouse people on the same site, old houses must be replaced by very tall flats". What is true of Britain is also true of India, In all our cities three to four-storey buildings are being built to accommodate displaced slum-dwellers. A portion of the newly-built colony on Barrackpore Trunk Road, Calcutta, which has been built to rehouse the *bustee*-dwellers of a slum cleared in Baghbazar area.

serious and in fact agonising issue, as it is everywhere in the Union."

We have to bear in mind, of course, that apart from the absolute powers of the Government and the concentrated effort to raise the living standards Russia has to provide for less than half of India's population.

So far as China is concerned, virtually no attempt has been made to solve the problem. Instead, community kitchens and group living have been encouraged—according to some visitors, even forced.

* * *

IT is in the light of all these facts that the magnitude of the problem in our own country and the steps taken to tackle it under the five-year plans have to be considered.

It cannot be said that India is unfamiliar with planning for the provision of comfortable accommodation. Archaeological remains and other historical evidence of Harappa, Pataliputra, Ujjain, Kanauj, Kanchi, Vijayanagara, Fatehpur Sikri and Shahjahanabad would show that the city-builders of old were well acquainted with the residential as well as civic needs of its dwellers. The rules for the builder even in those early days, as Prof. Athindranath Bose has recorded, "demanded the preparation of maps indicating density of population in different parts, allocation of sites for castes and professions, distribution of residential, business and industrial areas, of parks and squares with space". In the time of the Buddha, the great cities were well planned and beautifully laid out to allow the people to live in comfort and to protect them from foes. The architect enjoyed a high social status.

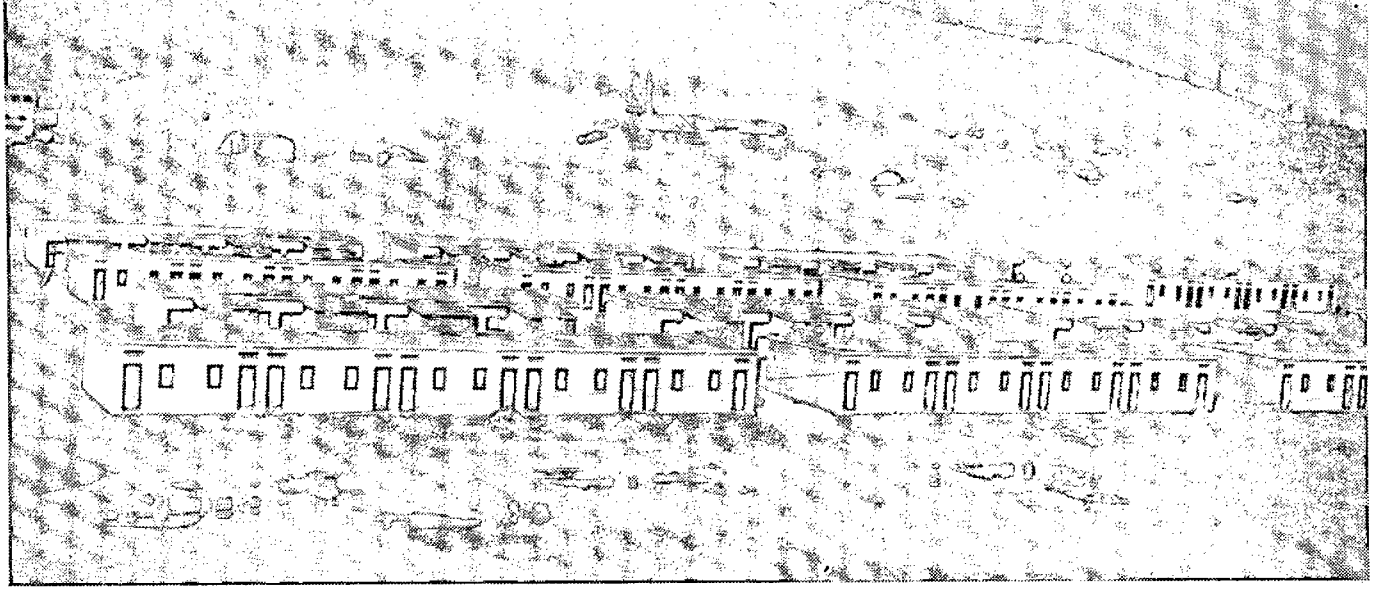
In later centuries, however, good housing was confined to the higher strata of society. Travellers in India during the Mughal days have remarked about the contrast between the magnificent palaces and the mean hovels of the poor, in villages as well as towns. This latter set-up was accentuated during British rule.

INDEPENDENT India started with heavy arrears in the matter of housing. The rise in the rate of growth of population after Independence, mainly due to the public health measures, has added to the acuteness of the problem. We are now 440 million people in the country. It has been estimated that in another 15 years the population will rise to 625 million. In 1951 the urban population was 62 million ; now it is 80 million. In arriving at this latter figure, the planners have laid down stringent tests for an area to be declared urban ; if the same test as in 1951 had applied, the figure would perhaps have been very near 99 million.

The aim of the five year plans is to meet the three basic needs of the people—food, clothing and shelter. Despite the difficult situation created by Partition, in the course of the first two five-year plans we have attained near-self-sufficiency in food production. This could be said of textiles also. But the third need remains, and grows ever more gigantic.

There are two broad aspects to the housing problem in any country, particularly ours : (i) to eliminate slum conditions in both urban and rural areas, and (ii) to make conditions of living in the villages sufficiently attractive to prevent continued migration on a large scale. The first is essential for maintaining the health and morality of families, and the second for limiting the growth of insanitary towns and cities and ensuring manpower for agricultural production.

Urban housing emerges as a major problem after any war. This happened after the First World War, and again after the Second World War. Although our country was spared the direct consequence of bombing and so on, the hasty growth of war industries and the scarcity of building materials led to greater crowding in cities and neglect of housing in villages. Partition followed soon after the War. The influx of millions of displaced persons of Pakistan, who had to be rehabilitated immediately, made the matter more complex. The establishment, after Independence and especially since the start of planning, of numerous major industries and projects in both the public and the private sectors, has led to a greater movement of population from rural to urban areas. Simultaneously, in a changing society, the pattern of family life has altered. The larger families are breaking into smaller units, and the demand for housing has been growing proportionately.



Housing colony in Ghatkopar, Bombay, built for residents of slums removed from the heart of the city.

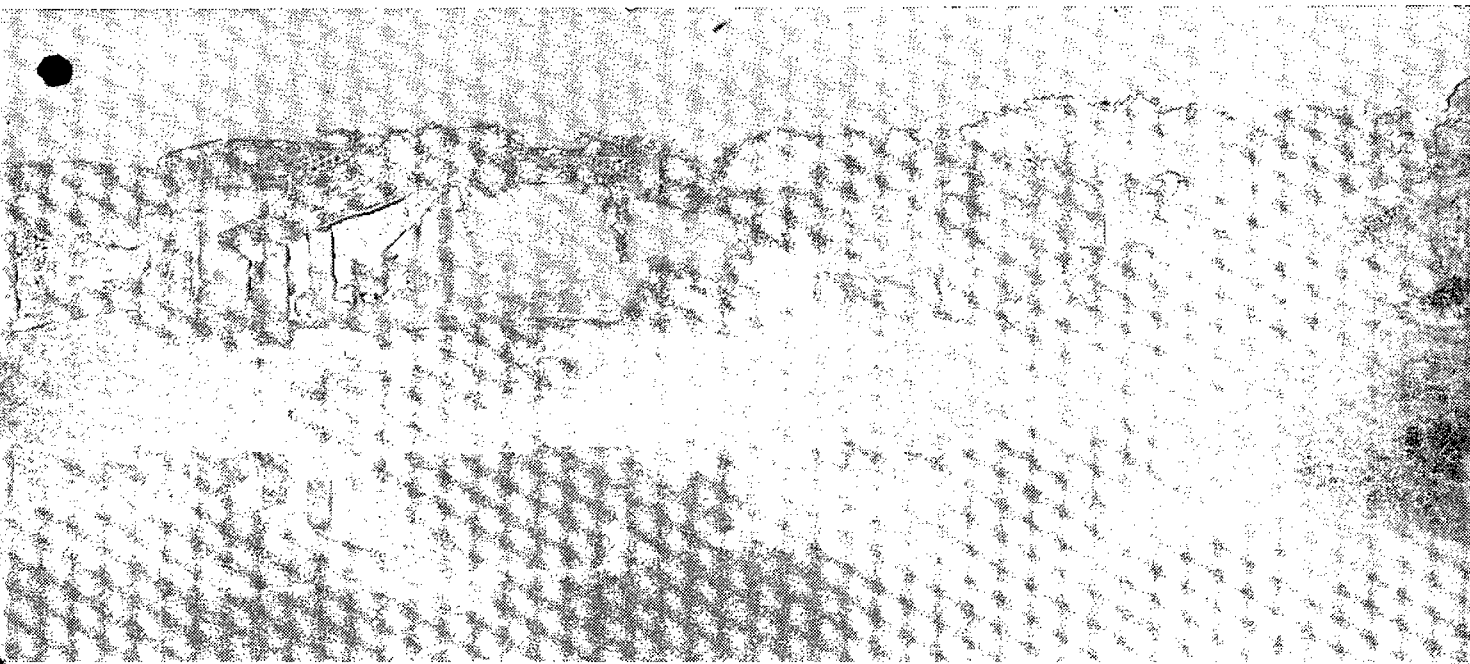
Our Villages Need More Attention

HOUSING in the towns and cities at present is so totally inadequate that half our urban population may be said to be living in slum or near-slum conditions. Experts have described a slum as "a chaotically occupied, unsystematically developed and generally neglected area which is overpopulated by persons and overcrowded with ill-repaired and neglected structures."

The condition in the villages is not very much better. Although overcrowding of the industrial area variety is absent, and despite the migration to towns, the population of India's 5,60,000 villages has increased in the last ten years. Whatever increase in incomes there might be is largey absorbed by more urgent needs, and the capital available for housing is growing at a slower rate than the population. Villages continue to be what Gandhiji had once called them: "dung heaps". No doubt the rural development programme has brought about changes. No doubt also that more public buildings of tolerable quality (schools, Panchayat houses, dispensaries) have begun to spring up. But the achievement is only a fraction of what remains to be done.

OWING to ignorance or to the romanticisation of country life, there is a tendency on the part of some people to believe that our villagers, living in vast, open spaces and limiting their wants, must be leading contented lives unlike the town-dwellers who are hard pressed for living space. In reality most of the houses in the rural areas are "so primitive and insanitary that they are hardly fit for human habitation." Data collected by the National Sample Survey during the First Plan period showed that roughly 85 per cent of houses had mud plinths, 83 per cent had walls of mud, bamboo and reed, and about 70 per cent had roofs of straw, grass or reed. In fact, only about 7 per cent could be

Urban people are apt to think that housing is a peculiarly urban problem. This is far from true. Our villages are even more crowded and insanitary. Here is a view of a village near Lucknow.



described as *pucca* houses. More than 95 per cent had no latrines.

It was pointed out in the Second Plan that "the housing conditions of under-privileged sections in the village communities are often extremely bad and need urgent attention. Artisans live and work under conditions which are a serious impediment to the adoption of improved techniques, besides being injurious to health. The traditional designs of houses in villages, even for sections of the population which are somewhat better off, do not provide for the minimum requirements of light, ventilation and drainage."

Overcrowding is thus common to both urban and rural areas, as are the consequences arising from it. The lack of privacy that overcrowding implies leads to psychological tensions and often to the breaking up of the family. Children, not getting the attention they need, are apt to tread the path of delinquency. Gangsterism, as is well known, is associated with slum areas; so is vice. Other effects include a proneness to disease, particularly epidemics. The loss of physical strength and mental poise that overcrowding involves leads to a reduction in employability and capacity to earn.

ADEQUATE housing has to be provided without delay if deterioration in the abilities of our working people is to be arrested. How soon can this be done ? And at what cost ?

Easily asked. Housing for 440 million people cannot be achieved with slogans; not even an all-party drive can do it. The investment needed is indeed staggering.

The First and Second Plans made a co-ordinated approach to the problem. Subsidised houses were provided for industrial workers, coal miners and slum dwellers, and loans were given to people with low incomes to build houses. Co-operative housing was also encouraged and the Central and State Governments undertook large programmes to house their employees as well as displaced persons. The supply of building materials eased somewhat, and private house-building activity increased.

In the Second Plan, public sector expenditure on housing projects was of the order of Rs. 250 crore, and about 500,000 houses were constructed. The private sector, it is estimated, invested about Rs. 1,000 crore. The total number of houses provided during the Second Plan has been estimated at 1.7 million, as against 1.3 million during the First Plan.

Taking into consideration the construction during these two Plans, the Working Group of the Planning Commission placed the stock of "habitable" urban houses in 1961 at 11.3 million. There is reason to believe that this estimate is larger than the real figure.

The urban population now is 80 million, or roughly 17.8 million households, taking a household to consist of 4.5 persons. Assuming the Working Group's figure of the stock to be correct, the deficit would be 6.5 million houses.

The Third Plan provides about Rs. 420 crore for a total of 900,000 houses in the public sector; the private sector is expected to invest about Rs. 1,125 crore. Since private sector investment is not on tenements or on very small houses, the number of units constructed will not be in the same proportion to investment as in the public sector; we may thus expect the private sector to put up about 1.8 million houses. The total number of houses constructed during the Third Plan will thus be roughly 2.6 million. With the population constant, the deficit would be 3.9 million. But then the urban population would have increased in 1966 to about 98 million, necessitating an addition of 4 million units, taking the total gap to 7.9 million.

LET us proceed on the basis that this entire gap of urban housing in 1966 is to be met by constructing tenements and not by individual houses which are costlier. It has been worked out that the average cost of building a two-room tenement, including the cost of development and amenities, is about Rs.9,480 (*Problems of Urban Housing*: Report of Seminar organised by the Indian Institute of Public Administration, Bombay : Pages 96-7). The estimate for construction given by the Central Ministries and included in the Third Plan puts the average at Rs. 6,700 per unit. Taking the cost per unit to be somewhere between these two figures (say, about Rs. 8,000), the cost of meeting the deficit in urban areas alone would come to Rs. 6,320 crore.

As for rural housing, the progress achieved so far has been insignificant. The need to ameliorate rural living conditions was recognised in the First Plan, but the Planning Commission observed that "having regard to the limitations of financial resources, a satisfactory programme of rural housing during the period of the Plan cannot be envisaged". This comment was fully justified by the figures.

It has been estimated that there are 54 million houses in the rural areas; of these 50 million have either to be rebuilt completely or improved substantially. The total rural population now is 360 million, which means that the number of houses needed is about 80 million. In addition to repairing or rebuilding the 50 million *kutcha* houses, 26 million new houses have to be built. Even on the basis of an average expenditure of Rs. 500 per house for reconstruction or improvement, the total sum required would be Rs. 2,500 crore. For construction of new houses, even on the modest basis of Rs. 3,000 per house, the total needed for 26 million houses is Rs. 7,800 crore. At the end of 1966, the rural population is expected to have increased by 34 million, requiring an additional 7.8 million houses costing Rs. 2,340 crore. To solve the rural housing problem by 1966 we would need Rs. 12,640 crore.

That is to say, if the entire housing problem of the country is to be solved —though only on a temporary basis in respect of 50 million rural houses— by the end of the Third Plan period, the amount needed to be invested is Rs. 18,950 crore—almost double the total outlay on all the development programmes in the entire Third Plan.

OBVIOUSLY, therefore, we have to attempt to solve the problem in stages. There are priorities more urgent than housing—such as building the basic industrial strength of the nation, and providing universal employment and education, clean drinking water and more nutritious food. It is against this perspective that the Plan provisions for housing should be viewed. The public sector programmes of the Plan are designed to relieve the distress of the weaker sections and to increase the productivity of labourers. At the same time,

(*Continued on page 25*)

Housing Co-operatives Can Play Vital Part

B. S. DHAVALE

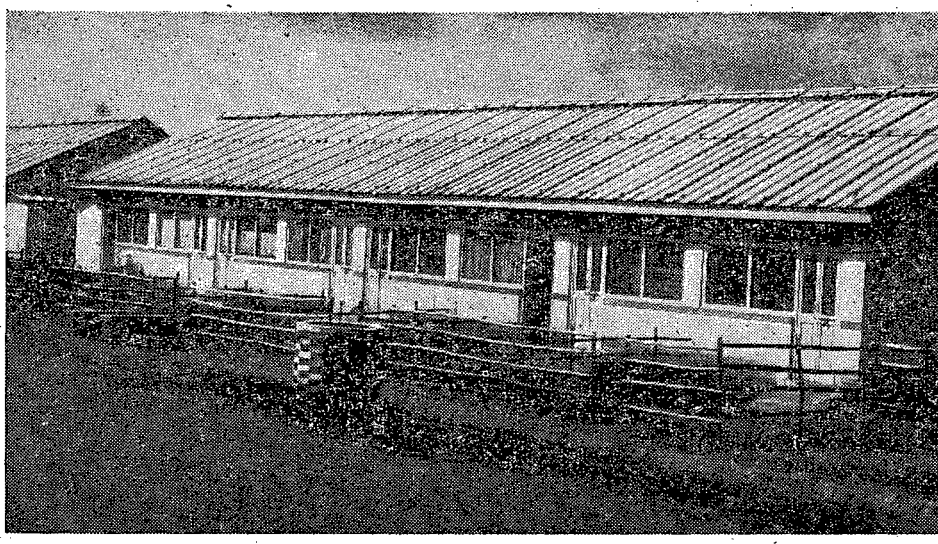
It is estimated that apart from the back-log of demand for seven to eight million houses in urban areas from the Second Five Year Plan, the additional demand for urban houses under the Third Plan would be about 5.6 million. Besides, nearly 50 million houses in rural areas are either to be rebuilt completely or improved substantially. The problem is so large that it is necessary that people in need of housing should come forward for concerted action to mitigate the situation. Co-operative housing societies have a vital part to play in this field.*

It is well known that in European countries, such as Sweden, co-operative housing societies have an impressive record of achievement. Compared to such countries, the cooperative housing movement in India is not significant in size. The mumber of housing societies may not exceed 1.5 per cent of the total number of societies in the country. The movement has gained momentum only in some of the States.

In the old Bombay State, a start was made with co-operative housing about three years after the passing of the Co-operative Societies' Act of 1912 which gave legal status to the formation of non-credit societies in the non-agricultural sector. It received impetus from the very beginning because of the State Government's policy of providing financial assistance. Immediately after the First World War, the State Government introduced a scheme of loans at low rates of interest to co-operative housing. In 1952, the State Government took the initiative in the establishment of a Co operative Housing Finance Corporation. Three federations of housing societies have also been organised in the State. Since the sanction of housing programmes under the low income group housing scheme and subsidised industrial housing scheme, State Government has also been preferentially earmarking funds for the co-operative sector. In the matter of acquisition of land, co-operative housing societies are charged the price on the basis of valuation as on January 1, 1948, or the current market price whichever is lower. They also receive priority in the release of controlled housing materials. In 1953-54 there were 984 societies with 52,421 members. The working capital stood at Rs. 1,344.32 lakh of which Rs. 171.35 lakh were received as Government loans. The number of houses built were 11,610. In the latest year for which figures are available, Maharashtra had 1,205 societies with 64,309 members and a working capital of Rs. 1,963.17 lakh for building 15,498 houses. The figures for Gujarat for the same year were 1,516 societies, 46,825 members, Rs. 864.35 lakh working capital and 16,339 houses.

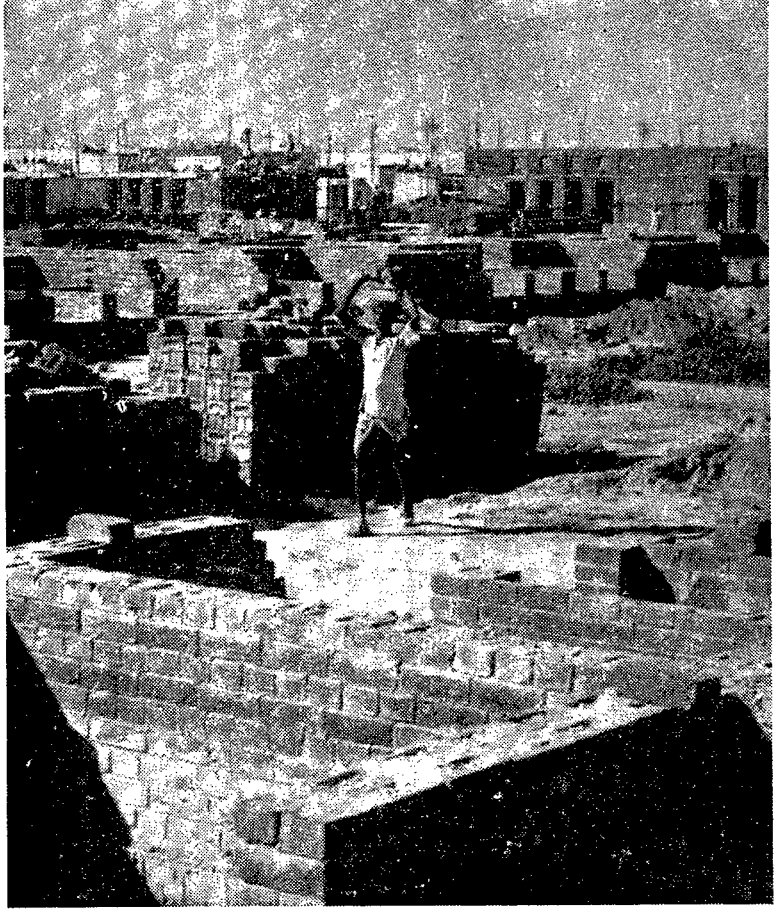
Position in Other States

In Madras the movement dates back to 1924. A scheme for building up co-operative housing colonies in municipal towns and major Panchayats was introduced in 1947. Three years later, with the introduction of the Government of India's housing schemes, a scheme for rural housing on a co-operative basis was taken up. Co-operative housing societies are being encouraged also under the subsidised industrial housing scheme. Another feature of the movement is the system of 'house mortgage banks'. These institutions provide funds on the mortgage of houses not only for repairs and extension but also for the construction of new ones. Housing co-operatives in the State receive various other facilities such as allocation of controlled housing materials and the help of technical and managerial staff. Acquisition of land is expedited by placing the services of a special land acquisition officer at the disposal of



A house built under the Low-Income Group Housing Scheme in Bombay

Mr. Dhavale is a Deputy Secretary in the Ministry of Community Development and Co-operation, but the views expressed here are personal and are not to be attributed to the Ministry.



The biggest builder in the capital is Central Government which, in the last fourteen years, has built thousands of houses in Delhi. Every few months a new 'nagar' springs up. Here is a view of houses going up on Ring Road for Government employees.

capital was Rs. 177.10 lakh and the number of houses built in the year was 3,713.

Although the first co-operative housing society was organised in the Punjab in 1920-21, the development of the movement in the State was not as rapid as in some of the other States. With the influx of refugees after Independence, co-operative housing societies have started coming up in increasing numbers. The Government provides financial assistance to deserving societies under the low income group and subsidised industrial housing schemes. Housing societies also receive some financial accommodation from Central co-operative financing agencies.

In Uttar Pradesh the movement took roots in the post-war period partly owing to the financial assistance available under the refugee housing schemes and the housing schemes of the Government of India. The State Government channels loans to housing societies through the State Co-operative Bank. They also receive assistance in the matter of acquiring lands. The number of housing societies in the State in 1959-60 was 462, with 16,548 members. Government loans amounted to Rs. 11.44 lakh out of a working capital of Rs. 54,57 lakh. The number of houses built was 356.

In West Bengal although a few housing societies came up during 1920-30, the movement assumed significance only after Independence mainly owing to the influx of refugees and the acute housing prob-

the Co-operative Department where necessary. In 1959-60, Madras had 489 societies with 39,179 members. They received Rs. 395.60 lakh as Government loans, and 869 houses were constructed.

Since its formation, Andhra Pradesh has taken up co-operative housing schemes in urban as well as in rural areas on almost the same model as in Madras. In 1959-60, Andhra Pradesh had 315 societies with 29,634 members. The working capital stood at Rs. 356.67 lakh, of which Government loans amounted to Rs. 251.14 lakh. The number of houses built was 1,436.

In Mysore the movement began in the pre-war years but gained momentum with the establishment of the State Co-operative Housing Finance Corporation in 1950 and the introduction of the Government of India's housing schemes. The Corporation is now being utilised by the Government and the Housing Board as an agency for channelling their loans. In 1959-60, there were 329 societies with 32,912 members. The working



Houses built by the City Improvement Trust, Madras, at Raja Annamalaipuram, for families with small incomes

lem in city areas. In Orissa a State Co-operative Housing Finance Corporation was set up in 1955. During 1959-60 there were 194 societies with a membership of 7,166 and the number of houses constructed was 933. During the same year there were 205 societies in Madhya Pradesh with a membership of 9,516 ; 106 societies in Rajasthan with a membership of 5,915 ; and 30 societies in Bihar with a membership of 4,333. There are 315 societies in the Union Territory of Delhi but in the remaining Union Territories progress has not been appreciable.

All-India Position

The following table gives an idea of the all-India position:

	1950-51	*1957-58*	*1958-59*	*1959-60*
No. of societies	1,727	4,172	4,739	5,558
No. of members	1,28,637	2,47,883	2,79,925	3,20,188
Borrowing (Rs. in lakhs)	N. A.			
(*a*) Government		286.75	1116.50	1281.48
(*b*) Central financing agencies		250.54	371.02	453.53
(*c*) Others		1163.20	1736.82	2073.32
Working capital	1345.94	3188.37	4133.21	4866.42
No. of houses built	8,686	36,571	44,005	44,650

Housing co-operatives can be broadly classified in four categories:

(*i*) *Co-operative house-building societies :* Such societies generally acquire land by outright purchase or on lease. The land thus acquired is distributed among members for building houses independently. Members receive loans as well as assistance in the procurement of housing materials, preparation of layouts and so on. At times such societies function as agents of members and undertake construction on their behalf. The majority of housing societies in the different States belong to this group.

(*ii*) *Co-operative house-construction societies*: These societies undertake construction of houses on the land purchased or acquired for the purpose. The houses so constructed are sold outright or on hire-purchase basis to members. House construction societies have been functioning mainly in Madras, Maharashtra, Gujarat, Andhra and Mysore States.

(*iii*) *Co-partnership tenancy housing societies*: These societies work on the principle of collective ownership of tenements/houses built or purchased by them. Monthly rents are recovered from members in such instalments as would enable the society to recoup the investments made within a fixed period of time. When the entire borrowed capital is recovered, shares are issued to members in proportion to the rent paid. Members are sometimes allowed to own the apartments as lease-holders. Such societies are in existence in the industrial areas of Maharashtra, Gujarat, Mysore and Madras States.

(*iv*) *Co-operative township or colonies* : Societies of this type provide facilities given by co-operative house building and house construction societies. In addition they prepare layouts and undertake planning of the township or model colony to be built and provide civic amenities to members. Such societies can be found in the State of West Bengal and a few other States.

State Interest

From this discussion it will be clear that the co-operative housing movement in India has largely been a post-Independence development except for the older Bombay and Madras States. In Bombay, and now Maharashtra and Gujarat, particularly the State Government has been pursuing for some time a policy of liberal financial assistance within their limited resources. The Government of Madras has also had suitable schemes since the twenties of this century. This has been the main reason why these two States account for about 58 per cent of the total number of housing societies in the country.

The trend of development unmistakably shows that wherever State Governments have been able to allot funds for the co-operative housing sector out of their own schemes, if any, and the schemes sanctioned by the Government of India such as the low income group housing scheme, subsidised industrial housing scheme and rural housing scheme, housing societies have sprung up quickly and have been able to render service to members.

Some Suggestions

In order to promote the movement further, the following suggestions could be considered:

(*i*) There should be a concrete programme in each State for the development of co-operative housing with necessary financial provision and physical targets.

(*ii*) Steps should be taken to achieve effective co-ordination between the different departments in the States concerned with the development of housing.

(*iii*) In these States where housing boards as well as house finance corporations are functioning it is desirable that there should be clear demarcation of activities of these bodies in the interest of speedy disbursement of Government loans.

(*iv*) Effective links should be established between housing societies and labour construction co-operatives.

TO READERS

The next issue of Yojana, our Annual Number, will be published on January 26, 1962 (instead of two Sundays from now, January 21).

The issue after that, which will be the second issue of Volume VI, will come out on February 4, 1962.

YOJANA

Yojana seeks to carry the message of the Plan to all sections of the people and to promote a more earnest discussion of problems of social and economic development. It is issued every fortnight in two separate editions, English and Hindi.

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Homes By The Million

A LITTLE field well tilled and a little house well filled—this has been the traditional wish of every family. The shift to an industrial way of life might have somewhat dimmed the desire for landed property among town-dwellers, but to build and own a house remains a universal human urge.

Since an adequate place to live is one of the essentials of improved living standards, housing has to be—and is—an important item in planning. Those who can, build houses for themselves. But the majority of people in our country cannot find money to do so. As the First Plan pointed out, 'private enterprise is not in a position to do the job' because people in the low income groups cannot pay the rents demanded by landlords. The housing needs of the weaker sections of our people are so vast that the State must take upon itself a large share of the responsibility for meeting the needs.

The question is sometimes asked whether housing has been given the priority it deserves in our plans. In order to answer the question we should appreciate various elements which constitute the housing problem. First of all the country as a whole must build a given number of houses to keep pace with the growth of population. Some amount of investment is inescapable merely to see that the situation does not get worse, even if it does not get better. Secondly, when new industries are started—often in remote, newly-cleared regions into which workers have to be attracted—houses are built as a part of the projects. Thirdly, a certain amount of house-building has to be undertaken to relieve evident distress among several sections of the people. Clearing slums and rehousing slum-dwellers or helping people of the Scheduled Castes and Scheduled Tribes to build houses for themselves comes under this heading. Our programme of reducing social inequalities and giving all people the chance to lead a better life requires the State to take special measures in favour of the underprivileged. There is a fourth aspect of housing, namely, *improvement* of standards. It is here that the question of choice can enter.

As an article in this issue points out, few nations in the world can claim to have solved the problem of housing. The Dewhurst Report showed some years ago that even in the United States a sixth of all houses were substandard. We in our country can at present think only in terms of minimum standards for the mass of our people and not in terms of standards that assure reasonable comfort. Most houses in our villages are houses only by courtesy. In the cities thousands are without any shelter whatever. Public housing programmes have therefore concentrated their attention on relieving distress and on providing housing that directly aids production and efficiency. Of course, besides building houses directly the Government also helps all those who want to help themselves. Important among such schemes of aided self-help are subsidised industrial housing, low income group housing, plantation labour housing and village housing. Public policies also ensure an all-round increase in building materials and the Government is keenly aware of the increased employment opportunities that construction provides. A considerable amount of research has been undertaken so that we can build more and better houses with the available resources in money, materials and men.

The allocation for housing in the public sector has increased from Plan to Plan. The achievement is also creditable. In the Third Plan Rs. 142 crore will be provided for housing in the public sector, besides Rs. 60 crore to be provided by the Life Insurance Corporation. In addition, more than Rs. 200 crore will be spent by the Ministries to house their employees. Co-operative housing organisations are being given help of many kinds.

Can we not set apart even larger funds for building houses? Certainly, provided we starve other key sectors of our economy and thus delay our march towards the self-generating stage. Even if we diverted the whole Third Plan investment to housing, we shall not have solved the problem in one grand smash. We have to realise that housing is a problem that we have to live with for some time, but a problem that is being steadily and systematically mastered.

Third Plan Sets Apart Fund of Rs. 1 Crore

THE GRAMDAN MOVEMENT

Need For Working Out Programme In Select Villages

SHRIMAN NARAYAN, Member, Planning Commission

I HAVE no manner of doubt that Acharya Vinoba Bhave's Gramdan movement is a revolutionary step in the progress of rural transformation in India. It is, indeed, the triumph of the non-violent techniques in the economic sphere that all the landowners, big and small, have agreed, in more than 5,000 villages, to surrender their proprietary rights in favour of the village community in order to lead a life of self-help and co-operative effort. Acharya Vinobaji is at present engaged in intensive work to secure all the villages in the North Lakhimpur Sub-Division in Assam as Gramdan. It is to be hoped that his earnest efforts will bear fruit and the whole sub-division will function as a Gramdan area before long. This will, surely, lead the way for other sub-divisions and districts in the country and if this experiment succeeds it could revolutionise the whole countryside in India in a novel and non-violent manner. It is evident that the social and economic benefits of a non-violent revolution achieved through the consent of the people are more lasting and enduring than the results temporarily achieved by a violent upheaval.

IN order to encourage the Gramdan movement in the country and to give an opportunity to the Sarvodaya workers to take up intensive work in these areas, the Planning Commission has decided to set apart one crore of rupees as a special Gramdan fund during the Third Plan period. The Sarva Seva Sangh has been requested to prepare a detailed scheme for the utilisation of this fund which would serve as a long-term and revolving loan for all-round development of the Gramdan villages. In addition, the Planning Commission has also decided that co-operative farming societies, both in pilot and non-pilot areas, would be encouraged in a special manner in Bhoodan and Gramdan villages. This is reasoable because the atmosphere prevailing in the Gramdan areas will be very congenial for the quick progress of co-operative farming, including the pooling of small plots of land by all the villagers. When the landowner is prepared to surrender his proprietary rights to the village community, his participation in a co-operative farm would assure its success and speedy development.

WHILE doing intensive work in the Gramdan villages, the Sarvodaya workers should lay great stress on self-help and co-operative effort on the part of the villagers without much dependence on the official agencies. The Government will, undoubtedly, try its best to give the requisite help for assisting the co-operative endeavour of the villagers. But the Gramdan concept is essentially based on mutual aid and community living and the Governmental agencies should not be given undue importance in this important experiment. At any rate, the pattern of assistance by the Government departments in the Gramdan villages should not in any way differ from the type of help which is rendered by the State to other villages in the Third Five-Year Plan. If the Government pours out financial assistance in a larger measure in the Gramdan areas, these experiments would tend to become some kind of "purple-patches" or oases in the vast desert in the Indian countryside. All attempts, therefore, on the side of both the Government and the Sarvodaya workers to assist the Gramdan villages beyond a limit should be strongly resisted.

FURTHER, the constructive workers in the initial stages should lay greater emphasis on quality than on quantity. It is much better to make a few Gramdan villages successful in their new venture than to attempt to secure hundreds and thousands of Gramdan villages without the fullest understanding and co-operation of the people. I do hope that the Sarva Seva Sangh would try to choose at least one compact Gramdan area in each State for intensive effort during the next few years so that the public in India and outside may be able to get a clear picture of Gramdan community life and the non-violent rural society that is envisaged by Acharya Vinoba Bhave. Success in a few places would prove to be highly contagious and even infectious and the progress of the Gramdan movement would become spectacular. But if we run merely after numbers and do not succeed in producing a few model villages on Gramdan lines, this great movement of Acharya Vinobaji would not be able to make much headway. That would, indeed, be a tragedy which must be avoided.

Surveys & Their Uses

BOOK REVIEWS

Family Living Studies—A Symposium. International Labour Organisation (Studies & Reports, New Series No. 63 : Geneva 61) Pp. 280, Price : Rs. 10.

Reviewed by B. N. DATAR

THE publication contains a number of useful contributions on surveys in different countries on various aspects which affect the life of a human being. The surveys recorded cover employment, unemployment, under-employment, consumer habits, standards of health, nutrition, conditions of life, and the like. They cover urban and rural areas, both in the under-developed and the more developed economies. The emphasis has all along been on the methods of sampling used in such surveys, questions asked and the kind of responses they evoked and the manner in which the information has been interpreted. The variety in the surveys is also indicated by bench mark vs. continuous surveys, and multipurpose vs. specific surveys. The merits and shortcomings of each type have also been analysed.

In the case of some surveys, important questions, as to whether those who have worked with the surveys feel satisfied with them or whether in starting new ones they would revise the methods and if so in what ways, have been raised and answered. Invariably, the reply to the first query has been that the surveys have worked well, but such an answer does not exclude improvements in specific respects. There is nothing new in this statement. Indeed, a similar question on any research activity would evoke the same answer. It is in the ideas which persons in charge of these surveys have thrown up for future work in this field that the symposium makes a positive contribution. Sample surveys usually come across difficulties in the nature of non-response, selection and training of interviewers, the framing of appropriate questions, and so on. The methods which have been used by different countries in overcoming these difficulties can be of mutual assistance.

The symposium describes studies concerned primarily with family income and expenditure patterns. These include an *ad hoc* study in Sweden and a continuous survey in the U.K. To add variety to similar studies in a different context, a continuous family budget survey in the U.S.S.R. is also included. Falling in the same category is the study in a less industrialised country, Greece, and another relating to a specific section of the population, agriculturists, in the shape of a study in the family budgets in agriculture in the Federal Republic of Germany. An attempt at international comparison is made in still another study which concerns itself with countries belonging to the European Coal and Steel Community. A second group of surveys relates to specialised aspects of family living apart from the family budgets. A survey of food consumption in Great Britain, of under-employment in Puerto Rico, a population study in the Mysore State of India, a health survey in Japan and the repeat surveys of consumer finances in the United States belong to this group. Still a third set deals with family living surveys of a more comprehensive type. The appraisal of community development programmes in the Philippines, current population surveys in the United States, the household sample survey of levels of living in the Ivory Coast and the National Sample Survey in India have been included as illustrations of multipurpose investigations.

A symposium of this type could have been more useful if the studies included in it from different countries could have given an analysis of the use to which the results of these surveys are put. The objectives for which the survey is undertaken have been mentioned in the reports on most of them, but what is missing is information as to how far the data analysed answer these objectives.

It is not possible to reveiw, in the absence of local comments, the surveys from other countries included in the symposium. Judging from the alertness of the users of such information it is possible to imagine that critical comments on the data so collected and analysed would be available in most of the countries represented in the symposium. One can, in the Indian context, illustrate the point by reference to a study included in the symposium, "Repeated Surveys of Rural Living Conditions in India", organised by the N.S.S. As has been pointed out in the symposium, the National Sample Survey was initiated in 1950 and has been in operation continuously since that time. The general objective of the Survey was to collect a wide variety of essential statistical information which would provide national and regional estimates of demographic characteristics, income, consumption, agricultural production, etc. Employment and unemployment have since been brought within the scope of the survey. It has been claimed in the publication that after ten years of operation, the National Sample Survey is one of the unique statistical operations in the world, a project on a vast scale covering a population scattered over a territory of 1.27 million square miles. But have the series of surveys on which reports are available been used for the purpose for which they were originally undertaken? National income estimation was one such subject ; the latest report on national income

statistics issued by the Central Statistical Organisation reveal's however that in important sectors of the economy the data available in the reports of the N.S.S. have not been used for assessing the national income.

Production

In a country like India where a substantial portion of national income is derived from agriculture, it is but appropriate that considerable attention has to be given to securing a reasonable estimate of crop production. The multipurpose survey of the N. S. S. type which at one time was considered appropriate for getting information on the subject (Refer pp. 273-274 : Household Schedules for Detailed Information on Household Enterprises) has not been able to secure over any period data which could be of use in national income statistics from the production angle. Also, the statistics of national income from the consumption angle and the official production estimates have shown such a divergence that to a lay mind the reliability of either or both becomes suspect. It is therefore that in an area like agriculture, where detailed planning is required, the primary agencies which collect information require to be strengthened in addition to whatever information is collected through multipurpose surveys. The phenomenal growth of agriculture in Japan has been the result of action based on a comprehensive analysis of detailed statistics that have been collected and are being collected over a number of years. Viewed in this light, there seems to be some justification in the criticism in many quarters against the multipurpose surveys. While, as pointed out in the report, they may give appropriate emphasis to a broad spectrum of data on major topics such as agriculturists' income, employment, education, housing, nutrition and health, and may have the advantages of speed and economy in terms of practical utility, the Indian experience has shown that the results so far have not been quite what they were claimed to be at the time when this survey technique was adopted. The N.S.S. perhaps has not yet got over the initial hurdles and is still trying out its concepts and definitions on the respondents in an effort to decide which way of interviewing evokes reliable response.

QUOTATION BOX

Peace, too, is no sentiment; if it is to live, it must be founded in the intelligence; there must be a reason for it. We must fight violence with our brains, not simply because we are afraid.

—Dr Verrier Elwin in his Patel Memorial Lectures

With effect from today the Delhi edition of 'The Times of India' is priced at 13 nP, a reduction of 3 nP.

—The Times of India

The reduction in price from 16 nP. (to 13) is not warranted by the economics of the newspaper industry ...(It) has been compelled by competition.

—The Hindustan Times announcing a cut in its sale price

In view of the decision of *The Times of India* and *The Hindustan Times* to reduce their price, *The Indian Express* has, under pressure of cut-throat competition been obliged to reduce the price of its Delhi edition from 12 naye Paise to 10 naye Paise.

—The Indian Express

The Press Barons have started a rate war in the capital. The new rate war has given reality to the fears that without a price-page schedule unfair competition by the big guns of the industry cannot be held in check. One interesting result of the announced price reduction is that the cost of white newsprint and the newspaper will be approximately the same...It is true this competition helps the reader for the present; but the bigger fact is that it represents a trend that will ultimately hurt the small papers considerably.

—Link

A great impediment to decision is the official who is incapable of letting any of his subordinates decide anything and eventually becomes incapable (because there is no time) of deciding anything rationally himself.

—Sir Paul Gore-Booth in a speech on "Decision or Pending" at the Indian Institute of Public Administration

Building the Avro—748 from scratch within 18 months was no mean achievement in any country.

—Mr. R.F. Hunt, leader of a delegation of aircraft equipment manufacturers, after visiting the Kanpur plant of the I.A.F.

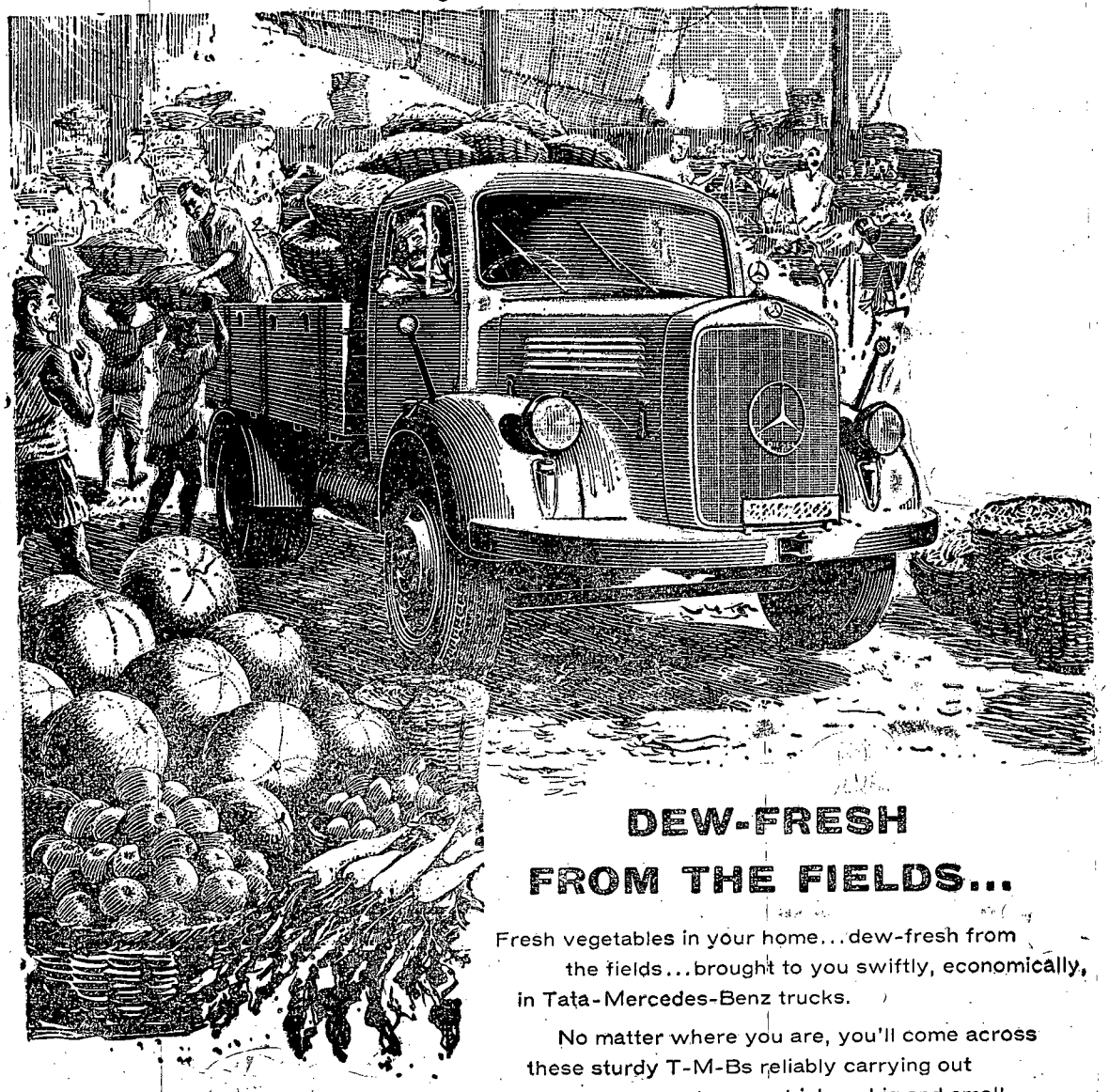
In an underdeveloped but already densely populated country like India, successful industrialisation will be impossible unless birth-rate is cut to about half within the next 30 or 40 years, for otherwise the capital and the trained man and woman-power needed to give the country a stable industrial economy will be swallowed up in feeding, housing, educating and servicing the excess population.

—Sir Julian Huxley writing on "The Crowded World" in Punch

Useful Service

As mentioned above, the symposium has grouped four studies as satisfying the criterion of multi-subject investigations. A closer examination of this group shows that the "Repeated Surveys of Rural Living Conditions in India" is quite different from the rest both in its content and in the range of applicability of results. The two surveys, one from the Philippines and the other from the Ivory Coast, constitute, more or less, a bench mark for certain characteristic of the population studied whereas the population surveys in the United States do not envisage collection of information on aspects other than demographic on a continuous basis. (Some further incidental information is also sought to be collected in the U.S. survey by canvassing supplementary schedules.) The Indian survey, however, is quite distinct in so far as it seeks to collect data on a continuous basis on a variety of subjects. This point has been particularly mentioned in order to help evaluation of a claim that surveys of the N.S.S. types are common in other countries for collecting information which will be of use for framing Government policies in different areas of its economic activity.

On the whole the symposium, by bringing together surveys on family living in different countries, has rendered a useful service to agencies working in this field in different countries. In any future study of this kind, it is hoped that attention will be given to an evaluation of such surveys from the users' viewpoint.



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THE STAR THAT HAULS A FORTUNE

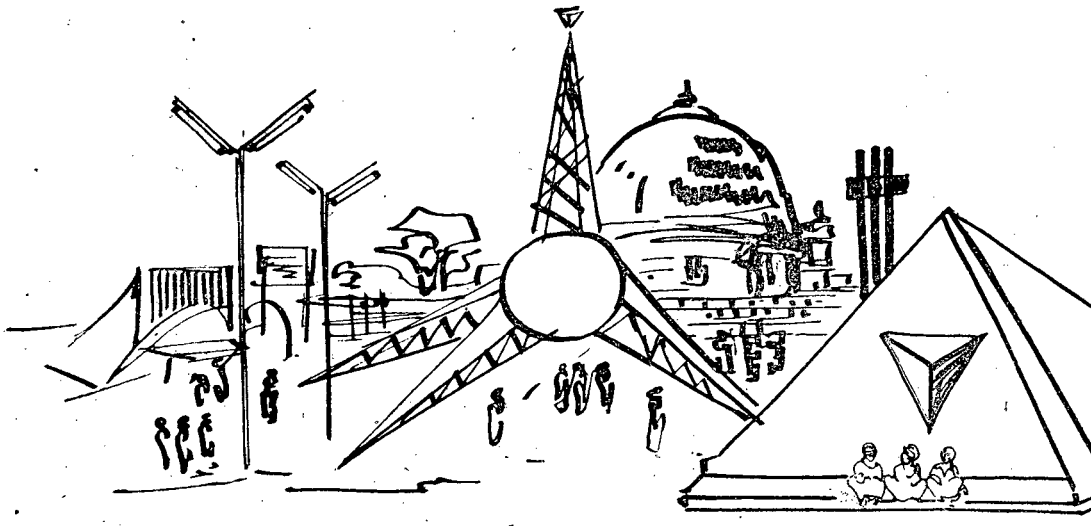
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When Our Way To Fair We Took



LIGHTS, songs, throngs and a good show—that is the surest way to reach our people. Publicity experts say that in the matter of putting things across nothing can equal an exhibition, not even the cinema. This is especially true in our country, with our inherited love of *melas*.

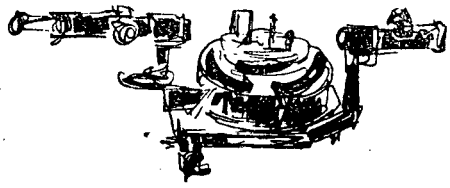
After the Agricultural Fair of two years ago, organised by the National Farmers' League, it was only natural that our industrialists should organise an industrial fair. The Industries Fair that is drawing to a close in the capital, although qualified by the adjective "Indian", is no less ambitious and internationally representative than the World Agricultural Fair. But there is one notable difference. In the winter of 1959-60, the easiest way of seeing the people of India was to spend a couple of evenings at the exhibition ground on Mathura Road. There they were in all their rich regional variety, exemplifying all stages of sophistication and simplicity—Kathiawari farmers in their red turbans, pleated jackets and clinging trousers, Kerala tillers with rose-wood skins and ivory teeth, Bengal *Karshaks* grave-eyed and clothed in white and fawn, Rajasthani peasant women with their beaded, billowing skirts and find-me faces, and office workers in brown, executives in grey flannel and the U-women bedecked, ornate and gay

> Like a Stately ship
> Of Tarsus, bound for th' isles
> Of Javan or Gadire
> With all her bravery on, and tackle trim,
> Sails fill'd, and streamers waving,

taking their amber scents where they went.

This time the crowds are almost all urban. There are almost no timorous or sturdy farmers with wondrous gaze. The smaller appeal of the present fair is understandable; for doesn't industry in our country as yet support only one person for every four supported by agriculture?

Turning from the seers to the seeable, what an eye-opening show this really has been? Barring a few top-ladder men like industrialists and officials, who would have known that India made so many kinds of goods—from the minutest to the mightiest, from buckets to boilers, from microscopes to mammoth milling machines, from druggets to draglines, from coffee percolators to supersonic aircraft? In just one stall,



A Spectrometer made in Ambala

that devoted to exports, the visitors could see that we are today sending to other countries not hundreds but thousands of kinds of industrial products. The crammed pavilion of the National Small Industries Corporation, likewise, showed the breeziness and bounce of our small entrepreneurs.

TO get the best out of a fair, one must be young. But even the young, the hardy of foot and the inquisitive can't take in the Fair in one visit, or even a dozen. It is too large and too various without the matter-of-fact tidiness of, say, the annual German Industrial Fair. Size is not the only drawback. The lavishness of some of the stalls puts off the diffident majority. It is hard for them to venture into glass-and-aluminium gorgeousness. The style of display is often

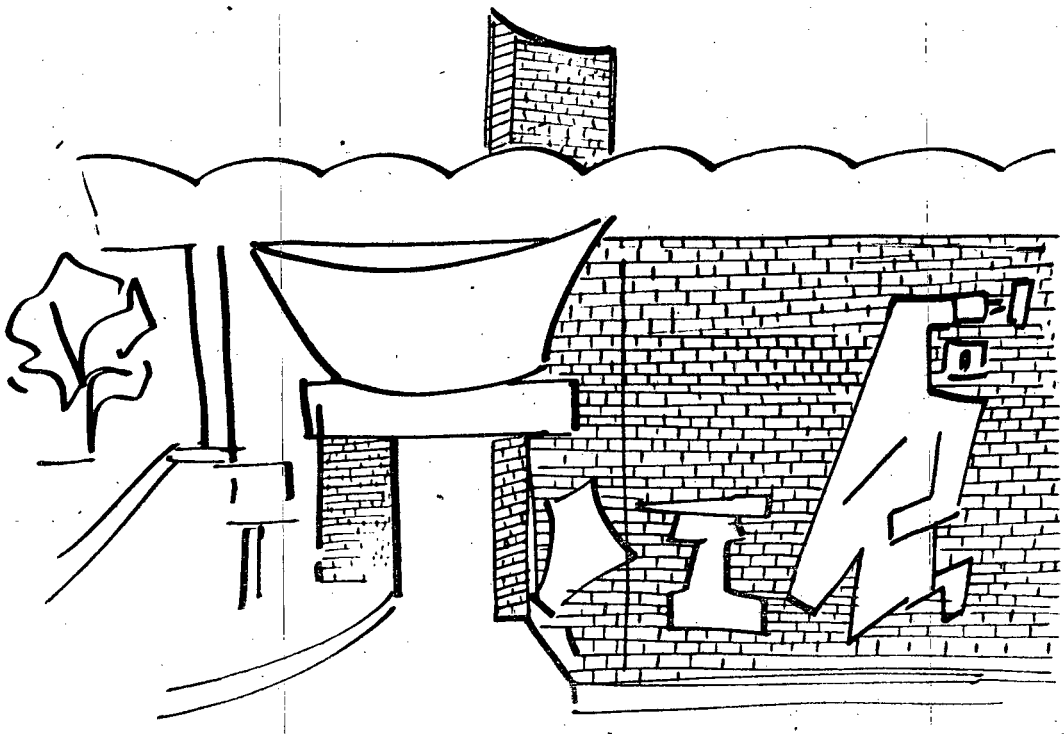
(*Continued on page 18*)

A giant drag-line (apparatus that moves vast quantities of earth) at the Telco pavilion.

Here, For All To See

Our Industry

On the Mark,
Ready,
Steady,
Go . . . . .

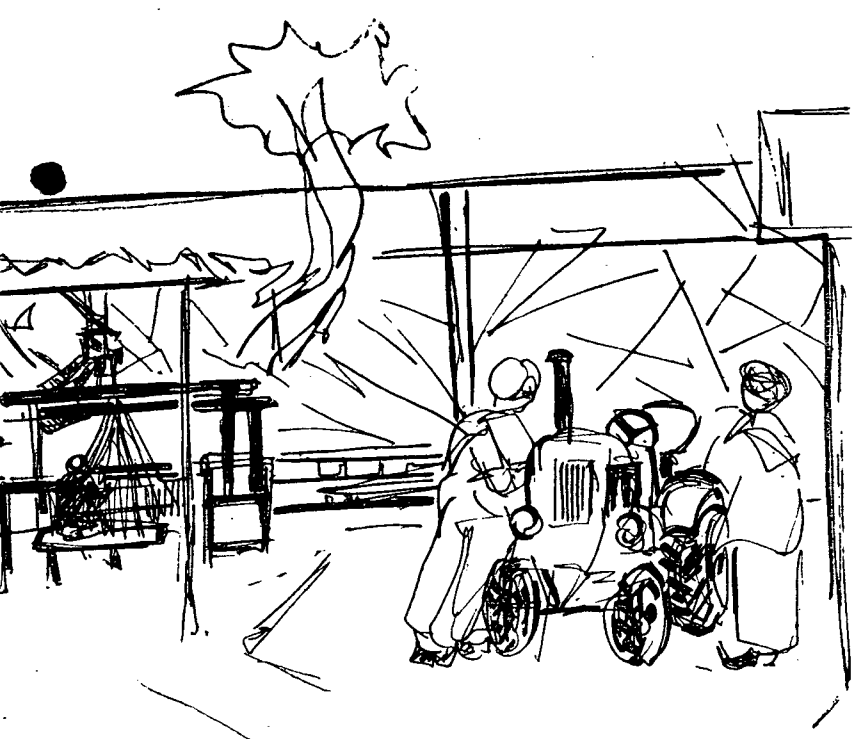


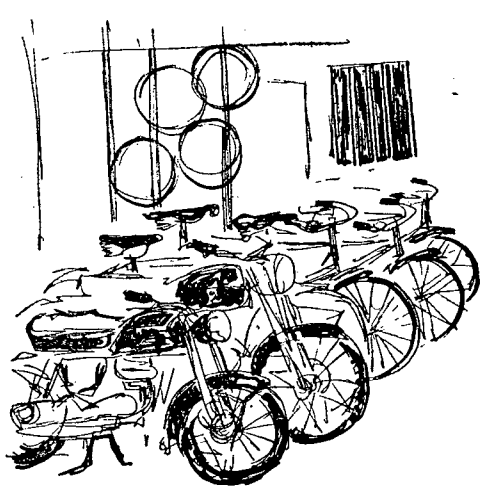


The National Small Industries Corporation's pavilion is a demonstration lesson of the skill and dash of people from almost every region in India. Many of our States have put up stalls which give a precis of their industrial activity. At right a portable diesel air compressor and an air-cooled diesel tractor jostle with a jacquard loom from the Punjab pavilion.

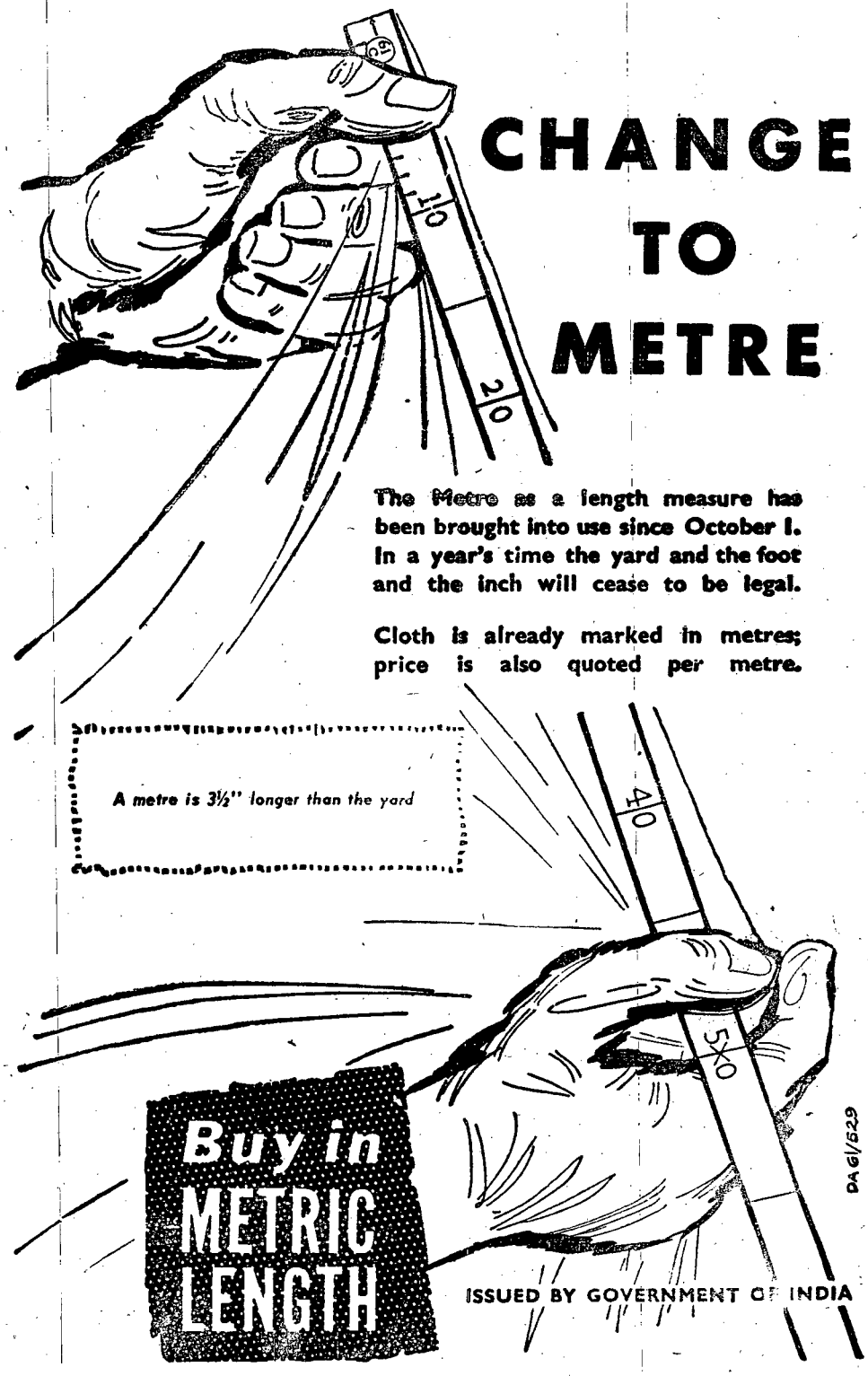
awings by R. SARANGAN

A night view of the Indian Industries Fair, a 180-acre spread of colour and bustle giving at one place a rapid tour of industrial India. Nearly 30 lakh people visited the Fair during its first 45 days. As many as 18 countries are participating.





The bicycle age in our country is already yielding place to the motor-bicycle age. And we are exporting not only bicycles but even motor bicycles.


CHANGE TO METRE
The Metre as a length measure has been brought into use since October 1. In a year's time the yard and the foot and the inch will cease to be legal.
Cloth is already marked in metres; price is also quoted per metre.
A metre is 3½" longer than the yard
Buy in METRIC LENGTH
ISSUED BY GOVERNMENT OF INDIA
DA 61/629

SIDE TRACK

Degrees of Pride

THERE are many who don't like centigrade temperatures and would stick to Farhenheit. To say one's fever was as high as 39 degrees is certainly less impressive than to say "Last night, do you know, I had 102,2. Still I am at work today".

Some of these people, however. took a reverse kind of comfort during the recent cold wave in North India when temperatures crashed down to 2 degrees C. A lot more prestigious—being just a nail's width above zero—than 36 degrees !

Understatement

TALKING of low temperatures, what is the line of distinction between cool and cold? It is a question that applies not only to drinks and handshakes but to the air that pierces one's skin.

Maybe because the phlegmatic Government servants of India are the last Englishmen on earth; while people froze to death in Kanpur and Delhi and the Tarai, the Meteorological Office bulletins went on forecasting 'cool' nights—just as they keep speaking of 'fair weather' during the pitilessly sizzling summer days.

Smile for 15 nP.

CONGRATULATIONS to the Post and Telegraph Department for putting out one of the jolliest stamps we have had for a long time. The stamp issued for the Archaeology Centenary is sure to make the messenger-boy or mother's little girl look at it before sticking it to the envelope.



Clever Fellows

THE ultimate in attribution is said to be the sentence "The moon is 238,000 miles from the earth, according to The Associated Press".

We had something to equal it recently when a swarm of locusts flew over Delhi. A newspaper solemnly reported : "According to revenue officials of the Delhi Administration, locusts are voracious eaters and pose a special danger to standing crops."

Book of Un-Genesis

ON another page of this issue there is a report of a remarkable vasectomy camp in Maharashtra. Maharashtra and Madras are the two States which are in the forefront of the family planning movement. The two Governments are popularising vasectomies, perhaps the most effective method of birth control. Thanks to these efforts, prejudice against this operation is being overcome and males are realising that their maleness remains unimpaired.

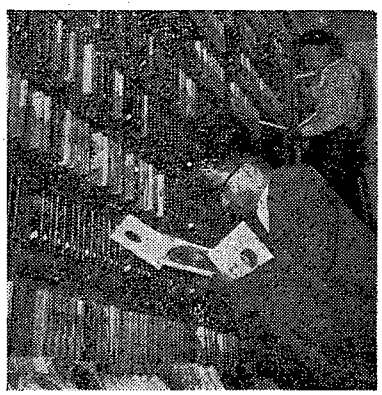
The Chief Secretary of Madras, Mr. R. A. Gopalaswami, is one who advocates vasectomy with missionary zeal. Mr. Gopalaswami, who was the Census Commissioner of India in 1951, never tires of telling people what will happen if our population grows unchecked. He believes that Madras has shown signs of being more progressive in this regard than other States. If the whole State adopts the attitude towards sterilisation that Madras City has adopted, it might achieve what Japan did—a halving of the birth rate.

Madras has published a family planning manual, of which 4,46,000 Tamil copies and 97,350 English copies have so far been snapped up by the people. Because of the demand, a fourth edition is being brought out. This, Mr. Gopalaswami says, is an indication of the growing appeal of the movement.

To promote family planning, most if not all Governments in the country offer a small cash bonus to people who undergo operations. A few days' leave is also given, if they are Government servants. There is a story told that a Madras ryot, father of four children, who had got himself sterilised, went to the doctor a few weeks later and asked that his wife also be operated upon. That wouldn't be necessary, he was told. "But we want the thirty rupees, Sir", the ryot persisted.

PLAN QUIZ

1. (A) The first transport aircraft, AVRO-748, built by the Indian Air Force at Kanpur, is named (a) Subroto, (b) Sujata, (c) Shaktiman.
   (B) It made its inaugural flight at Palam airport, New Delhi, on (a) October 31, 1961, (b) November 10, 1961, (c) November 26, 1961.
2. What is the total tonnage of our merchant shipping, as compared to that of the world?
3. What is the rate of domestic saving in India?
4. What is the annual production of bicycles in the smaller workshops other than the organised industrial units?
5. What does the picture below show?



(Answers on Page 25)

With the next issue

YOJANA

enters its sixth year

●

To mark the occasion
and to celebrate Republic Day,
A SPECIAL NUMBER
will be brought out on

January 26, 1962

●

The issue will contain articles on development-topics, reports on Plan projects, cartoons, sketches, photographs and a symposium on

INVESTMENT IN MAN

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64 pages. Colour cover. 50 nP.

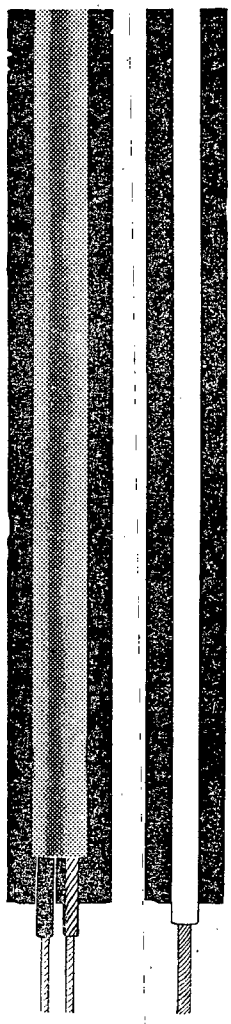
(At normal price to regular subscribers)

HAMARA HINDUSTAN

(*Continued from page 13*)

too far above the heads of the people at large—with the result that pavilions like that of Gujarat, using familiar motifs and materials, draw the largest crowds, while the stalls of some of the foremost industrial houses are practically deserted. We shouldn't grudge our architects, interior decorators and ad-men, who endeavour so hard to keep abreast of the most fashionable in the world, a chance to show off their skill. But it is poor consolation if their hits prove misses. The artists who did the mural outside the pavilion of a major public enterprise was asked by the chairman of the firm what his design (looking like a red octopus welded to a black octopus) stood for. "Oh, uninitiated people like you can't understand it," replied the artist with lazy disdain. Having earned his fee, and sure of his fit audience though few the artist may care little that visitors to the Fair passed by the mural and did not pause to stand and stare at it. The problem that our exhibition organisers face is to make the educational more attractive than bangles and potato-choppers and 'alu Tikia'.

Overheard at the Fair on December 20: A sprightly schoolboy asking another: Why couldn't they put up a Goa stall overnight in the States' sector?



Engineering College, Trivandrum,

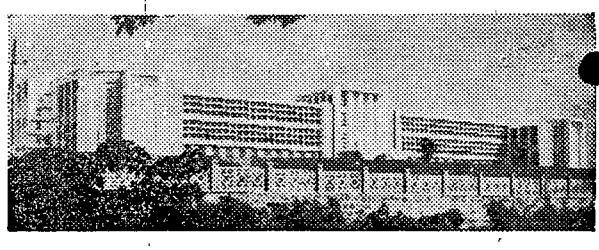
wired with ALIND *covered aluminium conductors!*

A recent addition to the growing roster of educational institutions wired with Alind covered aluminium conductors is the Engineering College, Kulathur, Trivandrum—some 40,000 core-yards of Alind CAC have gone into the electrification of this imposing edifice!

Dependable and economical, ALIND KER-AL-LITE building wire, and ALIND AL-VINYL all-purpose wire, employ polythene insulation, polyvinyl chloride (PVC)-sheathing and high-conductivity aluminium conductors, resulting in a light-weight construction with a broad range of desirable properties

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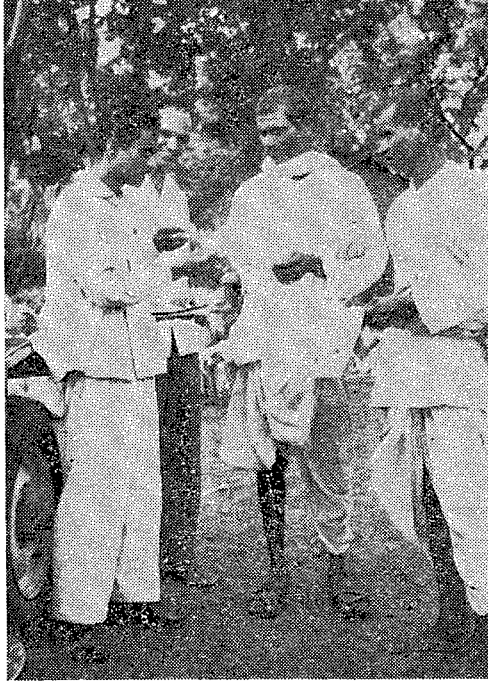
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Planned Parenthood Becomes Reality As 1,400 Villagers Undergo Operation In Camp

The Wise Men of Satara



A social worker giving instructions to people at the Satara camp.

THE Satara district in Maharashtra has set up a record in the field of Family Planning. At a recent vasectomy camp, 1,400 persons volunteered to get themselves sterilised. The camp was held from October 30 to November 1, 1961, at Satara.

The success of the camp was not an accident. It was the result of the sustained efforts of its organisers and the Government, and the understanding co-operation of thc people.

It was first in 1958 that the Public Health Department authorities in Satara district decided to organise sterilisation camps in the rural areas. This attracted the attention of the villagers and 72 persons came forward for the operation. Next year, the field workers of the Public Health Department intensified their efforts to create a more favourable public opinion and 305 persons underwent the operation in 1959. In 1960, a State-wide campaign was launched in Maharashtra. This campaign gave an impetus to the movement in Satara district. Door-to-door propaganda in favour of family planning was undertaken. Field workers stayed in the villages, so that they could meet the village-folk in their leisure hours and convince them of the benefits of family planning. The result was that 1,323 persons were vasectomised at 22 camps.

Elaborate Preparations

In 1961 the villages of Satara had to face a challenge. The People of Ahmednagar district made a bid to break the record established by a vasectomy camp in Japan, and as a result, 554 persons came forward to undergo the operation in a three-day camp. Satara villagers decided to better the performance of Ahmednagar and it was decided to organise the biggest vasectomy camp at Satara.

Preparations for the camp were started in right earnest. A non-official finance committee was formed to collect funds for conducting the camp. Social workers undertook to supply food to the patients for three days. This arrangement also facilitated the stay of the patines for pre-operation and post-operation madical care. Officials of the Health Department went from door to door for getting the consent forms filled in, and within a month and a half about 2,500 forms were collected.

During the three days of the camp 40 doctors and 30 nurses worked at 20 operation tables to vasectomise 1,400 persons from 231 villages. Seventy emergency beds were provided for giving rest to the operated persons.

One important feature of the camp was that the consent of the wife of the person to be operated was already obtained on the prescribed forms. Secondly, there was not a single case of any medical complication after operation. Thirdly, personal approach and persuasion was the method adopted for attracting people to the camp. There was thorough-going co-ordination between official and non-official workers. Patients were kept under watch for 24 hours after operation and stitches were removed in time. Each operated person was paid an allowance of Rs. 20 to compensate for the loss of his earnings. After the camp, staff of the Public Health Department paid a visit to every individual at his village to ascertain the success of the operation. Post-operation instructions were given to the patients and they were advised to get themselves medically examined after three months.

An analysis of the number of persons attending the camp, shows that out of the 1,400 persons, 847 belonged to the age-group 35-40 years and the rest were above 40. Of the total number, 98 per cent came from the villages, among them 700 were agriculturists and 500 labourers. As regards monthly income, 622 earned less than Rs. 60, and 511 had an income of about Rs. 70, while there were only two persons who earned more than Rs. 150 per month.

This report is based on the material supplied by Mr. Akshoy Mohanty, Joint Secrectary of the camp.

It is a cruel crime thoughtlessly to bring more children to existence than could properly be taken care of, causing endless suffering upon the whole family... I believe that to wait till the moral sense of man becomes a great more powerful than it is now and till then to allow countless generations of children to suffer privations and untimely death for no fault of their own, is a great social injustice which should not be tolerated.

—Poet Tagore in a letter to Mrs. Margaret Sanger.



We are now engaged in production of capital goods; most consumer goods are still scarce. Why not defer your purchases or even do without them until the goods are available in plenty at reasonable prices?

Put your savings to productive use .... for National Development and your future prosperity.

NATIONAL SAVINGS ORGANIZATION

DAVP/491

ENOUGH FOOD FOR ALL ?

QUESTION from Mr. Mohan Chandra Joshi, Kidwai Nagar, New Delhi.

Is it correct to say that even at the end of the Third Plan, the poorest sections of our population will not get enough food, clothing and shelter?

ANSWER. Here is a really tricky question. It is like having to give a reply when asked "Have you given up beating your wife?"

There is no doubt at all that there will be *more* food, *more* clothing and *more* housing at the end of the Third Plan. Targets have been fixed at such a level that at least 17.5 ounces of foodgrains will be available per head per day by 1965-66 and 17.2 yards of cloth per person each year as against 16 ounces of foodgrains and 15.5 yards of cloth in 1960-61. In the matter of food, it is not enough if the right quantity becomes available; the quality and the nourishing value must also be taken care of. The Third Plan programmes are aimed at seeing that more milk, butter, *ghee*, oil, vegetables, fruit, meat, poultry and fish will also be available. It should be recognised, however, that in talking of food, one can draw up estimates on the basis only of the *minimum* requirements for a normal, healthy life and not on the basis of *enough* food. In the last ten years food production has gone up by two-fifths, and the Central and State Governments have done everything in their power to remove food scarcities and, in particular, to combat distress owing to drought or flood. Large quantities of cereals have been imported.

However, with availability of food should go the ability to buy it. The incomes of a large part of our people are still too low for them to be able to buy all they need, let alone all they want to. The figure of the unemployed people is high in our country; even at the end of the Third Plan there will be a large number of underemployed people—that is, of people who are ready to work but cannot find work.

In the matter of housing, the distance between needs and realities is much larger. Good housing conditions are available to only a small fraction of our rural people, while in the cities, crowding is so great that many people who have tolerably good incomes are forced to live in intolerably bad houses. It is well to remember that unlike food, clothing and medical aid, even the most advanced countries of the world, such as the United States, the Soviet Union, Britain and France, have not solved their housing problem.

On the whole it would be right to say that there will be *more* jobs, *more* incomes, *more* food, *more* cloth and *more* houses at the end of the Third Plan, but still not enough of any of these from the standards of the rich countries.

YOU ASK US

Questions from readers on planning and development will be answered on this page. Please address the queries to the Chief Editor, Yojana, 216, Yojana Bhavan, New Delhi-1. It might be noted that the purpose of this feature is not to answer queries of a purely business nature.

SMALL INDUSTRIES . . .

QUESTION from Mr. H.D. Kulkarni; 70th Street; Killa; Bagalkot (Mysore State)

What are the sources of information on small-scale industries?

ANSWER: It is difficult to name any particular source unless the specific nature of information required is known. However, the following agencies are connected with small-scale industries at the Central level:

1. Development Commission, Small-scale Industries, Udyog Bhavan, New Delhi.

2. Small Industries Service Institute, 56, Sunder Nagar New Delhi-11.

3. National Small Industries Corporation, Rani Jhansi Road, New Delhi-1.

4. All India Handicrafts Board, Taj Barracks, Janpath, New Delhi-1.

5. Indian Handicrafts Development Corporation, Indian Express Building, Mathura Road, New Delhi-1.

6. Khadi and Village Industries Commission, K. Block, Connaught Circus, New Delhi-1.

Besides, there is a separate Division for village and small-scale industries in the Planning Commission, Yojana Bhavan, New Delhi-1.

At the State level, every State Government has machinery for village and small-scale industries, particularly as part of the Development Department. The State Director of Information and Publicity may be approached for any specific information on the State schemes.

. . . AND GOVT. LOANS

QUESTION from Mr. P.K. Damodaran, Sakli (M.P.).

What are the sources for obtaining Government loans for investment in small scale industries? What are the procedure and rules for obtaining such loans?

ANSWER: Credit facilities for small scale industries are available from the following agencies:

(i) The State Governments' Departments of Industries, who grant loans under their State Aid to Industries Acts/Rules;

(ii) State Financial Corporations;

(iii) State Bank of India under its special scheme for provision of co-ordinated credit to small scale industries; and

(iv) Certain specified banks and other financial institutions in different States selected by the Reserve Bank of India, under a pilot credit guarantee scheme.

The procedures and rules prescribed for giving loan assistance vary. For detailed information, either of the following publications may be consulted:

(a) "Information for Small Industrialist", published by the Central Small Industies Organisation, Ministry of Commerce and Industry.

(b) 'Small Scale Industries—Procedures and Facilities''—published by the Federation of Indian Chambers of Commerce and Industry, New Delhi.

Yojana Essay Competition

Rs. 250 IN PRIZES

For the fifth year in succession, *Yojana* is conducting an essay competition to promote clearer thinking among our students in regard to the basic problems of planned development. The competition is open to all college students.

Subjects

One of the following:

1. Economic integration as basis for national integration.
2. Role of public enterprises in India's economic development.
3. Lessons of ten years of planning in India.
4. Education and economic development.
5. Ways of modernising Indian agriculture.
6. Mobilising people's effort for the Plan.

Length and Language

Essays may be submitted in either English or Hindi. They must not exceed 1,200 words.

Prizes

Four prizes will be awarded as follows:

1. Best Essay in English by under-graduate student—Rs. 50.
2. Best Essay in Hindi by undergraduate student—Rs. 50.
3. Best Essay in English by student in Master's Degree classes—Rs. 75.
4. Best Essay in Hindi by student in Master's Degree classes—Rs. 75.

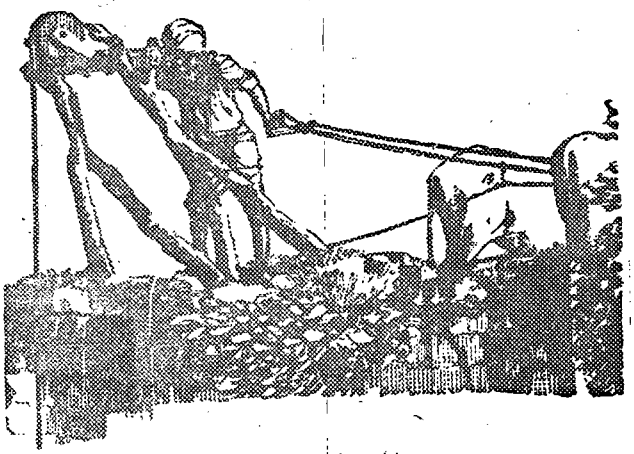
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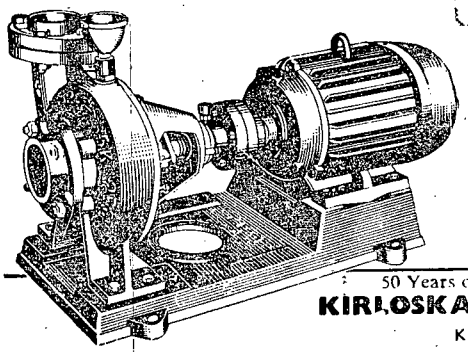
Entries should reach Chief Editor, "Yojana", Yojana Bhavan, Parliament Street, New Delhi-1, by January 31, 1962.

Each entry must be countersigned by the head of the institution where the candidate is studying.

The March of Time!

In Maharashtra, the land of Saints, irrigation was carried out by using "Mote" an old method of lifting water from the well. A laborious process and yet the peasants conducted their duty with equal zeal because they had inherited this method from their ancestors.





Time, however, has changed the old order. Peasants are now convinced that *Pumping* water is more economical and that the soil with plenty of water yields a better harvest.

Kirloskar Centrifugal Pumping Sets have undoubtedly performed their duty well.

Kirloskar ESTD. 1888

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E. 540

OVER TO YOU

FOOD PROBLEM: HOW WE CAN SOLVE IT

It is a well-known fact that with rising population and increase in demand for food, the food crisis becomes a burning problem. Today, however, we may say that the food deficit has almost been made up. The problem in some surplus states now is that prices of foodgrains have begun to fall. The imbalance in prices may cause the cultivators to employ their resources for producing cash crops in the coming harvests. Or, in the long run, there may be a shift of agricultural labour to the more lucrative industrial sectors. Argentina once had the same problem and suffered as a result. The imbalance between agriculture and industry was the main economic cause of the revolt in Turkey. In India our leaders have been trying to save agriculture and to develop a balanced economy. It is therefore essential that we should think of the future.

The age-old system of agriculture in India has been much abused for inefficiency. But we must thank our forefathers who had not been too greedy to squeeze out spectacular bumper crops in the past, exhausting the fertility of the soil. We have no Arizona as a mark of our sin. In most of the cultivated land, the optimum of diminishing return has not yet come. Of land, labour and capital, it is only capital that we have lacked, and the 'bacterial strata', the most vital treasure of the land, yet remain unmolested. With intensive cultivation of the present available land, India can meet the demand for many decades to come. Mechanisation, for instance, will have a welcome effect. But the steps taken should be cautious and steady. The allurement of bumper crops by intensive use of chemical fertilisers should be checked. I have talked of Arizona. Once it was a land of wheat. But now it is a desert losing the bacterial strata by using chemical manures too indiscriminately.

Now, presuming that India is taking the right path, the food production from the present cultivable land will have a continuous rise up to the optimum. After that stage it will begin to drop slowly.

On the other hand, the demand is continuously increasing owing to rise in population. Again, the increase in income due to Plans has been causing an increase in demand for food in recent years. The per capita consumption will become a constant factor when the demand will be inelastic on full implementation of the Plans. It is hoped that the final product curve will be parallel to the population curve during the take-off stage, at the end of the Fifth Plan.

If family planning has no substantial response in the rural areas, the rise in population will be almost constant with constant gradient. The gradient may fall, but not too much, owing to effective family planning and natural causes which limit the rate of child-birth in a community with high standard of living.

Another instrument in the hands of the nation is the reclamation and cultivation of uncultivated fertile lands and reclamation of once fertile lands lying barren owing to deforestation. The rate of reclamation multiplied by the productivity of these lands will thus be the main weapon to keep the final crisis away. The reclaimed lands will have an extra privilege of being under special supervision from the very beginning. The virginity of the soil and the proportionate and concentrated input of land, labour and capital will yield proportionally more than the present cultivated land does.

Thus the future solution to food problem will depend upon three variables : (1) the yield of the land already under cultivation, which will sooner or later begin to fall, (2) the yield of reclaimed land which will be rising for many years, and (3) the effective check on the rise in population. All the land available for reclamation should go under cultivation at the end of the Fifth Plan.

The crisis will come after decades, at least later than many advanced countries of today. Then the problem will not be merely Indian but international.

Gauhati — ASOK SEN GUPTA

HEADING FOR A CRISIS

Sugar is now surplus in India whereas the production of foodgrains is not sufficient to meet our requirements. We have often to approach America, Burma and other countries with begging bowls for food.

It is a pity that even though we had self-sufficiency in sugar, more factories were started and the Government went on granting permits for them. The result is that we do not know what to do with the surplus production.

We are producing sugar at a very high cost. In Java and Mauritius they produce sugar at half the cost we incur.

Our leaders appear more theoretical than practical. Those in charge of agriculture should have known that, in the Deccan, sugarcane is cultivated mainly because advances are available from moneylenders and commission agents against the crop.

I see a grim future for the industry. Sugar prices will ultimately come down. Factories will not be in a position to offer such high prices to canegrowers as they are giving now ; but, on the other hand, the cultivators cannot afford to sell sugarcane at cheaper rates. This may lead to a crisis in the sugar industry. Ultimately the cultivators will have to give up canegrowing and the Government may come into trouble in recovering loans from the sugar factories.

Kolhapur — K.B. BHAGWAT

NEW THRESHERS FOR MILLETS

THE threshing of *cholam* and *ragi* has always been a problem for the farmers. Spreading the earheads on the floor and beating them with a stick, using a stone-roller or cattle are well known conventional methods adopted in many parts of the country. These methods serve the purpose when the harvest is comparatively small. The need for a more efficient and quicker method of threshing is felt by the farmer when he has to handle a rich and large harvest reaped from bigger areas. In such cases a mechanical thresher proves more useful to him.

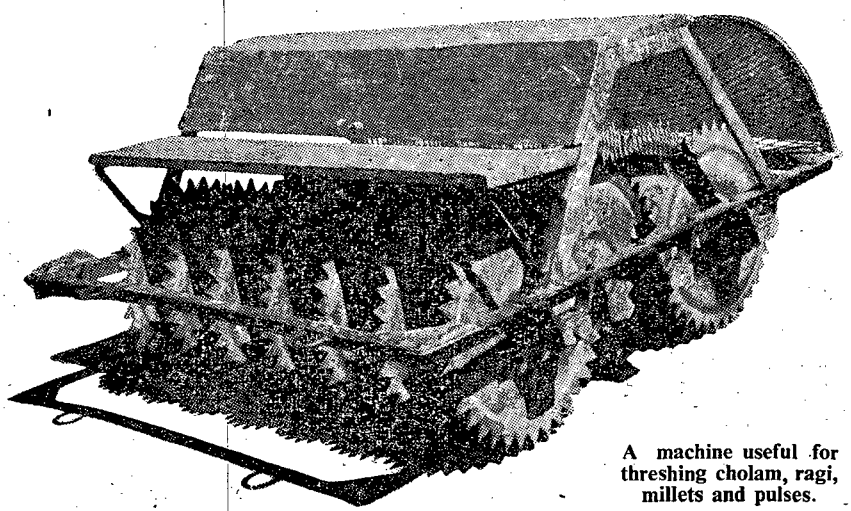
There are several types of mechanical threshers, both portable and stationary. They are of different sizes. Of three or five horse-power units, they can be operated by either a small oil engine or an electric motor. They are also very economical.

The threshing machine consists of a drum revolving at high speed alongside of a concave, so placed that it encircles the drum, allowing a space between the two which can be adjusted to suit different crops. There are two types of drum. One has steel beaters, and the other has a number of steel teeth or pegs bolted to the drum.

The earheads are fed in the open hopper at the top of the machine. When they pass through the drum and concave, grains are rubbed out of the earheads and fall down through the crevices into a riddle below. A strong blast of air is generated by a rotating fan and the grains and the broken earheads are then cleaned They are next conveyed through a spout to a bag.

The machine is useful for threshing *cholam*, *ragi*, small millets, wheat and pulses like horse gram and Bengal gram.

It cannot be used for threshing paddy as the straw gets damaged. The Japanese paddy-thresher also is not very helpful. Paddy threshing therefore has to be done by conventional methods.

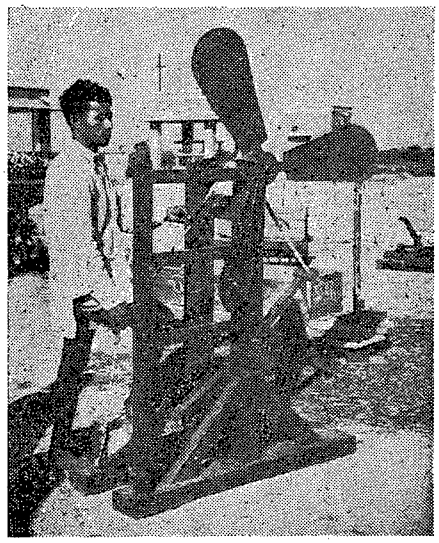


A machine useful for threshing cholam, ragi, millets and pulses.

WINNOWING MACHINE

HAND-MADE bamboo winnowers are the most common equipment for cleaning grains. When larger quantities are handled, the winnowing is done against a current of natural wind or wind created artificially.

When poured from a height heavy grains fall first, followed by lighter ones which can be easily removed. The wind blows away the light chaff and dust. The difficulty in winnowing with the help of natural wind is that we have to wait for the favourable wind and the work is often held up.



A hand-driven winnowing machine.

A winnowing machine is therefore useful.

The machine has generally two or more sieves to suit different sizes of grains. Air produced by a large slow running fan is directed to these sieves. The air drives out the chaff and other light stuff. The fan and the rotating sieves may be hand-driven or can be operated by power.

The winnowing machine has become very popular in many districts of Madras. It is useful for winnowing all crops. Farmers who handle large quantities of grain now use the winnower. The winnower is available in different sizes and priced between Rs 300 to Rs 500.

CANKER IN LIMES

CITRUS canker is a disease that affects acid lime in Madras. It is caused by a bacterium *Xanthomonas citri*. Young and rapidly growing tissues are most susceptible to this infection.

Spraying with one per cent Bordeaux mixture lessens canker infection. Spraying should be done frequently and should be so timed as to protect new foliage and young fruit.

HOUSING

(*Continued from page 4*)

private sector is allowed full initiative in building residential houses. The private sector includes not only individuals but business houses as well. These business houses have to come forward to a greater extent to build houses for their employees in urban areas. The response to the subsidised housing scheme has not been very enthusiastic so far.

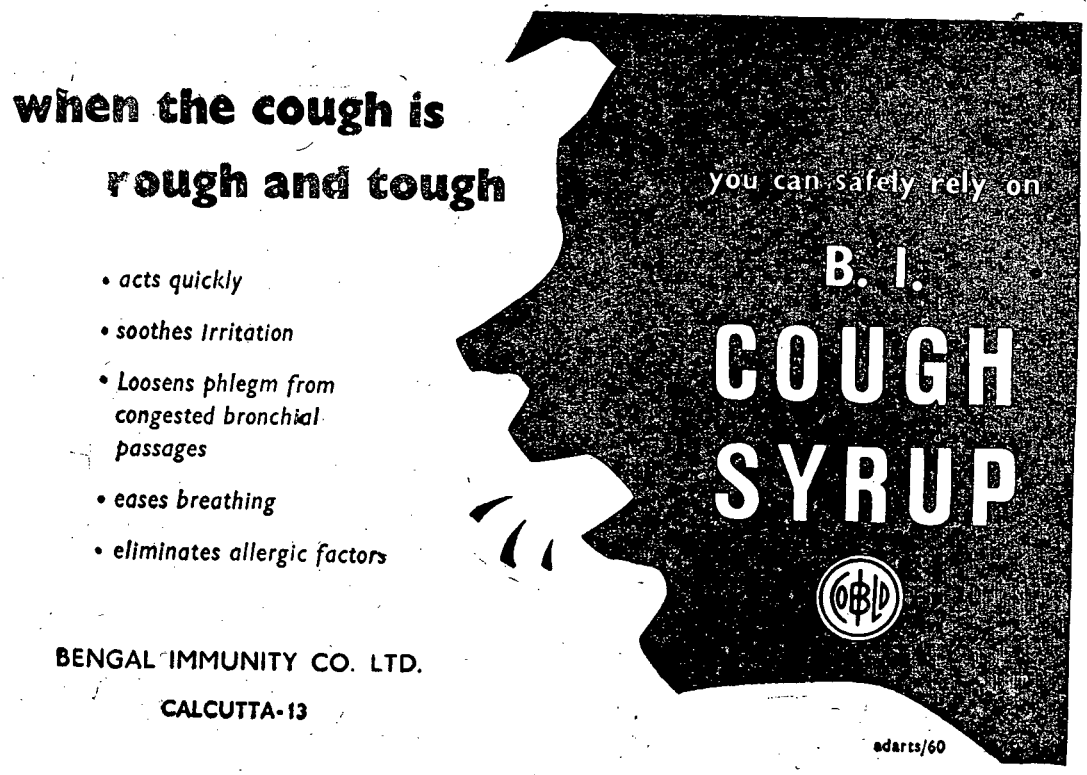
In the rural areas, there is no alternative to "aided self-help". The village housing scheme started in 1957 has not made much headway. As against the original intention of giving loans to cover the construction of 1,33,000 houses (for which an allotment of Rs. 10 crore was made) spread over 5,000 villages, in reality, layout plans for only 1,600 villages were drawn up, and loans amounting to Rs. 3.6 crore were sanctioned for building 15,400 houses.

The Third Plan emphasises that it is very important that the scheme should be taken up not in isolated villages but in groups of villages, as only then would it be possible to set up brick kilns economically, arrange the supply of components, and achieve the full impact of housing on employment and environmental conditions in villages.

It is no doubt the duty of planners to find ways of giving a higher priority to housing than hitherto; it is also up to the rural communities to understand the difficulties in the way of the Government and help it to help them. The Panchayats, which have now come into their own in most parts of India, can play a vital part in this matter by pooling resources and enlisting voluntary labour for construction. It is a challenge which they must meet. And the Government, on its part, should encourage building activity in the rural areas in all possible ways, particularly by means of subsidies, loans, free technical advice and general supervision.

Quiz Answers

1. (A) Subroto, after the late Air Marshal Subroto Mukherjee.
   (B) (c) November 26, 1961; the flight was inaugurated by the Prime Minister.
2. The total tonnage of merchant shipping in India is about 8.5 lakh as compared to 13 crore tons of the world.
3. The present rate of domestic saving in India is 8.5 per cent, and it is expected to be stepped up to 11.5 per cent during the Third Plan period.
4. The annual production of bicycles in the small-scale sector was 2.3 lakh in 1960 as against 25,532 in 1956. There are 150 units in the small-scale sector. The total production of bicycles (in the organised as well as in the small-scale sector) was 1,050,000 in 1960-61.
5. A view of the central tape records library of All India Radio in New Delhi.



SELECTED INDEX FOR VOLUME V OF 'YOJANA'

With this issue *Yojana* completes the fifth year of its publication. The more important articles and features published during the year (from January 26, 1961 to January 7, 1962) have been listed in the following index. They have been grouped under convenient heads and arranged chronologically within each group. Where the year has not been otherwise mentioned, it should be taken to be 1961.

A few regular features of *Yojana* such as *Side Track*, *Hamara Hindustan* and *Farming Notes* have not been included.

ECONOMIC ARTICLES AND NOTES

Income Redistribution in India: A. M. Khusro; January 26
O & M in India: A. Avasthi; February 5
Problem of Employment; February 5
Colleges' Contribution: Hrishikesh N. Pathak; February 5
Trade Unions in Planned Economy; February 19
Money Supply: A. P. Srinivasamurthy; March 5
Dynamism—Key Word of the Budget; March 19
Conquering Poverty; April 2
State Enterprises—P.N. Varshney; April 2
More Oil For Village Lamps (Budget debate in Parliament); April 2
Prices—Why They Fluctuate: Santi Kumar Ghosh; April 2
Lessons on Census —First Thoughts: Views of leading economists and scholars; April 16
More Views on Census; April 30
Tagore's Social and Economic Philosophy: J. P. Bhattacharjee; May 14
Jobs for Rural Families; May 14
Economic Quality and Social Mobility: Asoka Mehta; May 28
Educate the Women: Baljeet Singh; May 28
Money for the Plan—Two Ways: Santi Kumar Ghosh; May 28
Prize Bonds—R. K. Amin; May 28
Sugar Export: Hartirath Singh; May 28
Public Administration in Planned Development: Alak Ghosh; June 11
The Plans and Voluntary Workers: Suresh Asthana; June 11
States and Income Tax: R. K. Amin; July 9
Has India Come To The Take-off Stage? (Prize-winning essay): N. Subramanian; July 23
Internal Resources for Public Sector (Prize-winning essay): K. K. George; July 23
E. C. M. And India: R.G. Nayak; August 6
The Take-off and Its Pre-conditions (Prize-winning essay) :Nandita Mishra; August 6
Economic Factors And Social Goals in Third Plan (Prize-winning essay): G. E. Jonathan; September 3
Some Pre-conditions For Economic Co-operation in ECAFE Region: V.K.R.V. Rao; October 1
Progress of Population Control: C. Chandrasekaran; October 1
The Growth Rate of the Indian Economy—1900-1960: K. N. Raj; October 1
Private Sector and Economic Planning: P. Chentsal Rao; October 1
Models of Growth and Indian Planning: K. A. Naqvi; October 1
Competing Issues in Evaluation: J. P. Bhattacharjee; October 1
Fiscal Policy in Indian Economic Planning: Padma Desai; October 1
Towards Greater Asian Economic Co-operation; October 29
Developing ECAFE Region; November 12
Economic and Social Research; November 26
Government Publications—Cataloguing: N. K. Goil; November 26
Better Sale of Government Publications: N. K. Goil; December 10
Government And Economic Development: K.S. Gill, December 24

PLANNING AND DEVELOPMENT

The Socialist Objective: G. L. Nanda; January 26
For The Farmers Seeing is Believing: Shriman Narayan; January 26
Agricultural Price Policy: D. R. Gadgil; January 26
Planning Under Democracy: A. K. Das Gupta; January 26
Growth of Labour Force: K. N. Raj; January 26
Third Plan Targets Redefined by N.D.C.; January 26
Employment And The Plan: S. K. Bose; January 26
Achieving Higher Productivity: B.N. Datar; January 26
Party System And Our Planning: Surindar Suri; January 26
Labour Force in Third Plan—A comment: B. N. Datar; February 19
Some Aspects of Third Plan: Shriman Narayan; March 5
Growth of Labour Force—A rejoinder: K. N. Raj; March 19
Interview with Prof. Appleby; April 2
The Railways, the Plan and People; April 16
Chittaranjan; April 16
Rs. 300-Crore Third Plan for Madhya Pradesh; April 16
Interview With Prof. P. N. Rosenstein-Rodan; April 30
N.D.C. And Draft Outline of Third Plan; April 30
Role of the Public Sector: M. C. Munshi; April 30
State Enterprises—'Carrot' and 'Stick': H. K. Paranjape; May 28
N.D.C. Decisions on Third Plan; June 11
'We Shall Not Tolerate Failure'—Prime Minister's Points at N.D.C. Meeting; June 11
The Next 15 Years in Planning; July 9
Third Plan Outlay For U.P.; August 6
Bigger Plan Essential For U.P.: P.C. Jain; August 6
Third Plan—Vital Stage in Socialist Advance: Editor; August 20
Objectives of Planned Development; August 20
Press Comments on Third Plan; August 20
Perspective Planning; September 3
Press Comments on Third Plan (Contd.); September 3
Three More Plan Documents Soon: Shriman Narayan; September 17
Technicians By The Lakh; September 17
Plan Debate in Parliament; September 17
States' Plans And The National Plan: Y. B. Chavan; October 1
Surplus Manpower And Planned Development: Tarlok Singh; October 1
Strategy Of Our Planning: P.S. Lokanathan; October 1
The Third Plan And Socialism: A. K. Das Gupta; October 1
Our Planning Apparatus: S.R. Sen; October 1
The People's Own Institutions: B. Mehta; October 1
Consumption Growth in Third Plan: K. S. Gill; October 1
Power, Schools And Credit—P.E.O. Study; October 15
Have We Found More Work For Our Rural People? : A. C. Guha; October 29
Role of Women in Third Plan: Shriman Narayan; November 12
Planning in Yugoslavia and India: Tarlok Singh; December 24

AGRICULTURE

Technological Improvement in Rural India: Jack Dee Traywick; January 26
Agricultural Targets for Third Plan; February 19
Filter Point Tubewell: K. Varadachari; February 19
Food Targets and Fertilisers; March 5
Powdered Magic Helps Grow Record Crops: Pratap V. Mane; March 5
Balanced Diet for Crops: Interview; March 5
Soils Surveyed and Tested: S. P. Ray Chowdhury and N. R. Datta Biswas; March 5
Animal Husbandry in Agricultural Plans; April 2
Dairying Schemes in Third Plan: Shriman Narayan; April 30
Helping Weaker Sections in Villages; April 30
The Decade's Advance in Agriculture; May 28
The Luscious Litchi: S. M. Datta; June 25
Plans And Their Surroundings: G. S. Puri; June 25
More Mango Months: Yojana Report; September 3
Agricultural Credit: G. Ramamurti; September 17
Agricultural Policies: M. L. Dantwala; October 1
We Have Hurt the Soil: Harpal Singh; October 29
Radiation Genetics And Crop Yield: M. S. Swaminathan; November 12
Eat More Fish: S. S. Ahuja; November 12

COMMUNITY DEVELOPMENT AND CO-OPERATION

Role of Co-operation in Indian Planning: M. R. Bhide; January 26
The Future of Community Development: S. C. Dube; January 26
Changes in Village Leadership: K. D. Gangrade; January 26
Sugar Co-operatives: G. Ramamurti; April 30
Protecting the Weaker Sections: N. R. Malkani; June 25
Jury System And Panchayats: V. L. Narasimha Moorthy; July 9
Panchayati Raj and Family Planning: L. Abichandaney; September 17
The Co-operative Movement And The Plans: G. P. Srivastava; October 1
Instruments of Socialism—Panchayats: Suresh Asthana; October 15
Panchayati Raj and Zila Parishad: Ram K. Vepa; November 12
Gramdan Movement: Shriman Narayan; January 7, 1962

WATER AND POWER

Fuller Use of Irrigation Facilities: O. P. Anand; February 5
Nagarjunasagar: G. A. Narasimha Rao; June 11
Rs. 65 Crore For Village Wells; June 25
Power From Hill Streams; July 9
Madras Villages Will Have Electricity; July 23
Electricity From Tides; July 23
The Rajasthan Canal; October 29
A Pilgrimage to Chambal: Kali Biswas; December 10

COMMERCE, INDUSTRY AND MINERALS

Orissa Plans Big Advance in Industry: G. N. Das; February 5
Garnets: P. V. Rao; February 5
Durgapur—the Steel Citadel; February 5
Oil Hunters: Manuj Chatterjee; February 19
Bauxite: M. K. Roy Chowdhury; February 19
Chemical Fertilisers: V. Rama Iyer; March 5
The Economics of Fertilisers: R. N. Poduval; March 5
Large Increase in Industrial Production; March 19
N.C.D.C.: More Coal Dug: April 30
Cycle Factory, Sonepat; June 11
Defining a Small Scale Industry: J. S. Charlu; June 25
Oil Policy: R. N. Gupta; July 9
Kalol—Where Oil Has Been Struck; July 9
The Year In Oil—Main Events; July 9
Tea: M. P. Mathew; July 9
New Designs For Old Crafts: Ajit Mookerjee; July 23
Essential Oils : I. K. Vasil; September 17
A Museum is Born: Ajit Mookerjee; September 17
Mineral Wealth of Himachal And Punjab: Chandraverkar; September 17
Thrust And Power for Industries (Interview with T. N. Singh); October 15
Industrial Financing in India: H.T. Parekh; November 12
The Challenge of Exports: S.K. Muranjan; November 26
Industries in Villages: N. R. Malkani; December 24

SOCIOLOGICAL ARTICLES

The Linguistic Urge: C. B. Rao; January 26
Emergency and Communication : Jean Joyce; January 26
Returning To India : Manorama Mathai; January 26
Crisis in Traditional Values?: Bhabani Bhattacharya; October 1
Changing Attitudes in India Today: M.N. Srinivas; October 1
Mirror, Mirror On the Wall : Santha Rungachary; October 1
Problems of Technological Change: L. S. Chandrakant; October 1
People Speaking to People: Contributed; October 1
National Integration Conference : October 15
Appraisal of Unity Conference: N. R. Malkani; October 15

EDUCATION, HEALTH AND SOCIAL SERVICES

The Challenge to Voluntary Effort: P. D. Kulkarni; January 26
Teaching People to Read And Write ; February 19
Accidents Need Not Happen; April 2
Are You Sure Your Child Is Safe?; April 2
Going Ahead With Girls' Education ; April 16
Let Us Not Forget Our Children: Krishna Das Gupta; May 28
More Doctors for India: K. B.; May 28
Third Plan Measures for Family Planning; June 11
Why Do Some Children Turn to Crime?: Krishna Das Gupta; June 11
House of a Million Books: H.Y.S.; June 25
Rs. 29-Crore for Slum Clearance; June 25
Why Does Not Rama Go To School: Krishna Das Gupta; June 25
Third Plan And Girls' Education; July 23
Work and Welfare in a Changing Society: B. N. Datar; November 26
Teachers Honoured: K.B.; November 26
Education—Gate to Socialism: Shriman Narayan; December 10
Housing Co-operative: B. S. Dhavale; January 7, 1962
Housing: C.N. Chittaranjan; January 7, 1962
The Wise Men of Satara; January 7, 1962

REHABILITATION

Dandakaranya; January 26
A Thousand Women and One Purpose: Kali Biswas; October 15

SCIENCE AND LITERATURE

Gurudev: Some Reminiscences: Banarsi Das Chaturvedi; May 14
Moti Lal Nehru: K. Iswara Dutt; May 14
Rabindra Bhavan—Feature: Kali Biswas; May 14
Documentary on Tagore; May 14
The Poet's Restless Urge : Jasimuddin; May 14
The Supreme Singer: Sachindralal Ghosh; May 14
Cucumbers of the Sea : M.R.N. Prasad; June 11
Hobby Hints : Amarnath Roy; July 9
U.P. And the Country: J. P. Chaturvedi ; August 6
Kalibangan ; September 3
Plan For a Museum of Science : M. S. Randhawa ; October 1
Kashmir Grows into Prosperity : Sheila Dhar; November 12
Tributes to Mr. Slocum : A. N. Khosla; November 26
They Are Going : Yuvraj Divijay Sinh; December 10

EDITORIALS

Meaningful Planning; History and Hustle; January 26
Life and Death; Thinking of Britain; February 5
Putting Welfare Grants to Best Use; February 19
Aid At Root Level; Howzzat! March 5
A Leader of Men; We Can And We Must; March 19
Export-mindedness And The Plan; The Right To Die; April 2
The Battle of Numbers; Teacher's Howler; April 16
Population and Planning; Space in Our Time; April 30
Two Men And A Great Day; May 14
Work And Waste; Straight From The Heart; May 28
Mere Competence Is Not Enough; June 11
Socialism Through Education; Professor Krishnan; June 25
Record Harvest; Greece And We; July 9
Power For Villages; Files And Flood; July 23
Rivers And Engineers; August 6
Promises To Keep; August 20
Parliament Approves; So That We May Sing; September 3
Many Languages And One People; September 17
Non-Violent Economic Revolution; October 1
The Spirit of Vidyarthi; October 15
Good Beginnings; Keep It Up; Tale of a Tusker; October 29
The U Turn; Fitters And Whippers; November 12
Improving The Links; Litterbugs; November 26
Public Enterprises; For Adults Only; December 10
Employment Targets; Our Patrimony; December 24
Homes By The Million; January 7, 1962

CULTURAL HERITAGE

Anna Saheb Kirloskar and His Musicals: Shamlal Nilkanth Oke; February 5
Michael Madhusudan Datta: Lila Ray; April 2
Passing of An Acharya: H. Y. Sharada Prasad; June 11
Bhartendu Harishchandra: Jagdish Prasad Goel; June 25
Panje Mangesha Rao: L. S. Sheshagiri Rao; July 23
Acharya Prafulla Chandra Ray: Kali Biswas; August 6
Fakira Mohana Senapati: M. Mansinha; September 3
Bhatkhande And The Mansion of Music; September 17
Vishnu Krishna Chiplunkar: M. K. Pardhy; October 29
Nirala—Herald of New Hindi Poetry: Prabhakar Machwe; November 12
Jaishankar Prasad: Uma Rao; November 26
Kusumavati Deshpande: P. Y. Deshpande; December 24.

PRIDE OF PLACE

Walnut Work of Kashmir: February 5
Calico Prints of Jaipur: February 19
Horn Work of Orissa: March 5
Kanthas of Bengal: March 19
Leatherware of Kanpur: April 2
Clay Toys of Mathura: April 16
Blue Pottery of Delhi: April 30
Saris of Santiniketan: May 14
Brassware of Mirzapur: May 28
Folk Toys of Bengal: June 11
Handloom Fabrics of Assam: June 25
Rose-wood Elephants of Mysore: July 9
Pith Articles of Orissa; July 23
The Encrusted Brassware of Moradabad: August 6
Sandalwood Carving of Sagar: September 3
Oranges of Nagpur: September 17
'Tie & Dye' of Rajasthan: October 15
Image-Making of Bengal: October 29
'Pan' of Banaras: Madan Gopal; November 12
Brassware of Hajo: November 26
Saris of Chanderi: December 10
Krishna Dolls of Mysore; December 24.
The Horse of Bankura; January 7, 1962

SUCCESS STORIES

Babu Ram of Mirzapur: January 26; Three Men And A Road: February 5; The River Goes Up A Bridge: R.N. Gupta; February 5; Ten Times More Paddy Yield; February 19 A Village and New Grass: March 5; One Morning at Moghalserai: March 5 'Direct Action' by Kerala Authors: April 2; Two Men Show the Way; May 28 Shuklaji of Etawah: June 25; A Village Wakes Up in Vidarbha: July 23; On Their Own: Sept. 3; Gram Bhandar: September 3; They See For Themselves: September 17; Young Man's Shocking Machine: October 29; Lahsurne And Maharashtra Villages: November 26;

TABLE TALK

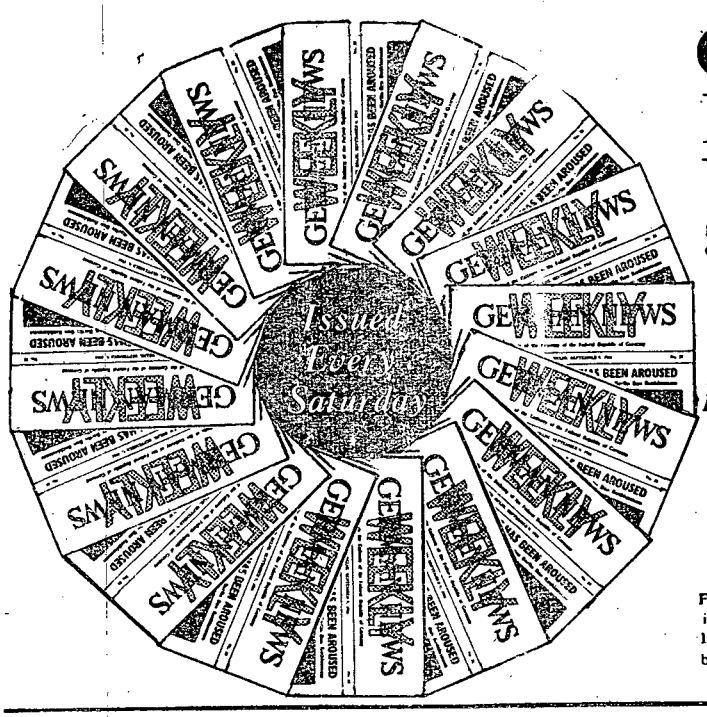
Money Supply: R. K. Amin; February 5
Economic Indicators: S. K. Bose; February 19
Are We Spending More on Administration? April 16
Banks Working in 1960—Reserve Bank's Annual Report; July 9

FEATURES, SKETCHES

Progress on Three Fronts; January 26
Close-up of a Basic Industry—Durgapur; February 5
Literacy House, Lucknow; February 19
The Salt of the Earth; March 5
Co-operatives—Togetheress in Third Plan: M. A. Husaini; March 19
Pimpri Penicillin Plant—P.R. Shinde; April 2
Census—Interview with Registrar-General; April 16
Coal; April 30
The Poet's Abode; May 14
In a Medical College; May 28
Sonepat Bicycle Industry; June 11
Importance of Water; June 25
Pipes and Towers at Nunmati; July 9
Tea; July 9
Home for Tibetans in Mysore; July 23
U.P.—Our Largest State; August 6
Third Plan Themes; August 20
Assam's Umiam Project; September 3
'Sujata' and 'Janata' Watches; September 17
Winds of Change—Story of Plans; October 1
Cowdung Gas Plant; K. B.; October 15
Family Planning; October 29
Co-operative Farming; November 12
Jute; November 26
An Hour With A Boy Inventor; December 24
The Hooghly And Calcutta Port : Editor; December 24

BOOK REVIEWS

The Capital Market of India : February 5
Three Helpful Books for Farmers: March 5
Nationalised Industry and Public Ownership: March 19
Organising Citizens' Development Councils: April 2
Beautiful Climbers of India, and *Horticulture in Central India*: April 16
The Directory of Hospitals in India, the New Year Book 1961: April 30
Services for Small-Scale Industry May, 14
Evolution of Central Banking in India; May 28
Communist China Today: June 25
Democratic Planning—Problems and Pitfalls: June 11
India's Villages; September 3
Saving in India; *Commentry on the Electricity (Supply) Act of 1948*; *Agricultural Economic Theory and the Indian Economy*, September 17
India on the Eve of the Third Five Year Plan—Economic Liberalism and Underdevelopment ; Studies in the Disintegration of An Idea; Investment Criteria and Economic Growth: October 1.
Farmers of India Vol. II, October 15
Technique of Planning, October 29
Educational Theories and Modern Trends; *Modern Economic Theory*: November 26
Blossoms in the Dust : December 10
Family Living Studies : A Symposium; January 7. 1962.



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JWT-G.N.W. 2168

NEW DEFENCE FACTORY At Avadi

THE foundation of a Heavy Vehicles Factory has been laid at Avadi, Madras. The factory will help the country's industrial progress and self sufficiency in defence equipment by manufacturing heavy tracked vehicles and other items of heavy engineering gear required for the Defence Services.

An Artisan Training School for training skilled craftsmen for the factory has already started functioning. It trains 100 craftsmen at a time.

Messrs. Vickers-Armstrongs (Engineers) Ltd., a well-known British firm, is the main consultant for establishing the factory.

The factory and the housing colony will be set upon a plot of 1,400 acres, of which 770 acres have been given free by the Madras Government.

The Defence Ministry has already been manufacturing 'Shaktiman', the three-ton vehicle at the Gun Carriage Factory, Jabalpur.

* * *

STATE TRADING

The State Trading Corporation transacted trade worth Rs. 15 crore either way with several West European countries during 1960-61. It also exported 3 million tons of iron ore and finalised a three-year agreement for supplying 6 million tons of iron ore to Japanese steel firms. The export of manganese ores and mineral products increased from 3.94 lakh tons in 1959-60 to 8.52 lakh tons.

* * *

BHADRAVATI TO EXPAND

The Mysore Iron and Steel Works proposes to expand its annual capacity from 30,000 tons to 100,000 tons by the end of the Third Plan. The programme also includes the establishment of certain new units such as L.D. Plant, an electric furnace, and a billet and light structural mill.

AS THE PLAN MOVES

BRIGHT

The first of our public sector oil refineries, that at Nunmati, near Gauhati in Assam, was inaugurated on New Year's Day.

SPOT

More Tractors In Punjab

THE number of tractors working in the Punjab has increased by over 100 per cent during the Second Plan period from 3,809 in 1956 to 7,840 by March 1961.

* * *

Help to Small Industries

DURING 1960-61, the Government bought goods worth Rs. 3.85 crore from small industrial units, through the National Small Industries Corporation. The purchases in the previous year were valued at Rs. 2.65 crore.

Under the Hire-Purchase Scheme, applications were received from small industrial units for supply of machines and machine tools worth Rs. 14.8 crore during the year. Machinery valued at Rs. 1.8 crore had already been delivered.

In addition to the Hire-Purchase Scheme which is in operation for the past six years, the National Small Industries Corporation introduced two special schemes, namely the Bank Guarantee Scheme and Special Hire-Purchase Scheme for the benefit of small industries.

The Corporation exported shoes worth Rs. 69 lakh during the year (compared to Rs. 43 lakh the previous year). Besides, the sale of cycle components and hosiery needles from the imported stock fetched Rs. 62 lakh.

* * *

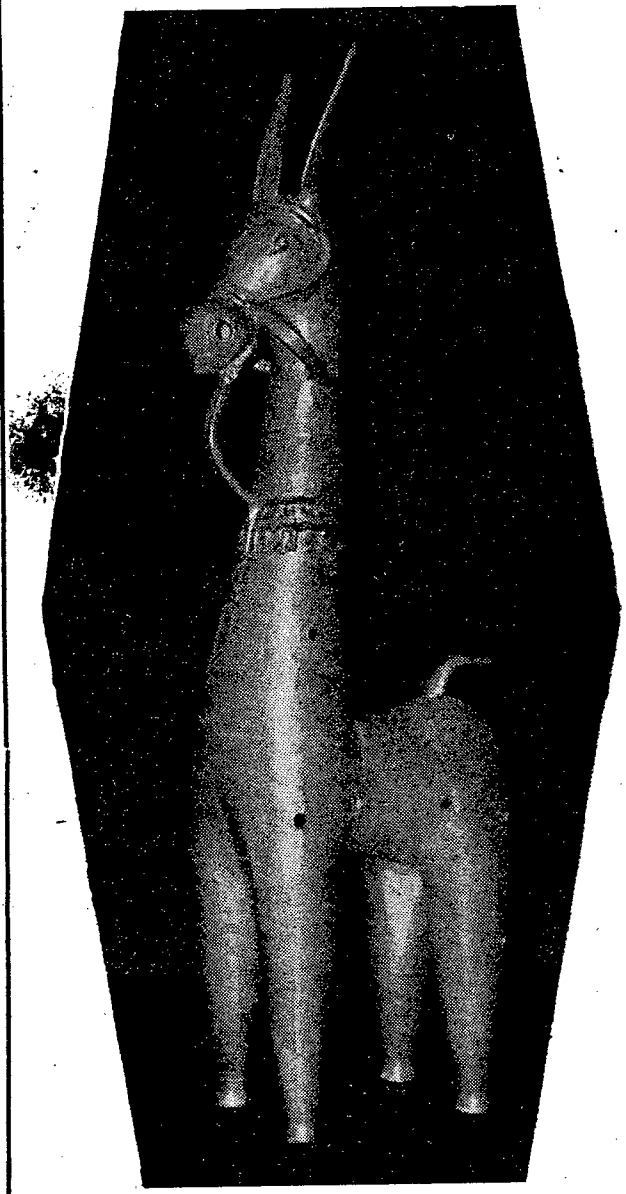


The generating room in the Bhakra Left Bank Powerhouse with all the five units at work. Photograph was taken on December 10, 1961, when the fifth unit was commissioned.

REG. NO. D-876

PRIDE OF PLACE

The Horse of Bankura



THE most popular horse in India today perhaps is the Horse of Bankura. It has been adopted as a symbol for our cottage industries which have broken from an amble into a sprint.

The Bankura horse is an excellent example of the real secret of folk art: that it refuses to be naturalistic. Folk art sees the world with its own eyes, refuses to accept the normal geometric proportions and the ordinary colours. The horse of Bankura has short, bottle-shaped legs, a fantastically long neck and almost no back. It is as different from the work horse as a horse could be.

Bankura is a historic town in West Bengal, and toymaking is the hereditary craft of the Mals, a community of the area. Mixing loam and the earth of ant-hills they make different parts of the horse separately, on the wheel leaving small holes here and there for admitting air. Next, they are joined and the complete structure is dried and kept on the fire. To add variety a coating of colour is sometimes applied.

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