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YOJANA

ELEVENTH YEAR I JANUARY 26, 1967

ANGING QUALITY OF INDIAN LIFE



Yojana seeks to carry the message of the Plan to all sections of the people and to promote a more earnest discussion on problems of social and economic development.

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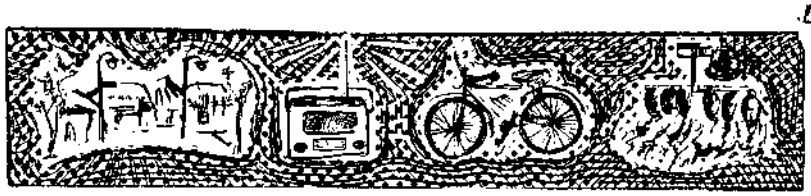
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THIS ISSUE



WITH this Annual Number, *Yojana* completes ten years of its life, and steps into the eleventh year. In planning this special number, we sought a theme which would give our readers a panoramic picture of the changing Indian landscape. In trying to do this, we looked around for a few persons who would be willing to get close to various aspects of Indian life, and report, as factually and objectively as they could, the changes that came over the pattern of living of the major segments of our people.

We did not go in for learned articles, nor for progress reports. The purpose of development is to bring about a qualitative change in the life of people. We wanted to find out to what extent, and in what manner, the quality of Indian life has changed in the last two decades of difference.

The result of our probe has been fascinating. Indian life is no longer what it used to be 20 years ago. If there is an explosion of aspirations of 500 million people, it is the result of development since independence.

Yojana staffmen, Rosscote Krishna Pillai and T.S. Nagarajan, travelled in West Bengal and Orissa to study the life of rural people. In their report (pages 6-15) they narrate what they saw in two West Bengal villages, and in an Orissa village on the outskirt of the steel town of Rourkela. H. Kusumakar reports on life in a Package programme district in Mysore State : it is a picture of rising hope and self-confidence, of the old village economy steadily yielding to a modern agriculture (pages 18-20). S. Ramanathan went to a group of village in Madras State to find out how electricity changes the quality of life of rural folk ; he found (pages 44-46) that, with all their problems, the villagers are now aware of life's new possibilities. A staff member visited the HMT factory at Pinjor, near Chandigarh, to report on the changing life and outlook of Indian workers; he met a multitude of young technicians who present a striking contrast with the traditional kind of workmen found in most Indian cities (pages 39-40).

Two enterprising young women have probed the changing pattern of life of Indian women and Indian youth. On pages 24-28 Suneet Vir Singh reports on the newly-emerging teenage world in India, while on pages 32-36 Usha Chettur writes about the many windows that have opened on the world of Indian women.

P. R. Gupta, a young science correspondent, takes up, on pages 29-31, the all-important question: how far has science and technology entered the ancient portals of Indian life? Dr B. B. Chatterji reports on pages 41-43 a very different aspect of Indian life : the Bhoodan village.

The theme is captured in the artist's own individualistic manner by Jivan Adalja in the cover design; other art work in this issue is by R. Sarangan.

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Two Decades of Difference

The Changing Quality of Indian Life

"Well, in our country," said Alice, still panting a little, "you'd generally get to somewhere else—if you run very fast for a long time, as we have been doing."

"A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that."

—Alice Through the Looking Glass

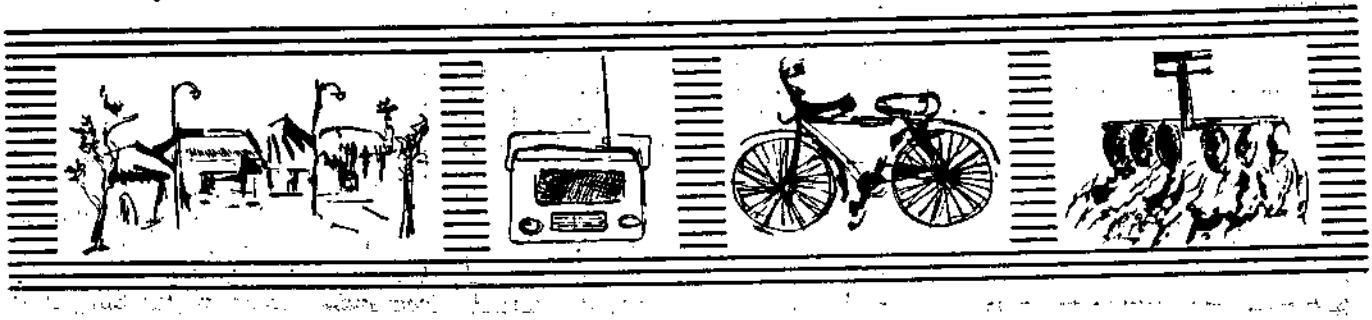
No revolution has ever been silent. Those who speak of the 'silent revolution' in India during the last two decades only underline its basic difference from other revolutions in history. By revolution we commonly understand a violent transformation of the political, social and economic order and introduction of social engineering at a fast pace. These attributes of a revolution independent India discarded by free choice. What she elected to do was not to reject the *status quo* as inherited from the British, but to build upon it a new democratic order, a united community, maintaining, as far as possible, its many diversities in culture and traditions, a secular national personality, and a "socialist pattern of economy" without violent convulsions.

In evaluating the changes which have taken place in the evolving pattern of Indian life since independence, it is necessary to have this as the starting point. The Congress party which took over the government of independent India, the Constituent Assembly that framed the Constitution, the men who put into shape the ethos of economic planning, and the thousands of people who lent their minds and muscles to work out independent India's social engineering, were all bound by a common faith and a common rejection: the faith was in gradual change without violently upsetting the social order, and the rejection was of creeds and methods of extermination, expropriation and liquidation.

Indian life in these two decades has not coursed in silence. It has not been in silence that the huge industrial plants have been built, the great rivers have been tamed, more than 50 universities have been set up, and eighty million boys and girls have been sent to school. Nor has the country held three elections, and is preparing to hold the fourth, in silence. Nor has the panchayat system spread out in silence all over the land, or the old feudal system has been abolished, or half of the village population brought within the orbit of electricity — in silence. Trombay, Koyali, Barauni, Chittaranjan, Durgapur, Chandigarh, Perambur, Bhakra, Bhilai, and many other towers of industry have not come up in silence.

The growth and development of India since 1947 has been the result of a unique social engineering, unattempted anywhere else in the world.

That is one reason why outsiders have taken a much closer look at our system than we ourselves appear to have done. The more noteworthy of empirical studies of the changing pattern of Indian life have come



from foreign sociologists, economists and political scientists, while the bulk of Indian intellectual endeavour has gone into interpreting official policies and programmes. In trying to sort out our bewilderingly complex process of development, the experts have tried to relate it to social engineering in the developed capitalist countries, in the lands under Communism as well as in the Afro-Asian and Latin American developing societies. Unlike a 'creative' writer like Naipaul, or a journalist like Taya Zinkin or Ronald Segal, they have not seen in India 'an area of darkness' or 'a deepening crisis of human immobility'. Most of the experts have noticed, often with fascination, sometime with bafflement, the evolutionary transformation of an ancient, tradition-bound, largely stagnant, very plural, multi-lingual and multi-national community into a steadily integrating and increasingly sophisticated modern secular society.

A Unique Experiment

They have admitted, not all of them without reluctance, that this has been, in many ways, an unparalleled experiment in human affairs. Other societies have made faster progress in limited fields under totalitarian direction. The Western societies of today crossed the threshold of affluence only after passing through many ups and downs, wars and revolutions; only after attaining economic maturity did they adopt the complete democratic system. Only in India have we deliberately and in freedom chosen, at the very moment of independence, to pursue the complete democratic way, give every adult citizen the right to vote, and, at the same time, achieve quick economic maturity, by mobilising without coercion, but under planning by consent, the maximum possible resources for nation-building.

IN one of the latest books on India written by foreigners, George Rosen, of California University, has thus summed up the results of our social engineering: "Following independence, the process of establishing a democratic government and political parties — as distinguished from a movement — and the reform legislation resulted in changes in the membership of the ruling Congress party, changes in the structure of inter-party power whether based on caste or class, and changes in ideas; and these changes in turn influenced the subsequent legislation adopted, the structure of the economic plans, the implementation of both the reforms and laws and plans, and thus the gains and losses to various groups from the economic plans and policies adopted. The interaction of these changes has contributed greatly to the fact that India has been successfully able to go through the past fifteen years peacefully, democratically, and fruitfully. In turn, the inter-related series of past changes will influence future plans and actions, India's responses to the continuously arising problems of development, and thus the future economic and political development of India."

We are tied up in humdrum affairs, but a country with no vision gradually loses energy and perishes.

—Jawaharlal Nehru

This somewhat ambivalent appreciation is of a continuing process of social and economic change, of policies and programmes creating new forces which, in turn, influence and create new policies and programmes. In other words, what we face as major social and economic problems today are basically the result of development and movement, problems thrown up from the wombs of a society subjected to change. To cope with many of these problems, our social engineering will have to formulate new methods, ideas and dynamics. Even these new formulations must emerge from the success we have achieved, the tasks that remain unfulfilled and the experience we have gained. There need not be a great divide between the path we have traversed so far and the path that lies ahead.

Three Basic Aspects

Much of the contemporary Indian bewilderment springs from an insufficient understanding or knowledge of the fundamental character of our revolution and social engineering. Reduced to simple terms, there are three aspects of this engineering, mutually somewhat contradictory. The democratic process gives all sections of the community, every individual and organised group, the right to register almost a limitless list of aspirations, political, economic, social and cultural. The socialist ethos urges the diversion of a major slice of resources to improving the conditions of the weaker sections of the community. Economic planning demands optimum mobilisation of resources and their utilisation for selected priorities.

These three major aspects of social engineering kept in mind, many of the perplexing shadows on our horizon become at least intelligible. We begin to understand why almost every linguistic or ethnic nationality concentrated on a mass of land demands "autonomy" for fuller self-expression and development. We understand the ascendancy of regional nationalism, the centrifugal pulls in our society, the quarrel over languages, the politicalisation of the caste, tensions between the hills and the plains, the ferment among tribals. The explosion of 500 million minds belonging to a multitude of cultures, languages and traditions, and at various levels of development, puts an increasing strain on the development of an economy of scarcity. The cake is too small to meet the demands of the awakened Indian multitude.

A Stream of Many Currents

The Indian milieu is a multi-current stream of strivings. In it darkness mingles with light, hope with despair, movement with immobility, self-respect with self-denigration. The new jostles with the old. Every triumph is also in part a setback, every defeat partly a conquest.

PERHAPS a few concrete illustrations will help. A correspondent once sent us an anecdote for *This India*. He was travelling in a

train, and the electric light in his third class compartment had failed. A co-passenger from Punjab was blaming the railways, quite rightly, and, warming up, was soon denouncing the entire *Desi Raj*. "Things were better under the British", he was shouting, for electric lights in those days never went off in a running train. Our correspondent was hurt, but hesitated to contradict his indignant fellow-traveller. When he cooled down, however, our correspondent picked up a conversation. Soon the co-passenger announced, not without an air of pride, that he came from a village in Punjab where every house had electricity!

Or take the case of a retired section officer (whom we know) who has settled down in Madras city. At a casual meeting we found him highly critical of economic planning which, he declared with a flourish, had led to "nothing". The country had made no progress; it was going down and down every year. Having granted him his convictions, we enquired about his sons. At once his face lit up. "They are all doing well, through the grace of God," he said, and proceeded to give details. The eldest was working in Assam with Indian Oil... "very big industry coming up, you know, we had no oil of our own till the other day"; the second was in Bangalore with HMT, "doing very well... he has been to Britain for training"; the third had gone to America as a Fulbright scholar; the fourth was in the Madras IIT...

Moon and Six Pence

Let us also introduce Bhajan Singh, who lives on the outskirt of New Delhi. He came to a friend of ours one morning seven years ago, a tiny tot of eight, offering to work part-time so that he could go to school. His father had died; the widowed mother had to support him and his younger brother. Our friend offered him a small monthly allowance. Today, Bhajan Singh is in the tenth class, and has had training in an industrial training institute. He is a "semi-skilled worker", according to the identity card he always carries with him; he makes pretty ladies' handbags earning three rupees for each, and he can make four every day. "When I have finished school, I want to take up this work seriously", says Bhajan Singh, "I'll first do it for wages, and then, when I have saved up enough money, I'll have my own little workshop. And I will send my brother to an engineering college."

The social engineering we have adopted by free choice rejects violent overthrow of existing institutions. It has been building a modern superstructure on an old society which has a surprising survival power.

In doing so, it has already changed the old society in many ways, and, with it, the traditional pattern of Indian life.

It has been transforming the old castes into new economic and professional classes.

It has brought about a gigantic shift of political power from a small urban class of liberal professionals to a large new community of rural elite.

It has subjected the Indian society to the ferment of science and technology.

It has made Indian politics the business of party machines and professional politicians.

It has brought the weaker sections of the Indian society into the vortex of social change.

It has led to an explosion of young minds.

Take Satish Agarwal whom we met sometime ago in an Uttar Pradesh village. He was reading in an agricultural school. He took us to his home, a brick house which had electricity, and though it was an early afternoon of December, he switched on the table fan, and all the lights. The radio blared out a Hindi film song. Satish was the son of a peasant. "What will you do after school?" we asked. He replied without hesitation, "Farming." "Where?" "Why? In this village! We shall make farming a real success. That's what we are learning in school."

Kusum was a girl of 14 in an East Bengal village when India became free. Her father was a petty goldsmith, but she belonged to the *chamar* class. She was married when she was seven, and her husband died when she was ten. We met her in Calcutta five years ago. We could hardly recognise her. And we were surprised to hear her story. They had all come away to West Bengal in the early fifties. Kusum, in the full bloom of her youth, determined to "do something", and entered a nursing school. After qualifying, she got a job in a medical college hospital where a doctor fell in love with her ("Did you, too, fall in love with him?" we asked, and she just smiled coyly) and they were married. Of course, he knew that she was a widow ("But then, you know, I was a virgin"). Now they had two children, both of whom were going to a good school.

These are not isolated picked-up instances to win a debate. If anyone looks around with scrutinising eyes, and notices what he sees, he cannot but be impressed by the many changes which have overtaken this ancient society. The quality of Indian life today is vastly different from what it was two decades ago. One may argue that we could have done better. One may claim that the changes have not gone far enough and have left portions of the community largely untouched. But one cannot deny that this society

has vastly changed, is changing, and will continue to change to organised social engineering.

The last two decades have indeed been for India decades of difference.

THE changes in politics naturally claim most of our attention. These changes have been almost revolutionary. Power has shifted from a small urban class of liberal professions to a much larger class of rural elite.

In Parliament as well as in the State Assemblies, in the Zila Parishads and Panchayats, it is this rural elite that today holds the key to political power. W.H. Morris-Jones, of the University of Pennsylvania, in his book *Parliament in India*, has given a class breakdown of the members of the three Lok Sabhas we have elected so far. He found 19% of the first Lok Sabha members belonging, by profession, to agriculture; the number rose to 22% in the second, and to 26% in the third Lok Sabha. Business claimed 10% of the members of the first and the second Lok Sabha each, and 11% of the third. Law was the profession of 25% of the members of the first Lok Sabha, of 23% of the second and 21% of the third.

The ascendancy of the rural elite has been far more pronounced in the State legislatures.

The caste has got mingled with politics and out of the melting pot new *classes* are growing, which will eventually break down the caste system. "The soil grows castes; the machine makes classes", says M. Young in *The Rise of Meritocracy*. If the castes still rule in our villages and have penetrated the emergent rural elite, it is because the machine has not yet entered the countryside as a powerful instrument of growth. Once this happens in the next ten years, we will have new classes in the villages dissolving the castes. This has already happened to some extent in the urban areas.

The 1961 Census put our urban labour force at 79 million; it should have increased now to about 90 million. This in itself is no small number. If this urbanisation of occupation has not worked as more than a modest force of transformation of social and caste relationships, it is because the vast majority of it, varying between 60 and 70 per cent, are clerks in government and administrative offices, and only about ten per cent are registered factory workers. The main point, however, is that the machine, that is science and technology, has already made an assault on traditional caste relationships which are bound to steadily decline as industrialisation goes apace, and agriculture becomes even selectively mechanised. Already the impact of the machine on caste prejudices is noticeable in the large co-operative sugar mill complexes in Gujarat, Maharashtra and Uttar Pradesh.

The great shift in political power is one of the consequences of economic development. The benefits of Community Development and National Extension Service have helped to strengthen the rural elite, while industrial expansion has fortified the power status of the manufacturers and entrepreneurs. Huge construction activity has given birth to a class of neo-rich. In the process, the middle classes have lost much of yesteryear's status and influence. This is probably because their numbers have swelled by promotions from below, depriving the middle class of its earlier exclusiveness and elite status, and making it more amorphous, less compact. Another reason for the decline of the middle class as a political force is that the management of party politics has progressively passed to party machines controlled by highly skilled managers or bosses. The sharp fall in the number of independent candidates in successive general elections is an indicator of the increasing supremacy of party machines. This has made our politics more and more the business of professionals, as it should be in a mature, sophisticated society.

No serious study has been made so far of the differences which may have occurred in status values in the changing Indian society. Myron Weiner, of the MIT, explained the control of "pressure groups" like peasant and workers' organisations or refugees' bodies by "full-time professional politicians, frequently with private income from the land, who are college or at least secondary school graduates" by the "unwillingness and inability of people at the bottom of the social ladder to communicate directly with those of higher caste, economic standing and power." He found that even workers were not willing to deal directly with management or government and, therefore, needed an intermediate group of educated leaders.

Has there been a major shift in status values in Indian society? The teacher, once highly respected, has lost his days; the legal luminaries hardly shine any more. Technologists and scientists constitute a new class, but in social and political concepts, they, in almost all societies, play a secondary role. Money is certainly a powerful status-indicator, but the over-rich businessman or the neo-rich contractor is somehow looked down in society. Perhaps the highest status holder in Indian society is the politician-in-office, followed by the high-ranking bureaucrat. In certain areas, an extra value attaches to writers, journalists, social workers and religious leaders.

The sharply unequal development of the pressure groups has led to a certain imbalance in social engineering and political management. Big business, bureaucracy and party machines are perhaps the three most noticeable groups in our society today; there will be a greater balance when other groups based on the new social and economic forces — trade unions, peasants' organisations, professional bodies — are able to make their weight felt.

Decline of the Intellectual

THE steady decline of the intellectual as a reformative force is attributable to several factors: commercialisation of the Press, horizontal expansion of education reducing the influence of the teacher on the students, diffusion of the political power of the middle class as a whole, and identification of traditional classes of intellectuals with organised party politics.

Commercialisation of the Press has practically eliminated the independent Editor who, in earlier times, was able to mould his paper's editorial policies and become a force to contend with. The great explosion of popular literature keeps the writers busy and gives them a taste of affluence; post-independence

Indian literature, almost in all languages, has, by and large, lacked in social protest and reformist zeal. The massive expansion of the cinema, sound radio, amateur theatre and other forms of entertainment has made the writer readier to please than to shock.

Expansion of education has created a huge market for educational books (or aids); a large number of intellectuals have been drawn to research and investigation in which the critical faculty has only recently begun to flourish.

In several States, castes which are traditionally scribes—the Kayasthas of Bihar and the Karans of Orissa, for example—now form the backbone of the Congress Party. Similarly, some of the leftist parties have drawn many professional intellectuals. It is the growing sophistication of Indian politics, the dominance of the party machine, which has probably more than anything else, deprived the intellectuals of the social and political influence they once used to enjoy.

Un-Angry Young Men

Nowhere in Indian society have the two decades of difference been more conspicuous than in the community of young people. Forty-one per cent of the country's population was found to be under 14 in 1961; it is this huge army of young people that is coming up year after year to the surface of society.

Some eighty million of them go to schools, colleges and universities and the environs are far from adequate to ensure their proper and full development. Disintegration of joint families, urbanisation, exposure to all kinds of external influences and other factors breed a climate of loneliness for most of our youth. They are becoming increasingly rootless. Students from villages are thrown together with those from the cities; caste mingles with caste, language with language, without any overall directive force to weld the youth together and diminish, if not eliminate, open or concealed causes of conflict. Neither at home nor at school or college do they get the individual care they hanker for and need; they are left alone to stumble on the facts of life. The system of education does not inform them with a sense of purpose, nor at the end of it are there sure prospects of employment.

Growing up has become a difficult job in this society, perhaps for the first time.

Youth presents a picture of paradoxes. There is the 'student indiscipline' we talk about so much and understand so little. The Indian young man (or woman), however, is far less angry than his father possibly was. He does not know what it means to live under alien rule. He has been born and has grown up in an independent country, in one of the freest societies in the world. Unlike his parent in his young days, today's young man travels from one part of the country to another; there are few who have not seen a good deal of India: some have travelled abroad. A process of integration forms unconsciously in his mind and finds itself in conflict with the pervading regional ethos. He is much more exposed to contemporary Western ideas than was his father at his age. He talks more freely about sex, about almost everything. He learns life in the films and in the pop-novels and magazines produced at home or imported from abroad. The ideals of earlier days which had an impact on his father as a young man do not stir him any more. He has not been touched by the glow of the freedom struggle, by the idealism built up by the stalwarts of yesterday. He is critical of the leaders who manage the affairs of his life.

And yet, scratch his skin, and you find that the young man of today is far from a rebel. The single most influential factor in his life is his family. He is ready to conform, is often guided by his parents even in the choice of career. Certainly more ambitious than the former generation, conscious of the new opportunities open to him, he wants to do well and live well. He has little social protest in his bones. In the lower and middle classes one comes across a curious mixture of ambition and frustration, of hope and despondency, purposefulness and drift. But by and large, the Indian young man now is capable of taking life in his stride; he is sometimes strikingly mature. His code of morality, largely self-made, is astonishingly strong, and not a little refreshing.

Great Tranquilising Force

Perhaps the largest expanse of social change during the last two decades has been absorbed by Indian women. Many of them have seen before their eyes the break-up of the old joint families, the tremendous movement from village to city, the intrusion of new values and ideas, the emergence of new professions. Millions of them have built new homes in India after being uprooted from their ancestral habitats in Pakistan, and life has never been the same for them. They have constructed new relationships with husbands, sons and daughters, in the small families which have, on a large scale, replaced the large joint ones. They have travelled far from their own areas to live with their husbands. Millions have entered offices, hospitals, educational institutions, laboratories and factories to work, and thousands have shouldered responsibilities as onerous as men's.

Women today run business houses and manufacturing units, work as diplomats, air hostesses, engineers, lawyers, journalists, chartered accountants and architects, not to mention teaching, nursing, medicine. Most of these changes they have taken with remarkable aplomb and fortitude, giving our changing society a much-needed balance, and often acting as a great tranquilising force.

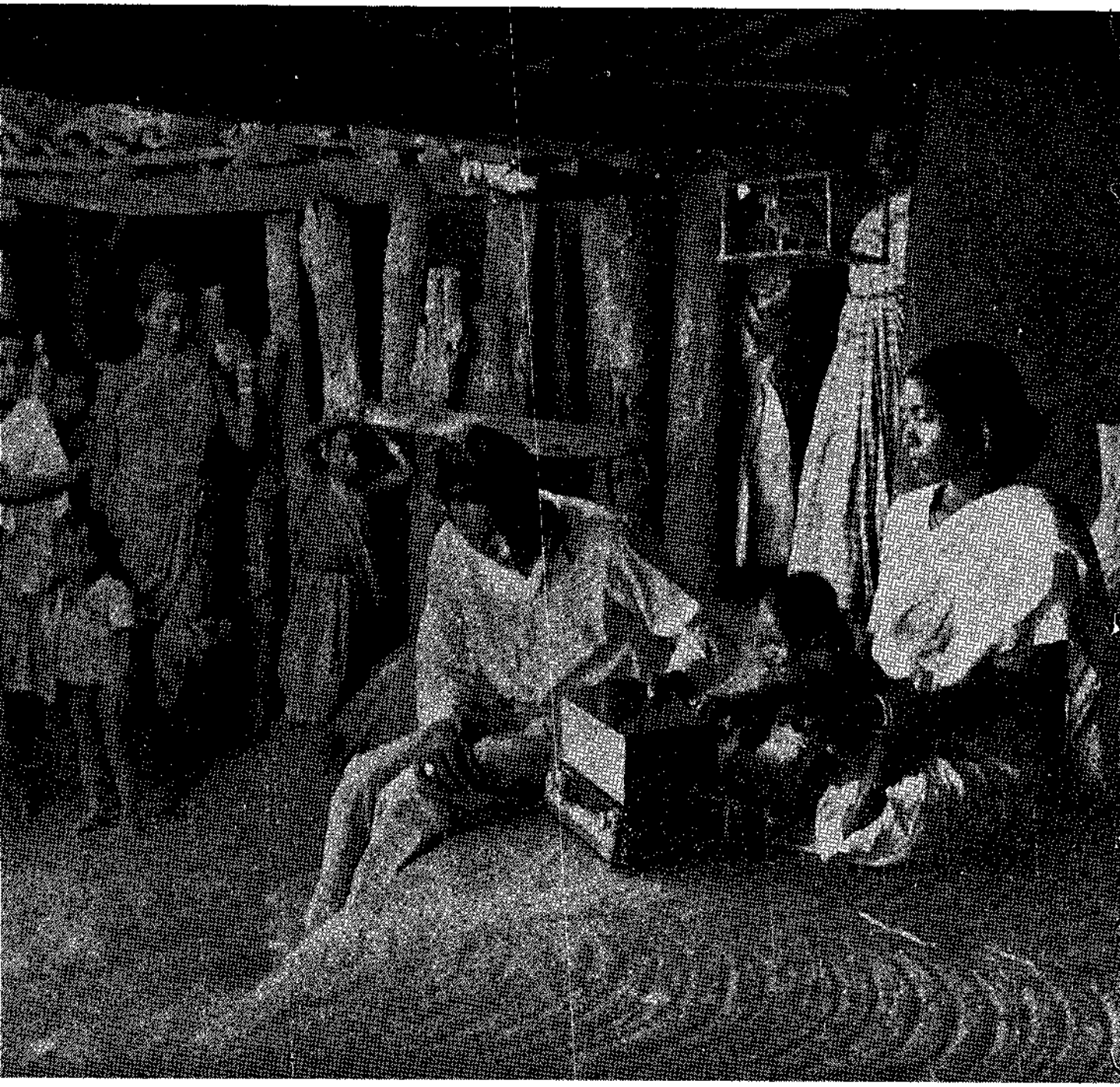
A NATION IS LIKE A CHILD

There's a great deal of similarity between a child's growth and a nation's. As a child is growing, you feel: "This is the worst moment," and that if only you can get over this period, everything will be all right. First, the baby's small, it's yelling away. You say, "If only it was bigger, it wouldn't cry so much." Well, it stops crying. But then you have other problems, which pose greater difficulties. It's walking. It's getting into the fire. And you say: "Well, when it's older, it will be more responsible." But with every age group, you then look back and feel that the last period was really an easier one.

It's the same with a nation. Once you reach a certain level of prosperity, the nature of problems changes. But until you get to that take-off stage, you will progressively be facing more and more acute problems, both economically and socially.

—*Indira Gandhi, quoted by Martin Page in* the Illustrated London News

Transistor and Terylene



CHANGING LIFE IN RURAL ORISSA AND BENGAL

Photographs by T. S. Nagarajan

Horses and Schools

Rosscote Krishna Pillai

BONIFACE Minj Kissan brought his table-model transistor to the porch with the pride of a new father. He wiped the set with his handkerchief and deftly tuned in for Vividh Bharati. In a moment the place was agog with excitement. A dozen children with huge, velvety eyes peeped and pried into the radio. They came from the several cowdung-plastered huts around the courtyard. The eight-month old bonny boy of Boniface, donning a blood-red terylene garment, crawled on to his father's lap and toyed with the transistor.

"This was the first thing I bought with my first pay packet," Boniface told me showing no visible sign of having achieved anything impossible. He was the only youth who went from Valudumer, a tribal village in Orissa, to Rourkela as an employee of the Steel Plant. An assistant in the Civil Construction Division, Boniface was one of the three matriculates of the village of 25 tribal families.

Boniface Kissan was a 'chance discovery' for us. We ran into him one November afternoon on the dusty road leading to Hamirpur, a pimple of a village on the beautiful Rourkela steel township. Kissan, in slack shirt and pants, was hurriedly riding off on his bicycle, when Thomas, another tribal youth who was our guide, stopped him. The steel plant employee liked the idea when Thomas told him that we wanted to get a glimpse of the changes that have come to the village with the advent of steel. Kissan looked at his watch and said there was still time for him to go back to the office after the lunch-break. He led us into the courtyard of his hut.



It was a single-room mud-plastered hut huddled together with four or five similar companions. On the soggy earth in front in the sun lay a little *charpoy* which he offered us to sit on. Inside the hut hung three shirts and three pants on a line. In a corner were two steel trunks. "This is where I take a little rest during lunch-break every day. I don't stay here. I stay in my village, Valudumer, 12 miles away."

"Change? Not A Wee Bit!"

Every evening after work, he pedals back home, near Kuarmunda in Sundergarh district. Although his wife belonged to Hamirpur, she had moved with him after marriage to his village and became a part of the joint family. They belong to the tribe of Kissans—farmers. When Kissan goes to the steel plant, his wife, brothers and sisters and uncles work in the field.

Till three years ago a Hindu, Kissan joined the increasing fold of Christians in the village when he married Lucia (25), a Catholic. "Now my name is Boniface Minj. Please don't forget to mention it when you write about me, "Kissan seemed to be proud of his new religious garb. But in the presence of Brindavan Behara (45), a Hindu, the village elder of Hamirpur, Boniface was all modesty and obeisance. Through narrow causeways, he took us to the Ganju's (elder's) house.

"My life has not changed a wee bit," the Ganju with unkempt hair and beard, dressed in tucked dhoti, grumbled in his tribal dialect, when asked about the impact of the Steel Plant. Boniface acted as interpreter. His English was not poor. No wonder that the Ganju grumbled.

On the fringe of the steel town of Rourkela is an Adivasi village where an old man grumbles that life is no better, and a young skilled worker tunes his transistor set. The village has no roads and no pure drinking water, but has a liquor shop, and the women wear blouses of soft mill-made cotton, even of terylene fibre.



Village elder of Hamirpur
"A new dimension to village life"

A third of the working people of the village was employed in the Steel Plant as manual workers in construction, as fitters in the electric stations, as *khalasis* in the steel mills. Each of them earned more than the Ganju whose monthly income averaged a hundred rupees. "What has the H.S.L. (yes, he said H.S.L.) done for us?" The elder countered and answered himself: "Nothing. There is no electricity. There are no good roads; of course the Christian missionaries have built for us a few roads. We are grateful to them. We are short of drinking water. No pipes. Not even wells. We take drinking water from the nearby river. And, what has H.S.L. done? The company has laid three or four pipes to let polluted water into the river. And we get diseases."

Smiling Faces, Plastic Dolls

The giggling faces of girls who collected at a distance, each with a plastic doll in her hands, to view the village visitors, did little to justify the Ganju's growl.

"Has'nt the village benefited at all from the Steel Plant?" I asked.

'Well," he made a meaningful pause, and said, "Those villagers who are employed in the factory pass their lives happily. Their standard of life is going up. True. They have more comforts at home. And they have added a new dimension to the life in the village, a country liquor shop which could'nt be there before. Now the unemployed amongst us — and they form the majority — don't fail to visit the shop occasionally. Is'nt it a contribution of H.S.L.?"

There was mute derision on the Ganju's face.

Our eyes did not belie all the words of the Ganju. There *was* the country liquor shop in an inviting corner of the village with row upon row of bottles. No street lights. There were only dusty footpaths edged with straggling trees, no roads.

The houses of Balmukund and Videshi, workers of the Steel Plant, looked much smarter and well-built than the Ganju's house that was nearby. Inside the houses was all spick and span. Wooden cots with fine, embroidered bed covers. A coat stand. Radio. Torchlight. Terylene shirts. There was a cot even with a mosquito curtain.

In a village in Bankura, West Bengal, makers of the world-famous clay horse have never had it so good. The village is proud of its first graduate who is a school teacher. Almost every adult knows about family planning.

As a whole, however, the village did not show any sign of great change, of prosperity, nor of poverty either. The solitude and tedium of village life was untouched by the sprawling, modern steel town. Rather the contrast was marked. Rourkela township is lovely by any yardstick: well-laid out, wide roads, vast patches of greenery, eye-filling gardens, clean, well-constructed quarters with spacious exteriors.

Is it then surprising that a few Adivasi employees of the Steel Plant, fitters and *khalasis* who were once farmers, still living in the surrounding villages lamented of the good old yesterdays? Arjun, of Sucha Bahal village, seven miles away, has learnt a trade and earns around Rs 150. He is a *khalasi* at one of the blast furnaces. The fact that he works in a new India show-piece does not inspire him. He thinks that it was better to have remained a farmer and earned Rs 50 than drudge off eight hours every day handling molten iron with a monthly pay packet of Rs 150. But, of course, this attitude does not reflect in his work. "He is a hard-working guy", says his supervisor, Mr Roy.

Earns Rs 500, and Grumbles

The same story of the good old past was sung by Mohan Hanns, once a cowherd and now a *khalasi* in the cold-rolling plant, and Bandhana Majhi, an Adivasi farmer and now a kiln operator. Majhi earns Rs 500 a month by working over-time, still was dissatisfied in having to part with his land taken over by the Steel Plant after paying compensation.

"It is psychologial," said Mr. A.N. Banerji, General Manager of Rourkela Steel Plant, when I told him about the Adivasis' complaints. "Some of them whose lands were centrally-located got greater compensation and are happy; some others, whose lands were far removed, got smaller amounts and are discontented. That is all. It is the Adivasis who have benefited most from the Steel Plant. Fifty per cent of our unskilled employees are Adivasis".

Some of the changes that had come to the life of the Adivasis were visible even to casual eyes. Ten years ago Adivasi women wore no blouses. Today not one goes half-naked. And not a few of them wear blouses made of fine mill-made cotton cloth or even terylene. Ten years ago they had heavy silver ornaments on all imaginable parts of the body. When I met Lucia, Kissan's wife, in the remote Adivasi village of Valudumer, she had no ornaments except a pair of gold ear-studs. Boniface bought her the gold studs. "After all we have to move with the times. I take my family once a while to a film show at the Rourkela theatre, 12 miles away."

Men and Horses

If Adivasis of Orissa move with the times, so do the potters of Panchmura. This village in West Bengal has the half a dozen

families who make the clay horses that now go by the name of 'Bankura Horses'. Bankura got tagged on to the horses, being a town: but Bankura is about 30 miles away from Panchmura, the home of the horses, and their makers. Twenty years ago the Panchmura horse never travelled beyond the village. Today hundreds of them journey to Calcutta, to Delhi, beyond our shores, across the Atlantic. Five thousand of them went to Delhi's Central Cottage Industries Emporium last year. Twenty years ago the Panchmura horse was worshipped by the villager at *Manas Pooja*. Today it adorns the drawing rooms of many a city-dweller. Businessmen from Calcutta make a trip to the village to buy it at a premium. The West Bengal Government buys large numbers for display at various trade fairs in India and abroad. And American tourists — men and women — go all the way through filaria-infested Bankura to see the horse being made.

One Dosen't Make Horses

And the popularity of this Indian handicraft has made all the difference between poverty and affluence in the potters' lives. Rajbehari Kumbhakar (72), who has been making clay horses ever since he was 18, never had it so good. He had to make earthen utensils and to fall back on his meagre land to make a living. He could not afford to go to a school. Perhaps it is true there was no school in the vicinity when he was a boy. Now he lives by the horse. Two of his five sons are educated. One, who is a matriculate with basic training, teaches in the primary school. The youngest, Manikchandra Kumbhakar (24), is a graduate in history and economics, and teaches in the local high school. There was pride in their voices when the father and the uneducated elder brothers spoke of Manikchandra to us. They would not blame him for keeping away from horse-making now. "Why should he?" one of the brothers asked me. "After all, by profession he is a teacher; not a potter."

Manikchandra has not shied away from his ancestral home. He married eight months ago — the age of marriage has gone up, said he — and with his wife, still lives in the joint family. All the brothers are married and they live together. And horses too. All over the place, on the verandah, in the courtyard, in the sleeping room and near the kitchen, there are horses and horses: miniature, small, big, huge, as tall as a man. Of various colours.

At Kamarpukur, a network of schools where there was none a few years ago. And an old man while switching on the radio says, "I never miss the news. I want to catch up with the latest news of the day."

To the family the clay horse has brought gaiety and *joi de vivre*. One hut has grown into four well-constructed mortar-plastered houses. Of them, one was two-storeyed, another had corrugated metal roof. A promise of a little garden in the courtyard.

Radio, Loop and Fertiliser

From among the horses a transistor radio made a tuneful appearance. Members of the potter family often get together around the radio to listen to music from Calcutta. They have heard of family planning from the radio. "Loop", murmured old Rajbehari when I asked him if he too had heard of family planning. He had heard of fertilisers too. The sons reeled off the names, sulphate, urea, superphosphate—for they use them in their field. They have heard of the Five Year Plans. They have a glimpse of the country's industrial development when they go now and then to Calcutta to sell horses. And when they return, they bring watches for themselves and sarees for their women. We found the women sprucely dressed, with gold-bordered superfine cotton sarees.

With one graduate in a family, the potters of Panchmura have begun to taste the fruits of education. All their children of school-going age go to school. In Panchmura now there is not only a high school, but even a college.

And from Panchmura, we learnt not to be surprised to see colleges in unexpected places, in remote villages. In Kamarpukur village, sanctified by the birth of Sri Ramakrishna, where 10 years ago there was only a primary school, today have come up a pre-professional primary school, a junior basic school, a senior basic school, a multipurpose school, a technical school, a higher secondary school and a college. Bajradhari Ghosh (27), the eldest son of a Kamarpukur farmer, talked to us with visible enthusiasm about the quick progress made by his village. His home and he, too, have caught the infection of progress. He graduated from the local college and was now a teacher. His father, Sudhir Chandra Ghosh (52), had studied only up to the fifth class and his mother could not read or write. The house was electrified four months ago. There were two latrines: a sanitary flush latrine and a borehole latrine. The floors of the house were cemented six years ago and the roofs were changed from thatched grass to corrugated metal.

Give Me the News

While we were talking, Bajradhari and I, the father saw off the *purohit* who had just finished *Satyanarayan Pooja*, and joined us. Bengali delicacies served to God were offered to us and they sweetened our conversation. "Our family temple was recently reconstructed," said the son. The father switched on the radio.

"What is your favourite programme?" I asked the old farmer. "The news," came the immediate reply. "I never miss it. I read newspapers. But I like to catch up with news up to the minute."

That told me a lot about Kamarpukur. Kamarpukur does not only bask in Sri Ramakrishna's spiritual sunshine. It has hitched its wagon to the star of material progress too.



The old man is the only one who seems to represent in his attire, or in the absence of it, the old village civilisation that is steadily vanishing. His nephew, Kissan, a worker in the Rourkela Steel Plant, in terylene shirt, cotton trousers and socks-and-shoes, represents the new society that is taking shape. The women have given up their traditional ornaments, and, unlike Adivasi women of earlier times, are fully, tastefully and cleanly clothed. Children are obviously well looked after. Members of the family did not "dress up" for the photograph; they just gathered together and posed.

Two Generations, Two Worlds

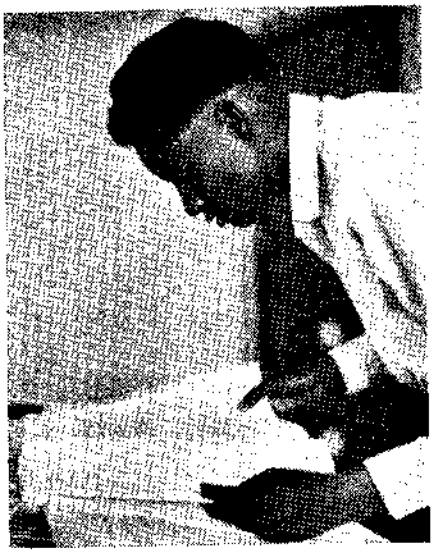
The Man Who Brings Today to His Village

A steel town, we all know, brings out an entirely new landscape. The unceasing glow of furnaces, the huge chimneys emitting smoke and gas-flame, the bewildering complex of the plant and thousands of hands and faces transforming iron ore into steel. Around the plant grows a new town, planned and laid out by expert designers, with houses that look like coloured clouds in the blue autumn sky, roads and boulevards, green parks and gardens where colours run riot.

What does a steel town do to the life of people living on the fringes of its planned orbit? They come under the impact of a new civilisation, but, for a long initial period, they perhaps go on moaning the old society that they see breaking up before their very eyes. On the fringe of the steel town of Rourkela, is an Adivasi village called Hamirpur. It is at once very old and very new, like this family, a joint tribal family typical of many families that live in villages on the outskirts of Rourkela.

Photographs by
T. S. NAGARAJAN





The Steel Plant has changed the look, outlook and mode of living for Kissan, but has not declassed him. He lives with the joint family, and gives the old men and women the respect that is their due.

He has brought the modern world into the old village. A transistor radio set. A bicycle. He has at least three pairs of trousers one of which he was darning himself when the camera caught him. He is proud of his school education, and not unconscious of his hair-cut. A ball pencil and a fountain pen adorn his breast pocket, and he is a good father to his children.





It is the children who reflect, more than the grown-ups, the changing pattern of life in the Adivasi villages. These small girls wear frocks their parents have bought in the market or the village fair; look at the ribbons and the 'hair-do's'. The plastic doll has reached the village home. And the bangles? They are not conventional at all.

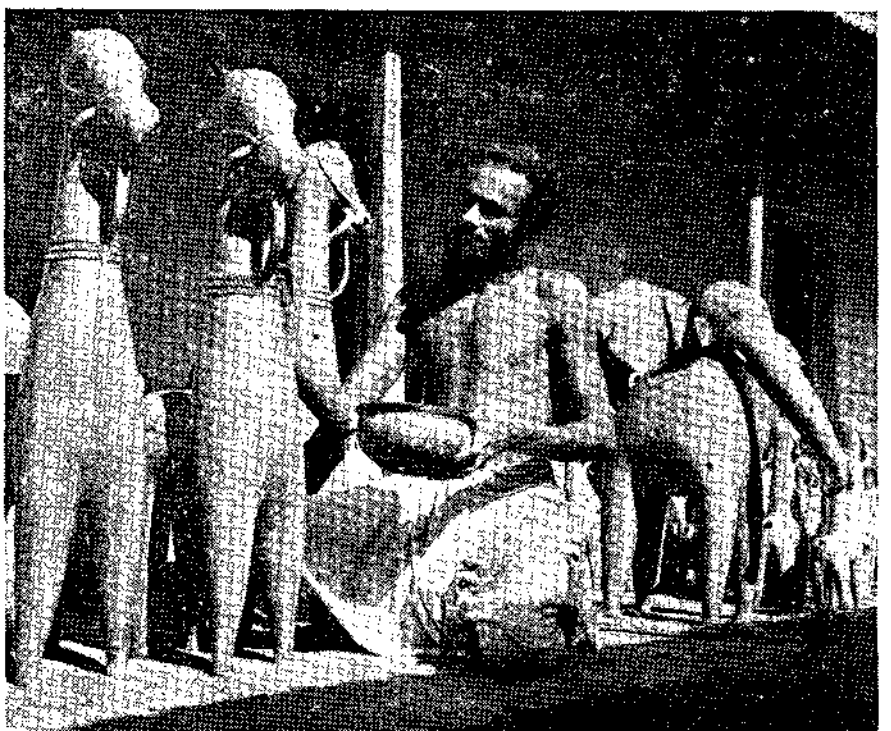
Getting Ready for Tomorrow's Society



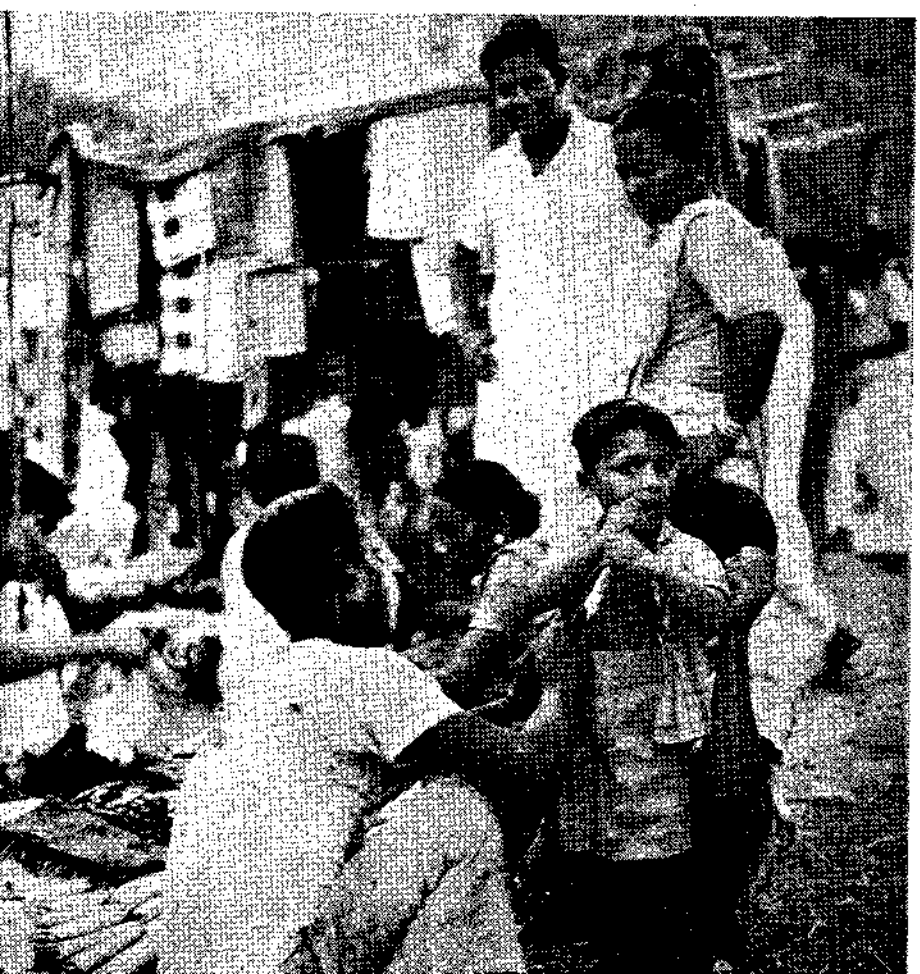
The horse-maker and his family. The son is a graduate and teaches in the village school.

Riding the Clay Horse, Life Changes

THE wind of change blows in the villages of West Bengal, even where there is no steel plant or other big industries or hydro-electric projects. In Panchmura village in Bankura district, Mr Rajbehari Kumbhakar and his people have been making 'Bankura horses' from generation to generation. He has perhaps not gone out of his village, but now, during the last few years, the world has come to his home. The Bankura horse adorns many drawing rooms in the country and far beyond its shores. The old potter is, however, aware of the wind of change, and he welcomes it and fights it too. His youngest son is a graduate and a school teacher; he does not make horses any more. "I can make small ones, if I concentrate", he told us. "Why haven't you given the other boys higher education?" I asked. The old man was clear in his answer. "One graduate son couldn't be too many. But the older ones couldn't get the benefit of schooling because there was no school in the village in their time." The conflict between the old and the new was visible in the house in which the family lives. The old mud-plastered house is being fast replaced by a new brick-and-cement building. The old man and his wife live in the old house; the sons, daughters and daughters-in-law have moved into the new one.







The Village Young

"What Does the Elder Say"

At Kamarpukur in Bankura district we met another neo-educated young man, a graduate who teaches in a high school. As we entered his house, he went inside and returned with a banian on before greeting us. His father, an old man, is seen in the background of the picture on the left, came straight to us in snow-white *dhoti* after performing *Satyanarayan Puja*. As we sat down to chat, with the young man, his younger brother came and leaned on the back of the chair, keenly following our conversation, while a small sister lingered to him.

There is hardly a boy of school-going age in the village who does not go to school. We found the youngfolk well-clothed and in good health.

A New Suit and Sugarcane

It was in the village market that one could get glimpses of the changed tastes and demands of rural-folk. Here again children come first. A father whose *banian* has quite a few holes buys his little son a new suit; and as he tries it on the child, it goes on biting off a stick of sugar-cane.

"Shoes for me? And a New Shirt Too?

This young man is, however, very conscious of the pair of new shoes his father has bought for him. He tries them carefully as he tried a new shirt a little while ago, and did not allow it to be taken off his body.



Looking Back

—From *Yojana*, January 26, 1958

I first heard of *Yojana* two years ago. Not being well up in Hindi, I believed it was the name of a girl—a nice looking young girl. Even when I came to know that the word meant 'Plan' and was meant to describe a journal, the charm of the name never left me. When I was invited to edit the paper, the first thing I thought of introducing as a character was a young lady who would bear the name "Yojana" and symbolise the country's joys and sorrows, its hopes and frustrations — a sort of a youthful Mother India.

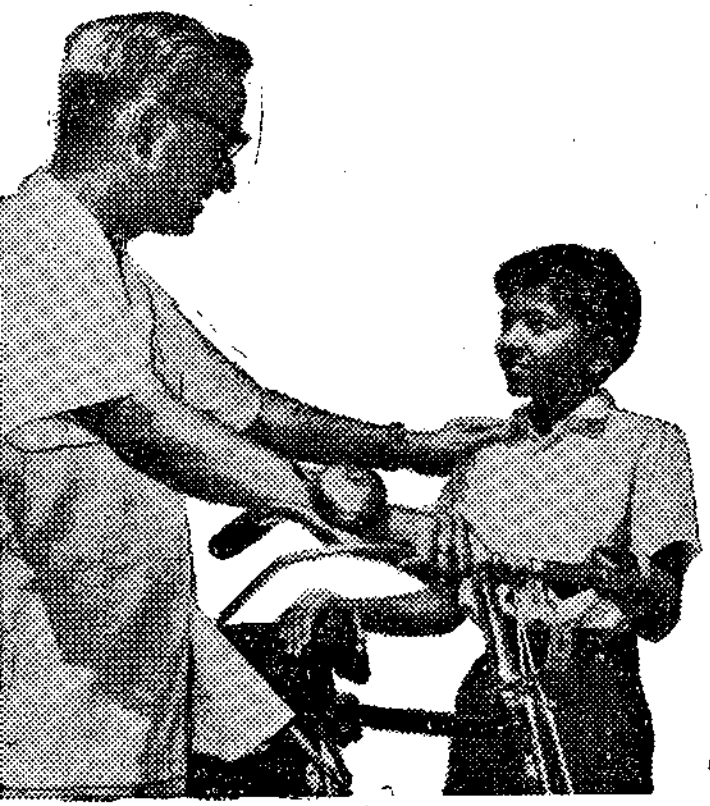
To have romantic day-dreams of *Yojana* was one thing: to have to edit a paper on something as down to earth as the Second Five Year Plan was another. What was the paper "Yojana" to look like? How was the Plan to be made interesting? How was one to persuade a generation whose tastes in non-curricular reading were largely restricted to politics, sex or scandal, to scan pages devoted to economic progress?.....

Yojana means to arouse the consciousness of masses to the country's problems and ambitions; it aims at becoming the instrument of national endeavour. Millions of our people are now learning to read; thousands of new libraries are being opened in the remotest villages. There are many journals — both Indian and foreign — competing to capture this enormous population of neo-literates. It is our duty to see that the best reading matter is placed in the hands of these people; that our land does not become either a battlefield for cold war between foreign countries or a happy hunting ground for publishers of sensational and sexy journals. Ours is a free country without a censorship. But we have a tradition of purity to maintain and a standard of integrity to set up. We owe it as duty to our people and to the future generations. This is the role *Yojana* aims to fulfil. It is our ambition that by the end of the 3rd or the 4th Five Year Plan, this little toddler of today, this baby "Yojana" will be sought out by more people than any other paper in the land.

—Khushwant Singh

between you and me...

Here's your bicycle, son...



I am glad I could get you one. You were so insistent.

When I was your age, you know, there was not a single bicycle in my village. Occasionally I would hop on to Raman's cart while going to school. It was such a pleasure !

Those days journey always meant travelling by foot or bullockcart, and never farther than 20 or 30 miles. I had not seen a railway train until I was 18; even then only because my uncle married out of the village. Thank him for that !

Now Raman's son comes from Bombay by air-conditioned train . . . think of a cooler for III class passengers ! By the way, I hear our railway engines are made here now; and some are sold to other countries too ?

And what is this air travel for letters ? Delhi can be reached in a day, they say. When you were born my letter conveying the good news reached my sister after three days. And you know she lives less than 200 miles away !

Things have changed.

Plan means Progress

DA 66/1

THIS INDIA

YOJANA invites contributions to this feature from its readers all over the country. Each anecdote must be true to life, of less than two hundred words capturing something significant of India's rich and varied life. Each published anecdote will be paid for.

It was a Malayalam film awards function. The best comedian of Malayalam films was also there to receive an award. The Governor of a neighbouring State presided. Before distributing the awards, he made a short speech. He said: "You all know, Mr. So and So was rotting at one time. He then contested the Corporation elections. I had to canvass against him, because he opposed my party's candidate. He was defeated. He left politics. And that did good to him for now he is the most sought-after comedian."

People laughed.

The comedian received the award and replied:

"What the Governor said is true. I was defeated, left politics and joined the films. It was good for myself. So also is today's President. He gave up politics of our State, became a Governor and made good. It was good riddance for him as well as for the State."

Trivandrum *B. Gouri Amma*

On a trip to Gaya we met this small shoe-shine boy at Moghal Sarai. After polishing my shoes, hopefully he turned to my companion, Mr. Iyer, though he was wearing only a pair of chappals bought at least a couple of years back. But Mr. Iyer let him have the chappals for a euphemistic brushing. The boy did his best, but was a little surprised when Mr. Iyer paid him 15 paise, the full rate.

The boy paid 10 paise out of his earnings to buy freshly baked groundnuts from a vendor. These he proceeded to divide into three equal piles; one he offered to Mr. Iyer, the other he offered to me, and the third he kept for himself. On being asked to explain the reason for his generosity, he replied, "These 10 paise were my extra earning, over and above what I deserved; it is only proper that we should share it among ourselves."

Varanasi *Ranen Bhattacharya*

In a small town of West Bengal, the usual evening crowd had gathered in a wayside tea shop. I was a visitor to the town and I found myself in the midst of somewhat strange company: young men in their early twenties, a few older people, and a very old man who was entertaining the others to stories of a long past.

"In those days," he was telling his audience, "rice used to sell for Rs 2 a maund, and you could buy a big fish for eight annas, and a seer of milk for two paise. A man got three rupees a month, and lived in plenty."

"Then, grandpa," one of them intervened, "we were far better off those days than we are now. In fact, we were better off under the British than we are now."

The old man's eyes glowered. "You are a fool to say this", he admonished the youngster. "That was a primitive time. Most people had no money. The vast majority of people ate only once a day, and that too, almost nothing but rice. Few villagers knew the use of salt; sugar did not exist; kerosene was a great luxury. People slaved for landlords and brahmins for no wages at all." He took a deep breath, and added, "I have lived two years less than a hundred. And I can say we are far better off today than in the days when I was not so old."

Calcutta *S. Mukherji*

Eight years ago, one day, I was just stepping out of my house to go to my office when a young man with long curly hair, dressed in *kurta* and *pyjamas*, met me. In a supplicant's tone, he said: "Sir, I am a dancer. Please give me a job in your Song and Drama Institute." I told him, there was no vacancy. Crest-fallen, he went away.

Three years later, one day, I heard a knock at my door and opened it to find a young man in tatters. He pleaded: "Sir, please give me a job in your Institute. Even a clerk's post will do." "Who are you?" I asked.

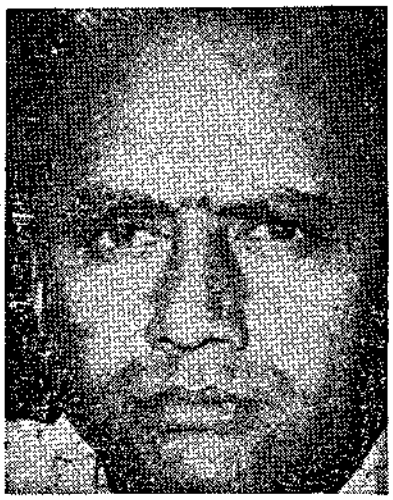
"Don't you recognise me? I am that dancer who came to you for a job in your Institute three years ago. I am no more a dancer because that doesn't help me to earn a living." I told him, there was no vacancy. He went away.

Last week, one day, I was walking hurriedly to catch the bus for my office when a car stopped near me. A voice came from the car: "Please come in." It was a Chevrolet Impala limousine and an immaculately-dressed young man at the steering wheel repeated, nodding to me: "Please come in. I shall drop you at your office." Nervously, I stepped in. Then the young man said, "I am afraid you don't recognise me. I am that dancer who came to you for a job some years ago." "Oh! What are you doing now?" I asked completely surprised. "Well, I do liaison work."

New Delhi *Gopan*

The Changing Face of MANDYA

H. KUSUMAKAR



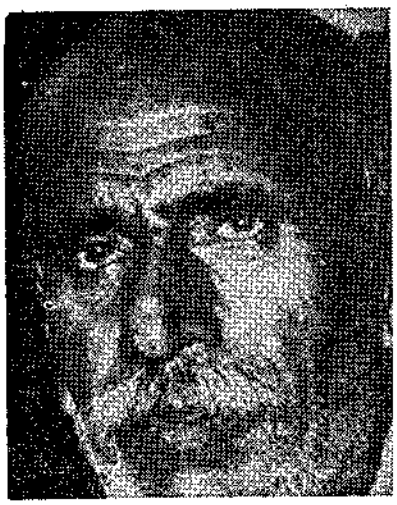
Mr. Chikka Thammiah

Farmers, 'happily married' to modern cultivation, discover that their own hands are 'Gold Mines'.

Their sons now hope to be Doctors and Engineers.

If successful farmers bemoan, it is over neglect of land by others and the invasion of village people by 'Urban Habits'.

But everyone welcomes the bicycle age which has come over the villages.



Mr. Kullegowda

FROM behind the grille of emerald-green paddy plants emerge strong, determined faces. Nimble, experienced hands work in this theatre of experiment and growth. Freed from the shackles of tradition and trained in new skills, the hands can produce encouraging results.

Buried in the mass of statistics of agricultural production, fertiliser consumption, credit facilities and co-operative expansion lies the story of a changing people. Alongside new seeds, new ideas have been planted, ideas that have brought about a transformation in the attitude of people, once hide-bound and custom-ridden, towards life's problems.

Figures say that the farm output in the Mandya Package Programme area, covering 1,320 villages in Mysore State has shot up by about 40 percent in five years. By all standards this is an exceptional achievement. More production means more money in the hands of people.

What impact has this economic improvement made on their way of life, on their thinking? Forty-six-year-old Chikka Thammiah looks and talks more like a missionary than the successful farmer he is. "I was myself a bit of rolling stone," he tells you in his clear, candid voice, "and I returned to my land after I had had a fling at hotel-keeping and other occupations." This prodigal son now swears by his land. "The only way to prosperity is to till one's land, not in the old way one used to, but in accordance with, and mind you, in strict accordance with the 'package' practices."



A Successful Marriage

Thammiah is out to set an example and convert his people. When he took to growing hybrid *Jowar*, he worked feverishly on the new project, plying the authorities of the Package Programme with innumerable questions. He had sleepless nights and the days, too, were fill d with anxiety. "A new idea is like marrying for the first time," his eyes twinkle at the earthly analogy. "And I am now successfully married to the Package Programme". His one worry is that not all people in Kama-

muddana Doddi, his village, take the trouble to find out what wonders one can do with one's land, a "gold mine." "If only the villagers free themselves from petty squabbles and take their work more seriously..." he bemoans.

Thammiah is a picture of optimism and confidence. He talks in terms of "investing thousands of rupees and making thousands of rupees," a far cry from his none-too-prosperous days when he was no more than a tenant. Today, a land owner of sizeable holdings, he has committed himself to a big loan, "but I know I will clear it off in five years." Himself hardly literate, his ambition is to educate at least one of his five sons to become a doctor. Why a doctor? "Because, this son knows suffering and has just recovered from prolonged illness, fits, fever and all. We offered prayers to *Mariamma*, used sacred *kumkum* and ashes and tried all the methods available in our village. But it was a doctor from Mysore that cured him. My boy knows what doctor can do."

"Urban Habits" of Rural Folk

The old, wisened Kulle gowda of Hannuru is a different kind of person. He is less of a romanticist than Thammiah. With his striped shirt, soiled *mundu* and thick-soled chappals, he sits quietly in a corner, hiding his maturity and wisdom. He does not speak unless spoken to. Once he opens up, he shows himself to be a down-to-earth realist, ever anxious to identify a problem and face it squarely. "Yes, we know what advantages we can derive from the Package Programme. We realise the new system gives us better returns from the land. We are sure the officials are being helpful. But despite all this, why is that the general lot of our people is not what it should be? You have gone round our *villages*, you have met our people, *you* tell *me*."

He knows the answers too and seems to enjoy your discomfiture.

"I'll tell you, if you like. There is more money in our hands than before. What do we do with the money? We spend it on tea, coffee, *bidi*, cigarettes, cinema and care a damn for the land. Look at our labourers. They are emaciated because they think it is fashionable to eat polished rice and have given up the nourishing *ragi*, our staple food for generations. They want 'coffee time' while working on land. They want to behave like factory workers. Have you seen our youngsters? They ride on bicycles for *masala dosai* and coffee at the restaurants in Mandya town. They are no more satisfied with the snacks they get at home."

Kullegowda can go on talking endlessly about what he disparagingly calls the "urban habits" to which his people are taking. "They want to show off like the city folk. I know that everybody has to spend some money on an occasion like the *Mariamma jatra*, *Sankranti*, *Yugadi* or a wedding. I am not a kill-joy, but what a waste of money, what extravagance! What can the Package officials do? If we don't want to soil our hands and want to go about in neat, pressed clothes, who can help us?"



The rich fruit of toil. Workers collect the harvested paddy in a field in the Package Programme district of Mandya in Mysore State.

Kullegowda is one of those rare types of farmers who combine ancient wisdom with common sense of an uncommon degree. He follows traditional farming methods to which he is accustomed in his fifty years of working life. But he has taken to new ways wherever he has been convinced of their usefulness. At one time, he thought, like the other villagers, that children's education was just fashionable and not essential. He has gradually veered round the view that education is a "must." With pride in his voice, he says: "I have a son doing the B.Sc. course in Mysore."

Chikkapape Gowda is a polished talker besides being a progressive farmer. He is able to maintain one of his sons in a hostel in Bangalore, and has chosen one of the reputed colleges there for his education. A leader in Kuderegundi village, Chikkapape Gowda's voice is heard with respect. Like Kullegowda, he too can reel off on his pet theme—"the decreasing efficiency and indifference towards land." B.N. Srikantaiya of Basaralu village has the mind of a shrewd accountant and can work out in minute detail how much it costs to grow paddy or *ragi* over an acre of land and get the maximum yield. He can pinpoint the difficulties of his area, where canals do not reach, and offer solutions in a language so clear and precise that easily qualifies him to be in any planning authority.

Bitten by the 'Package' Bug

Thammiah, Kullegowda, Chikkapape Gowda and Srikantiaya are but a few names of the many that have become bywords in Mandya district. They represent a generation of farmers who are bitten by the bug of the Package Programme and are impatient that the people in general are slow in realising its value. They are humble enough to admit that there are other farmers equally progressive, if not more progressive than themselves. "Go and meet K. Singarei Gowda, Chowdiah, Bore Gowda, Annoji Rao, B.P. Nagaraja Murthy, Andani Gowda, Nanjundiah, Venkatanarayan Rao, Mari Gowda or Basavalingappa. Some of them are our pioneers."

The names multiply.

Mandya district, once plagued by widespread malaria and consequent depletion in population, changed its face first when the Visvesvaraya Canal from the Krishna Raja Sagar Dam brought the hope of new life. The Intensive Agricultural District Programme, introduced in 1962, helped, as no other plan had helped before, the development of the area which, by then, had a high irrigational potential and, what's more, an unparalleled net-work of successful co-operative societies (all the 1,329 villages of the district are covered by co-operative institutions). A unique feature of the programme has been the channelising of all production requisites—seeds, fertilisers, chemicals and improved implements—through a single agency, the service co-operative.

Arrival of Bicycle Age

These five years of transformation have not been without its problems. There was initial resistance to adopting new methods of cultivation, whether it was paddy, sugarcane or *ragi*, the principal food crops of the district where thirty per cent of the total cultivated area has assured water supply. Hybrid *jowar* and maize have been recently introduced as subsidiary crops. Today, the average farmer in Mandya has adopted the line-planting method, uses treated and improved strains of seeds, goes in for implements wherever available and cries for more and more fertiliser and timely supply. Individual farm production plans have made him conscious of the importance of judicious use of water and fertiliser and need for plant protection measures.

The new Indian farmer emerging in Mandya has reached the "bicycle age." On black-top roads which reach almost all villages, one can see farmers riding on their bicycles from home to farm and back. The prosperity of some has enabled them to go in for scooters. Here and there, you do come across farmers owning cars. Many of the more fortunate farmers have built houses in Mandya town which they rented out. Radio sets may be found in many village homes, so much so that the community sets installed at village panchayat premises are deserted. All this transformation would not have been possible had it not been for the untiring efforts of some of the village leaders who blazed the trail in the initial stages of development. They are the heroes of the new era in Mandya. Village temples in the district abound in sculptured slabs, called *Viragals*. In the olden days, the *Viragals* represented the heroic deeds of village leaders in wars against intruders. Will they acquire a new meaning now?

Mr. Kusumakar is The Times of India correspondent in Mysore.

MANDYA

A Package District

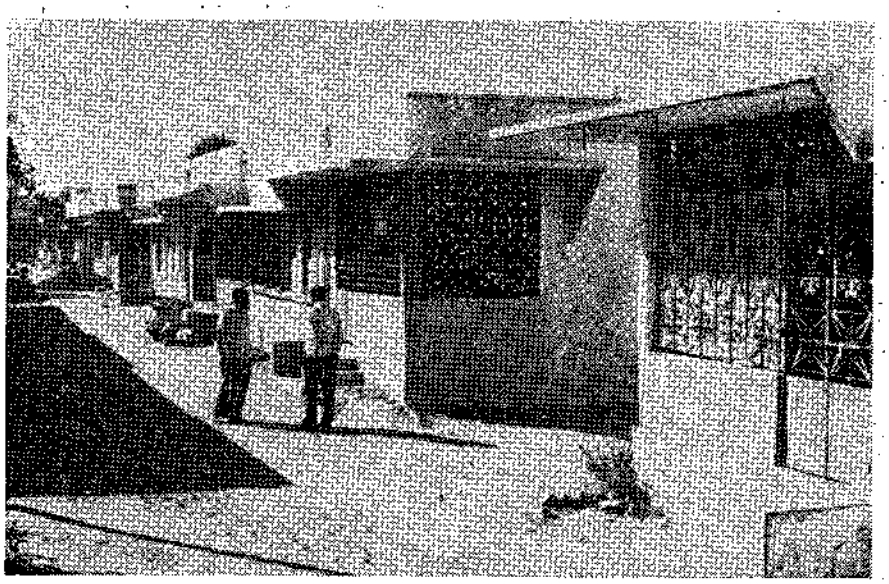
MANDYA district, 94 kilometres from Bangalore, is one of the areas chosen for the implementation of the Package Programme in India. Now in its fifth year, the programme aims at a rapid increase in farm production with consequent economic benefit to 1,38,663 agricultural families, constituting 85 per cent of the total population of the district. Adequate and timely supply of production requisites is the task of a network of co-operatives. This is backed by organised and intensive technical guidance on marketing and storage.

Paddy, sugarcane and ragi-rich Mandya district is an undulating table land, fertile, and having natural potentialities for agricultural development. Canals running from the famed Krishna Raja Sagar Dam across the Cauvery are the main source of irrigation. Past two years were difficult because of the failure of the monsoon in the catchment area of the dam, but late rains this year hold great promise. A predominantly agricultural region, the district has 6,02,114 acres under assured irrigation. Besides paddy, sugarcane and ragi, groundnut and potato—and now hybrid *Jowar* and maize—are extensively cultivated.

Individual farm plans lead to the adoption of the package practices, careful use of water and fertilisers, better cropping pattern and increased efficiency in farm management. Twenty five per cent of the cultivated area is covered every year by a programme for multiplication and distribution of improved seeds. Distribution of nitrogenous and phosphatic fertilisers went up from 38,338 tonnes in 1962-63 to 51,258 tonnes in 1965-66; more judicious application of fertilisers brought down the consumption per acre. The membership of co-operatives increased from 78,589 to 91,857. The pattern of assistance from co-operatives is : 60 per cent in kind and 40 per cent in cash for wet crops and, 40 per cent in kind and 60 per cent in cash for dry crops. Average paddy output grew from 1059.94 kgs to 1345.18 kgs per acre and that of sugarcane from 35 tonnes to 45 tonnes per acre. Ragi, normally a dry crop, was tried out as an irrigated crop last summer, yielding about 1,000 kgs per acre.

Co-ops. Change Life in Gujarat

Working together, people have found new strength, have done much to turn a traditional society into a dynamic one.



Houses for lower middle-class people built by a co-operative society in Ahmedabad.

J. C. DESAI

EVEN before the newspaper boy or the milkman's buzzer wakes you from your peaceful slumber, a queue of sturdy men and stodgy women with brass pitchers starts forming at the central place in the village of Bedwa in Kaira District of Gujarat. It is not a queue of men and women waiting for their turn to draw water from the village-well or to draw their ration of foodgrains from a fair price shop. It is a queue of men and women who collect every day, morning and evening, at the milk collection centre to deliver their milk to the Village Milk Producers' Co-operative Society.

At the counter of the milk collection centre sit officials of the Society, who test the milk in each vessel, take a sample to check its fat content, measure the rest, and note it down in their registers before tipping the milk in larger cans. The milkmen and women collect their money and leave. As the queue is over, a motor lorry comes along to carry the milk-cans to Anand, a few miles away. At Anand the milk is pasteurised and processed in the dairy owned by the Kaira District Milk Producers' Co-operative Union, which is the apex body of the village co-operative societies. The process is repeated in the evening.

Behind this queue is the story of a successful and organised co-operative effort in the dairy industry. It is a story of how co-operation can become a formidable force against vested interests and exploitation. It is also a shining example of how people, however small they be, can organise themselves to improve their lot through co-operation.

The scene at Bedwa is typical and can be seen every day in five hundred and sixty-one villages of Kaira.

Name a single movement which has, more than anything else, changed the quality of life in Gujarat State, we asked J.C. Desai; and his answer was: CO-OPERATION.

It covers almost any aspect of Gujarat's prospering economy — from agriculture to industry, from dairy to housing. Co-operation has led to the establishment, in Khaira district, of a modern dairy industry of which the whole country is proud.

It has given Gujarat a new sugar industry; it operates more than a third of the State's cotton-growing enterprise; it has extended its frontiers to rice-milling, weaving and ginning.

And, not the least, co-operation has built 30,000 houses in Gujarat. It has changed the face of the sprawling metropolis of Ahmedabad. Co-operative houses have brought in new architectural trends — a blend of the modern and the traditional.

Co-operation has taught thousands of people to work together for the common weal, has given the peasant an awareness of strength.

Of the changing quality of life in Gujarat, one fact mentioned by Desai should speak a volume: the Sarpanch of Bedwa village in Khaira district is a woman; and the villagers have elected a woman to the managing committee of the village co-operative milk society.

district which have combined together in one of the most courageous co-operative enterprises in this country. As many as one lakh and fifteen thousand farmers take part in this enterprise which, because of its organisation, efficiency and impact, has won esteem far beyond the shores of India.

How It Began

It all began twenty years ago. The beginning was quite modest. As in most cases, it was prompted by compulsion of circumstances and continuing economic distress. It was a time when the farmer in India was still groaning under the heels of moneylenders. His debts piled up from year to year. He was generally living a miserable life, eking out a meagre existence by cultivating the small plot of land owned or occupied by him. His fortune fluctuated with the vagaries of the monsoon. Agriculture gave him only partial employment. He had to sit idle for several months when he was not engaged in the field.

That was the condition twenty years ago. The farmer in Kaira district was no exception. His average land holding was only three acres. Honest and hard-working as he was, the farmer toiled and tended his land but the return was too little for a family of five. He had to supplement his income by keeping cattle. Women in the family looked after the cattle, milked them and sold the milk to the village milk-shop, after keeping some for the family consumption. But this also did not help him much. The fruits of his labour were largely usurped by the middleman.

It was at this time that milk scheme for Bombay city became operative. Demand for milk increased, but the condition of the farmer did not improve much. The middleman still continued to take away the lion's share. A way out of this exploitation and economic morass was suggested by Sardar Vallabhbhai Patel who advised the peasants to organise themselves into a co-operative for protecting their interests. This led to the formation of a co-operative organisation which was styled Kaira District Milk Producers' Co-operative Union.

It began its operations with two village Milk Producers' Co-operative Societies which collected and despatched about 500 lbs. of milk everyday to Bombay. The seed that was sown then has now developed into a fully grown tree. The Union has now over five hundred and sixty-one affiliated village societies and it handles nearly sixty-six million kilogrammes of milk a year. Milk-cans which were sent to Bombay have now been replaced by insulated railway tankers. Besides pasteurising milk for being sent to Bombay, the dairy processes and manufactures products like baby milk powder, butter and cheese which have become household names in many parts of the country.

Farmer's Life Is Changed

This co-operative enterprise has helped the farmer considerably. He gets a remunerative price for his milk and is assured of a steady income. This has encouraged him to increase his milk production. He takes better care of his buffaloes and, in this, gets help from the Union. The Union has set up an Artificial Insemination Centre at headquarters and several sub-centres in a number of member-villages for scientific animal breeding. It also runs twelve mobile veterinary dispensaries which, between them, visit all villages once a week and give free treatment to all ailing cattle. Besides these services, the Union has set up a cattle-feed plant to provide nutritious food to cattle all the year round at reasonable price. This has obviously increased milk production.

As the milk-producer gets cash payment for the milk he delivers to the co-operative, he is able to plan his budget. He receives about two to three rupees daily which is a welcome contribution to his family budget. He can also keep part of his income from the farm for settling his debts. From the cash money he receives, he is able to provide feed for his cattle and also meet his daily family needs. And he can look forward to something else: at the end of the year, a share of the profit as bonus from the Society.

Besides money, several other benefits flow to the farmer and the village community from this co-operative organisation. From the profits of the village milk producers' societies, certain amounts are allotted to charity fund, cattle relief fund, building fund, and so on. Many social welfare activities have been launched or assisted by the societies. They have helped in the establishment and running of primary and secondary schools, libraries, dispensaries, health centres, village water-works, common water troughs for cattle and village roads.

Rural Life Transformed

Over the past twenty years, this co-operative venture has ushered in a silent revolution in Kaira district. It has brought about — and the process is still on — a transformation of rural life and economy. It has gradually raised the level of the dairy industry, and also improved the standard of living of the farmers. It has also brought about a gradual but continuing change in the quality of the life of the village people. The village co-operative is managed by an elected committee. The elections and the working of the societies provide a useful lesson in democratic functioning of an institution. The training and experience gained by the farmers would go a long way in this intelligent participation in the democratic institutions that run the village administration.

A Nip of Hope in the Air

The other day I visited Bedwa to see for myself the metamorphosis that is taking place in the rural life of Kaira district. As I entered the limits of this modest village, I saw several community facilities, a school and modest but good houses. The village society office-bearers were quite enthusiastic about their work and planned to have their own building for the milk collection centre. A number of other villages have already constructed their own buildings with the assistance from the Union. Though a couple of farmers felt that the price given them for milk was not as remunerative as it should be, they were quite happy with the working of the organisation, which had brought them a sense of dignity and self-reliance. Women and children too bear the imprint of change.

In Bedwa there is an elected woman member in the managing com-

mittee of the co-operative society. Even the village Sarpanch is a woman. There are unmistakable signs of progress in many other fields. The village was of course far from affluent; in many ways it still looked like a traditional Indian village; but the faces looked happy, and there was a nip of hope in the air.

The success of this organisation is of course largely due to the dynamic and intelligent leadership provided by persons like Mr Tribhuvandas Patel, Chairman of the Kaira District Co-operative Milk Producers' Union, and Mr Kurien, General Manager. Year after year the Union is gathering strength and momentum. A seven-year plan for doubling the milk production is already under way. With the Union's expanding activities, the farmer is assured that his partnership in the enterprise will bring him more and more dividends, not only in personal benefits but also in community welfare.

Co-operative Housing

The development of dairy industry in Kaira District is not the only example of a successful co-operative effort in Gujarat State. There are various other fields in which the co-operative movement has made significant strides. Its success in house-building, particularly in Ahmedabad, is outstanding. If you were visiting Ahmedabad after a lapse of ten years, you will be struck by the tremendous change in its landscape. Ahmedabad today presents altogether a different spectacle than it did a decade ago. Ahmedabad city is now no more huddled into the city walls. It is now a sprawling city constantly extending its limits to absorb the neighbouring villages. Thousands of new houses have come up on the entire periphery of the old city.

In Ahmedabad nearly a thousand co-operative housing societies have been set up so far and still more are coming up. Houses built by these societies have completely changed the look of the city. The large-scale building activity in Ahmedabad has introduced several new trends in construction. The newly-built houses represent a combination of modern and traditional art. They have made the city more attractive.

Organised originally for middle class people, the movement has spread rapidly to low-income groups and backward classes. These categories benefit from various housing schemes. Altogether about two thousand six hundred co-operative housing societies have been registered in Gujarat. *They have built more than thirty thousand houses.*

The increasing tempo of industrialisation since independence intensified the flow of people from rural to urban areas, where most of the new industries were located in early years. This inflow resulted in a shortage of residential accommodation. Ahmedabad was no exception. Houses became scarce. People had to live in unhygienic conditions, many of them in single rooms. When the pressure kept on growing, Government stepped in to meet the increasing shortage of houses. It drew up several schemes to encourage people to build their own houses. The compulsion of circumstances led to the growth of co-operative housing societies.

When Ahmedabad was selected as the temporary capital of Gujarat it attracted even more people, and houses became scarcer and scarcer. But by then several houses had already come up as a result of co-operative movement and the influx of people was absorbed without any large-scale dislocation. Though rents increased, one could get a flat or rooms.

The co-operative housing movement has provided an answer to the housing problem of a congested city. The movement has also influenced the social life of the people. *It has brought people of the same mind, trade or profession to live together closely in compact units, more or less complete in all aspects.* Some of them have their own libraries, community halls and playgrounds. This has helped develop fellow-feeling among the people.

Co-operative Industry

One may take this opportunity to have a quick glance at the enormous expansion of the co-operative movement in Gujarat. As in other parts of the country, it began with thrift and credit societies. Now the number of agricultural credit societies has grown to eight thousand, covering nearly ten lakh out of twenty-two lakh agricultural families in the State. Between them they have advanced over Rs 32 crore in loans. The Gujarat State Co-operative Land Development Bank caters to the farmer's needs of long-term finance for land improvement. In 1965-66 it disbursed over Rs 10 crore as loans. It is, thus, playing an important role in agricultural development.

From the field of agricultural finance, the co-operative movement has expanded and extended to various other fields including processing and marketing activities. In Gujarat today there are 78 co-operative cotton ginning and pressing factories, twenty co-operative oil mills and twelve rice mills organised in the co-operative sector. Out of twelve lakh bales of cotton produced in the State, nearly four and a half lakh bales are handled by co-operatives. The sugar industry has been entirely organised on a co-operative basis and, at present, there are three co-operative sugar factories operating; two more are in the offing. As a result of the extension work undertaken by the sugar co-operatives, the normal sugarcane production per acre, which was around twenty-two tonnes, has now gone up to about thirty-eight tonnes.

There are seven co-operative spinning mills registered in the co-operative sector of which one has already commenced work. Besides this, there are sixteen co-operative industrial estates registered in the State which provide facilities to small industrialists and also help in procuring raw materials.

The co-operative movement has thus made a great headway in Gujarat. The total number of co-operative societies in the State has gone up to over 17,000. The impact of this movement on the economy of the State is considerable. It is true that there have been complaints of mismanagement and malpractices in a few co-operative societies, but their number is insignificant compared to the large number of societies which function efficiently. The movement, therefore, is now firmly established. It is expanding to embrace a variety of economic activities. *A climate of co-operation is slowly but steadily developing throughout the length and breadth of Gujarat.*



Girls in Delhi's Polytechnic for Women: many of them will be the first career women in their families

TEEN-AGERS OF TODAY



"NEVER HAD IT SO GOOD"

"OUR teenagers have never had it so good," says a university teacher. They dress better, have no responsibilities, travel more and definitely spend more than their parents ever did. They have a greater choice of subjects, better job opportunities, and no one expects them to do anything other than keep themselves occupied.

"In the last few years university life has come into its own," remarks a rueful parent. In our days college years were not considered apart from any other phase of life—not at all a part of growing up. But now it is school, colleges, and *then* life."

A Report on Our Young People

BY SUNEET VIR SINGH

Photographs by T. S. NAGARAJAN

An exclusive teen-kingdom has come into being in post-independence India. It is impressive in size. According to the 1961 census, 41% of 484 million Indians were in the 0 to 14 age group. So today there are approximately 196 million boys and girls in the 6 to 20 brackets. A substantial number of them are moulded by our schools and universities. About 67.7 million children are in school and 15 lakh in college. By 1971 it is expected that 97.50 million children will be in school and over 23 lakh students in college.

Worldly, well dressed, and self-assured, are these young men and women going to change the face of India? Parents and teachers talk of the decline of religion and yesteryear's values. Are the schools and colleges nourishing a new culture or is the change only skin-deep? Is the narrow-trousered youth rejecting the old social order? Are the cute young things in matching *kurta* and *salwar* going to transform Indian society?

The answer is both yes and no.

No, because they are not angry young men and women, rejecting all that is old and traditional. The boy who reads Sartre and does the

"No Angry Young Men"

twist so well, is usually the first one to consult the *pundit* for an auspicious date.

The answer is also Yes, because, in some spheres, there is a conspicuous change of attitude and beliefs.

THE change is more easily evident in girls. More girls are going in for higher education than at any other time in the history of India. In most families this is the first generation of girls to study. "If my daughter does not have a B.A. degree, who will marry her?" plead many fathers at admission time. And girls can be found studying almost any subject from English literature to electronics.

The Indian Institute of Technology in New Delhi has 23 girl students. The polytechnics for women opened in more than a dozen cities are full to capacity. Here girls prepare for careers as librarians, medical laboratory assistants, commercial artists, architectural assistants and similar vocations. What is most striking is their self-confidence and self-assurance. Education at these polytechnics is free and most of the girls come from lower middle class families. "Of course, I will work after getting my diploma", says 19-year-old Sunita Massey. Like most of her class-mates, she will be the first woman in her family to work. Having chosen her field—interior decoration—she has no doubts about her future. "There is a great demand for interior decorators. I have already undertaken contracts for display in exhibitions and shops." More and more girls are job-conscious, but very few are still ready to work away from home. And many choose fields where jobs are easier to get. Twenty-year-old Usha Nath is becoming a medical laboratory assistant. Why did she choose this line? "Because it is very easy to get a job in a hospital or a health centre," is the reply.

A SENSE of direction appears to be lacking in the non-technical institutions. After college, what? "Well, the question mark answers



the question—frankly, I don't know", says 20-year-old Gautam Ahooja, studying in the final year of M.A. Economics.

In the arts colleges it seems that most of the boys select their subjects without any particular career in mind. At school there is practically no guidance as to what particular course of study would suit a student most. Parents do their best to guide, but often they are not equipped to judge the inclination of the child and link it to job opportunities. A large number of boys, in selecting their subjects, trod the path on which their fathers walked. Most fathers put the highest premium on security; play safe, is their motto. Also, they are often traditional and conventional in outlook. They frown upon adventure, on anything new and exciting as a childish dream divorced from reality.

And "so after college, what?" becomes the most perplexing and often frustrating question for many young men in their final year.

For those whose families are well established in the commercial world or in Government service, there is often a feeling of reassurance that "my father's 'contacts' will see me to a good firm job." The bright student in a good university can always try for the I.A.S. Even many of the bright science students go for the I.A.S., without any apparent regret or sense of loss. Few want to teach because it is not paying. But the question is most frightening to the thousands of students from lower middle class families. Anand Goswami, for example, is an average student. With a little bit of work and luck, he is sure of getting through the B.A. Pass of Delhi University. But a B.A., as he says, is no qualification. His father, a retired mechanic, has no "pull". "The University Employment Bureau is not much of a help", he complains. "They are only good for very low-paid posts like junior stenos and clerks. So the future seems like a nightmare where nothing is certain."

The nightmare is more frightening for the student who has the misfortune of studying in the lesser known universities.

Here standards are appallingly low. Most of the teachers lack the necessary teaching qualification. And the students? "I interview hundreds of them for clerical posts," says Mr Udeshi of the Delhi Cloth Mills. "Many of them do not get jobs for months after they graduate. And the

reason is not far to seek. Most of them have made no effort, they have no self-confidence, no general knowledge. They hardly ever look at a newspaper."

FOR a young boy of adventure, who is prepared to go out in search of unconventional opportunities, the door suddenly opens up. Take the case of Surinder Siddhu. He comes from an agricultural family in a small village near Patiala. His father sent him to school and then to college in Simla.



On the other side of the river. They grow up playing 'Gooli-Danda'; A sullen look gets printed on their face; between them and the educated boys, yawns a great divide.

At college he got interested in dramatics, chucked up his studies and came to the National School of Drama in Delhi. Here was a line his father hardly understood and, in any case, he could not afford to support him in Delhi. Surinder approached the Director of the School who asked him to appear for the scholarship examination, "And from then on, it was smooth sailing." Now, having completed the course, Surinder plans to launch a mobile theatre company to tour Punjab.



For a student of merit and ambition poverty need not be a problem. Analytical studies made by the Union Public Service Commission show that a fairly large number of entrants into the I.A.S.

and the "Allied" services belong to middle class families of modest means. The merit and other scholarships have certainly opened up opportunities for a very large number of young people. What perhaps is really interesting is that once in a while even a girl gets into I.A.S. although her parents are poor. For example Asha, daughter of a fruit-seller. She is now an I.A.S. officer and her sister wants to study medicine. Neither the father nor the mother has been to school but they were determined to educate their children.

For the less ambitious and those who are not academically inclined, polytechnics and training centres have opened up new opportunities. Unfortunately, there are not enough of these institutions in the country; we need many more. But the network of institutions now existing have already created in their neighbourhood an awareness of the importance of vocational training as the key to a better future. Eighteen-year-old Jagdish, son of a construction labourer, read only up to the eighth class. Poverty compelled him to give up school and he had to take to car-cleaning and polishing to add to the family income. But he knows that he can go to a technical school and he is working hard to save money to join a nearby technical training centre.

Two Worlds That Seldom Meet

In the world of youth, however, a great divide exists between the educated classes and the huge mass of uneducated people. Within educated classes money, of course, draws dividing lines. Even in a place like the Delhi University campus, there is a social and cultural divide between students of St Stephen's college and those of some others. The public school boys develop a personality and a behaviour complex of their own. But within the educated classes social barriers, though still quite strong, are steadily breaking down.

The barrier is perhaps stronger today than in the past between the educated and the uneducated. In all metropolitan cities there are actually two worlds of youth — the world of the educated classes and the world of the illiterate manual workers many of whom belong to the scheduled castes. In the villages, although untouchability has been abolished by law, relationships between the lower and the upper castes remain frozen. In the cities the freeze takes on fearful aspects, all the more so because the affluent and the poor live within a stone's throw of one another. Beautiful, fashionable, modern houses stand within a few hundred yards of sprawling slums. Young boys and girls from the world of the rich cross every day the world of the poor. But there is no communication. Children of even lower middle classes whose fathers get no more than Rs. 4,000 a year and who live in the vicinity of slums, who walk to schools by *kucha* roads with stinking cess-pools and strewn with litter along which the *jhuggis* are built, hardly ever stop to say 'hello' to a friend in the slums!

In the slum areas around Delhi and in all other metropolitan towns children grow up into adolescence and their faces become sullen, hard — even cruel. The most potent instrument of breakthrough is education of which they have had either none or very little. Their fathers usually work as sweepers, household workers and unskilled labourers. The boys go to a local school for a couple of years, then give up and the fathers could not care less. The girls stay at home to help their mothers and, in many cases, as they grow up they go out to work with or without their mothers. In their late teens the boys find odd kinds of jobs in automobile workshops, petrol pumps and in *mandis*. Some become shoe-shine boys. Most of them take to their fathers' professions. The parents are reluctant to send the children to schools run by the Municipal Corporations. "No work is done," complains a 23-year-old employee of the Delhi Municipality. "My six-year-old daughter has been going to the Corporation school for four months and still she could not write a single word."

In the universities boys and girls from different socio-economic backgrounds are thrown together. Inevitably, there are two distinct groups — the elite from affluent and upper middle class families, and the "others" from the lower middle class families. But the two groups are more flexible than they were even ten years ago — there is much more crossing over the line, though group-consciousness is still there.

Perhaps one of the best places to watch this in practice is the Delhi University Coffee House. Winter or summer, during termtime, the small barrack-like cafe is always full. Around some tables sit the glamour girls with back-brushed hair, and the drones whose scooters are parked outside. On others sit the *bahenjis* wearing a plait or a tight bun, and shy young escorts. But here and there is a table where there is a mixture of both, discussing a seminar paper or the college play. They exchange notes, work together in the library, visit one another at home.

"When I joined in 1962 there were two groups in the hostel — the public school and the others," recalls a final year student. "But the two never met outside class. Now the groups are still there but we get to know each other outside class at the drama club or the debating society."

But between the university students and the village, the gulf is as wide, if not wider than it was for past generations. "Most of us don't think of the villages because we just don't know anything about them", says a student of Hindi literature. "The newspapers say very little about them, neither are we taught much about rural life." What about going to teach in a village? A few do think of it, "but it is just not the thing done".

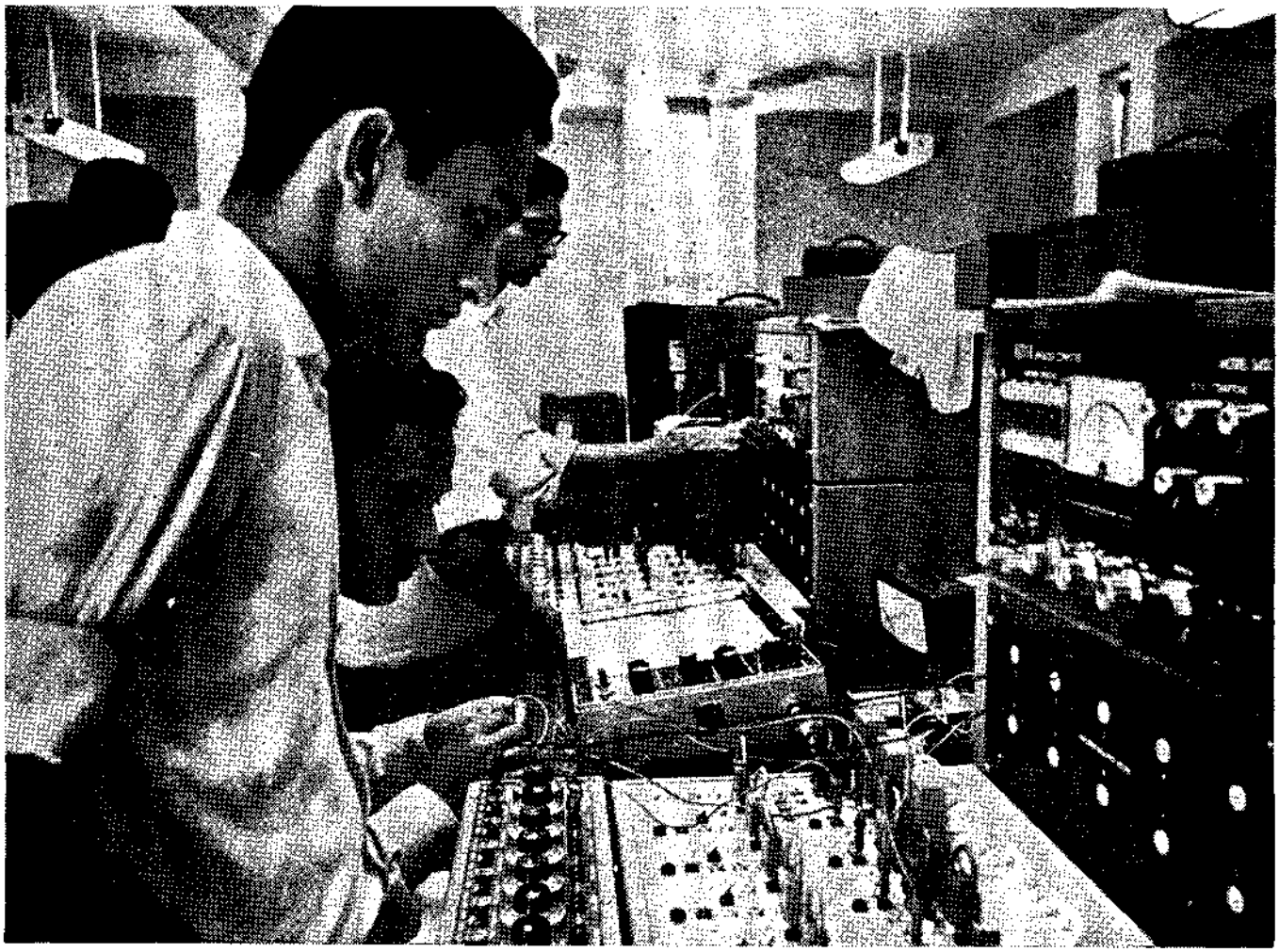
The spirit of adventure is not lacking. Rural reconstruction could attract the daring spirit of another sort — we could have our own Peace Corps; but right now, there is no effective organisation to create and channelise the enthusiasm. The total indifference of the university student towards rural life is not due to the so-called Westernisation of our youth.

The young people of India are today more adventurous than ever before. They scale moun-

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Living with a Technological Revolution

P. R. GUPTA



Fifth-year Aeronautical Engineering students of IIT Kanpur operate the Analogue Computer to solve some of their assignments (USIS photo by A. C. Pasricha)

Science and technology have begun to touch Indian life. The impact is greater in the big cities, just visible in the towns, and only barely traceable in the villages. And science has already brought in its trail new problems, tensions and anxieties, making the fermented Indian society seek a new balance.

IF politics is the art of the possible, science defines the limits of what is possible. While science can formulate technological solutions to various problems that face people, the basic task is indeed social. Opportunities offered by new technology can be fully grasped only if people are able to adjust themselves and accept new solutions and situations.

This conflict of science and society, of modernisation and tradition, determines the rate of social

change. The cultural barrier is often more formidable than the technical barrier. Failure to recognise the social problems implicit in new technology will not dispel them, while failure to cope up with them may be costly.

The fundamental problem, then, is to prepare people and their social institutions for the technological revolution. Eventually, not machines, but men set the limit of economic development. Social habits and attitudes could frustrate hopes of realising such a future. India is presently in the midst of such a dilemma. In the past, she had successfully faced similar predicaments.

Today, people are astir with new expectations, alive to new potentialities and demands of technology. To tap this mass urge with a minimum of heartaches is the challenge that faces the country. It will enable people to ride the wave of scientific progress and bring to realisation the promise of technology.

The gap to be bridged between technology and social morass is much wider in emerging countries like India where new discoveries and inventions did not evolve out of immediate social needs, as they did in the West. This process of leap-frogging out of one age into another is not altogether painless and does create conflicts and tensions on the indiviual and the society he lives in. To emerge successfully, these forces must be contained and directed into constructive channels.

In India, there are numerous examples of the changing social attitudes to the stimulus of up and coming technology. Under the impact of modernisation and its scatter into the rural India, the narrow tribal outlook is changing.

Shed Tribal Outlook

What happened in a local store in Delhi typifies this change. A lad was questioning the shopkeeper about eggs, their prices, their quality, their sources of supply. Provoked by the abnormal interest of the boy in eggs, a teen-age girl shopper, obviously known to him, teasingly asked him: "Oh, Jain! Will you touch an egg?" To this, the boy retorted: "I will not only touch it, but eat it, too." This incident could have taken place anywhere in urban India.

Last month, a newspaper reported a proprietor of Bombay's Irani restaurant, a symbol of the common man's tea-shop there, bemoaning that: "We can't stand competition from these newly emerging Udipi houses. They give cheaper and better food. After all, the South Indian *dosas* and *idlis* have acquired national fame."

Varanasi, India's holiest of holy cities, has launched many movements. This month, the 100th Diesel locomotive ceremoniously whistled out from the newly completed Diesel Locomotive Works. Another pilgrimage centre, Hardwar, is resounding to the blasts and buzz of a fast-rising industrial complex. Early this month, India's biggest heavy electrical plant was commissioned there.

Ludhiana, in Punjab, is a showpiece of industrial entrepreneurship—a town of small men with big ideas that demonstrates in practice the spirit of self-reliance. A cluster of small-scale industries there reflect the reservoir of technical ingenuity that can be tapped locally.

In Delhi, hundreds of school students flock enthusiastically and form one giant "classroom" for lessons given by the TV teacher. A new medium, the educational television, has now come to stay for teaching and social uplift. At present, there is no better audio-visual medium for mass persuasion which can skip the literacy barrier. Besides the educational TV, students are also benefiting from aids such as films and film-strips.

Putting in perspective the changed educational outlook, a Delhi school teacher stated: "It is not just the gadgetry, but the basic concept of education that is being transformed. The learning by rote is giving way to learning by comprehension. The student is no longer the passive listener to the erudite effusion of his teacher, but participates in the learning process. His classroom goes beyond the four walls of the school, with visits to local museums, laboratories, zoo, and so on, that relate his teaching to everyday life."

Technology and Villages

For millions of people in India's villages, their contact with technology is still very limited. It may be through the chugging tubewells drawing out the reluctant water from underground, or a channel of irrigated water coaxed into parched fields. Or, it may be the marvellous electricity that literally illuminates their lives as it streches their working day. Or, it may be the honking bus that passes by its dusty route.

The life of village India has been visibly touched by the mobile DDT-spraying squads. They have reached the remotest hamlet and successfully eliminated malaria, a scourge that once affected 100 million people. Ranked among the world's outstanding health achievements, India's malaria eradication programme has won the war against



An anti-malaria team in a Madras village (WHO photo by P. N. Sharma)

the Anopheles mosquito. In India where 800,000 people once died of malaria, none now does. This and other public health measures have added eighteen years to the life of an average Indian. His life expectancy is now 50, against 32 in 1950.

The changing agricultural scene in the past fifteen years gets little attention against the backdrop of the critical food shortage. The so-called tradition-bound Indian farmer has chalked up a record that could be an envy of a cultivator anywhere in the world. In the past fifteen years, the foodgrain production has gone up by nearly 80 per cent and overshadows the record of the Indian farming in the first half of this century. Significantly, the fertiliser consumption has multiplied ten-fold and exceeds 500,000 tons.

The impact of technology on social life in the country within the past two decades is reflected in the increasing utilisation of and reliance on technological amenities. It is well to remember that the steam engine rolled in the industrial revolution. In India, more bicycles and automobiles are on the road— the annual production of bicycles is now 17 lakh and of automobiles 70,900, a seventeen-fold increase since 1950. In fact, the length of the surfaced roads has nearly doubled to some 284,000 km. The annual production of radio sets has soared ten-fold to over 5 lakhs. The new mobility of men and minds, generated by the increased facilities in urban and rural areas, has resulted in cross-fertilisation of ideas and contributed to the accelerated pace of social change.

On this aspect of the changing Indian scene, one journalist remarked: "We are living in 'electrifying' times. Twenty years ago, my father would not have believed that his son would watch a TV programme at his home, sipping a cold drink cooled in a refrigerator, with potato chips fried over bottled gas."

A senior scientist, however, was not so enthusiastic. His view was that these amenities have created for many a nightmare of leisure. Many housewives who use these modern gadgets do not know what to do with the time saved. The result is a neurosis of mind, or hypochondria, or both. Talking generally, he continued that in India, science has multiplied new wants and made people aware of them, but has provided no satisfactory way of fulfilling them. This has resulted in frustration. In advanced countries, fruits of technology — radio, TV, refrigerators, washing machines, cars, etc. — are shared by virtually all. Even a scavenger goes out with his family for week-end trips in his car.

An international civil servant, with a Gandhian outlook and live ties with his village in Punjab, observed that science has enriched life. But he was not sure whether it has added to individual productivity or engendered enlightened attitudes among people. Looking back over the past two decades, he noted a marked shift in physical conveniences. In his own office, he observed that 70 per cent of the staff now use scooters, in place of cycles, for coming to the office; the traditional *khus khus* has made way for centralised air-conditioning, and the portly *surai* has been replaced by a water cooler; clumsy pins and messy gum bottles are now substituted by handy staplers and adhesive scotch tape; in place of wood furniture, there is the elegant steel. But all this is new wine in old bottles. People have not changed. Koestler's picture of "urban barbarians" often seems to come alive, when looking at some of the common social behaviour in public.

Science Needs No Apology

What is really sad, he continued, is that science and its outlook are being "sold" as a Western commodity. There is no need to go about disseminating science in an apologetic way. Science is not at all alien to the Hindu philosophy. For observing a phenomenon, the first of the eight *pramans* (proofs), according to the Vedas, is *pratyaksha* — believe what you see. This emphasis on personal observation is also the cornerstone of science.

Speaking for himself, he said that "science has clarified and intensely deepened my understanding of the Indian philosophy and values of life."

A facet of the changing social values pinpointed by a veteran librarian was the increased concern for documented facts than traditional opinions or hunches. This interest is reflected in the use and demand for reference service in specialised libraries. At these centres, a systematic search of published literature is undertaken on a continuing basis for "bits" of information that would be applicable. The impact of technology is visible in the modern library of today. It is no longer a dull, musty and dreary place, but bright and comfortable — lit with neon tubes, air-conditioned, inviting furniture and layout that attracts the reader. While the physical change is impressive, more significant is the altogether changed concept of a librarian. No more keeper of books, he is now a fount of knowledge — not for its storage, but for its active use.

Harvest of Problems

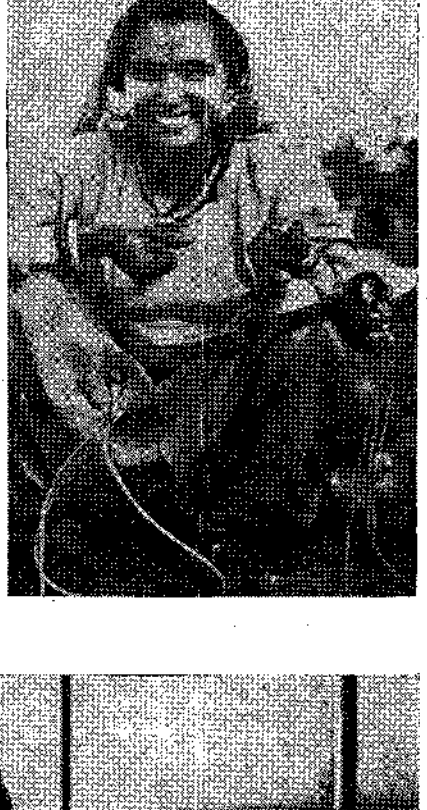
The process of modernisation and urbanisation has brought forth its harvest of problems. New social tensions have been generated, following the disintegration of the joint family system, new demands of the city life that call for a change in concepts of health, hygiene, recreation, food, clothing, work discipline, and minimal social control. Bursting cities are breeding worsening slums, deplorable sanitary conditions, and lowering living conditions. While villages are decaying, cities are becoming unhabitable for the vast majority. Added to all this is the mad race between production and reproduction. India's millions are steadily reaching the proportion of a billion. From some 360 million in 1950, the population crossed the half-billion mark in mid-1966.

Such a situation makes many complain that all sciences are considered by their practitioners as equally significant, by people as equally incomprehensible, and by administrators as equally expensive.

Frustration with science stems from the common habit to look at it as some magic with its own mumbo-jumbo. While science is international in its outlook, social attitudes are stubbornly tribal. Merely waiting for the technological revolution will not do the trick.

THE WOMAN INVADES M





Miss Sarojini (above), a self-confident advocate in the Supreme Court. Shanti (right), the vegetable seller, who wants to make her son "a technical". Ila Singh (below), who was an air-hostess and thinks "it has certainly been worth it".

Photographs
by T. S. Nagarajan



Usha Chettur

Many windows have opened o
of Indian women. Professions hit
as men's only have now become
In husband-wife relationship, equal
firm roots. For the first time a
opened between man and woman
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Beauty parlours symbolise the
preoccupation with her face; v
villages, no woman can now do w
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Nearly sixty million Indian w
In the coming elections, 110 millio
have the vote.

SHE is still the "better half", and will rem
for ever. She is still modest and sh
to be so for ever. And yet the Indian wom
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Her world is far from uniform; in f
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Nevertheless, she is a little different
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pattern of her life, perhaps more spectacul
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Women form about 48 per cent of
in 1961, the total women population was
lion. What we do not always remember,
this is far from an idle mass of people.
lion women are placed in the Census u
category of "workers". By the very natu
economy, 55.7 per cent of them all (that
million) work as "cultivators".

One of the major indicators of socio-
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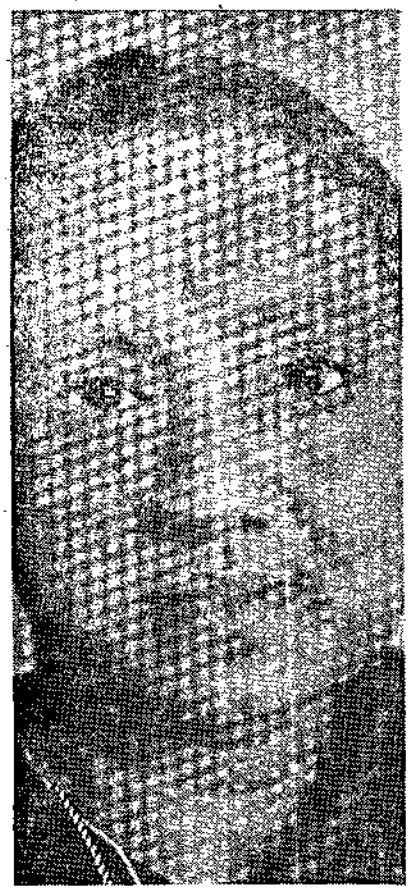
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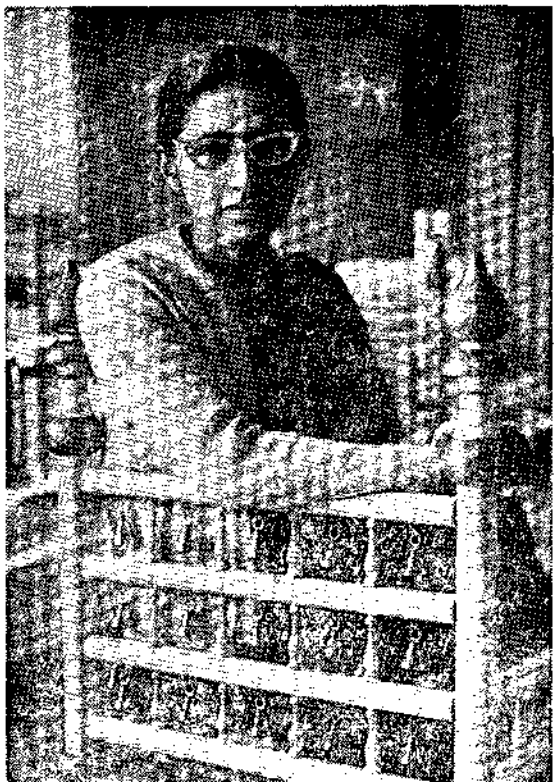
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Beauty is the business of Manjula Saluja (above). Mrs Kamala Devi (left), a tele-communications engineer, and a practical mother. Mrs Talwar (below), who has built up a thriving furniture manufacturing business and Mrs Sheila Sandhu (below left), who directs a big Hindi publishing firm.





women workers. The number in 1951 was 3.74 million. "Other Services" include public utility services, public services, education, science, medicine and various learned professions.

It has been calculated that about six lakh women work in 'modern sectors' of the economy, and almost all of them are at least matriculates.

A Niche Everywhere

Indian women have thrown up from amongst themselves not a small share of doctors, teachers, nurses, social workers, and politicians. At least 100 women today preside over village *panchayats* all over the country, while thousands have been elected as *panchayat* members. In Indian politics the woman has more than established her position. What is perhaps more remarkable is the many new avenues that have opened for the Indian woman since independence—avenues long considered as "for men only". We haven't sent a Valentina Tereshkova up into outer space, but we have turned out an Indian woman parachutist. We have a woman channel swimmer too. Except in the still exclusively male Indian Police Service, women have found their niche in almost every department of Indian life.

In a democracy with universal adult suffrage, women are a great political force. The number of women voters has risen from 38.7 million in 1957 to 110 million in 1967. Women constitute 48 per cent of the Indian electorate. More women are now members of political parties than ten years ago; in the ruling Congress Party, for example, they form one-third of the total membership. Analysts say that in 1962 women voted generally as their menfolk did; this pattern may not be totally repeated in the forthcoming general election.

For, as more and more women have invaded the men's world, not a few of them have, in recent years, developed their own political preferences.

Women who have spearheaded the feminine invasion of a hitherto exclusively male world, are business executives, engineers, administrators, diplomats, chartered accountants and industrial entrepreneurs. In this traditionally man-dominated society, men have not merely accepted, perhaps not without a growl, women as their equals; they have also submitted to the discipline of the woman boss.

Head of Publishing Firm

Mrs Sheila Sandhu entered the reputed publishing house of Rajkamal Prakashan (one of the established Hindi publishers since 1945) to take up the top managerial post. In 1965 she became virtual head of the organisation. She was not only the first woman Director of the firm, she was also there by virtue of being a part-owner. "Business was not part of my family or blood", she confessed during an interview. A former professor at the Central Institute of Education, Delhi, her only contact with the press and publishing was some voluntary help given to a weekly magazine run by a few like-minded friends. "That was just love's labour." Her present job is something quite different. Feminine intuition, tact and a lot of enterprise helped her in the confidence of the male world surrounding her. She retained most of the old staff, slowly proceeded to learn every aspect of the business. "It has indeed been a stimulating challenge and an education in itself," she said.

Mrs Sandhu can today talk authoritatively on every aspect of a publisher's job. She is a manager-*cum*-public-relations-*cum*-welfare officer to her 120 workers. There has been a marked improvement in sales in this business of slow returns and Mrs Sandhu hopes to expand the press section. She has maintained the all-male character of the business except for her own personal assistant.

Intruders in Men's World

Law, Journalism, and the Administrative Services are other fields into which the post-Independence woman has ventured more and more. In these new fields, however, the woman begins with a disadvantage—*being a woman*. She has to earn her deserts in a world of men!

Miss Sarojini, who works in the Supreme Court, feels that, once a certain seriousness about one's profession is maintained, male colleagues are not only sympathetic but also appreciative. But yet another young woman lawyer felt that a really flourishing legal practice is not within the grasp of the woman lawyer, as yet. "One starts off under a senior advocate—and one is likely to remain there—picking up the chicken-feed he throws at you by way of independent cases," she asserts.

A cub reporter on a metropolitan newspaper felt the same. "Whether out of sympathy or lack of confidence —the woman reporter is invariably sent out to cover only 'feminine' subjects."

There are several women lawyers in the Supreme Court today. But no leading metropolitan newspaper or periodical has yet seen a woman at the apex of the editorial ladder. Even *Femina*, India's leading woman's magazine, has tried and trusted a male editor.

Miss Anna George is one of the senior-most women in the IAS. Every year on an average about 10 girls choose the IAS as a career. Miss George feels that though power and responsibility are impressively placed in the hands of the administrator, she reacts unnaturally to it. Very often, specially in the districts, in her over-anxiety not to identify her action and decision with anything that is remotely feminine, she swings quite to the other extreme and adopts an abnormally brittle firmness which is quite unlike her. This in the administrative service, at least, is because of the consciousness (unfounded or otherwise), in the early stages of her career, that she is on trial far more as a woman administrator than just an administrator.

New Feminine Enterprise

Mrs Talwar is a symbol of new feminine enterprise. She is the innovator and builder of a thriving business in household furniture which has already captured the foreign market.

Her case is all the more remarkable because Mr Talwar is a new 'modern' Indian husband. Completely dissatisfied with the drab, commonplace furniture available in the country, Mrs Talwar set to work on a design for a telephone chair four years ago. She had neither training in design nor any knowledge of the craft of furniture-making. Starting with a carpenter whose most artistic handiwork did not go beyond

making wooden window-panes, she came out with a set of chairs, technically correct, artistic and sophisticated in design. From these modest beginnings *Alankrit*, their exclusive shop and workshop in New Delhi-Faridabad, took shape. Today a piece of *Alankrit* furniture in the home is almost a status symbol. Her husband, a production engineer, has given her practical guidance and encouragement which could well be the prime factor of her fantastic success. *Alankrit* reaped Rs 60,000 in the first year; the latest r.turn is Rs 2 lakh. Mr Talwar even contemplates moving into *Alankrit* whole-time, instead of as a part-time accountant and well wisher.

A Young Woman Diplomat

Helen Mathai is a young diplomat who is looking forward to her first posting—Mexico. Her husband is a doctor doing his internship at a hospital in New Delhi. Doctoring and Diplomacy do not make a frightfully untoward combination, but what about the 10,000 odd miles between Mexico and New Delhi? Says Dr Mathai, "There are adjustments to be made in every marriage —in our case it is only more so. We can definitely work it out, somehow. It is certainly not fair to ask her to give up at this stage what she has worked for, for so long, is it?" Helen Mathai giving credence to her 14-odd months of training, adds, "If the question really comes to a head and I have to choose— I would give up my career straightaway."

Helen Mathai and Dr. Mathai did not have a "love marriage"; the two families in Kerala had been known to one another for many years, and it was one of those "arranged" marriages which reflect the rising stature of the young Indian women. Though "love marriages" are quite common and inter-provincial marriages are increasing year by year, the vast majority of educated Indian girls accept "arranged" marriages without grumbling. The group decision, custom and tradition are still very strong; but the "arranged" weddings have undergone a qualitative change, because most parents take into consideration the preferences and sentiments of their daughters, and try to so choose the "boy" as would correspond to the tastes and culture-leanings of the "girl".

Husband-Wife Relationship

An important change has occurred in husband-wife relationship. In the old society, the husband was, for the woman, only one member of the big joint family; they saw relatively little of one another except at night. Now, in the small single-unit families, marital relationships are based on equality; there is a sharing of life together; in many cases, there is joint planning. All over the country, in all classes of people, a dialogue has begun between man and woman. The process started many years ago, but it has spread to the lowest remove of society mainly during the past two decades. When the villager comes to the city leaving his wife and children behind, he closes the dialogue with his woman. When he brings his wife to live with him, he writes a new chapter in his, and the community's life. Wherever one may go in India today, one sees men travelling with their far less urbanised wives, and introducing them to the wonders of city life.

Many indeed are the changes that have entered husband-wife relationship. For the first time in this society hundreds of women have to work away from their husbands. They meet during vacations or holidays. It is not rare to see a father taking his children to a hill station in summer while the mother is "tied down" to her desk or workshop. For hundreds of years, only a man could leave his newly-wed wife with his parents and go abroad for higher studies. Today girls too have started going abroad for similar reasons, leaving their newly-married husbands behind.

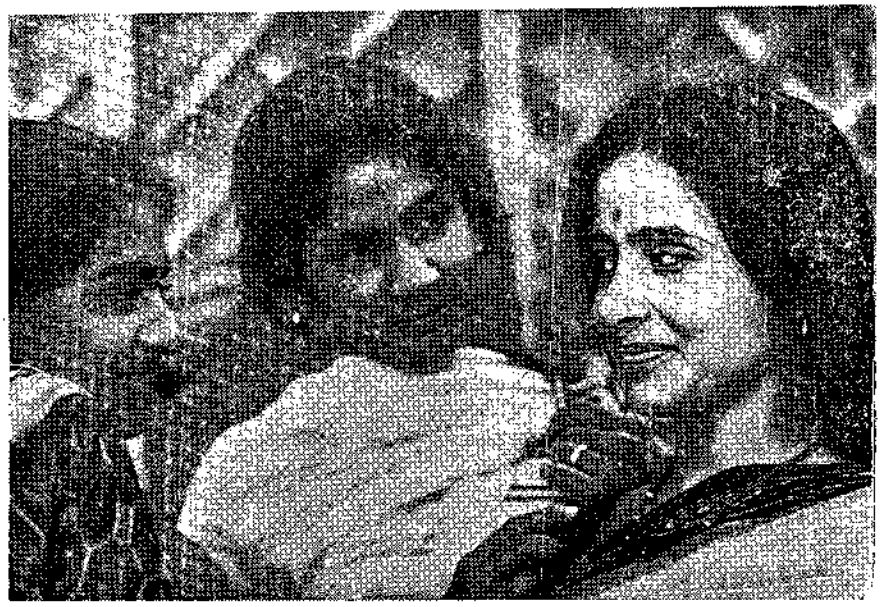
Children today are certainly not viewed as the sterling symbols of the eternal unity of *Purusha* and *Prakriti* whose duty it is to follow a well-defined idiom. The modern mother is far more realistic. Mrs Kamala Devi is a Telecommunications Engineer in All-India Radio with over 12 years of service. Her husband who is in the Railways is also an engineer. Her young daughter in school is good at Maths. But her becoming an engineer does not follow. "She will take up engineering only if she wants to." Mrs Sandhu, the publisher, is another practical mother. Her daughter who leaves school this year, will work at the Publishing House—in all the departments for a short period till she joins college—"just to help her make up her own mind later."

Aloka is a professional dancer at the Bharatiya Kala Kendra. Her husband, Sekharan, is also a dancer, but it does not follow that Ambika, their four-year-old daughter, should train to be a dancer too. "Dancing is in her blood. We would like her to dance, of course, but it is equally important for her to have a formal schooling so that dancing is not her only opening and she is forced to take it up because she can do nothing else."

An Air Hostess without Regrets

With the increase in the opportunities for women, it follows that there are fewer and fewer careers which are any longer treated as "suspect". The professional artiste of the stage and theatre, the dancer and the musician have practically no stigma attached to them. Air-hostessing used to be a career frowned upon as "not so nice." But a survey shows that every year the cross-section of girls joining Air India is as varied as ever and comprises girls from the so-called "good families" as well.

Ila Singh was an Air India air-hostess with two-and-a-half years of flying to her credit. She was definitely from a "good family". With a first class graduation degree and courage of her convictions she joined Air India. Her father gave her a two-and-a-half year let-up and all the gaiety and glamour of her career did not make her over-stay her lease. She now works with Japan Airlines as a PR girl on the sales side. How do her parents and her community in Bihar feel about her now? "My parents would, naturally, like to get me married. If not a Rajput, just any Indian would satisfy them now. My community has never quite understood or forgiven my father for giving me a long rope—they are just waiting to see me hang myself with it, I suppose." Does being a non-conformist pay? "It has certainly been worth it. I feel more independent now and,



Aloka, (extreme right) who teaches dancing at the Bharatiya Kala Kendra, New Delhi.

what is more important, I realise the value of it. I always wanted to travel and I did," she looks back to her air-hostess years, with no regrets.

Covering up and Uncovering

In fashion, the Indian woman avoids erratic changes, but she is certainly more fashion-minded today than she was twenty years ago. And while talking about fashion, it is curious how, on the one hand, millions of women have learnt to cover their bodies while millions of others practise various ways of uncovering them. In the villages of Kerala and all over the tribal areas, women who had long been used to leaving the upper part of their bodies uncovered, have now covered up; while in the cities, at least in the more sophisticated circles, it has become fashionable to expose more and more of the feminine form. The sari is tied below the navel; cholis are short; some are back-less, tied with a draw-string—all fashions of an ancient age.

While in the urban areas cosmetics impress upon our mind the care the modern Indian woman takes to keep herself prim and smart and to look a little more than her very best, in the villages the soap has entered almost every household. Always famous for her personal cleanliness, the Indian woman in the village today cannot think of living without soap, and likes to have a face powder and perhaps a cream too. In sophisticated urban society, the beauty parlour—there are at least a dozen of them in our main cities—symbolise a new trend. Make-up is no longer an art; it is a science. And because it is so, and because more and more women are ready to submit themselves to beauty treatment, it has also started being business.

It is business for Manjula Saluja, Manageress of a beauty parlour in New Delhi. A science graduate of London University, she turned to a training Institute in beauty culture. It was not long before she realised that beauty was certainly not for the birds. After working in England and Europe she returned to India and ran her own beauty parlour in Bombay, where women are far more beauty-conscious. In Delhi she gets on an average 12 clients a day who come for beauty culture. "They are a mixed lot," she says, "people from all walks of life and from all parts of the city". Students and working girls are given concessions.

Loneliness For Many

As we have already said, the changing pattern of women's life in India cannot be described in a compact tabulation. It is a picture of great variety. Changes have not always meant happiness; in many cases they have meant misery and loneliness. Life has become particularly lonely for the old middle class mothers and grandmothers whose sons have either been posted far away from their ancestral homes or have set up their own families. New values, new ideas of human relationships, the tremendous movement from village to town have, in many cases, brought tension and conflict and these have touched the women more than the menfolk. What is noteworthy is that at no level of society, life for the Indian woman is what it used to be 20 years ago. This is best illustrated by three women taken from three generations co-existing in a constantly changing society.

In the upper class we still have the mother who, having taught her daughter "a little French", "a few snatches on the piano", a bit of riding, waits for the right young man to come along who values just this sort of thing. Sometimes he does. But very often she is left waiting and wondering where she went wrong.

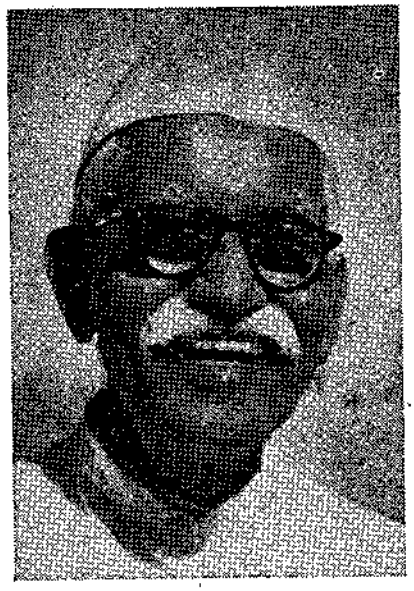
There is the grandmother from the middle class, a widow who has come to stay permanently with her married daughter—a thing she would never have dreamt of doing before. She made the trip all by herself in a few hours by plane. She sees that her son-in-law's nephew's wife is a girl from another faith and she has been accepted most whole-heartedly by her daughter's in-laws. Her own grandchildren do not look on her with reverence; but they like her and she is not less happy with them.

From the young generation, there is 24-year-old Shanti, married, with three children and the fourth on the way ("I have only *one* son, you know.") Shanti, whose stirring beauty has never really been appreciated. ("You say you like my face. But why?") She is a working wife and mother, supplementing her husband's income as a Mali. Shanti sells vegetables every morning and runs a make-shift vegetable shop in the afternoon. From her morning rounds itself, she earns about 60 paise, which is saved away. She has never been to school. She sports a dignity in her business. She never screams out her wares on the street—but goes to just a few regular customers. Shanti's children are all at school, and she hopes to make her son "a technical".

Shanti's, too, is a vibrant face of the Indian woman of 1967.

"A LONGER WAY IS STILL AHEAD," *Says Jugatram Dave*

J. C. DESAI



"We have gone a long way, but a longer way is still ahead," says Mr Jugatram Dave, the 76-year-old social worker of Gujarat. 'Jukaka', as he is lovingly known by inmates of his Ashram, is one of those devoted workers who have spent their entire life for the uplift and welfare of Adivasis and other backward classes.

Inspired by Gandhiji in the early twenties, the youthful Jugatram Dave decided to devote himself to the work of rural uplift. For his field work he chose Bardoli in Surat district which later became an important centre of the national struggle for freedom. Some spade work had already been done by other social workers like Maganlal Gandhi, Chunibhai, and Narhari Parikh before he arrived on the scene. Dave joined the late Narhari Parikh in Sarbhon Ashram. All these workers had come under the direct influence of Gandhiji who, while directing the freedom struggle, had enjoined on them to work in villages. Infused with missionary zeal, they triggered a revolution among the neglected and down-trodden people of the area.

As Jugatrambhai says, when they came to Bardoli the condition of landless agricultural labour, known as Halpatis, was extremely miserable. The Halpatis were treated like chattels. Under back-breaking debts they, along with their wives and children, had to work almost like slaves to Zamindars and Sahukars. They owned no land and did not get a just price for their labour. They were hardly given enough to keep their body and soul together. Equally abominable was the condition of the Raniparaj Adivasis who lived in the forest area round about. They were engaged by contractors for felling trees at a very cheap rate. Zamindars, Sahukars and contractors exploited these people and squeezed them mercilessly to fatten their own purse.

Such were the conditions, when Jugatrambhai, Chunibhai and others took up their work. It was an uphill task to break through the steel wall of superstitions, inhibitions, class and religious prejudices and, above all, the vested interests. Undaunted by odds and opposition, they set on their work. They observed that continuous exploitation had made the people दरिद्र (lazy) and दरिद्रता (laziness) brought दारिद्र (poverty). They had, therefore, to work to achieve the twin objectives of ending exploitation and removing laziness of the people by providing them with work to earn their livelihood with dignity and honour.

While Chunibhai devoted himself to the propagation of Charkha, Jugatram Dave paid his attention to the fundamental work of spreading education. The Charkha served two purposes. It provided useful employment and also instilled in the people a sense of dignity and self-reliance. Jugatrambhai believed that change must start in the minds of people if it were to be enduring. Only education could bring about such a change. This had to be slow but steady. "The work which a wind can do cannot be done by a whirlwind." He, therefore, started Balwadis and Ashramshalas. Adivasi boys and girls trained in these institutions over the past three decades have been the carriers of reform.

The other day when I met him in his Ashram at Madhi, Jugatrambhai told me that a breakthrough has been achieved but a long way had yet to be covered. Dressed in a short, coarse, khadi *dhoti* and collarless half-sleeve shirt, he sat cross-legged on the floor, with a small wooden desk before him. He looked askance and was rather cold when I introduced myself and told the purpose of my visit. He shuns publicity. He was, however, as kind as always and before long I regained my confidence as he became expansive. In slow, measured tone, he told me the story of the revolution started by a band of selfless, dedicated workers over a period of more than three decades.

Jugatrambhai said, "We have made great strides since Independence with schools, roads and communications established in distant parts. But the progress is in patches. It is a pity that benefits of the Plans have not percolated to the large masses of our people in rural areas in the measure in which they should have. Plans are good and well-intentioned but they lack proper implementation. If the best results are to be obtained, welfare schemes should be implemented through panchayats or peoples' voluntary organisations and not through official agencies. For this, panchayats should be revitalised and strengthened."

Jugatrambhai is simple and rustic in appearance. But behind his cold looks is a heart full of warmth and

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THE TREASURE HUNT

A Union Carbide salesman from India sings songs in Swahili. Another explores Australia...That's how export targets have gone up 20 times in 12 years.

The treasure hunt for foreign exchange has been long but rewarding. A Union Carbide salesman from India composes rhymes in Swahili, tells stories to children as he takes his van through the villages of East Africa. Starting with Egypt some years ago, sales executives continue to explore markets as far apart as Australia, Finland, Zambia. This year Union Carbide will export to more than 50 countries. Even the U.S.A. and Canada buy flashlight components from Union Carbide India – so excellent is the quality.

Union Carbide initially exported dry batteries only. Today the export range includes batteries, flashlights, battery depolariser, zinc products. Chemical and Polyethylene products, too, will soon sail across the high seas. From a mere Rs. 4 lakhs some 12 years ago, Union Carbide's export target has soared to Rs. 80 lakhs for 1966.

Union Carbide continues the hunt for foreign markets to support the nation's drive for exports.

UNION CARBIDE *SOWING THE SEEDS OF PROGRESS*

UNION CARBIDE PRODUCTS FOR INDIA'S HOMES, INDUSTRIES AND AGRICULTURE:

EVEREADY Torch Batteries; Torches, Torch Bulbs; Radio and Transistor Batteries; Telephone, Railroad & Industrial Cells; Mantles; NATIONAL Cinema Arc Carbons.
UNION CARBIDE Polyethylene Resins, Film & Pipe; Plastics; Organic Chemicals; Agricultural Chemicals; Metallurgical Products; Zinc Products; EMMO Photo-engravers' Plates.

PRODUCTIVITY : the only way to self-reliance.

Impatient, Ambitious

A Yojana Staff Report

IN many ways the new and the old jostles with one another in this country. Hardwar has a heavy electricals factory, Varanasi a diesel locomotive plant. Pinjor, famous for its Mughal Gardens, has now, just about a mile from it, one of the most modern and sophisticated factories in the country. A unit of Hindustan Machine Tools. And a new township, called HMT Township, now nestles at the foothills of the Simla hills.

He had a passion for beauty, the man who conceived of this plant and this township. On three sides the hills, never very high, give it their benign protection. Yonder flows a river, Kaushalya by name, which, in winter months, is as slender as a maiden's waist. Amidst the dry greenery of Punjab (or Hariana) landscape, hums this new centre of production; neon lights suddenly lit up the small township as you drive down from Chandigarh to Kalka: The factory does not offend the scenic beauty; in order to keep it low, it has been built somewhat underground. Under a single roof sprawls an entire complex of "shops"; —small parts, heavy parts and assembling—and behind the main building is the foundry. HMT, Pinjor, makes several sophisticated milling machines M-2, M-2 P and 2-D13; it caters both to the domestic and the overseas markets. This year forty machines are to be made for import to the United States. Among the countries that have bought machines made here is Czechoslovakia. The plant puts out about 60 machines a month —an average of two per day.

It is a young plant, only four years old, run entirely by young people. The General Manager, Prasanta Bannerji, is just about 40; most of the engineers are round about that age; and the workers, some 1,700, are, almost all of them, below thirty.

A Different Lot

They are a very different sort of workers, these young men who speak of the plant with a feeling of pride and affection because they have been with it from the very beginning. Pinjor is by no means an industrial centre; it is not even in the vicinity of a big centre of industry. Most of the workers come from agricultural families; land-based, they have no proletariat feeling of having been uprooted from the soil.

And yet they are not just workers; they are *skilled technicians*—matriculates, with a period of training at industrial training institutes, and then trained again at the HMT itself. You talk to them and you know they are a different lot from the workers you normally meet in big industrial centres. They have hope. They are impatient. They know they have learnt new skills. They are ambitious. You almost begin to like them at the very first encounter.

And suddenly your heart lifts up a little when you remember that there are 1,20,000 Indians going every year for training as craftsmen; and as many as 22,500 were getting training as apprentices at the end of September last year. For these are the men who are building, and who will build, the industries in our country.

Unfortunately, HMT, Pinjor, went through a fairly long strike recently. It was a rather 'nice' sort of strike. "Passing by the factory, you would't have noticed that anything was wrong", General Manager Bannerji told me. "There was not a single incident. We waved at one another as we met on the road; and human relations in this small town were not in the least tarnished".

Workers confirmed this. "There was nothing wrong between us as human beings", said Jagjit Rai, Vice-President of the Union, a bright-looking young man of 22, "we are very happy that it's all over".

One great thing is that in the first month after the settlement of the strike, production picked up very well, and the plant was able to do almost a record volume of business. It made forty machines last month, and every worker I met mentioned this with unconcealed pride.

It's Our Plant

But a strike is a strike, and there is a certain amount of suspicion on both sides. It was a bright sunny Sunday when, along with Metallurgist Sanjit Sen, and Personnel Officer Dillon I went to the workers' colony. A hockey match was going on in the spacious playgrounds, and several hundred workers were watching. I left my escorts behind and went up to a group. At first they would'nt talk. "Go and see the Personnel Manager", said a young Sikh. But soon the ice broke, and we were good friends.

"You know, this is a public sector plant", I told them. "Look at the township, how beautiful it is. I am sure it means something to you, something more than just working for wages."

"It surely does", said the Sikh. "We have been here from the beginning. It's our plant. We want it to do well."

"We want to do well too," quipped a fellow worker, a boy of just 21.

They are not doing badly at all. After training, they start on a total emolument of about Rs 180. There is an inclusive bonus of up to Rs 65 a month. Each worker gets a two-room flat, and the rent is Rs 20 or less. He gets a lunch (*chapati* and vegetable curry) for just 25 paise. He gets free treatment by an M.B.B.S. doctor, and free medicine. There is a consumer co-operative store from which he draws his daily necessities. There is a workers' club where several newspapers are available, and many in-door games are played. These young men work in the most hygienic of conditions—the workshops are completely dust-proof. Spotlessly clean.

"I should like to see your homes", I suggested tentatively, and was immediately met with competitive

hospitality. At the first flat we went to the worker, a young man from Hariana, was engrossed with his brand new transistor radio; his living room has a modest sofa set, and on the wall, along with religious figures, there was a pin-up film-star with a bewitching smile. In the kitchen there was a kerosene stove. "Don't you use coal at all?" I asked. "Not very much." In fact, few of them did. Perhaps because most of them were still bachelors. "But we have started getting married", said one of my companions. "In 1966 several got married. This year, perhaps more will be married." "You will then think twice before going on strike", I said. There was a collective nod of approval.

The kitchen gardens sported a variety of vegetables. At the second flat where we were treated to a sizzling cup of Punjabi tea (one-fourth liquor, three-fourths milk, three spoonfulls of sugar), I was pleasantly surprised to see a picture of John F. Kennedy hanging on a wall. There were pictures also of Nehru and Gandhi. And the inevitable pin-up film star.

They had their grievances. They did not make enough to maintain a family. Some had to get money from home. Yes, they got a promotion every second or third year, but it meant only two or three rupees more in their earnings. They knew their job, thought that they could do it as well as the supervisors, why, then, this difference in salary? Why should a B.A. Pass get more than a matriculate with several years of technical training? Why shouldn't they get at once the enhanced rate of DA announced by the Central Government? But by and large they had no bitterness in their young hearts. "Our General Manager is a very fine man, very sympathetic to us," they said. I had heard a reciprocal word from Bannerji—"They are a fine lot, these young people."

The canteen is run by a co-operative. It has to buy *atta* in the market at Re 1.20 per seer. How could it go on offering a lunch for just 25 Paise? On economic ground the canteen could have closed down. But the General Manager had taken up with the Civil Supplies people at Chandigarh the question of supplying ration to the co-operative at fair price shop rates. And he had succeeded in persuading the department to agree to his suggestion only the previous night. It was an action the workers wholeheartedly applauded.

"We want the plant to make more machines. We are ready to work. Why can't we make more machines and sell them in India and abroad?"

It wasn't difficult to explain to them why this could not be? The plant wasn't making transistors, was it? Even the small machines cost more than Rs 30,000 each. Industrialists buy them only when they are willing to invest. If there is a setback in the economy, fewer machines sell. And after all, exporting machines is not an easy job. HMT was, however, doing increasingly well with exports. Why build a machine tools plant at all? Only because we have to build machines for new industries. This is a pioneering field, where returns will take time to come in. They have to be patient. In the meantime, there was so much criticism of public sector plants, often by people who would like to see them fold up. Isn't it the duty of all of them to see that these plants were a roaring success?

It certainly was, they all agreed. "We shall never have it otherwise. This is our plant." But...They knew that there was a market for their skills. They could go to a private sector plant at a higher salary.

"But will you get such a nice flat for Rs 20? Free treatment and free medicine?"

There was no immediate reply.

And then suddenly one eager-looking young man spoke up, "I don't want to go anywhere. I want to make my fortune here only."

Our Young People

(From Page 28)

tains, learn gliding, and their hobbies include sailing and globe-trotting. They travel. They talk freely about many things, including sex and human relationships. They question. Their reading tastes are catholic and ambivalent. Most of them read popular foreign magazines such as *Time*, *Life*, *Encounter*, and *Reader's Digest*; quite a few read comics and some confess to reading magazines like *Playboy*. Their list of reading includes classics as well as modern "hot" fiction. In the semi-urban and rural areas there is, by compulsion, a greater appetite for Indian books in which the classical writers predominate. But, by and large, students are fond of modern writings in their own languages.

Almost as a rule, they are more conscious of the good things of life. They see more films and plays than their parents could even think of. Music, dancing and the fine arts have begun to touch their life. In the sophisticated urban society there is a lot of Western pop music and dancing. In middle class homes the radio and the gramaphone provide most of the entertainment, and there is, of course, the cinema. In the villages it is the radio which is giving young people an introduction to the world of entertainment. The traditional forms of Indian entertainment seem to be losing their grip on young minds.

Westernisation is an over-played myth. In any case, it is limited to a very small upper fringe of society. With education, modernisation of outlook is surely coming and the minds of young men and women are changing. But the old traditional values remain. By and large, there is no revolt against them. Perhaps the philosophy of the Indian revolution has caught the young people too. They want to change, but they are not yet ready for radical transformation.

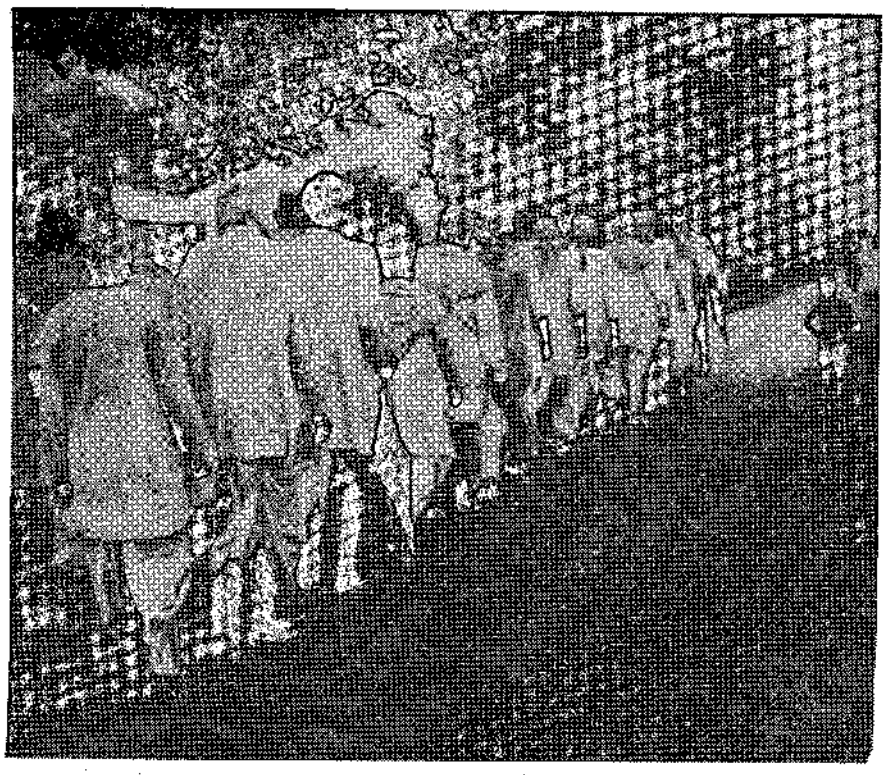
Fertiliser Plant

It is proposed to set up a fertiliser plant near Rishikesh under the Fourth Plan. Costing Rs 50 crore it will be in the co-operative sector.

Drinking Water

The Central Food Technological Institute at Mysore has developed process by which drinking water can be preserved in tins from six to nine months. The Institute now supplies all canned water required by the Defence personnel. The new device has resulted in considerable saving of foreign exchange as canned water was imported up till now.

Bhoodan Changes Life in 30,000 Villages and 83 Blocks



Common ownership of land by people who had no land at all for many years has led to joint efforts to change the old pattern of life. Many Bhoodan villages grow bumper crops; many have almost totally wiped out litigation. Thousands of people have discovered a new self-confidence, a new identification with the dynamics of progress. In the border areas of NEFA, Bhoodan villages have become fortresses of freedom.

Only the first stage of Bhoodan work has been accomplished. The second is far more important — reconstruction of village economy. This needs a large army of devoted constructive workers, which is still to be built.

BISHWA B. CHATTERJEE

THE S.D.O. himself was driving the jeep when we entered the village, somewhere in Rajasthan. The jeep was literally packed, with three block level officials including a B.D.O., one Sarvodaya worker, our team of three 'social scientists', a village level worker, a veterinary officer from the district, and the jeep driver. The veterinary officer was always on the look-out for cattle—stray, in herd, or in tether. It was a beautiful afternoon of late autumn. With the air full of unnamed fragrances, and the golden sunlight gliding, trembling, shivering, everywhere—on tree leaves, standing crops, slender streams, thatched roofs.

There were two rows of huts on both the sides of a rather wide, dust-covered road. And a sudden clearing on the left side where we met the group of, maybe, twenty or thirty men, women, boys and girls, all engaged in winnowing the freshly-harvested *kharif* crop. Suddenly a gaunt, tall, old man, all bones, and eyes still bright with a benign smile, saw the jeep passing, recognised the driver and some of the passengers, and ran forward, signalling us to stop—almost imperiously, but with a show of silent claim which issued more from affection than supplication. The S.D.O., the B.D.O. and the Sarvodaya worker were equally happy to see old Chhajjuram, the patriarch leader of that group. All of us had to get down from the jeep, and filed to the place where winnowing of the grains was going on, and had to sit down on a hastily spread out *chaddar* of rough khadi. Men, women, boys, girls and even children were busy—but most of them were chatting. Some were singing, others listening, and still others merely watching. They looked happy and contented. Harvesting a good crop is always a joyous event; but here, there was something more—a spirit of equality, a sense of fulfilment

shared by each of the thirty odd people was altogether rare. We were curious to know how this had happened.

At the insistence of Chhajjuram, we had to eat the *gur* brought by his grandsons, before drinking water. During that interval he told us the story, supplemented by the B.D.O. and the Sarvodaya worker, which was simple and brief. These were the five families who had owned no land since last 150 years or so; they and their forefathers had been for all these years landless labourers. As a result of *Gramdan*, some land was made over to them. When this happened, they could hardly believe that they actually owned land. And when they knew, they wondered what they were to do with the land gifted to them—what use could they make of it, they who knew only how to till and toil on other people's lands, sometimes as a share-cropper, or most of the time on a daily wage?

The Sarvodaya worker who belonged to this region advised them to pool their resources. After negotiations and consultations, some further exchanges took place and these five families got two pieces of land, instead of the previous five small fragments. They formed what really was an informal co-operative firm, and with guidance from the Block people, and with some trials and tribulations, produced a bumper crop in this, the second, year of their ownership of the land. One interesting result of this was that Chhajjuram and his band had come to think of the Block people as their own; the latter had begun to take a pride in the achievements of these five families—as one would feel about one's own kith and kin.

Before leaving, I asked Chhajjuram a straight question: "Baba, are you happy now?" A bright smile lit up the wrinkled face of the old patriarch. He clasped his gnarled hands in a salute and replied, "Now that we *all* have land of our *own*—why should we not be happy?"

"Oh, you have got now land of your own, but who gave you the land?"

"You are joking with me—*sarkar*. Everybody knows that Baba (Vinobaji) has given us this land."

"But did Vinobaji come here himself to give you the land?"

"*Sarkar* is very fond of jokes! Of course, Baba did not come here. But *he* commanded the people to gift their surplus land, and all these "afsars" and "Sarvodaya bhais" are only implementing his orders so that we, the landless, have now got land of our own. We have now a 'gram sabha' which looks after the welfare of all of us, the rich and the poor alike."

Such was the simple story of 72-year-old Chhajjuram—the patriarch of five families related by ties of blood, which have become like one family on the basis of common ownership of land which they never possessed before.

When we scrambled into the jeep and left the village, all the thirty odd people bade us goodbye with a new slogan, "Jai Jagat"—also given to them by Vinobaji.

We started discussing the reasons for this sudden and spectacular transformation of these people—what gave them the new self-confidence and freed them from the traditional shyness and indifference. The S.D.O. said the reason was economic—now they had got security by owning land, which they did not have before. The B.D.O. agreed with S.D.O. but one must also note the factor of cohesion and group leadership—all the five families were pulling together, thus getting the strength of group belongingness. To both, the argument of the Sarvodaya worker that the cause of the transformation of the community lay in the awakening of *Lok Shakti*—the power residing in people—was rather obscurantist, though they did not openly say so. To us, students of social science, the whole thing was revealing: we felt that all the three were right, because these processes were not isolated from one another, but complexly inter-related links in the same chain of social progress—built upon a simple urge to do things for our own kith and kin with our own hands, an urge of self-actualisation rooted in the history of man.

II

THE change that we noticed in one village in Rajasthan is being repeated in a variety of forms, in thousands of villages in India where, following "gramdan", constructive work has been taken in hand in right earnest.

Acharya Vinoba Bhave, fondly called "Baba" by millions of simple countryfolk, after much experimentation, has evolved a simple workable formula of "Sulabh Gramdan". The villagers have to sign a declaration which contains, in fine, only four basic conditions :

(1) We are giving a minimum of five per cent of our cultivable land for the landless of the village.

(2) We are vesting the ownership of all our land to the 'gramsabha' of the village. Our (and our descendants') right to this land (after deducting 5 per cent for the landless), will, however, continue.

(3) We will create a 'gram kosh' (village fund) by contributing to it one-fortieth of the produce of our land.

(4) All adults of the village will unite to form the *gram sabha* which will function either with unanimity or consensus, for the benefit of all people of the village.

When at least 75 per cent of the land-owning people of a village have signed the declaration, and at least 51 per cent of the total land have come under its purview, the village is eligible to be declared as *gramdan* village. Similarly, when at least 75 per cent of the population in a *Prakhand* (Block), excluding the townfolks or 85 per cent of the revenue villages of the Block have declared *gramdan*, the whole Block may be considered as *prakhand dan*. Participation in *gramdan* is strictly voluntary, depending upon the spontaneous desire of men to share their own properties with others. It is the work of persuasion, an appeal to logic, and kindness and desire for progress through group effort. This is the only method recognised for *gramdan*. A devoted band of Sarvodaya workers, under the guidance of leaders like Acharya Vinoba Bhave and Jayaprakash Narayan, are spreading the message of *gramdan* and *prakhand dan* in large parts of the country. Their achievements can be judged from the following figures of *gramdan* and *prakhand dan* in sixteen States.

State	*No. of gramdans*	*No. of prakhand dans*
Bihar	10,966	34
Orissa	5,241	14
Maharashtra	2,259	7
Andhra	2,152	2
Madras	1,867	14
Madhya Pradesh	1,805	4
Assam	1,341	—
Rajasthan	940	—
Punjab	144	—
Haryana	381	3
West Bengal	342	—
Gujarat	493	3
Uttar Pradesh	409	2
Himachal Pradesh	437	—
Kerala	409	—
Mysore	58	—
Total	29,474	83

(up to 15th November 1966)

This unique movement which has been slowly changing the face of thousands of villages has received support, sympathy and assistance from people of all walks of life: officials and non-officials, Rightists or Leftists, Communists or Swatantraites. No one has opposed it. Many have tried to help, often with enthusiasm.

III

THE most subtle changes go in the minds of men of the *gramdan* villages.

Most people still remember the disorganisation and demoralisation that swept entire areas in north Kamrup of Assam, with a focal point at Tejpur, when the Chinese were advancing in NEFA in 1962. The situation has changed completely now. To several people of *gramdan* villages around Kauli, bordering Bhutan, I put one question: "What will happen to you, if the Chinese attack again?"

The answer, though very indifferent appearing on the surface, had significance: "What happens to *India*, will happen to *us*!"

"But, take it from me, there will be no unseemly stampede any more. Come whatever may, we won't leave *our* village, which we have built up with our own hands", said Rohini Babu, the sixty-year-old *pradhan* of Gramsabha Chandranagar, of Kauli. Could there be a more unmistakable indicator of national integration and sense of belonging than this simple statement?

In another village I asked the assembled people, "I heard of *gramdan* achieving this and achieving that. Now tell me, what is the most important achievement of your village?"

The bluntness of this question perhaps bowled them over, as they began mumbling about opening of a Balwadi and of two handlooms and so on. But came forward a lady, the wife of the *pradhan*, and after a show of graceful shyness — she was about to address a *bhadralog* from outside by rearranging her off-colour sari to cover her head— spoke to me in distinct words, "We the women, have, through voluntary picketing, closed down two liquor shops; now our village has no licenced liquor shop at all! This, Sir, we consider to be the greatest achievement of our village." The clarity of her articulation was only matched by the ring of conviction in her tone.

I had asked the same question to a group of villagers in Kaliakhia in Balasore district in Orissa, bordering the Bay of Bengal. The old men did not know what reply to give. But a young man, who was a voluntary social worker, posed a counter question to me.

"There were 108 litigations last year before our village became *gramdani*. Today there are only 11 or 12 cases pending. All the cases have been withdrawn or settled by our *gram sabha*, and in our village lawyers will lose their trade. Sir, will you, or will you not consider it an achievement?"

I admitted that it was a fine achievement indeed, but could there not be something more positive, something more concrete and spectacular?

The young man promptly answered, "Sir, please come here again next year, or better still in 1968. We promise to become a substantial foreign exchange earner by that time. We are going ahead with our plans to grow cashewnut on *panchayati* land by co-operative farming, and we are confident of success. But please give us some time."

But perhaps more striking are some of the changes that are found in the social workers who volunteer to work in *gramdan* areas. More often than not a process of involvement and identification with the villagers takes hold of the social worker, so that chords of deep job-satisfaction are touched, and the social worker may not like to be transferred from his or her field of action even if administrative orders demand it.

That is why an Assamese girl social worker from Goalpara, after working for and with the villagers of Angarikata of North Kamrup, would rather leave the Bharat Sewak Samaj, her parent employer, and join the Shanti Sena Mandal than be taken away from the people with whom she had worked. So complete was her identification with the villagers that the very thought of going to another place was like "leaving our own men and women in the lurch," as she put it. Prasanna Pradhan left his political party to devote his entire time to constructive work in interior Balasore of Orissa, because, in his own words, "Now I can devote my entire time to *building*, instead of demolishing."

The story of Kalicharan of Hathi Doba is perhaps more touching. Hathi Doba, a village near the Bhutan border, was not a *gramdani* village when I visited that area. He wanted me to visit his village and stay there for a few days and enthuse the local youth to build a few wells through voluntary effort. When I said that I would visit Hathi Doba in my next trip to Assam, if only it became *gramdani* by that time. Kali Charan replied: "If that is the condition, take it that it is fulfilled. If you promise to visit Hathi Doba tomorrow *evening*, Hathi Doba will become *gramdani* tomorrow *morning*."

Gramdan and *Prakhand Dan* are only the first step of a peaceful revolution in our villages. The next step, a far more important one, that of reconstruction of the village economy and social life through wholehearted village participation, will require a very large number of selfless constructive workers. Is our country ready to undertake this task of ensuring that building up of village India from below is continued on the social foundation provided by *gramdan* and *prakhand dan?*

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When Light Comes To Village



LIFE CHANGES

Report and Pictures by S. RAMANATHAN

Electricity has lit up the life of half the Indian people living in the villages.

More villages in Madras State—eight out of every ten—have been electrified than in any other State.

Electricity has removed an ancient darkness, has brought cheer and gladness to village homes.

It has brought new industries and given a boost to agriculture.



Streets and houses are lit up. Below : A *Chakki* run by Power.



TEN miles west of Madras, less than four miles from the city limits, lies Periapanicheri in Chingleput district, an unpretentious small village of about 800 people, mostly farmers.

A hundred dwelling houses, including about 60 huts and 40 or so brick houses, unpaved dusty earthen streets, a stagnant pond and wells without parapet walls, an old temple and a mosque and nearly 110 acres of paddy land, these comprise the village of Periapanicheri.

The buses came and the dusty village roads full of ruts and pot holes were relaid and black-topped with macadam. The unsophisticated villagers were no longer isolated from the State's capital. Yet every time they took a bus ride to the city — these were few and far between — and got a view of the well-lit city, its broad roads, palatial buildings and business houses, its parks and gardens, the museum and the zoological gardens, the light house and the High Court building, the vast sandy expanse of the beach, their thoughts travelled dismally back to

their little village, where every day was as uneventful and monotonous as the thousand yesterdays, and nights seemed the longest, for when dusk slipped into night, darkness and gloom enveloped the village, and, in a sense, the lives of the people.

Periapanicheri was one of many villages which were so near the city or town, and yet so far away from modern, civilised living. Communication and electricity made all the difference between comfortable, cheerful living and a life in darkness and drudgery.

Those were the days of the kerosene oil lamps in houses of the better-placed, earthen oil lamps in quarters of some, and complete darkness in the huts of the lowliest. In more senses than one, the millions of poor people in the Madras State groped through the dark labyrinth of existence half their life time. Yet, nights to them were welcome relief, to rest their fatigued, famished frame after the day of hard toil in the paddy fields and to snatch what joy they could in the company of their women and children. And nights were a nightmare too, specially during the squally monsoon months.

A Village Transformed

But those gloomy, dark yesterdays are over. In the changed conditions of today, the great many things the unborn tomorrows hold in store, and the drudgery of all the yesterdays is just an unpleasant memory.

Now Mr K. Arumuga Gramani, President of the Periapanicheri Panchayat Board, the village elder loved and respected by the community, chuckles with great relief, "Thanks to the extension of electricity to small villages like ours, life now is a lot more comfortable, cheerful and easy."

Periapanicheri tasted the luxury and comfort of power ten years ago, in 1956, when the State Electricity Board, in the first year of the Second Five Year Plan period, continued its phased programme of rapid rural electrification. "True," Mr Gramani admits, "our village has not been transformed into a modern little town or a worthy satellite colony of a sprawling, ever-expanding city suburb. But the people have now the opportunity, denied for decades, for a better, cleaner and comfortable life."

Today, away from all the din and bustle of the maddening crowd, Mr Gramani, as do many other men in the village, reads his morning newspaper, listens to the news broadcast over the All India Radio, and ponders over the political, social and other economic problems facing the country, and is contented looking after his paddy land, his family, and still has time for public service through the local Panchayat.

Periapanicheri is no longer plunged in darkness. The old lamp posts with the kerosene lamps flickering feebly only to heighten the darkness all around have given way to tall electric lamp posts. Many of the houses, old and new, have domestic power supply. Some have wireless radio sets to listen to the news bulletins, for the younger ones to tune in the running commentaries of cricket test matches and for the women in their spare hours to listen to music or dramas or other programmes of interest to village-folk. A rice and a flour mill are new additions to the village. The Harijan colony, too, has street lamps under a programme of the State Government subsidising the Electricity Board for providing electric lights in such colonies. Women have no longer to trek miles with headloads for hulling paddy or converting rice or wheat into flour.

The 110 acres of paddy land, fed by old shallow canals from the Chembarampakkam lake five miles further west in the district, have now about nine pump-sets which ensure uninterrupted supply of water from wells sunk in the field. The ryots raise two crops, and some even three, besides coconut topes and betel vines. Mr Arumuga Gramani, the Panchayat President, however, regretted that inadequacy and uneven distribution of chemical fertilisers to ryots hampered their efforts to boost the yield per acre. About 25 boys and 15 girls from the village go to the nearby elementary or high school.

All this big change in the dull, prosaic life of the people in this, as in hundreds of other big and small villages in the State, has been woven into the fabric of everyday life by the determined and tremendous strides in rural electrification during the first three Plan periods.

8 in 10 Electrified

Whatever the critics of planning might say, whatever the deficiencies and shortfalls of planning in a democratic set-up, the rural electrification programmes of the first three Plans have brought power and light to eight out of every ten villages and opened up opportunities for economic regeneration, through small-scale rural industrial units which provide jobs for local skilled and semi-skilled people and train the youth in various crafts.

Statistically, in 20 years between 1947 and 1966, the number of towns and villages served by electricity had risen from 4,000 to 54,700, a fourteen-fold increase for the country. In Madras State there were only 1,813 villages which had electricity before the First Plan: in 10 years the number rose to 10,000 and by the end of the Third Plan, the State had 23,276 villages electrified (compared with 54,700 for the whole country). Against 14,474 powered pump-sets before 1950-51, there are now over 280,000 electrically-operated pump-sets in Madras, out of a total of about 900,000 irrigation wells. And power is sold at a subsidised rate of 8.25 paise per unit, cheapest in the country.

Mr V.P. Appadurai, former Chief Engineer and currently Chairman of the State Electricity Board, and his men, have placed the Madras State at the top in respect of rural electrification. Yet they are not quite satisfied with the pace of progress at about 2,000 villages a year.

Mr Appadurai said, nearly 85 to 90 per cent of the villages in the Madras State had now power supplies and "I am confident that by the end of the Fourth Plan period, electricity would invade all the villages and hamlets in the State."

The capacity of the Madras grid had risen from 156 MW in 1950 to 1070 MW at the end of the Third Plan, excluding about 300 MW from the Neyveli thermal power house. The H.T. transmission lines had risen from 6,935 kilometres early in 1951 to 39,500 kilometres in March 1966, and L.T. transmission lines from 5,738 kilometres in 1951 to 73,266 kilometres in 15 years, while the per capita consumption

rose from a mere 12 units to 98 units in 1966. Almost a third of the State Electricity Board's annual budget of Rs 30 crore is spent on rural electrification.

Robbers Vanished

All villages in the State with a population of 5,000 and over have been provided with electricity. Out of 2,566 villages with a population of 2,000 and over, 2,515 villages have power; out of 4,777 villages with a population of 1,000 and over, 2,842 have now power; out of 3,220 villages with a population of 500 and over, 1,600 villages have power; and out of 2,667 villages with a population of less than 500, 721 have been electrified. Besides these, about 15,000 hamlets have been electrified, all in the course of the 15 years.

In 1966 industrial plants in the State consumed 146.6 crore units of power, against 18.7 crore units in 1951, and power for agriculture rose from 4.4 crore units in 1951 to 78.6 crore units by the end of March 1966.

A Government spokesman pointed out that the Gudalur village in Madurai district lived under the constant fear of highway robbers before 1958 and numerous cases of robberies were reported. Since electricity dispelled the darkness of the highways, the robbers had to change their profession! At Tharamangalam in Salem district, an enterprising man with only a domestic load connection, had built up a paying unit producing *banians*, socks, toys, etc. In the Nilgiris district, new tea factories have come into being with the advent of electricity. Another person in Salem, who got an agricultural connection, uses the power, during off-time, for sugarcane crushing, hulling, etc. These are but a few instances to illustrate the claim that cheap power had provided considerable economic opportunities for the millions.

Power in villages, which for decades were backward and undeveloped, has provided the key to prosperity. It has brought about many social changes and, in terms of economic development, it has enabled the establishment of modern farms and factories providing jobs to the underemployed ryots and the unemployed educated. It has also provided an incentive to skilled artisans and craftsmen to set up their own small-scale or cottage industrial units in or near their villages. The multiplication of such small industrial units, apart from the numerous industrial estates established by the State Government, has increased manifold employment potential in various ways.

Madras, it is evident, is poised for an upsurge in consumption of power for agricultural purposes, which, even as it is, works out to nearly 25 per cent of the total energy sold.

Periapanicheri is in many ways different from what it was 10 or 15 years ago. And so are other thousands of villages.

—Mr. Ramanthan is Chief Reporter, The Mail, Madras

Quotation Box

Many grandparents and quite a few parents simply refuse to grow up. They maintain that everything, including children, has changed for the worse.

—From Editorial in "The Statesman"

We are converting our cities into concrete and asphalt jungles of stifling dreariness.

—Mrs Indira Gandhi

I cannot imagine that the students of, say, Oxford or Cambridge Universities, would go on a fast if a change were made in the syllabus.

—Mr Justice M. Hidayatullah in a convocation address

People, by and large, are weary of hearing empty platitudes from VIPs....Mr Subramaniam's fairly recent suggestion, however, that students should declare war on rats is very practical. This would provide an outlet for pent-up frustration and would surely be a more profitable pastime than destroying valuable equipment in laboratories or burning tram-cars.

—From a letter in "The Statesman"

When we come to power, we will have a lot of trouble.

—Maharani Gayatri Devi

Politics is after all nothing but passion multiplied by numbers.

—Mrs Taya Zinkin in her book "Challenges in India"

Our Permit-Licence Raj may want to license the cow-owners, and eventually a Cow Minister with a full fledged Cow Department may become necessary.

—From a letter in "The Hindu"

They (Americans) are so open that it's troubling. The taxi driver tells you his life story, sales girls call you 'honey'.

—Mr. Francoise Sagan in "Time"

We also need a noun to sum up the appearance of a woman walking down the street in stretch pants. With some word like "juglipidity", the spectacle need no longer throw us off stride. We have only to say, "That poor woman's juglipidity is acute," and the problem can be dismissed.

—R.B. in the "Reader's Digest"

Indeed, the traditional distrust of authors can be seen in the twice-yearly Honours List (British), which admits the inventor of the miniskirt to the Order of the British Empire, makes Knights of conductors and tenors, but rarely acknowledges the contribution of the writer to the pursuit of British happiness.

—Mr. Anthony Burgess in "The Hudson Review"

The vast majority of the human race will not be white, and they will be hungry, and a quarter of them, despite the Joint Chiefs of Staff, will be Chinese.

—Mr James Reston in "The New York Times"

Today so few people remain incorruptible that it is agreeable to read of someone who remained uncorrupted for hundreds of years. I refer to St Cuthbert, who died in 687 A.D. After death his body was washed, vested and put in a stone sarcophagus on Lindisfarue. When the tomb was opened 11 years later, the body was found to be 'incorrupt' and was revested...Indeed, it is said to have been still intact when it was seen...in 1537-8..."

—From "The Science Journal", London

If man can construct a schizophrenic computer (an American scientist is trying to do just that), it should not be beyond the wit of man to construct a computer which is corrupt.

—From "The New Scientist"

Pleasantly bizarre phrases turn up when scientific jargon is translated from one language to another—as when a machine translated "out of sight, out of mind", into Russian. The operators thought that they would check the result by feeding the Russian version back into the machine and seeing what English emerged. Out came the answer: "invisible, insane".

—Ariadne in "The New Scientist"



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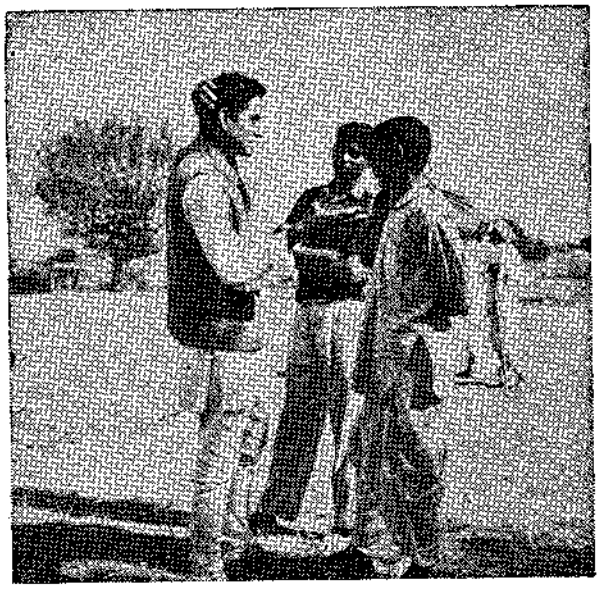
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STUDENTS FIND OUT HOW



Peasants reply to questions; channels of communication open up between urban boys and rural people.



Socio-economic surveys by students embrace farmers too

LIFE IN VILLAGES CHANGES

STORY OF COLLEGE PLANNING FORUMS

Or Does Not Change

WHEN college students make a socio-economic survey of a village, build or repair a village road, open bank accounts to save a little out of their small pocket money, organise social service camps, it is not *news*.

Students are *news* only when they strike classes, *gherao* the principal or a professor, hold up traffic, or burn a bus or a tram.

The story of the College Planning Forums is not told in the Press. Yet it is a story worth telling. All over the country 1,000 colleges have Planning Forums, and even if each has fifty students seriously involved in its work, there are 50,000 students who give part of their time to constructive, nation-building work.

This number is likely to double when 800 more Planning Forums are set up by the end of the Fourth Plan period, 1970-71.

What kind of work do the boys and girls of the College Planning Forums do? For the year 1965-66, reports of activities have so far been received only from 210 College Planning Forums. *These reports show that 15,000 students have taken part in various kinds of work related to socio-economic development, including 36 socio-economic surveys.*

They have held 76 Plan exhibitions, organised seven social service camps, visited 28 villages to create Plan awareness among the rural people and collected more than Rs. 11,000 for the National Defence Fund.

These students have *built or repaired eleven village roads.* More than 900 of them have opened or helped others to open Cumulative Time Deposit accounts and 125 post office savings accounts — their contribution to small savings.

The socio-economic surveys are perhaps the most significant part of the Planning Forum activity. These not only introduce college students to the changes coming over the Indian countryside, they bridge the gulf between town and village and open up channels of communication.

It is interesting to know what these young people, working under the expert guidance of their teachers, find in the villages. What changes do they notice? Their reports, when finally drawn up, read like miniature

15,000 college boys and girls spend part of their time in constructive work, including 36 socio-economic studies.

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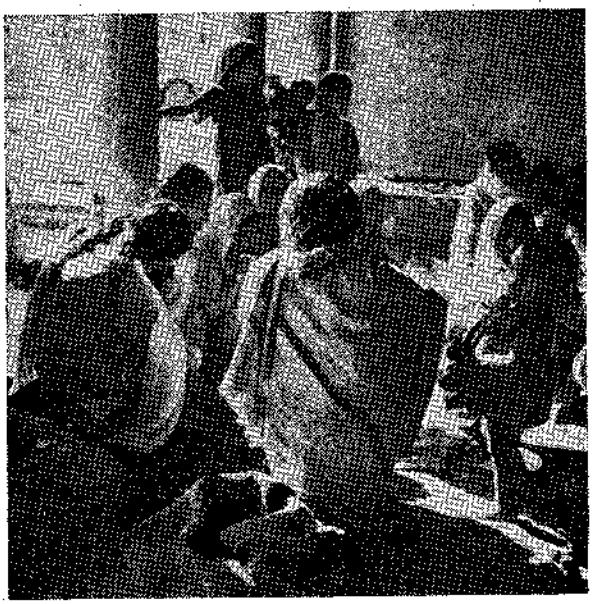
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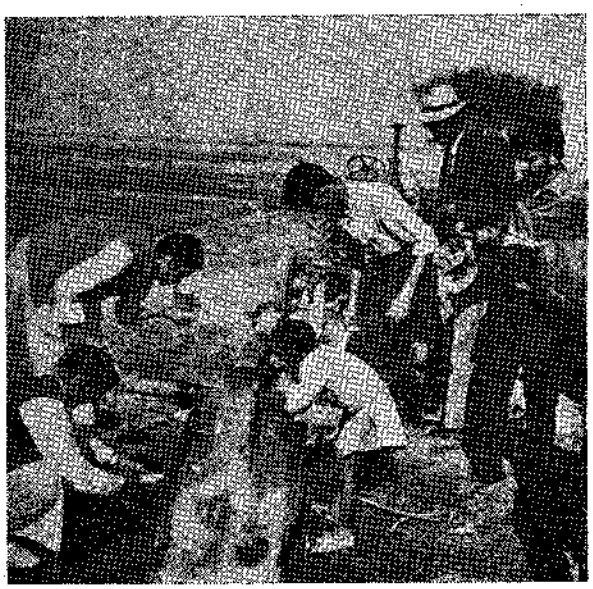
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expert surveys which is what they really are. They thro ample light on the changing Indian rural landscape.

The Planning Forum of G.G.N. Khalsa College, Ludhiana, made a survey of savings in Mahmudpura village, on the outskirts of the town. They found all farmers in the village savings-conscious. The survey report says that practically all of them save, in one way or the other. And they invest their savings in agricultural operations. They get good price for their crops. With a fairly good communications system, they no longer sell their produce in the village itself but take them to the town where they get a decent price for their products.



Girl students visit a rural household during a village survey



During a village survey, students take a close look at a power-driven irrigation pump.

The students found out quite a few other things about the village people too. The villagers don't know much about the Five Year Plans. They are not very eager to send their children to schools. What is the use of educating them? they ask. After education, white-collar jobs are hard to get, and, in any case, there is more money in "other avenues of occupation." So why indulge in such 'waste'? Instead, the villagers have learnt that it is wise to save a little and invest it in agriculture which gives quick and sure returns.

From village savings to municipal finances seems to be a natural progression. The Planning Forum of S.D. Government College, Beawar, Rajasthan, had a close look at the finances of a municipality. Established as early as 1867, it is not in a flourishing state. A study of the financial position of the municipality during the 20-year period, 1940-41 to 1960-61, revealed that the municipality is leaning heavily on government loans and grants and doing little to raise its own resources for essential development programmes. The elected members of the municipal council refuse to introduce a tax on sanitation, light and water facilities which the people of the municipal area continue to get free of cost.

Though the income of the municipality has increased from Rs 1.70 lakh in 1940-41 to Rs 13.53 lakh in 1960-61, the municipality has been unwilling to raise enough funds to pay off even current interest on Government loans which worked out to Rs 1.10 lakh a year. At the end of 1960-61, the municipality was in arrears, on this account, to the tune of Rs 3,32,671. The councillors apparently feel that any fresh imposition of taxes would scare away people, especially business people, from the town. They point out that already there is a trend for people from the town to migrate to 'pastures new'.

Drought and consequent misery and hardship of a large number of people in Bihar and Eastern U.P. are much in the news today. In 1965, Mysore State was also hit hard by the failure of rains. The Planning Forum of Government College, Tumkur, undertook a survey of six villages near the town to study the effect of drought.

The survey team found that the average production in these villages fell from 16.95 quintals of foodgrains per family in a normal year to a mere 0.28 quintal per family after the drought. Villagers migrated and cattle perished. For irrigating the land in the six villages a total of 145 pump-sets were needed. But only a handful—only six pump-sets—were actually available.

The study also revealed that the alleviation of the misery of the people by providing work opportunities through relief works had only a marginal effect. A bold and forward-looking programme of sanctioning sufficient pump-sets, desilting of existing tanks, provision of credit and fertilisers, and setting up of cottage industries to provide side-occupations to the villagers, has to be adopted by the State authorities to avoid occasional destitution and distress.

Agricultural progress and animal husbandry go hand in hand. Two Planning Forums of Madras State conducted livestock surveys to highlight the need for a more imaginative cattle development programme.

The Ramnad District Livestock Farm at Chettinad near Karaikudi, one of the 12 State-maintained livestock farms in Madras State, was started during the Second Plan period. The area covered by the farm is about 1,900 acres. The working of the four sections in the farm, namely, those relating to cattle, sheep, poultry and agricultural farm, was scientifically studied by Mr. N. S. Thiruvenkatachari of the Planning Forum of the Alagappa Chettiar College of Engineering and Technology, Karaikudi. The operations of the farm during the four years, 1960-61 to 1963-64, were studied by the Planning Forum team.

The study revealed that the farm as a business unit has been running at a loss for several years. The cattle unit has been able to develop a few improved breeds of cattle, but the milk-yield did not improve appreciably. The poultry unit was working satisfactorily and it had potentialities of earning some profit for the farm. The sheep unit was also capable of becoming a self-supporting unit, especially after the proposed scheme for fattening ram-lambs for the market was put into operation. Better veterinary facilities were needed for the sheep unit to prevent death and sickness among young sheep. The agricultural farm unit was a total failure as it would not produce the fodder necessary for the farm.

The Planning Forum of Madurai College, Madurai, took up Samayanallur village for its survey to study the impact of the Intensive Cattle Development Programme on villages. It found that, in spite of the operation of the I.C.D.P. (a) improvement of breeds of cows has been tardy (only 3% of the cows was of the improved breed); (b) no green fodder or market fodder was given to cattle; (c) the average milk-yield per cow was pitiably low, only 1 to 1½ litres at a time;(d) the bullocks were of a poor quality with scanty tracting capacity; and (e) returns from cattle were uneconomic compared to the high prices that had to be paid for these animals.

While the Madras College forums conducted surveys of the impact of cattle development programme, a Planning Forum in U.P. undertook a study of the impact of community development programme on rural people.

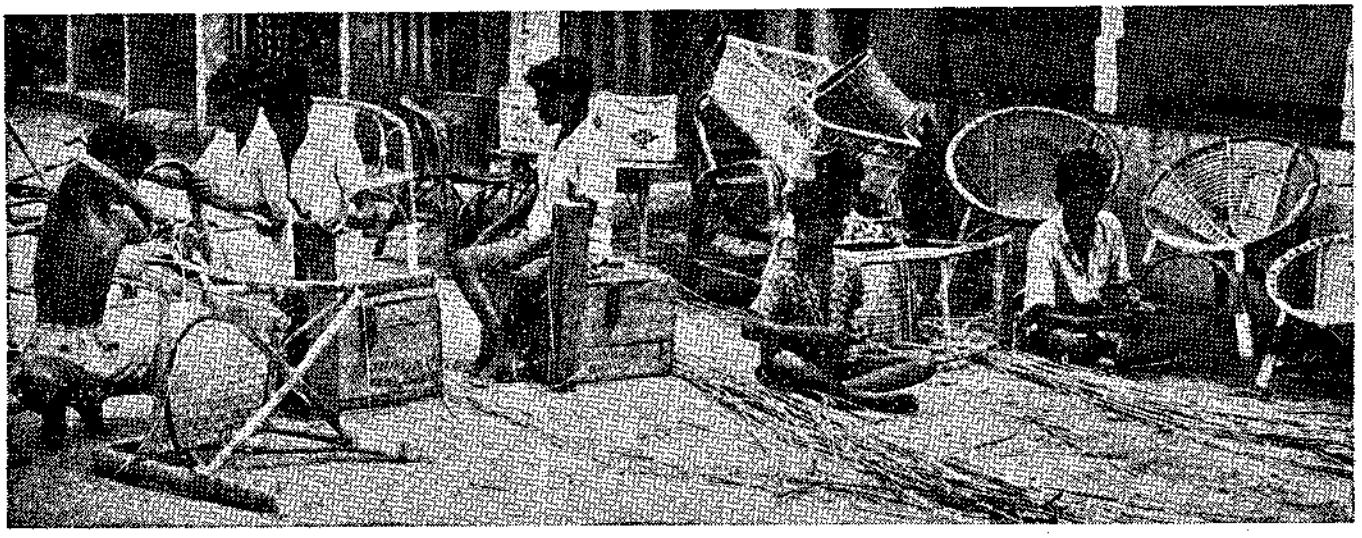
A batch of 25 students and 3 teachers of the D.A.V. College, Azamgarh, conducted a survey in Walidpur village in the Mohamedabad Block of Azamgarh district. The team visited all the 142 households in the village.

The study revealed that the extent of people's participation in the various Block programmes varied, as indicated in the table below, between different income-groups :

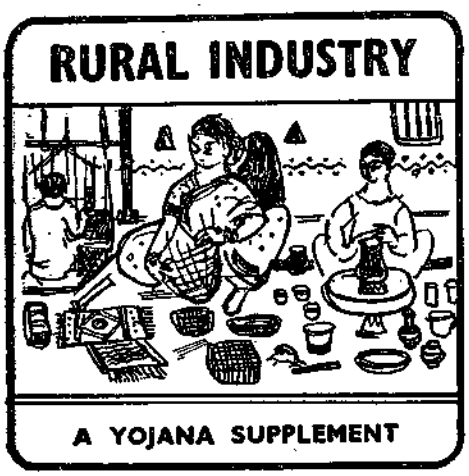
Income groups	*Participation*
1. Large-scale farmers	29%
2. Medium-scale farmers	25%
3. Small-scale farmers	19%
4. Agricultural labourers	10%
5. Service class people	7%
6. Artisans	3%

(*turn to PAGE 64*)

WORK FOR 3,200 MORE PERSONS



TRAINING FOR 300 ARTISANS



Nanguneri Rural Industries Project in Madras State has some notable achievements to its credit. In less than three years it has created fresh employment opportunities for 3,200 persons, established a network of training-cum-production centres which provide training facilities to nearly 300 artisans, and organised 27 industrial co-operative societies—all of them functioning successfully.

NANGUNERI Taluk in Tirunelveli district is one of the three areas selected in Madras State for the intensive development of rural industries. The Project which came into existence in 1963 comprises four Blocks—Nanguneri, Valliyoor, Radhapuram and Kalakad—all situated in an industrially backward area.

The first thing the Project did was to undertake an *ad hoc* survey of the natural resources and industrial potentials of the area, on the basis of which various schemes were drawn up for implementation. In these programmes stress was naturally laid on training of artisans and small entrepreneurs as also on provision of common facility service centres and credit facilities.

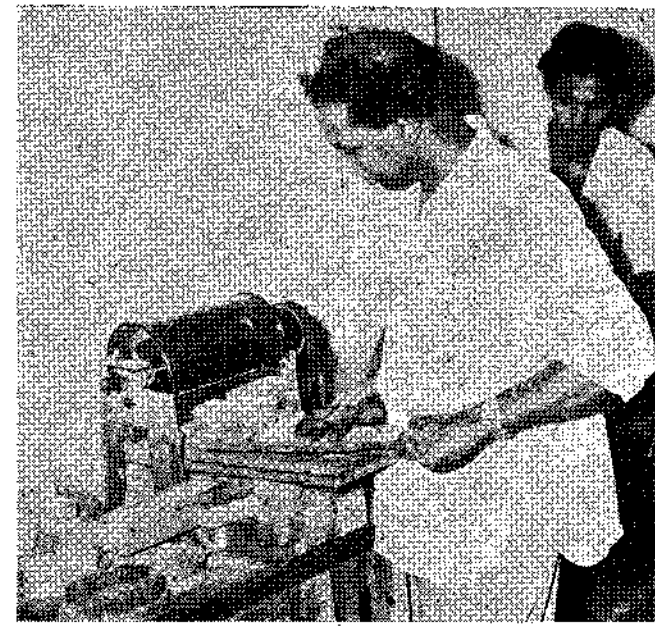
27 Industrial Co-operatives

A notable achievement of the Nanguneri Rural Industries Project lies in its success to create fresh employment opportunities for 3,200 persons in less than three years. This achievement is further highlighted by the fact that its efforts in organising industrial co-operative societies have been very well rewarded; all the 27 industrial co-operatives registered so far are functioning smoothly providing employment to about 600 persons in brick-making, palm-leaf article manufacturing, pottery-making, oil-crushing, lime manufacture, korai mat weaving and many other trades. And we will appreciate the effort still better if we keep in mind that the area is practically devoid of industrial raw materials.

Extensive Training Facilities

The chief natural resource is the palmyra tree. More than 5,000 villagers in this area depend upon the manufacture of coarse packing mats out of palm leaves. To enable these villagers to manufacture improved articles of utility for which there is a steady foreign and urban market, five training centres for manufacturing palm leaf articles have been established — two in Radhapuram Block and one in each of the other three Blocks.

One hundred and eighteen women have been trained for a period of one year in these centres, and another 125 are undergoing training at present. Five industrial workers' societies have been registered for the benefit of the artisans already trained. All these societies are functioning well.



Training has been imparted to 20 boys in the manufacture of scrubbing brushes of various types and designs.

Twenty boys have been trained for a period of one year at Thisayanvilai in Radhapuram Block in the manufacture of scrubbing brushes of various types and designs from out of palmyra fibre, and steps have been taken to start a co-operative production centre at Thisayanvilai.

One training centre has been established at Therkku Valliyoor in Valliyoor Block to rain 15 boys in the manufacture of cots, utility articles like tiffin baskets, waste paper baskets, cycle trays etc., out of palm *naar* and strands, and the training is well under way.

Twenty trainees are undergoing training in a centre for the manufacture of art silk hair nets established at Kootapuli. The first batch of 20 trainees has already completed its one-year training. A private industrialist is supplying raw materials and receiving the finished goods.

The centre for the manufacture of chalk pieces at Vadakku Vijayanarayanam, takes 20 women for training, and produces, on an average, 5,000 gross per month.

Ten women who were trained in the manufacture of Korai fine mats of Pathamadai variety at Eruvadi in Kalakad Block have since been admitted as members in the existing Korai Mat Weavers' Society at Eruvadi.

SALIENT FEATURES OF TRAINING FACILITIES

1. **118 women trained in 5 centres for manufacturing improved palm leaf articles and organised in 5 industrial workers' societies. Another 125 women under training.**
2. **35 boys trained in the manufacture of scrubbing brushes, cots and other utility articles.**
3. **30 women receive training in the manufacture of chalk pieces and Pathamadai variety of fine mats.**
4. **24 artisans to get training in the manufacture of bell metal products and leather gloves.**
5. **23 youngmen to get training in book-binding, printing, radio servicing and manufacture of chokes and transformers.**

A unit to train 12 artisans for a period of one year in the manufacture of Bell Metal products is being established at Valliyoor at a cost of Rs. 73,800/-. Another unit sanctioned for Valliyoor is the leather gloves production and training centre which will also take 12 artisans for a training period of one year.

10 Common Service Centres

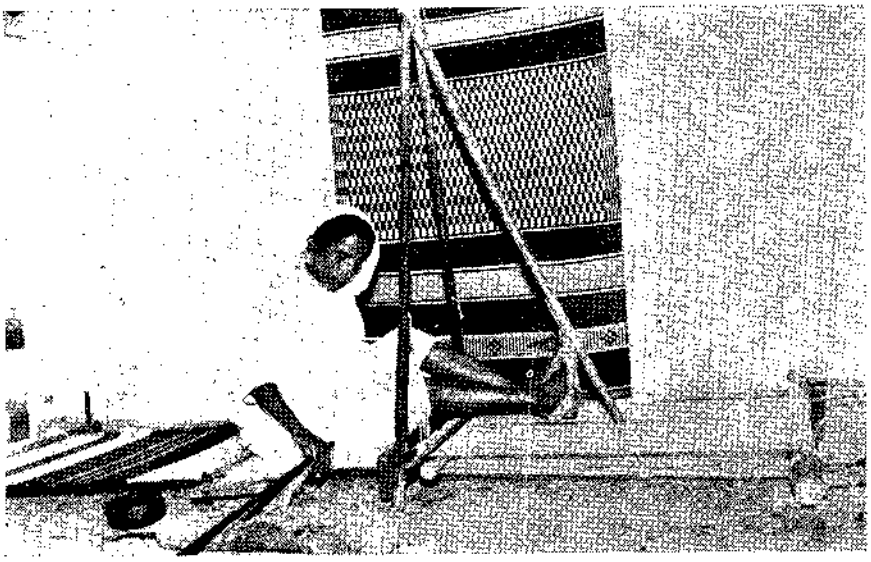
With a view to raise the productivity of the village artisans (blacksmiths and carpenters) and provide servicing facilities to agriculturists in repairing their pump-sets and other implements, 10 Common Service Centres have been established — four each in Nanguneri and Kalakad Blocks and one each in Valliyoor and Radhapuram Blocks.

These carpentry and blacksmithy service centres have been set up at places where there is concentration of such artisans. In each of the centres, power-operated simple machines like wood-working lathe, thickness-planer, drilling machine, hacksaw, bench grinder, circular saw and arc-welding transformer, and improved tools have been provided. Five artisans are undergoing training in each of the service centres except the one at Meenavankulam in Kalakad Block.

Achievements of Nanguneri

Rural Industries Project

A total amount of Rs. 11,35,426 was spent out of the Project funds made available by the Central Government during the Third Plan period to further the cause of industrialisation in the Project area. Rs. 2,69,800 was disbursed to 169 private parties as loans on easy terms.



Weaving Korai fine mats of Pathamadai Variety

Engineering Workshop and Foundry

A general purpose engineering workshop with foundry has been established at Valliyoor at a cost of Rs. 3,38,700. This workshop is manufacturing agricultural implements, steel furniture, and iron and steel articles required for the State Electricity Board. In this workshop also 10 artisans are undergoing training in the use of power-operated machines and production of sheet metal articles.

Under the Training Programme a scheme to select 15 youngmen from Nanguneri Taluk and train them in book binding, composing and printing for a period of 3 years in Tirunelveli District Co-operative Printing Press, has been sanctioned, for implementation during the current financial year.

Another scheme to impart training to eight boys in radio servicing and in the manufacture of chokes and transformers for a period of one year at Madras, is expected to be sanctioned soon.

Other Activities

There is a scheme to introduce sericulture based on mulberry plantation in Valliyoor and Kalakad Blocks. A demonstration silk farm has already been established at Panagudi in Valliyoor Block and an area of three acres planted with mulberry cuttings. An annual income of Rs. 800 to Rs. 1500 per acre is expected from the sale of cuttings.

Six hundred improved *neera* boiling pans have been distributed on half-grant-half-loan basis to palmyra jaggery manufacturers. This has improved the quality of jaggery and consequently raised the income of the manufacturers by fetching them better price for the product.

A scheme has been sanctioned for the establishment of a palm candy production centre at Moolakadu. This scheme will be implemented through the Tirunelveli District Palm Products Co-operative Federation at Tuticorin.

Among the activities financed through other sources, mention may be made of the training in spinning on six-spindle Ambar Charkha imparted to 662 women in 22 training centres, and the establishment of three palmyra-fibre sizing centres giving employment to 75 persons.

Financial Picture

During the Third Plan period a total amount of Rs. 11,35,426 has been utilised from out of the Project funds provided by the Central Government to give a fillip to rural industrialisation in this backward area. Out of this a sum of Rs. 2,69,800 has been disbursed as loan to 169 private individuals in Nanguneri Taluk for starting new industries and improving the existing ones. Besides this, a sum of Rs. 95,000/- has been disbursed by the Director of Industries and Commerce, Madras, under State funds to three private individuals. As a result of this financial assistance some very good modern units have come up in the area. One radio assembly and quality furniture manufacturing concern has been set up at Singaneri. A private foundry for the manufacture of rice mill spare parts is being established at Devanallur. Two roofing tile manufacturing units, one at Kavalkinar and another at Panagudi, have been enabled to put up a power-operated pug mill and an improved kiln.

From a Poor Agriculturist to a Flourishing Industrialist

How a poor lame agriculturist eking out a difficult existence from repair work was enabled to become an industrialist is illustrated by the success story of Mr Bishnupada Bag, the proud owner of M/S. B. Bag Engineering Industries in Kolaghat village of Rural Industries Project, Tamluk (West Bengal).

Mr Bag, 48, started as a village agriculturist with only 3/4 acre of land. He could study only up to the seventh class. He lost his father at 20, and after a few years, as if to complete his bad luck, he lost his right leg. It fell to the lot of this petty agriculturist to bring up a family of seven members. It was his sheer grit and perseverance that enabled him to tide over a very difficult period. A small huller working in the adjacent house proved his 'inspiration' to solve his immediate economic difficulties. After working on the huller for some time, he took to the repair of oil engines and hullers without the help of any technicians. A friend of his who happened to be a technician helped him to read drawings. It was his major breakthrough, for today he is an expert mechanic.

In the year 1954, Mr Bag started a very small repair shop at Kolaghat. In June 1963, the Project Officer contacted him and advised him to take up manufacture of water pumps for which financial assistance from the Project funds was also assured. Mr Bag was only too keen to grab the opportunity, and so he lost no time in setting up a pump manufacturing unit with three workers—himself, his son and a nephew. Steadily the unit began to grow. On the advice of the Director, Small Industries Service Institute, Calcutta, who visited his unit in 1965, Mr Bag further expanded it by taking up the manufacture of oil engines. The first engine came out in June, 1966.

With 11 workers and machines worth Rs. 20,000 B. Bag Engineering Industries is now an established unit which produces 100 centrifugal water pumps a month. About 100 old oil engines are repaired/reconditioned to be fitted in those pumps. The factory now works in three shifts with a total capital of Rs 45,000.

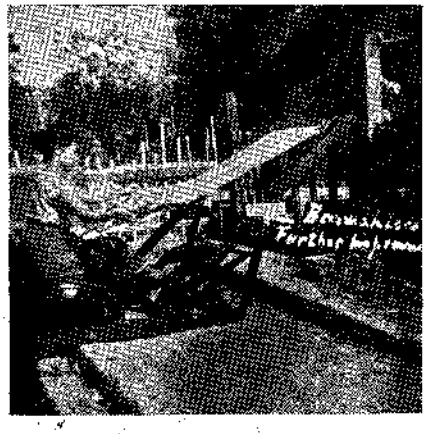
The first oil engine manufactured in the unit has been sent to the S.I.S.I. for display at Calcutta, while 10 more are under production. Experts of the S.I.S.I. and the Project technicians have been rendering valuable technical assistance to the unit at all stages. The Project Officer is trying to get the unit enlisted with the Agriculture Department as a regular supplier of pumps. To help the unit meet its expanded programme, he is also trying to secure new machinery for it through the N.S.I.C. on hire-purchase basis.

Hand-Operated Corrugating Machine

Pu (Mr) Kailianchhunga of Republic Avenue, Aijal, is one of the many artisans in the Rural Industries Project of the Mizo Hill District of Assam State who have been greatly enthused and encouraged by the Project authorities. Though poorly educated, Mr Kailianchhunga is specially gifted in mechanical line. He used to earn his living by casting certain types of aluminium utensils required by the Mizo people. But his innovating mind and mechanical skill combined to open a new and more lucrative avenue for him.

The local people have been experiencing much difficulty in getting supplies of corrugated iron sheets due to great scarcity of the material. Mr Kailianchhunga with the help of the Project staff has designed and fabricated one hand-operated machine which can corrugate thinner gauges of plain iron sheets of any length. Three persons are required to handle this machine which, though of a crude type, is quite popular and useful locally. And so Mr Kailianchhunga has now set up a small workshop for corrugating plain iron sheets brought by his customers. His machine received due recognition at the All Assam Industries Exhibition held at Gauhati in 1965 when he was awarded a special prize for this innovation.

'BARUAH LOOM'



'Another innovation designed and introduced by the Rural Industries Project, Aijal, in the Mizo district and proving equally popular in the adjoining hill districts, goes under the name of "Baruah Loom". It is a gift of the Project Officer Mr S.C. Baruah (who designed and constructed this loom) to the (women) loin-weavers of the Mizo Hills as also to those of Nagaland, Manipur, NEFA and other hill areas of Assam where this special variety of tribal cloth is much in demand.

The traditional loom which the Mizo and other loin-weavers in these hill areas have been using, gradually causes bodily pain and other ailments. They could not take to flyshuttle loom as it would not give them the required texture of their cloth. 'Baruah Loom' has now solved one of their biggest headaches. With the help of this simple and convenient device, the women loin-weavers get the required texture for tribal cloth as well as the relief from the bodily pain and other ailments previously suffered by them.

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Books

A Marathi Play in Sanskrit

Bhumikanya—Sanskrit translation by Ratnamayi Devi Dikshit of the Marathi play Bhoomikanya Sita by B. V. Warerkar. Published by Sita Charan Dikshit, Delhi. 118 pages. Rs. 2.50.

B.S.G.

THE RAMAYANA of Valmiki has been a source of inspiration to numerous litterateurs of the various languages of India. Through the ages poets and playwrights have borrowed their themes from it, adapting them to suit the times and societies to which they presented their works. Most of them have accepted the divinity of Rama, though Valmiki himself is by far reserved even while idealising the character of his hero. Among the Sanskrit poets only Kalidasa has kept to the spirit of the Ramayana and elucidated further the ideas suggested by Valmiki. It is that spirit which has once more been brought to light by the late Mama (Bhargavaram Vitthal) Warerkar in his well-known Marathi play, "Bhumikanya Sita", translated into Sanskrit by Dr. (Mrs.) Ratnamayi Devi Dikshit. Foreword by Acharya Kakasaheb Kalelkar has added to the value of the book.

The last phase of Rama's life after his coronation at Ayodhya is described in the Uttarkand of Valmiki's Ramayana. Mama Warerkar followed the trend of thought suggested by Valmiki and later expanded by Kalidasa, read between the lines and succeeded in painting the whole picture in natural colours and significant lights. It is only proper that this work has been presented in Sanskrit language, so that all Indians, interested in Valmiki's Ramayana and Kalidasa's Raghuvamsa, could read and understand the sequence of events clearly, irrespective of the regional and language differences.

The banishment of Sita due to the scandals spread in the city and the killing of Sambuka by Rama at the behest of the Brahmin sages are two unconnected incidents in the Ramayana. Kalidasa has also left them separate. But the natural sympathy of the daughter of the Earth towards the tillers of the soil, who are down-trodden by the higher caste Aryans, is closely connected with the banishment of Sita in the present play. The life of Sita and Rama in Ayodhya is different from what it used to be in the forests. The blind devotion of Lakshmana to his elder brother, which almost kills all other emotions, the plight of Urmila, and the unreality of the praise of Ramarajya, in which all beings are supposed to be treated equally, have been very forcefully brought out by Mama Warerkar.

Urmila, Sita and Valmiki are the three characters in this pl y who throw a flood of light on the contemporary society. The gradually deteriorating condition of women and the fight they were putting up in vain against injustice are vividly seen in the portrayals of Urmila and Sita. The conflict between the Brahmins and the sages like Visvamitra—the latter working for the uplift of the down-trodden—has been shown in the Sambuka episode

The translator, Dr (Mrs) Dikshit, has undoubtedly dived deep into the spirit of not only the author of this play but also of the whole story of Rama, and has thus produced a simple and lucid translation, for which she deserves appreciation and thanks at the hands of the Sanskrit reading people, particularly students of Sanskrit. Printing errors are found here and there; but these could be condoned, in consideration of the effort of the translator and the fact that this is the inevitable fate of most of our Sanskrit publications.

DEFICIT FINANCING AND DEVELOPMENT

Deficit Financing and Economic Development by R. G. Kulkarni. Publi hed by Asia Publishing House. XV+399 pages. Rs. 28.

N. Venkataraman

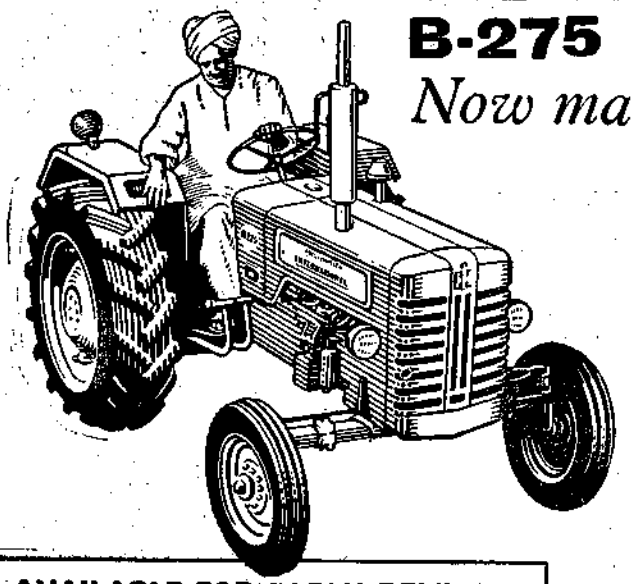
THIS book is a revised version of the doctoral dissertation submitted by the author to the University of Poona. Though the title suggests that the subject is essentially a discussion of the impact of deficit financing on economic development, the book is in fact more comprehensive. It is partly a probe into the theory of public finance and the Indian experience; partly a thesis of financing development and, partly an evaluation of the three Plans, especially their financial operations.

The justification for this large canvas is that deficit financing cannot be isolated and dealt without considering the other sources of finance for, the impact of the magnitude of deficit financing, to a great extent, depends, on the effect of all the types of financing on increasing the total output.

Deficit financing, as understood in terms of the economics of developing countries, refers to that part of Government revenue accruing from the creation of additional money which is over and above the savings generated in the economy. This type of deficit financing has come to stay as an inevitable source of resource mobilisation for development. The crude Quantity Theory suggests that deficit financing will lead to immediate inflation. Whether this will really happen will depend on the ability on the part of the planners to increase the output sufficiently to bring under control any such inflationary tendency within of course, the permissible level.

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In India, inflation and price rise are, to a great extent, corelated to agricultural production and hence the author could have easily attempted a competent analysis of the three variables, namely agricultural production, deficit financing and price rise. While the author mentions agriculture in passing, no systematic analysis of the relationship between the two has been attempted. Some may even say that if agriculture is taken care of, deficit financing will not have much of harmful effects.

Secondly, inflation assumed a formidable problem in this country only during the Third Plan. Unfortunately, the analysis of the Third Plan in this book is rather sketchy. Granting that this dissertation was finalised towards the end of the Second Plan at which time no evaluation of the Third Plan was possible, even then at least an appendix could have been added on the Third Plan since the book was published in 1966. This was essential because it was during the Third Plan that the planners said that deficit financing would be curtailed and that, at all costs, it would be only Rs 550 crore, whereas the actual amount, was more than double. Coupled with an increase in the defence expenditure and the failure of monsoons this amount of deficit financing resulted in the present preposterous price rise. In a subsequent edition of the book, this can be taken care of.

While it is true that deficit financing is one source of resource mobilisation, it would have been worthwhile if the author had added a separate section first on deficit financing and development and brought the various variables like agricultural production, industrial production, per capita income, deficit financing and money supply year after year, and derived some intelligent conclusions. One would expect a more detailed discussion on the relationship between money supply and production than what the author has attempted.

In spite of these shortfalls, this book is a welcome addition to the literature on public finance. It will be of great use to students, both Indian and foreign; the theoretical background of financing development and the discussion of the Indian Plan programmes could be profitably used by them.

MANAGERIAL ECONOMICS

Managerial Economics by Norman F. Dufty. Published by Asia Publishing House. vii+287 pages. Rs. 24.

R. K.

THIS is a text-book on managerial economics with a difference. It is written by an Australian for Indian students, and published in a series entitled *Essays in Social Sciences* edited by an Indian professor teaching in a Canadian University. Otherwise, the present volume can be classed among the general text-books available on the subject. Managerial economics, which is more or less synonymous with management science, has developed into a separate subject only in the last two decades when new trails were blazed with the application of modern mathematical methods to the management field.

The book presents the elementary theories and the mathematical techniques used in the different areas of the micro-economic theory in which a student in business management is interested. Obviously the whole gamut of business management cannot be covered in a small volume like this. The author has his own selectivity criterion. He has excluded the sophisticated theoretical structures and has given greater attention to the applied side of the management problems. In this he has eminently succeeded. The book is readable and succeeds in communicating to the reader in simple and straightforward language many a complex problem. More especially, chapters on decision theory, game theory programming, price discrimination and demand analysis are lucid, despite the inherent intricacies of the subjects.

The author has put in an apologia for the mathematical approach of the book which is unnecessary. Present day students of economics and business management can scarcely afford to go around without a mathematical kit necessary for the understanding of the subjects treated here. The book should provoke serious students to search for advanced material elsewhere for further study. It is useful not only to the students of business management but also to the students of engineering who aspire for the top and the middle level managerial positions in large enterprises.

Two comments, however, may be made. It would have been better if a select bibliography was given at the end. This would have vetted the desire of those who want to know more in any given area of interest. Secondly, though the book is written for the Indian students (pace the Editor's Foreword), the illustrations have been drawn wholly from the Western, particularly British, experience.



IGNORAMAN

Wants to Know

If

Usual Fireworks

on Republic Day

Have Been Reserved

This Year

for Electioneering

Yojana Bhavan Diary

The study group of the National Planning Council on Scientific Research met on December 30, 1966.

The Planning Commission has been meeting regularly to give final shape to the chapters of the Fourth Plan.

The chapters on Development of Foreign Trade, Manpower Requirements and Training Programmes, Construction Economies, Land Reform, Village and Small Industries, Industries and Minerals, Education, Scientific Research, Health and Water Supply, Family Planning and Regional and Urban Development and Housing were discussed.

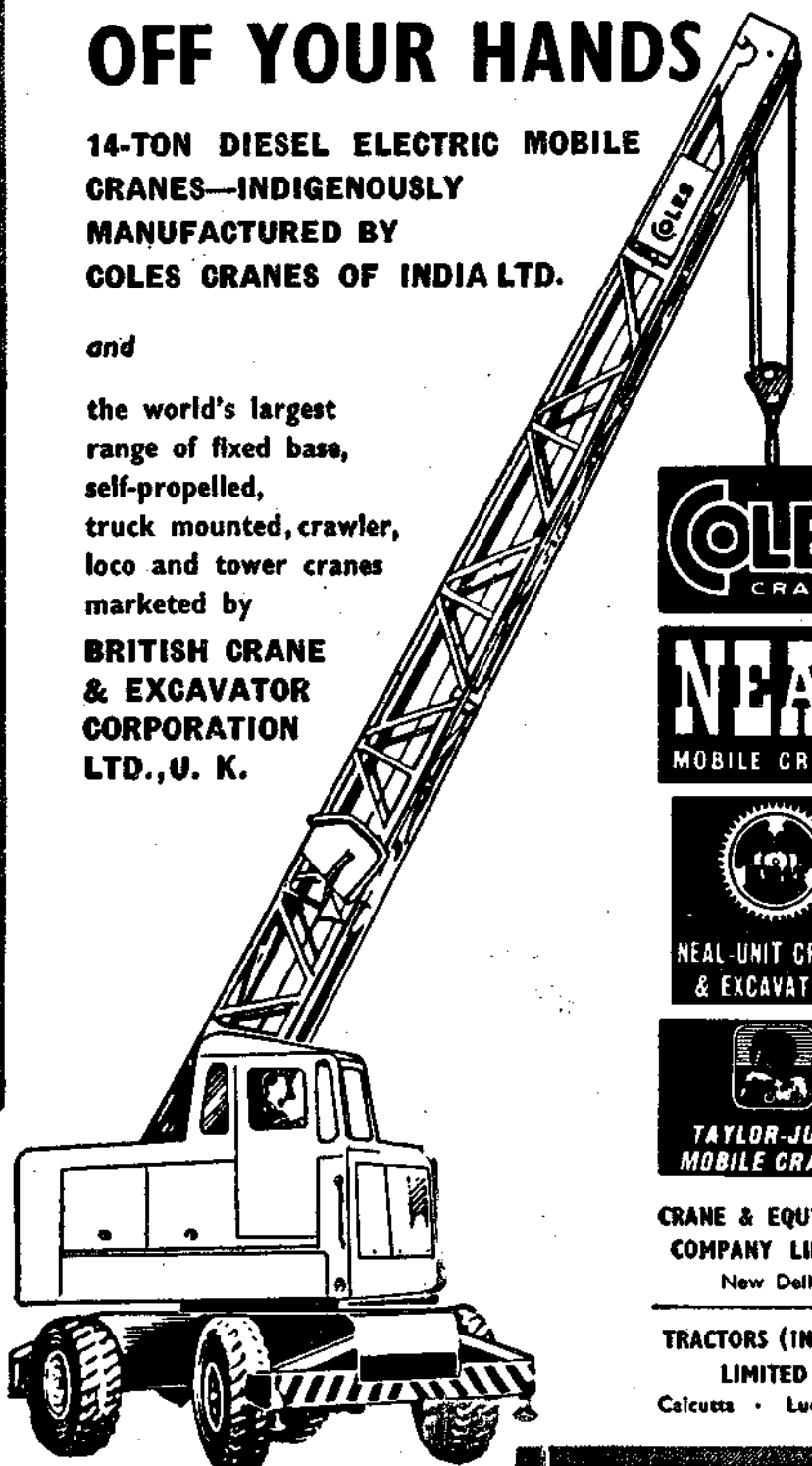
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TJ/0/297

Letters

ANDAMAN'S WATER PROBLEM

THE article on page 3 of *Yojana* of November 13 says that 'Perhaps the biggest single problem has been to find drinking water for the new settlers'. In this connection I think your readers would be interested in knowing how a similar problem was solved in Hawaii which has, like the Andaman Island, soil which cannot retain water but lets it seep through. I am giving below an excerpt from the American weekly *Time* of November 11 which describes this phenomenon and its solution.

"Of the 13 billion gallons of rain that fall every day on the island of Hawaii, a mere 3% is retained by the land. Much of the rest soaks rapidly through permeable soil and rock and seeps into the sea. The continuous loss leaves three-quarters of the island with no streams or lakes to supply fresh water. Now, as a serendipitous byproduct of volcano research, scientists have found new fresh-water sources that may not only enable Hawaiians to move into previously uninhabitable areas, but could also help meet the needs of the island's growing population for generations to come.

The discovery of Hawaii's untapped fluid assets was made by University of Michigan and U.S. Geological Survey scientists while they were charting temperature variations in the vicinity of Kilauea, the island's largest volcano crater. In an old B-25 bomber crammed with infra-red scanning equipment, they mapped the volcano's hot spots; then they enlarged their thermal survey by following two great rifts that led from the crater to the sea. Under the shore, and in nearby coastal waters, their infra-red detector revealed just the opposite of what they were searching for: large areas that were not hotter, but as much as 12° cooler, than their surroundings.

Geologist William Fischer, who headed the survey, soon recognised the significance of the findings: like an aerial divining rod, the infra-red scanner had spotted streams of cool, fresh rain water flowing out into the ocean. After completing the volcanic survey, the B-25 flew back and forth over Hawaii's entire coastline, eventually detecting a total of 219 shore areas that might have underground fresh-water springs."

Phaltan, Dist. Satara B.V. NIMBKAR

Metric Still

IT is more than 8 years since our country has adopted the metric system. But even now many new industries still call for supplies under the FPS system. It is not only the private sector but also the public sector projects who have not switched over to the metric system, an example being Heavy Electricals (India) Limited, Bhopal. To make conversion to metric standards expeditious, not only should new industries ensure that equipment manufactured to metric standards would be installed but existing plants should change over to metric system in replacements and additions.

The plea that the collaborator is from a country still working on FPS system is not tenable since such countries are not unwilling to, and in fact do, quote to metric standards where the customer insists.

VISAK

Half-Hearted Approach

THE economic prosperity of a country depends upon its industrial base, and that in turn, on iron and steel industry. India has a strong industrial base with its huge steel plants under the Government control. But there is a marked difference between the installed capacity and the production of these plants. A number of units are lying idle and much investment in this key sector has become unproductive.

Similarly, in spite of our demand for steel products in the country, a huge pile up of hot rolled coils and plates is lying unmarketed in the Bhilai and Durgapur plants. The authorities seem to be concerned only with constructing new plants, and not with their full utilisation.

No doubt, we are not very much behind other countries in design and engineering skill, but we have still to go for foreign collaboration for our steel industry. Although drought has become a regular feature in our country, little interest is shown in producing pumping sets and other things necessary for the improvement of our agriculture. A separate plant to produce pump sets, tractors, power tillers and other auxiliary equipments is very much needed. As in everything, the Planning Commission, however, makes a half-hearted approach to this field as well.

JAGDISH PRASAD AGARWAL
Rourkela

Jugatram Dave

(*from PAGE 37*)

generosity. He has become a part and parcel of the life of the people. He is forthright and does not mince words when he calls a spade a spade. He said, Government has made several laws for the benefit of the backward classes and the Adivasis. But unfortunately very little care is taken to see that they serve the purpose for which they are made. He cited tenancy laws as an example. Because of loopholes in these laws, he said, the Zamindars did not for long let loose their hold on their tenants. This could have been avoided if there had been a more realistic and human approach to problems.

Jugatrambhai was visibly pained when I asked him about student 'indiscipline'. He said, the pattern of education followed by us is "totally wrong". Education must aim at infusing in the children a sense of service, self-discipline and self-reliance. Students must be made to realise the dignity of labour. *Half the time of their training should be devoted to productive work.* Education must be completely reoriented if it is to produce young men and women of character and integrity.



Over Rs. 6,250 crores worth of packaged consumer goods are bought and sold every year. Their range and volume would expand rapidly if imports were liberalised.

Unless more packages are available, the marketing of consumer goods will be impeded

As more consumer goods are produced, there must be a corresponding increase in the output of the consumer packaging industry. This is obvious. But it must happen without prices rising to uneconomic levels.

Four steps to help ensure that we can help deliver the goods—at the right prices:

1. Increased output of consumer packaging calls for adequate supplies of local raw materials at reasonable prices. *Which means a reduction in levies.*

2. Essential raw materials not locally obtainable, must be imported. Again, at the right prices. *Which means a reduction in import duties.*

3. The healthiest, most progressive units in the packaging industry *must be encouraged* to grow so that economic production, through scale and diversified activity, may be achieved.

4. Continuous access to the mainstream of international packaging technology *must be allowed* to provide consumer goods manufacturers with improved yet less expensive packaging.

Metal Box are ready and willing to do everything in their power to produce more, at reasonable prices. But we need the conditions and materials necessary to function at full capacity.

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BLACK WHEAT

K. K. Aggarwal

You have heard of white wheat which is mostly grown in the country. During the last few years, India has also taken to brown wheat commonly known as Mexican wheat, the seed of which was imported from U.S.A. Now there is a black wheat, the credit for which goes to the village Latani in Barwala block in Hissar district.

It happened thus :

Mr Mam Chand Chauhan, *alias* Imamdin, of Latani, luckily got some six kilograms of the black variety of wheat and he sowed it in a *bigha* of his land in November 1965. He never knew that the wheat he was growing would make history. He treated the crop as of an usual wheat and did not give it any special attention — no fertiliser, nor an insecticide. He did not do the weeding nor used any farmyard manure. The only treatment he gave was six ploughings — three before the monsoon and three after the monsoon. The plough was *desi*, making 42 to 45 furrows in a *bigha*.

He irrigated the crop four times, including one before sowing. The sowing was done by pore method instead of the *Kera* method. The seed had very good germination, and the plant was dark green like other wheat plants. The crop looked golden yellow at the time of harvesting, but the grain was black.

Inspite of the indifference in cultivation Mr. Mam Chand got a high yield of 10 maunds, that is 50 maunds an acre. The yield will certainly improve with better care.

The black wheat is a dwarf variety, the height of its tillers being under 3 feet, like the Mexican variety. It does not lodge. It has two advantages over the Mexican (Sonora 64 and Lerma Rojo): (1) more tillering and longer ears, each 6 to 7 inches ordinary wheat ear is of 4 to 5 inches) and (2) bigger and thicker grain.

An outstanding feature of the black wheat is that its flour is whiter than the flour of any other variety and is very tasty.

It is time that research is conducted to develop this black wheat.

The origin of the black wheat is not known. Even Mr Mam Chand could not tell from where he got the black seed. The black grain was first displayed by Mr Duli Chand Dagar, B.D.O., Barwala, at an exhibition of agricultural production and small savings in his Block held in December last. It took every visitor by surprise and a special prize was given to this wheat.

RUPEE BANK FOR NEEDY STUDENTS

The students of the Rural Institute at Amravati (Maharashtra) have learnt to help themselves in the co-operative way. They have established a Rupee Bank to help the needy. The amount of contribution to the Bank fund is only one rupee a month, which a student can easily save from the monthly allowance he gets from his parents. The Bank advances loans for buying books, paying fees, and such other necessities for which a student might find himself in difficulties at times.

The students of the Rural Institute come from villages. Many a time they are short of funds to pay for their meals, books, examination fees, medical treatment and even clothes, as the parents cannot send them money in time. In some cases, the students had to go without books and even food at times.

One day the teacher in co-operation put up a proposal before his students for a rupee bank. The students responded quickly and the idea was put into operation then and there. The teacher contributed Rs 5 as his share money.

In a few days a number of students joined the co-operative venture by subscribing a share of Rs 2 each, together with an entrance fee of 50 paise.

A good amount was collected within a few months as the members formed a habit of saving one rupee every month out of the money-orders they received from their parents and deposited the amount into the Rupee Bank. The members passed the constitution of the Bank and elected from among them a Board of Directors with a chairman and a secretary. The teacher was requested to work as adviser.

The objectives of the Bank are: (1) to inculcate among students the habit of saving and thrift, (2) to help students by advancing loans, in times of their difficulties, for purchase of books, payment of mess charges, examination fees etc., and (3) to provide practical experience to students in running their own affairs.

The Rupee Bank has attracted a number of students in a very short time. Its membership has gone up to 200. Its share capital now stands at Rs 1,300 and the reserve fund at Rs 200.

The teachers have also become members, but have kept aloof from its management. The Bank is managed entirely by students.

The Rupee Bank has now decided to expand its activities to meet the needs of the student community. The first step in this direction is to start a Book Bank to lend to students textbooks on technical subjects like agriculture and engineering. The second step is to open a consumer store for the benefit of students as well as teachers. A more ambitious step contemplated is to bring the entire student community of the city under its fold. It has already created a stir in other colleges. It has drawn a plan to admit students of other colleges as its members. The city has a student population of about ten thousand.

IN MADRAS

Parents Work To Make Their Schools More Efficient

PARENT Teacher Associations are devised to promote mutual understanding between parents and teachers so that they as a group can, through concerted action, tackle problems like student indiscipline and other adolescent destructive tendencies among students and make the school a more effective instrument of education.

In Madras State, associations also function as centres for imparting much-needed social and community education.

Today there are over 450 parent teacher associations in Madras State and more are being established through the persuasive efforts of the Madras State Parent Teacher Association.

The Madras State Prarent Teacher Association has drawn a model constitution for parent teacher associations in schools. The model constitution also serves as a guide in the formation of new parent teacher associations.

The associations cover a wide range of activities. They exercised their influences during the anti-Hindi agitation and ensured uninterupted working of schools;

They purchase land to construct buildings for schools;

Collect funds for free mid-day meals to school children;

Organise cultural programmes;

Arrange lectures and other facilities for the enlightenment of parents.

The associations also train students to behave with elders and to conduct themselves properly in railway stations, cinema theatres and public transport and to contact fire stations and ambulance in case of emergency. They also teach students in story-telling and public speaking. Some associations have co-operated with the school authorities in introducing uniforms for school children and some have donated typewriters to schools. One association has started a pupil's bank to inclulcate the habit of saving among children and to teach them to operate bank accounts. Another association has introduced the Helpless' scheme under which each donor is alloted a pupil who will be awarded Rs. 50 per annum by the donor for books and uniform and the donor is kept informed about the progress of the pupil.

The work done by the parent teacher association of the Vidyodaya Girls High School, in Madras City is outstanding. The association is perhaps one of the oldest in the State; it was established in 1954. It collected a handsome fund of Rs. 3.5 lakh for the construction of an auditorium and library for the school. The construction work is nearing completion.

Students Survey Villages

(*from Page 51*)

This would indicate that (i) participation of people as a whole is not as high as it should be in such a programme, and (ii) the involvement of poorer classes in the programme lags much behind that of comparatively better-off classes. The investigators further found that the hold of caste, creed and privilege on the village people was so powerful that in their wake the programmes like the C.D. could not realise their ends.

One-Third Use Chemical Fertilisers

The Planning Forum of Government College, Kota, Rajasthan, carried out a useful socio-economic survey of the nearby Keshorai-patan village.

According to the survey, the average monthly income of 42 out of a total of 65 families in the village, was less than Rs. 150. Only 33 per cent of the agriculturists used chemical fertilisers like ammonium nitrate and superphosphate. Over 50 per cent of the families was in debt. Co-operative credit was either not available or very cumbersome to get. Hence the majority of peasants got their credit and seeds from local *mahajans*, who charged high rates of interest.

The villagers spent 70 per cent of their income on food. Forty per cent of the families had *pucca* houses and *33 per cent electricity in their homes.* Most of their children went to the village school. There are no medical facilities in the village.

How the student community can play its role in arousing the interest and enthusiasm of villagers in self-help efforts, is illustrated by a Work and Study camp organised by the Planning Forum of Andhra Loyola College, Vijayawada. The 20-day camp was undertaken by a team of 45 students and 4 teachers in village Vattamrajupalli near Guntur from 11 to 30 September, 1965.

The campers, with the help of villagers, built a 5-furlong road for the benefit of the village. Besides, the group conducted study circles and group discussions on topics relating to rural problems and student life. Much emphasis was laid on personal contact with the people of the village. The activities included educational films, one-act plays, magic shows and music programmes for the villagers. They also instructed the villagers in adult education, self-help, child welfare, small savings, and undertook a cleanliness drive in the village.

Sing and Save

The Planning Forum of the P.S.G.R. Krishnammal College for Women, Coimbatore, hit upon a novel way of promoting small savings among students and others. It recently held an inter-collegiate contest of 'Composing Songs on Small Savings' and awarded prizes to winners.

Here are excerpts from the First Prize-winning poem by P.J. Mohan Ram, a student of the Coimbatore Institute of Technology:

Save, for your own rainy day,
In order that you also may
Be one of the great Indian clan
Aiding the success of its Plan.

So save, that you may proudly see
Your penny add a leaf to the tree
That is India's progress, which, if you ask me,
Without you, would not be.

Development Diary

January 1 to January 10, 1967

Jan. 1

India's first turbo-jet engine has successfully taken the preliminary test. The working of the engine, designed, developed and built entirely by Indian engineers, is demonstrated at the Hindustan Aircraft Factory, Bangalore. The jet will power the trainer aircraft, *Kiran*, and will replace an engine now imported.

Mr Dinesh Singh, back to New Delhi from a visit to Bhutan, says the King is keen on having the closest relations with India and our collaboration in Bhutan's development programme. If there are any offers of foreign assistance, the King would like them to be channelled through India.

The Central Potato Research Institute, Simla, has developed a wide range of new hybrids of potato, thus achieving a major breakthrough in the field of plant-breeding.

The Agricultural Research Station at Jamnagar has evolved an improved hybrid variety of *bajra*. It has given a yield of 2,400 kg of *bajra* per acre; the present average is 800 kg.

Jan. 2

With Soviet collaboration, India is to set up a metallurgical designs institute which will help in the construction of steel, aluminium and other plants.

Jan. 3

The Kalol oilfields begin to supply crude oil to the Gujarat refinery.

The Central Research Institute at Karaikudi has developed an electro-chemical method to produce dialdehyde starch widely used in the tanning industry.

The foundation stone of the National Geophysical Research Institute in Hyderabad is laid by the Prime Minister.

The Heavy Electrical Equipment Plant at Banipur near Hardwar begins production. The biggest of its kind in the country, the plant is scheduled to produce nine turbine generators of 100 megawatts each and seven hydrogenerators of various capacities a year.

The Diesel locomotives works at Varanasi turns out the 100th diesel locomotive, with 58 per cent indigenous content, and costing Rs 17 lakh. Set up three years ago, the plant plans to produce 55 such locomotives this year.

Jan. 4

An official review says India's food output this year may be between 80 and 85 million tons. It may be necessary to import 15 to 20 million tons to meet people's needs. Since imports of this order may not be possible, allocations to the traditionally deficit States may have to be drastically cut. About 13 crore people are being served through the public distribution system, including four crore seventy lakh by statutory rationing.

An official spokesman says that the public sector refineries at Barauni and Koyali are expected to reach their capacity, two million tons of oil each, any day this month.

The Bangalore Division of HAL is designing a plane for use in agricultural operations. During the next six to eight years, the country may need 500 such aircraft.

Jan. 5

P and T Workshops in Calcutta, Bombay and Jabalpur have been producing more and more of the equipment hitherto imported from abroad. For instance, a special type of cable terminal box which alone has saved Rs 50 lakh in foreign exchange every year. The output of the three workshops in 1966 was valued at nearly Rs 5 crore, compared with Rs 1.2 crore in 1952.

The foundation stone of a Ferro-chrome Plant laid at Cuttack. When completed next year, it will produce ten thousand tons of low-carbon ferro-chrome a year, exploiting the chrome deposits in the mines nearby. The plant is being put up by the State Industrial Development Coropration, at a cost of over Rs 6 crore.

In Madhya Pradesh an ordinance is promulgated to give relief to tribal debtors.

Jan. 6

India's first Ayurvedic University is inaugurated in Jamnagar by Mr Morarji Desai.

A model dairy project is inaugurated in Hyderabad. Built with assistance from UNICEF, the dairy will meet the milk requirements of the twin cities of Hyderabad and Secunderabad. Initially, it will handle 50,000 litres of milk every day.

The Central Food Technological Research Institute at Mysore has developed a process for the manufacture of 95 per cent pure protein from groundnut. It can also replace milk powder in the preparation of ice-cream.

Jan. 7

The Hindustan Photo Films Factory at Ootacamund is inaugurated by the Prime Minister. The factory will meet the country's entire demand for most types of photographic film paper. One of the most up-to-date photo film plants, and the largest in Asia outside Japan, it has been set up at a cost of Rs 12 crore in the public sector. This year it will produce X-ray, negative films and bromide paper. It will also produce colour films.

Construction work of the Madras Refinery and the Madras Fertiliser Project has begun. The first sod of earth was turned by the Prime Minister at Manali near Madras. The refinery will process 25 lakh tons of crude oil a year and will produce liquid petroleum gas, motor gasolene, furnace oil and asphalt. It will have a lubricating oil plant. The fertiliser project will have an annual capacity of about half a million tons of 'N' and 30,000 tons of ammonia.

Jan. 8

The foundation-stone of the heavy plate and vessels plant at Visakhapatnam in Andhra Pradesh is laid. It will produce equipment for fertiliser factories. The plant, to be built with Czechoslovak collaboration, is expected to reach full production in two years.

A city milk project completed at a cost of more than Rs 1 crore commissioned in Madurai by the Prime Minister.

At the Kalwa Industrial Estate near Bombay, a Rs 4½ crore electric light factory in the private sector is opened. For the first time two basic components of the incandescent lamp — the filament and the lamp glass tube — are being manufactured in India.

The Second Indo-German Agricultural Development Project in the country is inaugurated at Ootacamund. The chief objective is to achieve a rapid rise in agricultural production in the hilly areas. The first project is operating in Mandi district of Himachal Pradesh.

The Tata Institute of Fundamental Research Bombay has obtained the first positive evidence for the emission of energetic solar neutrons with the aid of a new instrument. The instrument has been developed by the Institute's cosmic ray group. It is an electronic detector system.

Jan. 9

An express passenger-cum-freighter air service is inaugurated between India and East Africa. A firm of Indian industrialists has put up a factory near Glasgow in Great Britain to manufacture various products from asbestos. Machinery for the plant will be sent from India, and the factory will be manned by Indian technicians.

The United States has announced a loan of 12 million dollars (about Rs 9 crore) to help improve scientific and technical education in India.

At Hospet in Andhra Pradesh, the Prime Minister commissions the Tungabhadra high level canal, the first stage of the Tungabhadra project. She also lays the foundation-stone for the second stage. The project will irrigate arid areas in Mysore and Andhra Pradesh. The first stage, completed according to schedule, will irrigate more than 2 lakh acres in the two States. The second stage will irrigate another 2 lakh acres.

Jan. 10

The foundation-stone of the second plant of the Hindustan Cables laid at Hyderabad.

Regd. No. D 670

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"I appeal to every individual to come forward in a big way to assist our distressed countrymen in the drought and scarcity areas.

"Cheques and contributions in cash or kind may be sent to the P.M.'s Drought Relief Fund, Prime Minister's Secretariat, New Delhi-11."

Indira Gandhi
Prime Minister

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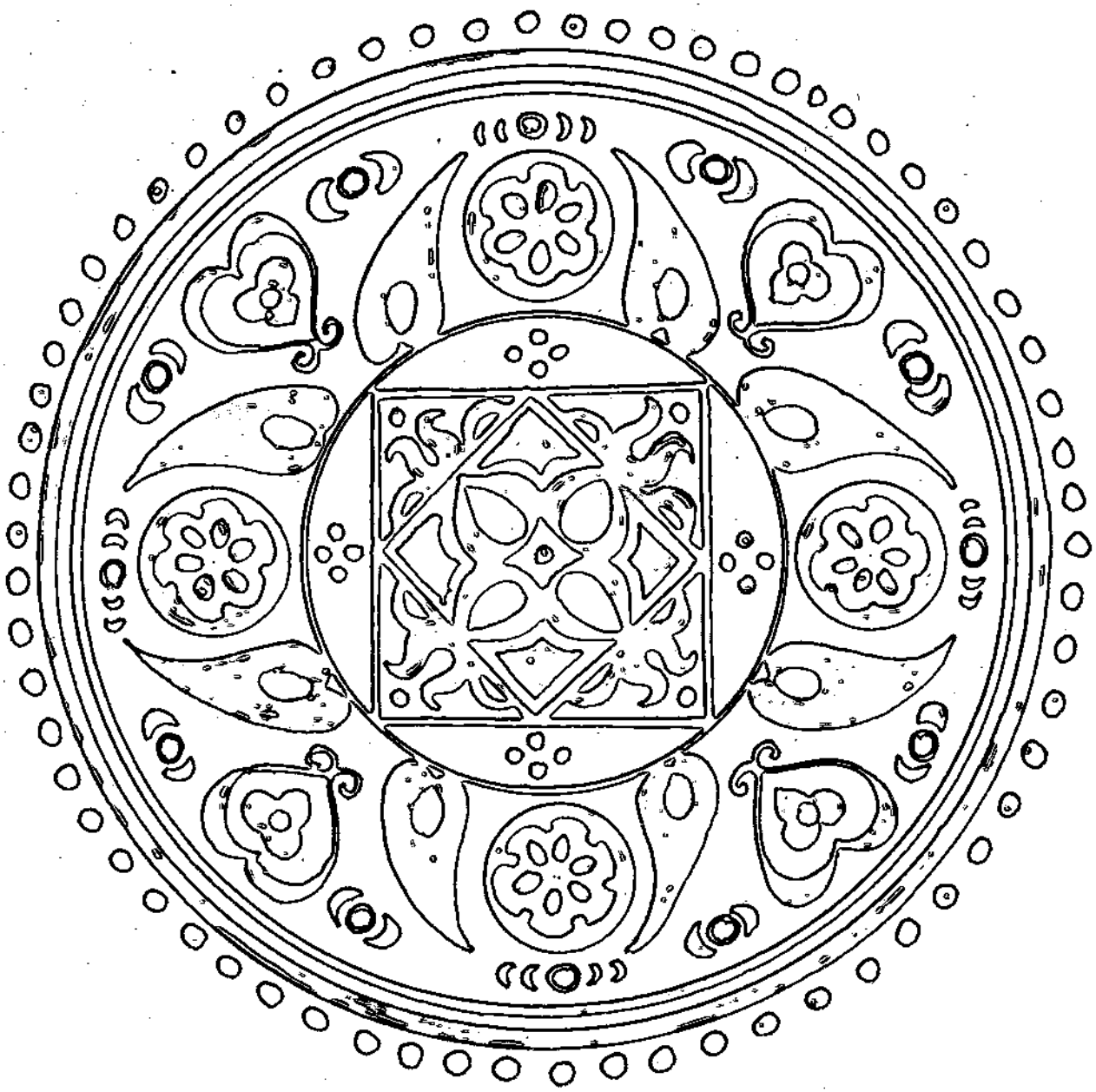
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YOJANA

ELEVENTH YEAR 26 . JANUARY 7, 1968 25 PAISE

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FROM DESPAIR TO HOPE

THE world has just bid farewell to yet another year, and already we are looking towards the future against the backdrop of what has become part of history. The old year that has been left behind has been a momentous one in the life of the nation. It has been a period of great changes in the political sphere and severe trial and tribulation as far as the economic life of the country is concerned.

It began with the fourth General Elections, which was not only a remarkable manifestation of the democratic process we launched in January 1950, but also evidence of the inherent vitality of the Indian body politic. The results of the elections, which saw, for the first time, the end of the dominance of the Congress Party in the States, marked the beginning of a new era in the nation's political life. For the first time, non-Congress governments came to power in several States, thereby putting the federal structure of the country to a real test. The political uncertainties that followed this development have still to be resolved.

On the economic front, the year has been a very difficult one. Rising prices and industrial recession have slowed down progress, and the burdens of the common man have increased, often beyond endurance. The devaluation of the rupee, which was expected to salvage our foreign trade from the mire, proved to be an illusory hope. Continued drought in several parts of the country, especially in Bihar, not only brought untold misery to countless people; but added a severe burden to the economy. Food production, severely depleted by the failure of the monsoon in the two previous years, was desperately short, requiring huge imports.

The problems have, indeed, been numerous; and often baffling. The cumulative effects of Chinese aggression in 1962 and the more recent attack by Pakistan in 1965 on the nation's economy were felt severely in 1967. The impact of the obvious imbalance in our economy, especially in the sphere of development and planning, has led to the decision to postpone the launching the Fourth Five Year Plan to April 1969. The period between 1966 and 1969 is being covered by Annual Plans. This decision of the Planning Commission, to break the cycle of Five Year Plans, has led some people to believe that the country has taken a "holiday" from planning. It has even been suggested that the "postponement" of the Plan is a "defeat" of the planning process.

These criticisms are based on certain misconceptions. In the first place, the preparation of Five Year Plans has not, in any sense, assumed less urgency or importance. Obviously, the effort is essential and has to be continued. There is no denying that long-term perspective planning is essential for the proper orientation of the planning effort. However, in view of the uncertain resources position, it would have been highly unrealistic to adhere to the fetish of five year planning. Secondly, the decision to adopt the system of Annual Plans in the interim period is designed to provide for investment and development expenditures within the limits of resources.

The past year has certainly not been very auspicious from the Indian point of view. Nevertheless, we have managed to keep going forward, however slow the rate; and these last few months have shown that the worst is behind us. A plentiful monsoon has made the prospects of a bumper crop more assured. This is a major gain; and, with a bountiful crop in sight, the economy is already gathering momentum. The delay in launching the Fourth Plan has been more than offset by the Annual Plans, which are more realistic in concept and are assured of more effective implementation. And so, we enter the new year with hope and confidence. The omens are good; but we have to keep on striving to attain the goals that we set for ourselves on the morrow of freedom.

A Yojana Symposium On PLAN POSTPONEMENT

The Decision Alone Not Enough

C.C. DESAI
Member of Parliament

BY announcing the decision to postpone the Fourth Plan, the Government have skilfully deflected much critical fire towards the fruitless controversy over whether the current three-year hiatus constitutes a Plan Holiday. I believe that unless a clearer picture emerges, especially regarding our fundamental approach to planning, no right-thinking person should overlook the grave policy errors committed during the last two five-year Plans. Do a new team in the Planning Commission and an extended period to complete their homework justify our continuing loyalty to any old panacea the Government may market in a new form?

We all fully endorse the much needed shift in priorities to making agriculture regain the paramount position in investment allocation. We have before us the tragic experience of the Third Plan which became a calamity because of the inflationary impulses in excessive public sector industrial investments without a cushion in agricultural production. Due to this, the capital-output ratio jumped to over 5:1 as against only 2.22 : 1 in the First Plan and 3.88 : 1 in the Second. We must not be allowed to assume too easily the facile belief that there may not occur years of some shortfall in food output. These declines in agricultural production may seriously affect the market for our major industrial goods and also our exports of primary commodities, which even now constitute a large fraction of our total exports by value. The Planning Commission, which has often failed to appreciate the effect of such shortfalls and is still weak in implementing Plan projects, gives no indication that it can rise to the occasion to formulate and carry through an operation so lightly set out with the grandiose form of India's Draft Fourth Plan. We now also face more difficult external pressures.

The changed climate of foreign aid and the drastic cuts that the U.S. Aid Budgets have already undergone, and are further likely to suffer, sometimes against the wishes of the American President, imply that foreign assistance will steadily go down. The crushing burden of both direct and indirect taxes implies that the Fourth Plan can be welcome only if it is a smaller and more realistic Plan, based on actual as against hypothetical resources. Otherwise, the impulse to recline on deficit financing is likely to prevail or the gap between the financial and the physical Plans may widen as in the Third Plan. During 1961-62 to 1965-66, Plan investment actually exceeded the target of Rs. 10,400 crore but the national income increased by only 15 per cent as against the target of 27.5 per cent. It is necessary that there should be less of financial model building and a greater devotion to the implementation of Plan projects. Full use of the experience acquired in the current Annual Plans needs also to be made to revise Plan programmes in mid-stream, if necessary.

Finally, there does not appear to have been any basic change in the official approach to the public sector industrial projects. Only after the existing capacities in the more efficient private sector projects are fully utilised, can new investment in public sector projects be allowed. There must also be a common criterion for judging the performance of industrial projects, whether in the public or the private sector, and this should naturally be the accepted norms of financial profitability.

Unless the decision to postpone the Forth Plan is buttressed by these necessary changes in Plan policies, I cannot consider it anything but an exercise in those very measures of extravagance of which the Third Plan gave such abundant and painfull proof.

Yojana initiated a discussion on the decision to postpone the Fourth Plan. In response to our invitation, leading Members of Parliament, distinguished economists and economic journalists have offered valuable comments.

Ten of them appeared in the last two issues. We conclude this discussion with four more comments here.

A Little Too Optimistic

V. R. PILLAI
Head of the Department of Economics, University of Kerala

NEITHER credit nor blame should attach to the Planning Commission for its decision to postpone the Fourth Plan to 1969-70. It is the compulsion of circumstances which has forced this decision.

The economic as well as the political situation in India today is so nebulous and so full of uncertainty that the time is least opportune to project to future growth of the economy. There

has been substantial change for the better in the conditions which prevented the launching of the Plan according to schedule. The vicious wage-price spiral is proving to be more intractable than anticipated. Our cost structure is becoming more and more inflated causing grave concern to our balance of payments. The resources position for the current annual plan is pretty tight and threatens to unleash another dose of deficit financing.

The growing resistance of the public to additional taxation and the adverse reaction of State Governments to even the most reasonable proposals to tax the agricultural sector are pointers of India's economic climate today. The prospects of massive foreign aid are fast receding, while the burden of service charges on dissipated old debts is hanging heavy round the neck. No Plan can succeed without public co-operation. The common man can judge our planning by one acid test and one only; namely how it affects his daily life. Is it any wonder if he has lost faith in planning, *sans* food, *sans* sugar, *sans* clothing, *sans* everything which makes life worth living ?

It is idle to pretend that all is well with our economy and the present difficulties are only temporary and transitional. The malady is more deep-rooted. Recession is a corrective which the natural play of economic forces has brought about. To counter it by stepping up monetary investment in the present context, will be like trying to stop fever by applying ice.

Several urgent tasks lie ahead of us to enable the economy to regain its momentum. The proper course therefore is in the first instance to make a determined effort to face them, for example, to effect drastic economies in wasteful expenditure, to tone up the efficiency of our public sector enterprises so as to make them yield a reasonable return on investment, to restore the buoyancy of the capital market by suitable measures, to redress the imbalance in the consumption goods sector consequent on its comparative neglect during the last decade and to concentrate on the maximum utilisation of the production potential created during the Plan period. If our annual plans can achieve these ends, it would automatically create more of real resources which can be channelled into new investment.

A firm base for the Indian economy to take the next leap forward can be obtained only if two essential preconditions are satisfied; the food problem must be brought under control and the price level should be stabilised. A realistic appraisal of the problems which confront us would suggest that the Planning Commission is perhaps a little too optimistic in proposing to begin the Fourth Plan in 1969-70. But Prof. Gadgil has certainly made his statement with commendable caution. What is envisaged appears to be that the Plan will merely "lay down the broad objectives, guidelines and policies for a five year period", on the basis of which detailed planning can be carried out from year to year within the ambit of available resources.

Prudent and Farsighted

KHANDUBHAI DESAI

Member of Parliament

DEFERMENT of the final formulation of the Fourth Plan, it seems, has created unnecessary but avoidable misunderstanding. The country must realise that we have passed through external difficulties in the course of the Third Plan period.

The beginning of the implementation of the Third Plan was made in April 1961. In the very next year the country had to face the invasion of China. This invasion upset all our expectations. Defence expenditure, which was only about Rs 450 crore, had to be stepped up to about Rs 1,000 crore by the end of the Plan. The first three years of the Plan remained static so far as agricultural production was concerned. The fourth year gave us some hopes; but the fifth and the subsequent years gave us a disastrous set-back due to the failure of monsoon, and the foodgrains production went down to about 74 million tonnes as against the anticipated Third Plan target of 95 million tonnes. This fall in agricultural production, coupled with a war with Pakistan, further upset our economy and the disequilibrium aggravated. All these realities cannot be ignored in the formulation of the Plan. The first three years of the contemplated Fourth Plan had to have only annual plans so as to give an opportunity for the economy to settle on an even keel.

Experiences of the past seventeen years would have to be concretely weighed by the new Planning Commission to give the country a realistic Fourth Plan. The potential resources available have pushed up the activities in the different sectors of the economy. In this connection the following few points require to be borne in mind.

Let us see retrospectively and historically the achievements of the planning strategy which this country has developed in a democratic way. We can say without hesitation that the First and the Second Plans succeeded substantially. We achieved an economic growth of 45 per cent in the first ten years of planning on the 1948-49 prices. At the same constant prices, the per capita incomes had increased by no less than 25 per cent. The Third Plan was badly disturbed by difficulties and prices rose up by nearly 60 per cent compared to the last year of the Second Plan.

Deficit financing had to be resorted to fulfil financial targets of the Third Plan which again added to the inflationary trend. Agricultural production was deplorably short. While the industrial production rose to 44.3 per cent, it distorted the equilibrium between the agricultural and industrial production. Some time is necessary to bring the equilibrium back. The three-year pause to rethink and reorientate the planning strategy is, therefore, absolutely necessary. This is not a Plan Holiday, but a short pause essential for the formulation of the Fourth Plan.

The country would not lose by it, instead it will considerably gain, and will be able to make an investment of Rs 2,500 crore in public sector undertakings to create resources for the Fourth Plan. I have no doubt that the experience of the

working of the public sector undertakings will also help the Planning Commission in streamlining the administration and management of these undertakings to yield additional internal resources. The pause is thus not only necessary; it is a prudent and farsighted decision which is justified and which we all must welcome.

A Reader's View

If one carefully reads the announcement of the decision to postpone the Fourth Plan, one finds two factors which explain the basic reasons for postponement.

(1) *Firm base* would be obtained in 1968-69.

(2) To project the future growth of the economy and *real development effort* for the five year period.

The entire planning process depends on these points. If the firm base does not seem to be available, then planning is bound to result in unrealistic efforts to achieve unattainable targets.

The present planning and economic development proceses can be likened to a train which has reached the platform but some of whose bogies are still outside the station. The postponement is like the brief pause to reach the entire train to the platform. This is done during the postponement period and the future course is then planned.

A brief stop is required to take stock of the structural, institutional, social and economic changes. The period since planning began has brought forth a lot of transitions and crises in all walks of national life. Hence, at the height of these crises, the postponement is desirable for further perspective and realistic planning.

R. L. Pitale

Amravati (Maharashtra)

Planning Note

State Annual Plans for 1968-69

The Planning Commission held discussions with the State Governments to finalise the annual plans for 1968-69 of the respective States. The meetings began on December 18.

The first two stages of discussions with the States for their annual plans had been completed earlier, except in the case of West Bengal and Nagaland. The discussions then dealt with financial resources and sectorwise programmes.

During the recent discussions, no decision could be reached on the Annual Plans of Andhra Pradesh and Madras. Discussion on Bihar's plan was postponed to January 8. No dates have been fixed for West Bengal and Nagaland. The annual plans of Maharashtra, Madhya Pradesh, Uttar Pradesh and Jammu and Kashmir were finalised. In the case of Gujarat, Mysore, Orissa, Punjab, Assam, Kerala, Rajasthan and Haryana, the outlays are subject to adjustments.

The outlays and main features of the Annual Plans as emerged from the discussions are given below :

MAHARASHTRA

Total outlay—Rs.139 crore.

Agriculture Rs. 33.35 crore. Co-operation and Community Development Rs. 3.49 crore. Irrigation and Power—Rs. 57.17 crore.

Industry and Mining—Rs. 3.20 crore.

Transport and Communications —Rs. 13.08 crore.

Social Services—Rs. 28.59 crore.

Miscellaneous Rs. 0.12 crore.

The outlay for the State's Annual Plan for 1966-67 was Rs. 115.46 crore. The anticipated expenditure on the current year's Annual Plan is Rs. 122.07 crore.

Next year's agricultural programme lays greater stress on extended use of hybrid seeds and intensive cultivation blocks. The Planning Commission is exploring possibilities of making more funds available for agricultural production and minor irrigation schemes through the Agricultural Refinance Corporation and other sources of institutional finance.

The State Government proposes to complete its programme of putting up at least one well in every village and providing other amenities during the year.

The Annual Plan also provides for a special programme of road construction in the forest areas of Chanda district with a view to speeding up the resettlement of refugees from East Bengal.

The State has launched a special drive for the recovery of arrears of tax and loan dues, and for the procurement of maximum quantity of foodgrains.

MADHYA PRADESH

Total outlay—Rs. 57.05 crore.

Agriculture—Rs. 15.88 crore.

Co-operation and Community Development—Rs. 2.00 crore.

Irrigation and Power—Rs. 21.70 crore.

Industry and Mining—Rs. 1.90 crore.

Transport and Communications —Rs. 2.65 crore

Social services—Rs. 12.17 crore

Miscellaneous—Rs. 0.75 crore.

The outlay for 1966-67 was Rs. 56.18 crore and that for the current year is Rs. 59.47 crore.

A HAPPY NEW YEAR

TO ALL OF YOU FROM YOJANA

The Chief Minister referred to the possibility of increasing resources by way of additional taxation and other measures. To the extent that this was effective, the total outlay for 1968-69 would be revised upwards. A net addition of Rs. 4 crore was expected which could take the total Plan outlay upto Rs. 61.05 crore.

JAMMU AND KASHMIR

Total outlay Rs. 21.70 crore.

This compares with an outlay of Rs. 17.38 crore for 1966-67 and an anticipated expenditure of Rs. 21.38 crore in the current year.

The Chief Minister said that the oultay would not meet the developmental needs of the State, particularly in respect of power and minor irrigation.

UTTAR PRADESH

Total outlay Rs. 140.18 crore, including Central assistance of Rs. 75.6 crore.

The outlay could be raised by augmenting the State resources.

GUJARAT

The annual plan for Gujarat as envisaged by the Planning Commission is based on an assessment of the total resources, namely Central assistance available to the State and the resources at present in sight, totalling Rs. 79.70 crore.

The Chief Minister stated that his Government would make an effort towards mobilisation of additional resources to the tune of Rs. 5. 30 crore. This could take the total outlay to Rs. 85 crore as compared with an outlay of Rs. 57.33 crore for 1966-67, and Rs. 72.06 crore for the current year.

It was agreed that the State's annual plan may be increased to Rs. 85 crore if the State Government was able to frame specific proposals for raising additional resources.

MYSORE

An outlay of Rs. 51.32 crore has been proposed by the Planning Commission on the basis of resources available.

The Chief Minister felt that the outlay should not be less than that for the current year, namely Rs. 60.25 crore, in view of the programme requirements of agricultural production, irrigation and other sectors.

It was agreed that efforts should be made to increase the resources by exploring possibilities of selling power to other States, collection of arrears and other avenues. The outlay in the annual plan would be augmented to the extent there was a net addition to the resources of the State.

ORISSA

With the resources in sight the Planning Commission has suggested an outlay of Rs. 29.60 crore.

The Chief Minister mentioned Orissa's special difficulties as a backward State and said that in order to maintain the tempo of development, the Centre's contribution to the available resources should be increased. The recovery of dues and repayments owing to the State and measures to raise additional revenue would enable the State to have a more satisfactory outlay.

PUNJAB

On the basis of the resources in sight, the Planning Commission has indicated an outlay of Rs. 29.53 crore. Allocations had been provided to ensure that implementation of the schemes of irrigation and power would continue.

The Chief Minister referred to the State's debt repayment and other obligations. There were also dues to the State which, when returned, could add to the Plan resources. The State would explore the possibilities of raising additional resources.

ASSAM

The Planning Commission has suggested an outlay of Rs. 29.40 crore.

The Chief Minister stated that the outlay was not adequate. There were also special regional compulsions.

KERALA

An outlay of Rs. 44.27 crore for the annual plan of Kerala for 1968-69 was discussed. The Central assistance will be more or less at the same level as in the current year.

It was agreed that the outlay for Idikki, at present suggested at about Rs. 8 crore, should be reviewed by technical experts.

RAJASTHAN

With the resources in sight, the Planning Commission indicated that the annual plan of Rajasthan should have an outlay of Rs. 37.30 crore, the entire outlay being met by the Centre.

The Chief Minister pleaded for a larger outlay in order to carry on the development work already in hand, specially in the field of irrigation and power. The Centre should also take into account the relative backwardness of Rajasthan in allocating resources.

HARYANA

A tentative outlay of Rs 21.53 crore has been suggested for the annual plan of Haryana for 1968-69. The outlay includes Central assistance of Rs. 13.9 crore.

The State representatives urged for a higher Central assistance on account of their enhanced repayment liabilities in regard to multipurpose projects and the various disadvantages from which they had suffered at the time of reorganisation of the State in November 1966.

IRRIGATION PROJECT FOR RAJASTHAN

The FAO, the United Nations Development Programme and the Government of India have agreed to a plan of operation for an irrigation project in the Chambal area of Rajasthan. The project will cost Rs. 4.5 crore.

The FAO and Government experts based in Kota will undertake a 1000-acre pilot development project in the Rajasthan part of the Chambal irrigation system. Based on their findings, a master plan will be formulated for reducing water-logging and managing soil and water resources efficiently.

Full needs for the reclamation and development of the entire 13,000-acre irrigated area will be determined and recommended in a feasibility report.

British Minister of Overseas Development tells YOJANA

U.K. Keen to Aid India's Agriculture

The Rt. Hon. Reg Prentice, U.K.'s Minister of Overseas Development, was in New Delhi from December 13 to 18. During his short stay YOJANA posed to him a few questions on topics of immediate interest to India and Britain.



Yojana : Mr. Prentice, you are now on your way back from the Colombo Plan meeting at Rangoon. Now, as has been reported, the Rangoon meeting discussed the availability and use of resources for increasing agricultural production in the Colombo Plan area. As you know, India is on the threshold of a breakthrough in agriculture and is trying to raise its agricultural production under a new strategy of high-yielding seeds, more fertilisers and other inputs. To what extent would the U. K. help in furthering this programme? Will it aid in setting up fertiliser industries and also provide more technical assistance in this field?

Mr. Prentice : I have been very impressed by what I have seen of agricultural production during my short stay in India, specially on my trip to the Punjab. I, like many other people from developed countries, was encouraged to hear the Indian delegate to the United Nations Food and Agricultural Organisation in Rome recently say that he hoped that India would be self-sufficient in food by 1971. Britain is always ready to give any help it can, and which the Indian Government would wish it to give.

With fertilisers, you will already know that I. C. I. are collaborating in setting up a very large fertiliser plant at Kanpur. But as far as my responsibility as Minister dealing with development assistance is concerned, *I would like to say that we are considering various possibilities: grain storage, fertiliser production and intensive agricultural development schemes.* We are keen to help in this direction, and in consultation with the Government of India, there is no doubt a way will be found. Of course, Britain has already provided some aid to agriculture. It is going into the Namrup fertiliser factory in Assam, and last year we gave a loan of £7.5 million for emergency use in connection with the food shortage. Much of this was spent on fertilisers, pesticides and port equipment for handling foodgrains.

Yojana : External aid to developing countries is sometimes linked, with specific projects and sometimes to support annual budgets or long-term plans. With U.K.'s experience in aiding India in both these categories, which of these, in your opinion, is a more suitable form of aid? Is tying of aid to specific projects a convenient form of helping or forcing the assisted country to translate a development strategy, acceptable to the donor country, into concrete projects?

Mr. Prentice : Let me make it clear straightway that Britain has never helped under its aid programme to support India's budget. Budgetary help is given only to those countries (most of which have only recently become independent) which lack total resources and finance enough to maintain their economies. An essential part of our philosophy as an aid donor is that we do not believe it desirable

We present here Mr. Prentice's views on :

- **U.K.'S HELP IN OUR AGRICULTURE**
- **AID TO SPECIFIC PROJECTS**
- **U.K.'S ENTRY INTO E.C.M.**
- **EFFECT OF POUND DEVALUATION ON INDIA**
- **FOURTH PLAN POSTPONEMENT**

to attempt to force our own ideas upon recipient countries. We try to provide aid in such a way that it can make the greatest contribution to development. I am concerned with development, and aid is only a way towards achieving this end.

In India Britain has, over the last few years, provided the bulk of its assistance in non-project form because this is what was needed. Nobody can look to the future and say with absolute certainty what will happen, but as the Indian investment programme builds up again, it may well be appropriate to link some of our aid to specific investment projects. This would have two advantages: it would enable our contribution to the development effort to be so clearly identified that it would be easier to show people and Parliament in my own country what is happening to our aid money; and incidentally, it would enable us to bring about a closer link between our capital Aid and technical assistance.

Yojana : Instead of looking to E.C.M., would Britain consider closer economic co-operation with the underdeveloped world ? What are the implications of Britain's entry into the E.C.M. as far as the Colombo Plan countries are concerned ?

Mr. Prentice : It is my view that British entry into the Common Market and co-operation with less developed countries to promote their development are not alternatives. My country can only play its full part in the development effort if we have a strong and expanding economy. Entry into the Common Market would, I believe, in the long run, create conditions in which the British economy could grow more rapidly, thus making it possible for us to play an even more active part in overseas development.

Yojana : Is India's trade likely to be affected adversely as a result of the devaluation of the pound ?

Mr. Prentice : Mr. Desai, your Deputy Prime Minister and Finance Minister, made an announcement on this point the other day. My ministerial responsibility is concerned with Aid rather than trade, but in general I agree with what Mr. Desai had to say. I am sure that India's own extremely capable economists are in a far better position than I to be able to calculate these effects.

Yojana : In the wake of devaluation, is a wage and price freeze likely in the U.K. ?

Mr. Prentice : There is no intention to legislate for a compulsory freeze on all prices and incomes. But we shall need very severe restraint, and the Government are relying on both sides of industry to co-operate. The Trade Union Congress have accepted the fact that devaluation will lead to some increase in the cost of living but that this should not be regarded as a reason for wage increases.

Yojana : In the light of the postponement of the Fourth Plan to 1969, will the U. K. formulate a fresh programme of aid ? Does the postponement in any way help framing such a programme ?

Mr. Prentice : While our aid programme naturally takes account of a recipient country's long-term development plans, the precise aid we give is worked out from year to year—in the case of India, in the context of the Aid India Consortium. The Consortium, as you know, receives reports on development progress directly from India and the World Bank.

A DESERT VILLAGE BLOOMS

BORUNDA WORKS "WONDER WELLS"

On the eastern fringe of Marwar, in Jodhpur district of Rajasthan, is situated a village named Borunda with a population of 4,000. The names Borunda and Chandi Dan Charan, a young farmer of the village, cannot be viewed separately, since Mr Chandi Dan Charan has transformed this desert village into a smiling garden.

What we find in Borunda today is the spectacle of a man's earnest effort for the development of the desert village. Scarcity of water was the curse of the village, although underground water was known to be there. In 1950 Chandi Dan Charan started an experiment by installing a 29 H.P. diesel pump to lift underground water. Following the success more than a dozon pump sets were installed and the village started getting assured supply of water throughout the year.

As a result of the water supply from the "wonder wells", the irrigated area in Borunda has now been raised from 4,000 bighas to 23,000 bighas. It produces Rs. 50,000 worth of barley, grapes, chillies, mustard and jeera.

Chandi Dan Charan also introduced high-yielding varieties to the village. The age-old barren land has now been transformed into a green verdour.

The villagers are confident that they could triple their annual income if the village could get electricity to run their pumping sets.

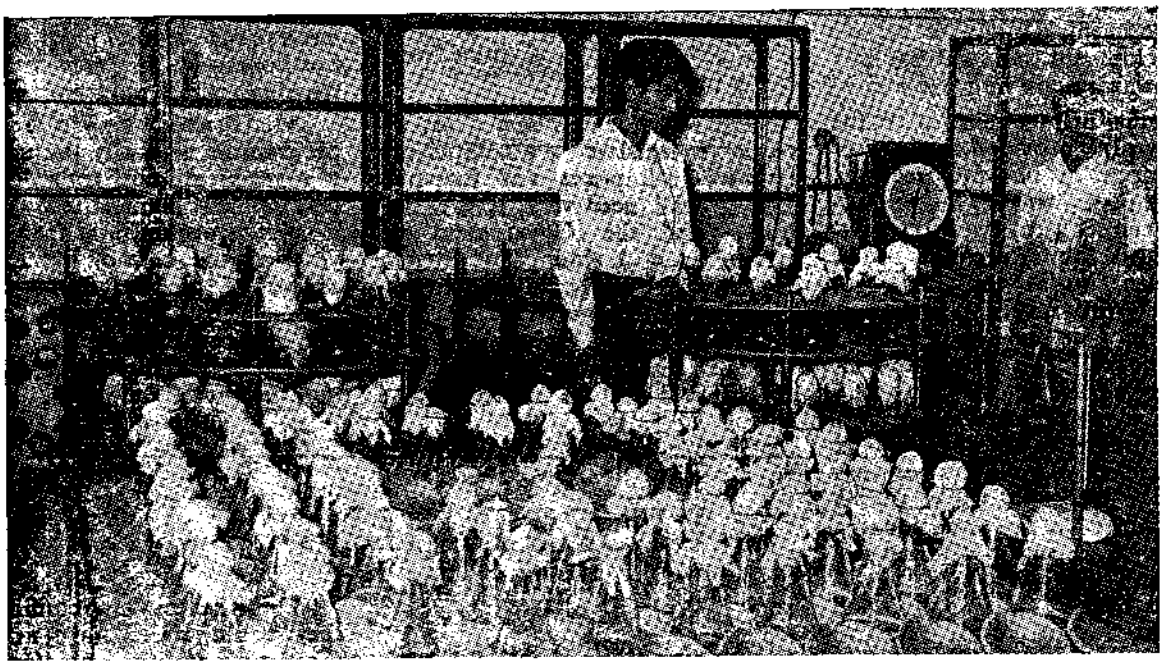
Apart from giving a lead in the field of agricultural production, he stepped into the field of education as well. The village Jagirdar and tahsildar were scared when there was a fight over the laying of the foundation of the first primary school ten years ago. But he did not. Conditions have changed, and now the village has a higher secondary school with 600 students. Even a girl school has come up in the village under his guidance.

The Films Division of the Information and Broadcasting Ministry has featured a film *mati ban gai sona* (soil became gold) in 1959 depicting the real struggle of the village. Now the villagers have started a folklore academy under the leadership of Chandi Dan Charan. They have also established a printing press and published collections of Rajasthani folk tales.

Chandi Dan has his rewards. The Government of India has awarded him 'Padmashri' in 1967 for pioneering work done in the field of agriculture. The villagers elected him 'Sarpanch' of the village Panchayat in 1955, and he continues to enjoy the confidence of the village ever since.

Kalyan Singh Kothari

ONE MORE STEP TOWARDS



SELF-SUFFICIENCY IN ANTIBIOTICS

Rishikesh Plant to Start Commercial Production Soon

Pimpri Finds New Antibiotics

Picture at the top shows development of cultures in flasks by shaking, in the room specially designed for the purpose.

Picture on the next page shows the penicillin crystallisation plant at Pimpri. The operator is handling penicillin crystals in the sterilised room.

THE new year will mark yet another step in India's progress towards self-reliance in antibiotics. The antibiotics plant at Virbhadra, four miles from Rishikesh, will go into commercial production in a few days. The Rs. 24 crore plant, considered to be the biggest in Asia, started producing penicillin a few months ago and will start trial production of streptomycin sometime this month. In a period of two years from now, the plant is expected to produce to its full capacity of 202 tonnes of antibiotics a year.

The production and use of antibiotics have increased tremendously in the last two decades. Since the days of the Second War, when penicillin was used on a large scale as an effective anti-infectious agent, more than 20 antibiotics have found their application in clinical medicine.

It was Pasteur who found that substances produced from living creatures could be used effectively against micro-organisms that cause diseases. The word "antibiote" was first scientifically employed by P. Vuillemin in 1889 to describe the concept of one creature destroying the life of another in order to sustain its own—one being in unrestricted opposition to the life of the other. It was in 1942 that the term "antibiotics" was finally adopted by Selman Waksman, a great researcher on the activities of these agents, to define chemical substances of microbial origin that possess anti-microbial activity.

Antibiotics inhibit the growth or destroy micro-organisms. They have been found to be specially effective against a number of infections in man and animals, caused by three groups of micro organisms, namely bacteria, ricketsiae and large viruses. Millions of human lives have been saved by them. Of late, these substances have come to the succour of plants. Hundreds of crores of rupees worth of foodcrops have been saved by the application of antibiotics. They have also been found useful in the preservation and transportation of fruits and vegetables.

In India the role of antibiotics assumes urgency and importance in

view of the large prevalence of infectious diseases. The present production of these substances falls far short of our requirements.

The Rishikesh plant and the Hindustan Antibiotics Ltd. at Pimpri, a village nine miles away from Poona, together have taken us on the road to self-sufficiency.

The Rishikesh project established under the Indo-Soviet Trade Agreement of 1959 is one of the three projects run by Indian Drugs and Pharmaceuticals Ltd. Soviet engineers have contributed a great deal to the working of the project and the training of Indian personnel.

Rishikesh was chosen for its abundant supply of water and because of its low dust content and negligible bacterial count of atmosphere.

The main products that will be manufactured at this plant are : sodium penicillin, procaine penicillin, streptomycin sulphate, dihydrostreptomycine sulphate, chlorotetracycline, oxytetracycline, tetracycline and nistation.

At its maximum production, the plant will manufacture the equivalent of one billion vials, capsules and tablets of various products.

The project extending over 900 acres has used over 6,000 tonnes of imported and 7,000 tonnes of indigenous equipment and machinery. Nearly 20,000 tonnes of indigenous and imported raw materials like corn-steep liquor, lactose, soyabean flour, butyl alcohol, starch, vegetable oils and oil cakes, are used every year in the production of antibiotics. Only about 25 per cent of the raw materials may have to be purchased from abroad.

The Plant has a well-equipped Research and Development Laboratory with a pilot plant which is the brain-cell of the project. The Laboratory engages itself in continuous improvement in yields and in the discovery and development of newer and better strains. It has one of the best animal houses in the country.

The Hindustan Antibiotics Ltd. was set up on the basis of an agreement between the Government of India, World Health Organisation and United Nations International Children's Emergency Fund.

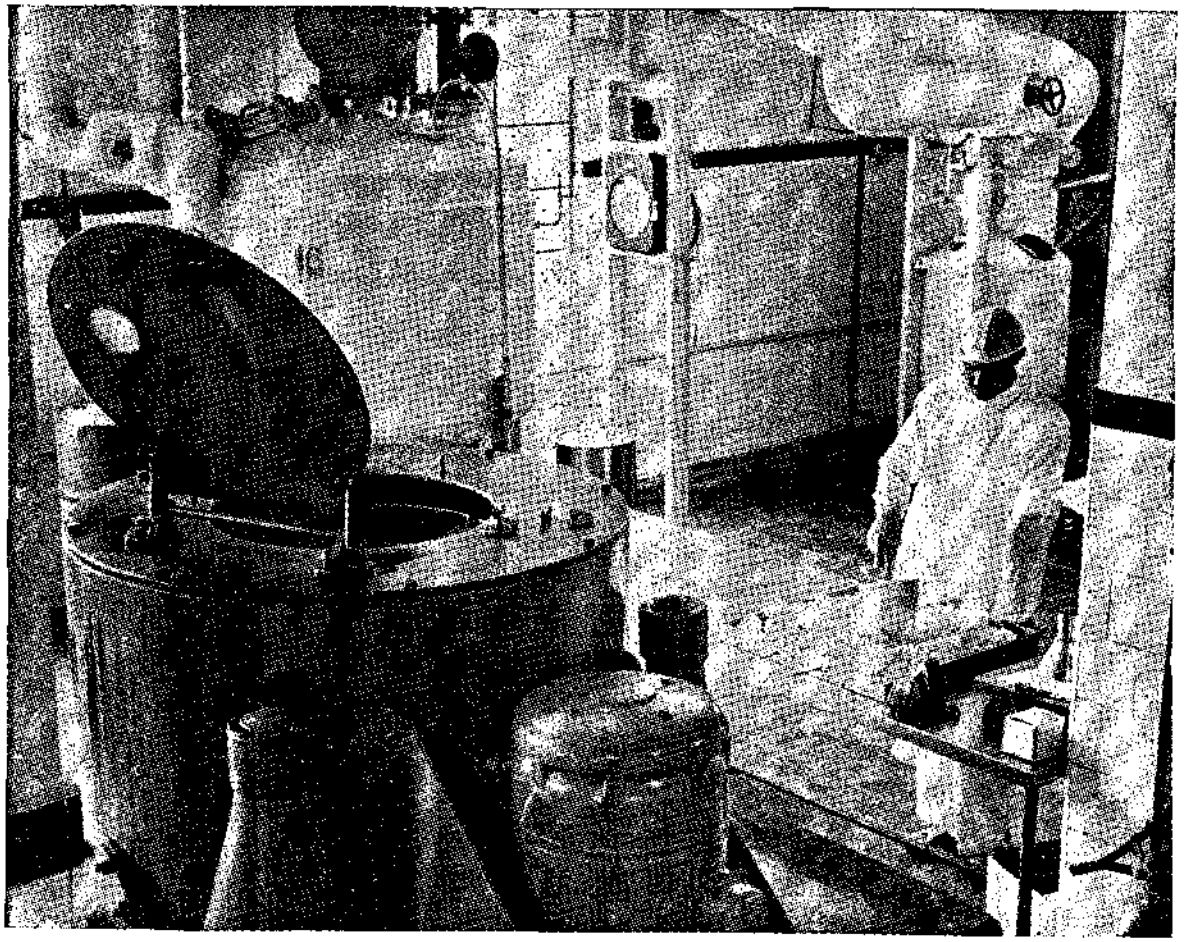
The Pimpri Plant meets a large part of the country's requirements of penicillin and streptomycin.

The initial capacity of the Plant in 1955 was nine millimega units (M.M.U.) of penicillin. The installed capacity was increased by nearly nine times, to 77 m.m.u. last year.

The streptomycin plant with a rated annual capacity of 40 tonnes started production five years ago. The capacity has since been doubled.

Pimpri's antibiotic plant has an internationally reputed Research Centre. It has developed two new antibiotics, Hamycin and Dermostatin, highly useful in the control and treatment of dermatomycosis, (infection of scalp, nail and skin with eczematous patches).

It recently discovered two other products, aureofungin and streptocycline, effective against fungal and bacterial diseases of plants.



NEXT ISSUE

Collective Thinking of India's Leading Economists, Publicmen and Journalists in

Republic Day Special Number

On

PRICES AND PROSPERITY

Why a price policy ? and a price structure ?

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Articles by

H.V.R. IENGAR
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CHIMANLAL B. PARIKH
Prof. BALRAJ MADHOK M.P.
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Prof. M.R. HAZARAY
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Dr. A. VASUDEVAN

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Special Articles on

UNCTAD—*February 4*

Social Control on Banking—*February 18*

3 Kg SEEDS YIELD 500 Kgs of PADDY

A Kerala Farmer Does It

I was busy with my office work. One of the farmers of my block area, P. K. C. Cheria, appeared before me with folded hands and a broad smile. I had never seen such a hearty smile on his face.

He told me that his IR-8 paddy had been harvested the same day. With folded hands he continued, "Sir, it fetched me 68 *paras* of paddy. This is the first time in my life that I get such a good harvest. What you said has come true. Excuse me, I did not believe you when you advised me to sow it".

"Are you convinced now ?" I asked.

"Cent per cent," Cheriya replied.

There is a story behind Cheriya's IR-8 cultivation. Cheriya is a farmer as well as an industrialist. Once he came to me in connection with his industrial problems. I also talked to him about the improved seeds and the high yielding capacity of IR-8.

He grumbled, "Last year I lost Rs. 1,500 in Tainan-3 cultivation. Hereafter I will never go in for your so-called improved seeds".

Finally on my pursuasion he agreed to try IR-8 for my sake. I gave him 3 kilograms of treated seed. He was surprised when I told him it was enough for about 30 cents of land.

He cultivated the seed as per my directions. At every stage the local Gramsevek assisted him. He did not use any additional quantity of fertilisers. The three kilograms of seed fetched him 68 *paras* (about 500 kg) paddy.

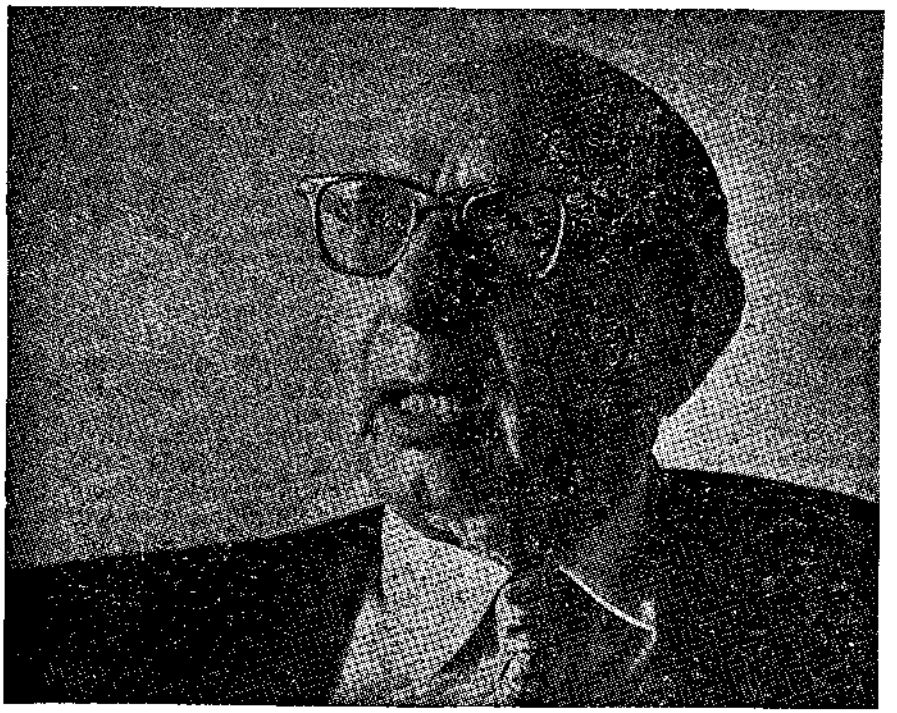
Cheriya has decided to cultivate IR-8 in all the five acres of his land. He says, "I get 7 kg. of rice for 10 kg. of paddy from IR-8. The bran is very thin and white. And the *chorr* (cooked rice) is delicious. My cattle relish IR-8 bey as my children eat sweets".

K. JACOB SAMUEL

"Nobody Really Wants India to Become Great"

G.B. Lal

Science Writer Emeritus Of America Says



Picture : T. S. Nagarajan

WE HAVE TO BE A SCIENTIFIC PEOPLE



"I don't like other people telling us—do this or do that. I tell you, nobody really wants India to become great. But we have to become great and equal to the more successful, more prosperous, more powerful nations of the world and for this, only science, technology and industrialisation can give us the tools," said Mr. Gobind Behari Lal, one of America's ace science writers in an interview that *Yojana* had with him in his hotel suite in New Delhi. Mr. Lal, now 79, looked much younger, bubbling with verve and vigour. An Indian by birth, he was visiting India after a lapse of 18 years to receive the Watumull Foundation Award for his contribution to Sciences and Humanities. Earlier, in 1937, he had won the Pulitzer Prize and is now the science correspondent of the Hearst chain of newspapers in San Francisco.

A talk with this spirited preacher of science leaves you surcharged with a craze for the popularisation of science.

Between his last visit in 1949 and now, Mr Lal found that there was a little more appreciation of the need for industrial development generally and a certain pride in the development of atomic energy. "But as for scientific spirit generally, now it is probably less than what it was in 1949", Mr. Lal lamented. "The most important factor for science in India was the personality of Jawaharlal Nehru. Our losing him obviously has done a great deal to weaken what could be called the general attitude towards science." Some of the most distinguished Indian scientists who were very active in the field had either retired or were dead. The absence of such personalities from among those who were specially important in managing the affairs of the country meant the weakening of the attitude which was essential for the growth of science and scientific institutions.

"Now in India the people's minds are guided by literary people, artistic people, most of whom are non-scientific," Mr. Lal pointed out. The most important thing our country was doing now was making laws and our Parliament had many lawyers. How many among these Members of Parliament were science-minded lawyers, he asked. Some of the best makers of science could well be enlightened statesmen, he added.

Although Mr. Lal has been away from India for nearly four

decades and has been a domiciled American, his identification with India and things Indian was admirable. He always spoke, "We in India" and talked fluent Hindi.

He ruefully commented : "Our desire in India is to retain scientific operations for some useful performances. But the scientific spirit associated with any establishment or institution, including that of atomic energy, is almost imperceptible." "In fact," he said, "I would start by saying that one of the first things to be done is to make up our minds that we do want to be a scientific people." As the first step, he wanted the inculcation of a belief and an understanding of the nature of science, both as knowledge and as technology and its association and operation in machine industrialism. "Allow me to point out that we are operating a whole new culture which may be called modern science, modern technology and modern industrialisation," Mr. Lal said. Whatever we call it, it is a complex kind of imitation. He thought some kind of old science was embedded in what was called religion, theology, creed or faith, variously denominated as *dharma* by the Hindus and *akida* by the Muslims and so forth. "So we have actually to remove some of our old clothes in order to put on the new ones. It will need a deep conviction for anyone to do that and will call for a great deal of energy and effort."

No doubt it was difficult because we had pride in many of our old theological systems. One reason for this pride was that European religious men and scholars had highly praised some forms of our theological systems.

Mr Lal agreed that evolutionary ideas had, of course, a role to play in India's resurgence. The Indian nationalist movement always tried to play up anything that was evolutionary. We had, therefore, a revival of our theological systems during our freedom fight. Thus a new religion or a revival of the old had helped us in winning freedom. During our struggle for independence, everything that seemed to us as coming from Europe was rejected. Mr Lal thought we had thereby thrown the baby along with the bathwater. The praise bestowed on our theology had gone to our heads. "It has now become a craze. We have got to get rid of it. Let us now go to the next stage," said Mr Lal emphatically.

He would not advocate banishing religion altogether. In fact, some religious symbols would come in handy for propagating science in this country. Some religious beliefs were intended to be rational but had misfired. For example, our worship of the sun god. It made a lot of sense. But mere sun worship would not do. The sun is a source of tremendous energy and has enormous influence upon us all the time. As Mr Lal tellingly put it, "If we study the sun as the profound ocean of energy, we can make the hydrogen bomb."

"People believe in many kinds of gods," he added. "But tell the people who the real gods are. The force of gravitation, the electromagnetic force and the stronger nuclear force are the real gods. You can very easily dress them up in mythology and you have gods." Mr Lal would not like the temples to be burnt down but would like them to be used in an extraordinary novel way. "Why don't you put a telescope in the temples and say this way the gods wanted us to have a *darshan* into things ?" he asked.

According to Mr Lal it was an art, the art of transition and evolution from the old pieties into the new ones. The study of philosophy, anthropology and psychoanalysis and certain other new branches of behavioural science should direct our thinking so that we might not get into a foolish quarrel with people of different beliefs which were once supposed to be rational but had failed.

The mass illiteracy in our country was a terrible hindrance to the growth of science and industry. Illiteracy had made our people complacent and insensitive to the problems of life. The relative poverty of our nation and our weakness in arms were the result of this attitude to life's problems. "You have to develop among the people a desire for better living," Mr Lal said. He agreed that almost every Indian today, of any consequence, wanted equality with the people who were known to be the world's most influential and prosperous, particularly with those of European descent and of Japan, "an excellent Asian country that has taken up modern ways." But the generality of people were yet to realise this need to catch up and go to the front row.

The whole level of life had to be changed. The only way was to develop a new interest in life. The characteristic of European middle ages of being preoccupied with things outside the earth, of an unknown future life would have to be given up. "You have to grapple with the problems of the world and compete with other nations. Otherwise it will be difficult to live with self-respect among those who are rising and swiftly going forward." Mr Lal said, "There is one thing I want to stress. If we want to become strong, we can certainly be so."

Mr Lal said he was not competent to say if the research carried out in our national laboratories and institutes was lopsided or if

THE SCIENTIFIC SPIRIT IN INDIA IS NOW MORE IMPERCEPTIBLE THAN TWO DECADES AGO. BUT THERE IS MORE APPRECIATION OF THE NEED FOR INDUSTRIES AND PRIDE IN ATOMIC ENERGY DEVELOPMENT.

NEHRU'S LOSS IS A BIG BLOW TO SCIENCE. NOW OUR PEOPLE'S MINDS ARE GUIDED BY LITERARY AND ARTISTIC PEOPLE, MOSTLY NON-SCIENTIFIC.

PRIDE IN OUR THEOLOGY MUST BE REPLACED BY CONVICTION IN A NEW CULTURE. TELL THE PEOPLE WHO THE REAL GODS ARE : THE FORCE OF GRAVITY, THE ELECTRO MAGNETIC FORCE AND THE NUCLEAR FORCE.

it had contributed to self-reliance. He, however, said that in spite of the fact that scientists in these institutions were top class people, equal to the best anywhere, their influence upon the people or the country's development in general or industrial development in particular was not sufficient. "They keep their knowledge locked up in chests" he added. "I am interested in changing the whole picture of scientific research. There should be high quality research. There should be people who take pride in having done research."

Mr Lal wished that the application of science should spread to every domain and aspect of life in this country. There were all kinds of people : those who were interested in living a better life, having better health, having a lot more money and so on. To all of them science could be useful. But he

RICH PEOPLE SHOULD INVEST MONEY IN DEVELOPMENT WORKS AND NOT IN BUILDINGS FOR RENT AND SALE.

had a ruse against the rich people who tried to get richer by making unproductive instruments. He pointed an accusing finger at the class of people who bought plots of land to build houses for letting out on rent or for selling and thereby making huge profits. They could easily invest their money in development works, industries and laboratories and enable other people also to get employment or to grow prosperous.

In an earlier interview in New Delhi, Mr Lal had said that "to learn and to bring the headworker and handworker together" was science. When asked to elaborate, he said, "As you know, in Europe, in the middle ages, there was a separation between intellectuals who learnt usually through the medium of languages like Latin, great scholars and university men who were mostly theologians concerning themselves with matters unrelated to technology and people who were craftsmen who made things with their hands." There were the leisure class and the non-leisure class, as he put it. The leisure class deliberately eschewed doing anything with their hands. Only when experimental science began in Europe with Galileo and Newton did a new age begin. The intellectual engaged in scientific activity and the practical man the craftsman, began to combine their specialities. Galileo initiated it. Newton continued it. Faraday also did it.

WE HAVE TO BECOME EQUAL TO THE MORE PROSPEROUS NATIONS. FOR THIS ONLY SCIENCE AND TECHNOLOGY CAN GIVE US TOOLS.

"We have not had that kind of thing sufficiently in our country," said Mr Lal. He pointed out that in China, even in the 19th century a group of Chinese thinkers like Hushi, the famous Chinese philosopher, had started a general movement of scientific attitude and continued for a long time. That was called scientificism by some people. "Without that movement the present change and acceleration of progress in China would have been delayed" Mr Lal said.

As an experienced science writer of long standing Mr Gobind Behari Lal wished that journals and newspapers in India could greatly help in building up such a movement. But when he was pointed out to him that only some 3 to 6 per cent of the total reading matter in Indian newspapers was devoted to science, he laid the blame on the reading public. They could help the publication of science articles by showing greater interest in them. "It is a two-way traffic" Mr Lal said. "If readers say, we don't want any stuff on science, then it is futile for newspapers to publish that kind of material."

ANY LANGUAGE THAT HELPS TO GET NEW KNOWLEDGE ACROSS TO THE PEOPLE IS GOOD LANGUAGE FOR SCIENCE. IT MAY BE FROM MARS OR THE MOON.

PUT TELESCOPES IN TEMPLES AND HAVE A DARSHAN INTO THINGS AS GODS WOULD HAVE WISHED.

To the question if the language for science writing should be the regional language and not English, Mr Lal's reply was categorial. "I would care less for any particular language. It can be a language from Mars or the moon. To me, any language that helps to get new knowledge across to the people is good language for science. Why quarrel about names and terms ? The test for the use of any language should be how far it is most likely to promote things. If you find that the language that you are now using is rich in content, why don't you continue to use it ? It is more convenient. If you want to go ahead in science, technology, industry, medicine, then you better get hold of some language that can deliver the goods. It is nonsense to bring in a language that is not rich in these things."

Interviewed by

Rosscote Krishna Pillai

Looking Back

Yojana, January 12, 1957

The Krishna Barrage at Vijayawada was inaugurated on December 24 by the Chief Minister of Andhra. The origin of this project goes back to 1792 when the idea of utilising the water of the Krishna for irrigation was conceived by Major Beatson. A terrible famine occurred in 1932-33 devastating the entire region and opened the eyes of the administration for the need for a barrage. Krishna anicut was brought into being in 1855, irrigating about 6 lakh acres. Since then the scope of the anicut was increased to 11½ lakh acres. Again the heavy floods of 1952 which devastated a large area compelled the undertaking of a new project which could both irrigate and check the floods.

The projeet has been named after the late Shri T. Prakasam. It ensures water supply to the existing 11½ lakh acres in the delta and will bring an additional one lakh acres under irrigation. Nearly 40,000 acres are already being cultivated. This barrage will have an all-weather road bridge on which all vehicles can ply. The bridge is on the National Highway between Madras and Bombay.

THIS INDIA

YOJANA invites contributions to this feature from its readers all over the country. Each anecdote must be true to life, of less than two hundred words, capturing something significant of India's rich and varied life. Each published anecdote will be paid for.

During my field survey, I met a progressive cultivator who had won the prizes for the best paddy cultivators within the Block as well as in the sub-division. He had always been encouraged by the agricultural and Block Officers. He was once requested by the Agricultural S.D.O. to collect from his office a very good variety of tomato seeds. He walked 12 miles to the office and eagerly bought a packet of seeds. He had to pay Rs. 1.40 although he used to buy such packets at 25 paise.

He sowed the seed in the specially prepared bed and anxiously waited for the seeds to sprout. When the day came, he found that the seedlings were not of tomato, but of brinjal.

Khagendra Nath Bondoloi
Barbheta, Jorhat

My friend, an Inspector of schools, went for inspection to a school in an interior village. He was glad to find the school running. But to his surprise, instead of the teacher on the acquittance roll, he found a different person handling the class. On enquiry, the inspector found that the teacher on the rolls had appointed him to run the school and that the regular teacher used to come there only on the last day of the month, pay his substitute some remuneration and go away.

Hawanur Sripathi
Thirthahalli, Mysore

Sukhada, (80), a poor refugee woman, works as a part-time servant in our house. Rather physically fit, she often criticises the ruling politicians. She has been so consistent in this that sometimes we wondered if she was a paid worker of a radical party. For some days past she clamoured against the possible dismissal of the United Front Government and even wanted us to protest against any such eventuality.

On the night of November 21, at about 11 P.M., when we were going to bed with worries about the announced market closure on the next day, consequent upon the sudden dismissal of the U.F. Government, someone knocked at our door. Sukhada to our surprise was found with a basket full of eggs, potatoes and onions. She told us that she had bought them for us with the money she was paid that very morning as her monthly wages.

Calcutta *Kamal Sen*

I was hurrying to my office when a voice from behind stopped me. It was a middle-aged man in simple, but well-ironed, clothes. Touchingly, he started relating how he had lost about Rs 45. He had come from Ludhiana and intended to go to his village, near Amritsar. In an extremely courteous manner, he requested me for five rupees, which he promised to return on his way back. I was so moved that I could hardly refuse. I gave a five-rupee note to him. He duly jotted down my address and started showering blessings. I really felt happy, having helped a needy person.

The same day, after dinner, I went out for a stroll. The 'needy' person, whom I helped that day was in the queue before the country-liquor shop.

Jullundur *Surinder Sharma*

An M.A. in commerce, after remaining unemployed for a year and a half, recently joined a Government concern as an Assistant in the Accounts Department.

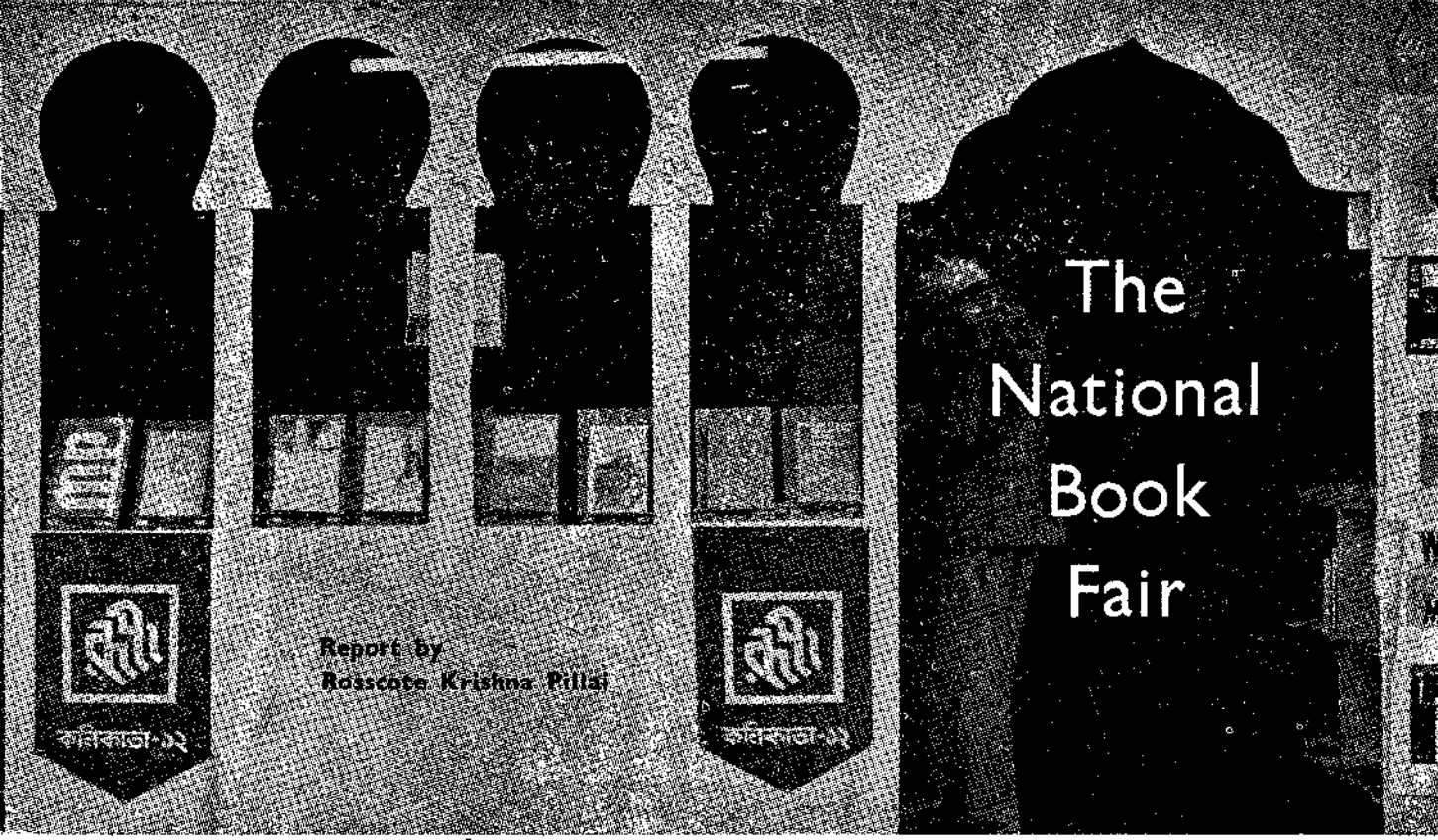
With the natural eagerness of a fresh entrant, he wanted to impress his superior officials. He disposed of all his files as and when they came to his table and kept all his work up-to-date. One day, one of his superior officials, in the course of a casual conversation with him, pointed out that he was too sincere in his work and in a serious tone advised him : "If you want to become a successful Government servant you must always appear busy but do nothing."

Madras *C.R. Thiaga Raja Varma*

A friend of mine was returning home after his usual evening stroll. On the way he was stopped by a lad who asked : 'Sir, could you kindly lend me Rs 8. I have not paid my fees and so I have been sent out of my class. He was taken aback by this rather opulent demand of the boy. My friend said : 'Sorry', and moved ahead. The boy wouldn't leave him and pleaded with tear-filled eyes for help. My friend was moved and thought that it might be a genuine request and gave the lad the sum. The boy thanked him and ran away joyfully.

Seven years later when my friend was seeing a film at a theatre, a young man came to him and gave him Rs. 8 while expressing words of thanks. The young man is now gainfully employed in a bank.

Baroda *Miss A.D. Wadia*



Report by
Rasscote Krishna Pillai

80,000 people see in Delhi the Second Fair

"We are really overwhelmed", said an official of the National Book Trust, which organised the second National Book Fair, when I asked her about the response of the public to the Fair. People swarmed in hundreds on the evenings of Sundays and holidays to the 200 and odd bookstalls at the Fair. Judging by the number of 10 paise entry tickets sold, the Fair had more than 12.000 visitors daily. On other days, the number of visitors averaged five to six thousand. And a considerable number, who came by invitation to the daily cultural programmes in different languages in the evenings, also had their look at the books.

This had far exceeded the organiser's expectations and pulled down a number of prejudiced notions about Delhi. The organisers never thought that in Delhi, generally given to gay abandon, the Fair would get one and a half times more visitors than the first Fair in Bombay, a major centre of booklovers in India. Even if one were to subscribe to the cynical remark usually heard about Delhi that hereven a money-player would collect a huge crowd, it would certainly not be wrong to conclude that at least a third of the 80,0000 of people who visited the fair was among Delhi's booklovers. In fact the organisers regulated the entry by tickets so that the Fair was not thronged by "gossipers, casual strollers and fun-seekers".

YOJANA Spotlight

Photographs : T.S. Nagarajan

About 200 different publishers had displayed books at the Fair. Among them were a few government publishers from the Centre and the States. Theywere, besides the National Book Trust, the Publications Division, the National Council of Educational Research & Training, the Sahitya Akademi, the Maharashtra Information Centre of Delhi, the Rajasthan Government and the Hindi Samiti of U.P. The Children's Book Trust which had already won encomiums for its lovely pubcations and other sellers of children's books and the publishers of paper-backs in Hindi were delighted with their brisk sale.

NOT ADEQUATELY NATIONAL

On the debit side of the Second National Book Fair was the absence of any publisher from the South, except the Southern Language Book Trust which publishes largely translations in the four Southern languages (their total number of publications is so far only around 550), or from Bengal, Assam, Orissa, Kashmir or Gujarat. A firm from Bombay publishing Gujarati books was there. One couldn't justifiably quarrel if someone were to say, "It is not fair to call this a National Book Fair."



Remarkable Growth in Popular Science and Technical Literature in Hindi

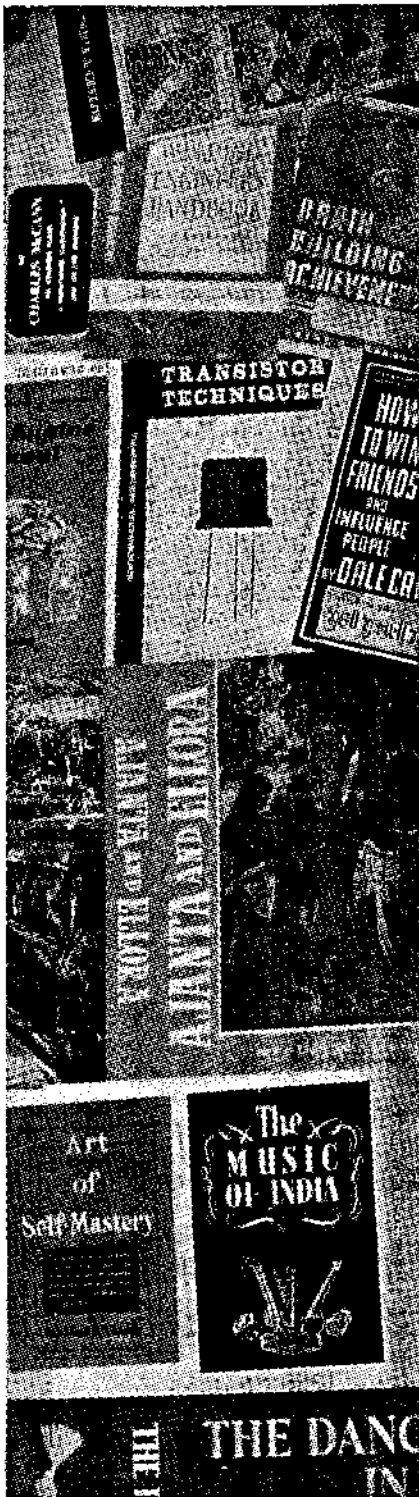
One couldn't escape noticing this lapse even in the otherwise imaginatively selected and tastefully arranged exhibition of books in the huge Central Pavilion. Among the 10,000 books selected from among those published in the country since 1964 in English and all Indian languages, 2,500 were in Hindi and 2,000 in English. The number of books in other languages had no relation or proportion to the actual number of books published in them or to their quality and variety. The numbers displayed there were as follows : Assamese—500, Bengali—500, Gujarati—500, Kannada—200, Malayalam—200, Marathi—500, Oriya—100, Punjabi—400, Sanskrit-100, Sindhi—200, Tamil—250, Telugu—100, Urdu—350.

UNWILLING PUBLISHERS

A visit to the fair alone without any further reference to the facts of book publishing in these languages might lead one to the conclusion that as many books were published in Telugu as in Sanskrit or a larger number of books were published in Urdu than in Tamil and that in some of these languages no books came out in certain branches of literature. The Fair organisers adduced the inadequate representation to the fact that publishers were unwilling to sent their books all the way to Delhi from the South and Bengal bearing freight charges to finally leave them with the National Book Trust for building up a mobile book exhibition.

The Central Pavilion left an outstanding impression of the remarkable growth of Hindi in the last three years in different branches of knowledge, especially in popular science and technical literature. The books in the technical section showed that Hindi was trying to bridge the gap caused by decades of stagnation. There were tomes on alternating current, fundamentals of testing, cinema machine operation, railway train lighting, armature winding, gas welding, soap making, automobile engineering, artificial insemination and reinforced concrete. And the titles were all in English in the Hindi script. This should certainly prove an inspiration and a challenge to the so-called 'better-developed' languages.

Hindi's many-sided growth could also be seen in the massive volumes of encyclopaedia, of histories of India and different parts of the country and different periods

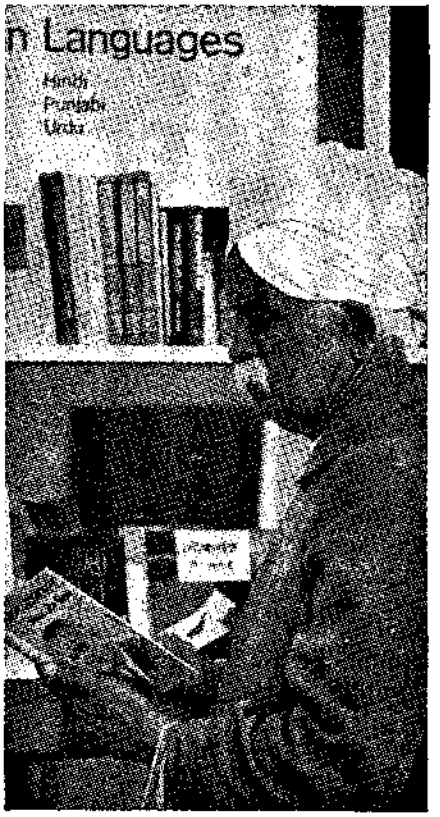


and dynasties (Rajputs, Marathas, Khiljis), on agricultural science and so on. The considerable strides that publishing in Hindi has made in the last few years were visible in the large number of paper-backs that were displayed.

PRESIDENT'S CALL

The importance of organising such book fairs in different parts of the country in order to inspire new trends and vigorous growth in book publishing and to foster book-mindedness in the people cannot be overemphasised. India today ranks seventh among the leading publishing countries of the world, producing over 20,000 titles a year. But one could see how lopsided still is the process of publishing in Indian languages from the fact that half these titles are published in English. According to a UNESCO expert, of about 5,000 million books annually produced in the world the Asian countries account for only 130 million and of these a considerable number is written in non-Asian languages. An authoritative estimate says that in the next 30 years India would have a reading public of 300 million. It would not be wrong to guess that a large majority of them would be familiar only with Indian





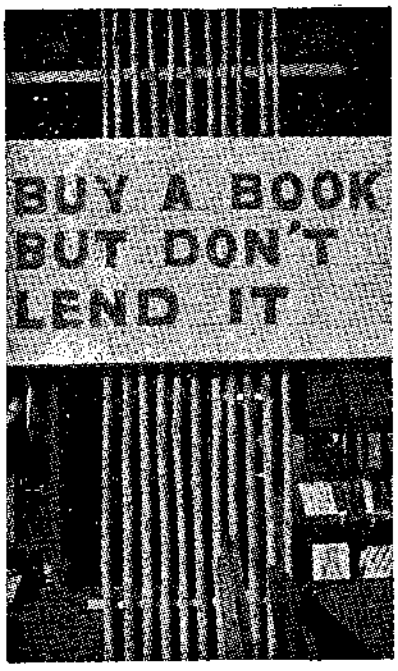
This and the picture at far left are by the courtesy of USIS

languages. The call of Dr Zakir Husain, the President of India, while inaugurating the Second National Book Fair "to concentrate on translating technical works in all subjects" was timely. He added that we would face the question of our subject experts not knowing the language and the language experts not knowing the subject. He, however, said that the universities and educational institutions could help resolve this dilemma.

The Education Commission has estimated that the student population which is now about 70 million would be more than doubled in the next twenty years and in less than

two decades it would be about 170 million or about equal to the total population of Europe. Opening the advanced fields of knowledge to this huge segment of our population requires an enormous production of scientific and technical literature. In this field the publication of low-priced editions of American books through subsidies from P.L.-480 funds has made available to the Indian student a large body of hitherto inaccessible advanced technical literature. But only a massive programme of publication of science books by indigenous authors in Indian languages would help in the colossal task of educating our millions of children knowing only their regional languages.

The Seminar and Round Tables organised at the National Book Fair helped to throw light on some of these problems of book-publishing in India. They were the National Book Trust's seminars on book reviews and fostering book-mindedness, the seminar on publicity, promotion and distribution of books arranged by the Federation of Publishers and Booksellers Association, the seminar on Children's Books organised by the Southern Language Book Trust and a Round Table on Copyright.



"It instructs, advises, inspires . . . . but never gets irritated."

As democracy takes deeper roots and as industrialisation and urbanisation grow in dimensions in this country, the demand for books is also bound to grow. Then, as the President said at the Fair, the face-to-face community would gradually give place to an impersonal conglomerate. The book would then almost replace the friend, as he put it. "It instructs, advises, inspires, rebukes, but stops immediately you have had enough of these. It never gets irritated at the silly questions one sometimes tends to put to it. It just smiles and holds its breath."

In our country where people ungrudgingly pay the increased price of terylene shirts and readily accept even the higher costs for the ingredients that go to make a book, like printing, cost of paper and so on, why should they grumble at the higher price of books, such delightful life-long companions, a person with 25 years experience in book publishing asked. Well, future Fairs should try to drive this point home.

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Arjuna Award

INDIA'S tradition in sport is as ancient as civilisation itself, and history abounds with the names of those who have enriched its pages with deeds of valour and feats of endurance. Foremost among them is Arjuna, who epitomises, not only the highest skill as a warrior and sportsman; but the chivalry, sense of honour and all the noble qualities that go to make a great sportsman. It is, therefore, appropriate that the nation's highest award for sportsmen should be named after the legendary *Mahabharata* hero.



The "Arjuna Award" was instituted by the Government of India in 1961, and is given to outstanding sportsmen and sportswomen in certain selected games. The award is made for a particular year, but on performances during the past three years. In selecting the recipient, due regard is paid to sportsmanship. The final selection is made by the Union Education Ministry, from amongst those recommended by the national federations and in consultation with the All-India Council of Sports.

In the six years, since the institution of the Arjuna Award, as many as 76 men and seven women who have brought honour and glory to the country on many a foreign field, have been given the award. A welcome departure was made in 1965, when an entire team was selected for an award, normally made to individuals. The honour was deservedly conferred upon the "Indian Everest Expedition," which wrote a new glorious chapter in the annals of mountaineering in 1964 by scaling the world's highest peak four times in a row.

Among those, whose names are inscribed on Sports Roll of Honour, are some of the all-time greats of hockey, cricket, tennis, football, athletics, polo, golf, gymnastics, wrestling and many other disciplines. Their names spell magic to sports-lovers and are an inspiration to the young men and women of India, striving to reach the dizzy heights of supremacy.

Two Decades of Rumania

THE Republic of Rumania was twenty years old on December 30. The first two decades in the life of the Republic have been marked by a remarkable transformation in the social and economic life of the country. This has been particularly marked in the development of industry and agriculture, and the complete elimination of all forms of exploitation.

The rapid industrialisation of Rumania between 1951 and 1966 is reflected in a 13 per cent increase in industrial output, which is among the highest recorded in the world. The increase has been of varying degrees in electrical and thermal energy, ferrous metallurgy, engineering and metal-working, chemicals, as well as in a variety of consumer goods. The overall prosperity of the country is evident from the high standard of living of the people, and in the provision of social services.



IGNORAMAN

Wants to Know

what is

"mini"

about

Ministers

Relations between India and Rumania, which have always been warm and friendly, were further strengthened during the visit of Prime Minister Indira Gandhi to Bucharest in October last year.

Rumania is well known for its highly developed and sophisticated oil industry. Various types of oil equipment manufactured in Rumania, therefore, form the major part of the country's assistance to India. In the last few years, Rumania has delivered to India drilling installations, the refinery at Gauhati of a capacity of 750 thousand tonnes a year, and the Singareni thermal power station. Rumania has also supplied the sulphur dioxide solvent installation in the Barauni refinery. Recently an agreement has been signed for collaboration on the Haldia Refinery. Rumania supplies India with oil products, sodium products, fertilisers and other chemical products.

In turn, Rumania imports from India raw material and manufactured goods, including iron ore, cotton thread, sheepskin, tanning and semi-tanning materials, jute sacks, cotton and woollen cloth, spices and coffee.

YOUNG India

ANTI-ENGLISH AGITATION IN THE CAMPUS

Predicament of the Student-Intellectual

SHIVAJI SEN GUPTA

WE have seen how the majority of students in the Delhi University campus condemned the recent anti-English agitation, and we have read about the stand taken by the 'Hindi Senas'. But few of us have regarded the problem through the eyes of the 'student-intellectual.' What differentiates him from other students is that it is difficult for him to adapt himself to the situation. Other students condemned the agitation or conformed to it. But the student-intellectual's trouble is that he responds to such a situation more academically than actively. He is not just a rebel; he seeks harmony between two ways of life. And this he tries to do by analysing every situation. Unlike other students, he cannot ignore the sentiments of the literary people like Sumitranandan Pant and Mahadevi Verma. He realises that English cannot after all continue for ever. He has nothing against Hindi; if anything, he may even be for Hindi being the *lingua franca* of India. But at the same time he sees the justification in Nehru's promise that English will continue as long as it is necessary.

The problem, therefore, to the rest of the university student-intelligentsia, does not arise. Articles on this issue in university journals are rare and even when one is printed it does not indicate any anxiety. In one of the recent issues of *The University Review*, for example, the writer was of the opinion that the language issue, in the face of so many graver issues, should not be given primary attention to. Can we really split the hairs, the writer seems to ask, over this when people are dying of hunger and governments are toppling in States ?

Can we ? The student-intellectual is not very sure of his answer. Coffee house discussions show that the tendency is to go to the root of things. The question is not whether the de-Englished graduates will get jobs or not. Rather, they talk about the sentiment for languages in people. They argue, and it is true, that because of anthropological reasons a quarrel over language can be extremely difficult to settle. The rejuvenation of Hindi, which has been the mission of writers in that language has at least for them a tremendous value. Every country has striven for a national language. In English, writers from Chaucer to Dryden had insisted on their 'native language, refin'd and free'. If we appreciate their struggle for establishing the English language, how can we then close our eyes to the struggle of Hindi in our own country ?

Many Bengalis and Tamilians are still parochial about their attitudes to Hindi, pooh-poohing it as a poor language, deficient in vocabulary, and so on. Hindi is a developing language and like all developing languages and literatures it ought to evoke a more positive interest among people. We have to admit that it is doing excellent work in translations and creative writing. Why do we then dismiss the language problem as merely a revolutionary fuddy-duddy? These are some of the questions which confront the student-intellectual before he is able to take a stand.

A solution, however, is not reached. And this is because of the fact that he is aware of the other side of the picture. Whatever he can say for Hindi on academical or emotional grounds, he has to face up to the pragmatical questions asked by various people. Only a day or two ago some students were seriously considering Mr Mohinder Singh's article on 'The Anger over Language' in *The Hindustan Times*. "What do the students really want?" the article asks. It is true that with non-English degrees, job-seekers will hardly be better off than they were when the medium of examinations was English. Someone in the group asked how those students fared in the past Honours examination who were allowed by the Education Commission Report to write their answer books in Hindi. If any of them had done really well then, surely, we would have heard of him. By the same logic, how many of us are prepared to take the I.A.S. examination in Hindi even though we know the language well? It is obvious that even today those of us who do not have a smattering of English are almost always from weak academic backgrounds. Moreover, as Mr Singh pointed out, the agitation is meant only for about 10-15 per cent of the university students who are reading for their Master's degree. Is all the vandalism then worth it ? The student-intellectual is painfully aware of the dichotomy between his academic opinion and their application to life.

Vandalism is the one thing which the student-intellectual has no hesitation in denouncing. He might sympathise with the sentiment of the agitators, but he

turn to PAGE 24

Mr. Shivaji Sen Gupta is a student of the Delhi University

PUBLIC ADMINISTRATION Should Be Part of Education

S. C. SETH

The British rulers had shaped the Indian administration to serve the Crown. Since Independence, India has chosen to go the democratic way, but the bureaucratic pattern has not changed much. To reorientate the bureaucracy to the democratic set-up education in public administration should be expanded and should form part of the university syllabus.

THE Indian governmental system has derived several of its characteristics from the British administrative traditions of the imperialist era. One of these administrative traditions has been the bias for the civil servant as an officer who is superior to other citizens and who knows something of everything.

The Britishers, during the course of their rule in India, took all steps to clothe their administration and administrators in India as representative of the imperial power of the British throne. Each public functionary, thus, represented the Crown, and each officer became the repository of a portion of the legal authority of the State.

The administration thus grew on the basis of unlimited authority, which the bureaucrats exercised over their Indian subjects. The bureaucracy, along with the entire official paraphernalia, thrived in complete isolation, and in a state of perpetual confrontation, nevertheless, with the fullest possible domination over the Indian people.

The modern Indian educational system is the product of an official educational policy which was too narrowly conceived and implemented by the British to perpetuate their rule. The British Government needed such Indians who possessed a basic knowledge of the English language, so that some of them could assist the British masters in carrying the white man's burden in India. The bureaucracy reigned supreme in all matter and did not pay any importance, whatsoever, to establishing any conscious links with the centres of learning in the country.

With independence India thus inherited a bureaucracy, in which general educational ability, as obtained by passing graduation course-supplemented by in-service-training, became the bed-rock of the development of the elite administrators.

In the field of education, the country inherited an educational system consisting of less than twenty universities and a few hundred schools and colleges, which depended mainly on Government funds and benevolence and which were no where near the bureaucracy in hierarchical status. They were not counted as equal to the bureaucracy as an important socio-cultural force, although, the products of the Indian universities had made substantial reinforcements to the British Raj bureaucracy for well over a few decades. The Government relegated the universities to a secondary status in getting their assistance in nation building activities. The lecturers, readers and professors working in the universities thus came to acquire only a secondary importance *vis a vis* the adminstrator.

This typically British attitude, that a general administrator is both socially and intellectually superior to any other professional worker, was a sacrosanct notion not on y in the days gone by; even today the administrative faith continues to be nourished with the nineteenth century fervour and reverence, in the public administration realm of India. This faith also determined the place of other professionly educated civil servants with the Government as well. For instance, even during the British period, there were several all India services, such as the education service, the forest service and the medical service, but they all had only a second class status *vis-a-vis* the covenanted Indian Civil Service.

Neglected Subject

Another important administrative view of the relationship between administration and education, which again was typically British, is revealed by the British attitude towards the development of 'Administration' as a subject of educational study. Whereas the British universities and the Whitehall elites could establish a Royal Institute of Public Administration in London way back in 1923, and had almost, within a few years' time, sponsored the establishment of its Dominion counter-parts in Australia, Canada and the New Zealand, public administration was not thought worth the study for the Indian educationist or administrator. Thinking about the Indian administration and administrators was done only in London.

The universities, both in the United Kingdom and in India, for a long time, failed to conceive

'public administration as a separate subject of study. The main avenue of such an educational exercise was provided through the educational syllabus on political economy, jurisprudence and the constitutional history of the British Empire and its constituents.

Even today, this practice persists in most of the Indian universities. Public Administration is taught as only a part of the studies in political science. Of late, though, there are some exceptions.

However, with the promulgation of the new Constitution of India in 1950 and the advent of the planning era, gradually began a qualitative change in the complexion of the Indian administration. The commitment to cultural and rural uplift and industrial expansion has brought about a fundamental change both in the functions of the Government and in the general attitude and obligations of the bureaucracy towards the society. The setting up of these new goals and the Government's effort to realise them in a big way have initiated a new trend, whereby the government and bureaucracy are brought closer to the people.

This trend was further strengthened by the flux of international intercourse of ideas and institutions on the one hand and simultaneous international participation of other countries, particularly the United States of America, in the socio-economic development of India. New vistas opened up in the relationship between bureaucracy and education. Paul Appleby's recommendation in 1954 for the setting up of an Indian Institute of Public Administration was an example and a landmark of the new thinking. It commenced a feeble dialogue between the world of bureaucrats and the world of educationists.

New Awareness

The new awareness that public administration is a subject of study in its own right and that countries like the U.S.A. and France have covered a vast territory in this field, whetted the appetite of some of the Indian universities, who have of late attempted to evolve teaching programmes in public administration in a bigger way than before. However, the paucity of funds, literature and trained teachers still continue to be the main stumbling block in achieving substantial progress.

The Government also came to realise that the bare education received by a civil servant, prior to his entry in the Government, was not sufficient and that, there was a need for greater post-entry educational exposure and training in administration. This has since led to the establishment of an official training academy, a few institutes, some training centres and schools.

However, the government has not yet forsaken the idea that it should train its officers only in its own training centres. The bureaucratic distrust of the capacity of the educational institutions to handle this job still continues to stand in the way of building up an adequate bridge between the world of education and the world of Government.

Consequently, the healthy process of a continuous exchange of 'ideas and personnel' between the universities and the Government and *vice versa* (which is almost non-existent today) will continue to be a far away dream, which was realised in the U.S.A. a hundred years ago. The entrusting of official programmes to the research institutes and universities during the two world wars by some of the Western Governments is still a lesson unlearnt for the Indian universities and bureucracy.

Task for Universities

Notwithstanding the loss of quality and standards on both sides, the need persists for a detailed investigation of the various aspects of the problem. Such investigation should be seriously pursued as a first step in the quest of administrative reform. If the Government thinks that it can become both an employer and at the same time a big training centre, it is not really trying to make a judicious use of the educational resources of the society, which could be harnessed by the Government to get its men exposed to new ideas and to implant such skills that the new commitments of the bureaucracy today require of its men.

Progress in a developing society depends greatly on the imaginative development and use of its manpower. This objective can be made considerably easier if a proper dialogue is established between the bureaucracy's needs on the one hand and the skilled out-put of the centres of education in the country on the other.

What is important is the need of reviewing educational programmes and syllabus, in general, and, of starting the public administration faculties in the universities and colleges, and of making them government-oriented, in particular. The universities and colleges have to realise that they are not simply ivory towers of learning but that they now have a special part to play in the building of modern India by producing the highly needed skilled men and women. The faculties of public administration and education in the various universities should be called upon to share the largest burden of disseminating continuously the new knowledge in administration to all administrative organisations and their functionaries, whether working at the Centre, or the State, or the district level to effectively run the secretariat, municipalities and other public offices.

Some Suggestions

Such a programme calls for a deeper investigation in the following directions :-

(i) A general assessment should be made of the manpower and training needs of the administration at the Central, State and local levels.

(ii) The out-put potential of the universities, technical institutes should also be examined.

(iii) An organised attempt be made whereby the faculties of public administration and adult education and *extra-mural faculties* of the various universities and colleges could be strengthened. And it may be determined in what possible manner can these faculties render useful service to the Indian administration and bureaucracy.

(iv) Requirements of a long-term educational training programme be assessed in order to make available ample indigenous and foreign literature on public administration.

(v) All possibilities be explored to avoid the growth of public administration education in India in isolation of similar developments in other centres of advanced learning and Government in the rest of the world.

Books

The Nehru Personality

Facets of Nehru edited by B.K. Ahluwalia. Published by S.E.S. & Co., Delhi. 97 Pages. Rs. 10.

THERE is a bumper crop of literature on Pandit Jawaharlal Nehru at home and abroad, including his own published speeches and writings. Perhaps no other Indian leader has inspired writers to write about himself, whether in praise or in criticism. And it is also true that no writing on Nehru reveals him as truly and as comprehensively as his own writings. *Facets of Nehru* is an addition, and not a very notable one, to Nehru literature.

This book is an anthology of articles which attempt to localise and highlight the various facets of Nehru's dynamic personality. It is an eulogy rather than a critical study. These articles were written by eminent men in public life, as tributes to Nehru after his death. Tributes as they are, they need not dive deeper assessing their hero. But isn't it yet time to evaluate the personality of Nehru and whatever he stood for and strove for, on the backdrop of his times, since, as Frank Moraes puts it, 'India moved with Jawaharlal wherever he was in or outside the country' ?

These articles have been collected from various journals. Two of them, one by Asoka Mehta and the other by Tarlok Singh, were published in *Yojana*, and two others, one by K.V. Raghunatha Reddy and the other by K.P.S. Menon, were released to Press by the Press Information Bureau of the Ministry of Information and Broadcasting.

"The aim of this book', claims the editor, 'is to bring to the reader a brief account of the late Shri Jawaharlal Nehru's rich and complex personality and his contribution to the liberation of India and its all round development." The book aptly opens with a sketch by Dr. S. Radhakrishnan outlining the role played by Nehru in the nation's life for forty years. Humayun Kabir traces the qualities of Nehru 'as a man of letters' through his works, particularly the *Discovery of India* and the *Autobiography*. V.K.R.V. Rao describes Nehru's contribution to the cultural renaissance of India, namely the identification of Indian nationalism with the larger world forces of anti-colonialism, making respect for the individual a part of Indian culture, and emphasis on science. K.P.S. Menon discusses Nehru's foreign policy, the unique feature of which was non-alignment. Homi J. Bhabha points out the implications of Nehru's insistence on science and technology 'for bettering man's lot and not for devising more powerful and destructive weapons of war'. K.V. Raghunatha Reddy depicts the evolution of Nehru's political thought crystallising into the concept of democratic socialism aimed at creating a classless society. Asoka Mehta delves into the mind of Nehru and its charismatic influence on the Indian people. "As the sculptor", he says, "sees in the marble the outlines of the image he seeks to carve, so did Jawaharlal see in the people their unfolding potentialities he cherised", and "under his spell, men somehow rose above their fragmentary faiths and sensed something of the universal *gestalt* that guided them." Tarlok Singh, who worked with the Planning Commission since its inception until recently, delineates Nehru's conception of planning through the three Plans. T.N. Singh explains the Indian industrial revolution of Nehru's concept. Frank Moroes reveals the artist in Nehru and K. Santhanam portrays Nehru as a statesman and an idealist fused into one. To these various facets of Nehru, B.K. Ahluwalia, the editor of this book, adds, in his own contribution, the human qualities of Nehru.

Any one of these articles by itself may not comprehend the towering personality of Nehru. But all put together they make a vivid picture of Nehru as the architect of India's destiny after independence, seen from different angles. Among them, the two articles, one by Asoka Mehta and the other by Frank Moraes are more interesting; the former gives an insight into the exaltingly creative mind of Nehru and the latter touches the delicate and musical notes of its vibrant impulses.

M.K.P.

THE LANGUAGE PROBLEM

The Indian Language Problem by Prof. R. K Yadav. Published by National Publishing House, New Delhi. 171 pages. Rs. 15.

A. W. Nawab

SINCE independence, next to the food problem the language problem has caused many a tribulation and turmoil, discord and dissension in India. The problem constitutes the biggest challenge to Indian statesmanship. There is, doubtless, a plethora of writings on the subject, not a single solution acceptable to all sections, is however, in sight.

A large confederation of people as the Indian nation is, billinguism or even trilinguism will remain inevitable, if not incorrigible.

In India, as in most other Afro-Asian countries which gained independence after her, a foreign language, be it English or French or Dutch, as the official language, came to be looked down upon as an undesirable relic of foreign domination. *Ipsofacto* India had to establish her own language and replace English.

According to the Indian constitution, the official language of the Indian Union is Hindi. The Constitution has also made provision for the recognition and promotion of 14 other languages. This constitutional provision was made when memory of partition and independence struggle was fresh. But lately the issue of changing over to Hindi as an official language caused hostile demons-

trations in different areas of the country.

Dr. V. K. R. V. Rao has called for the use of Devanagari as a common script for all the 15 major Indian languages, so as to open out possibilities of inter-communication among the Indian masses on a scale undreamt of in the Indian history.

On December 27, 1917, Mahatma Gandhi said that the first and the greatest service that we could render was to revert to our vernaculars; to restore Hindi to its national place as the national language and begin carrying on all provincial proceedings in our respective vernaculars and national proceedings in Hindi.

Dayananda Saraswati, Subhas Bose, Shyama Prasad Mukherji, C. Rajagopalachari were ardent supporters of Hindi, yet Gandhi felt compelled to admit in 1921 that "English is a language of international discourse. It is the language of diplomacy and it contains many a rich literary treasure. It gives us an introduction to western thought and culture."

C. Rajagopalachari asserts that "The English language may be beautiful but it sits heavily on our thoughts and does not let them grow or move about freely."

In this study, Prof. Yadav has discussed these mutually conflicting problems, and has pointed out the inherent weaknesses and inseparable defects in Hindi, English and Hindustani. Well-read and well-informed, Prof. Yadav has minutely diagnosed each tongue and each script and has suggested measures to improve Hindi if it is to be the official language of the country.

In his lucid way he asserts that "Urdu is Hindi Persianised. Amir Khusro, Malik Jayasi, Khan Khanan and Kabir were some of the distinguished Hindi writers. Urdu is the language of Hindus and Muslims; Hindi and Urdu are the two styles of one language. The case of Hindustani was ignored and the artificial polarity was highlighted. Gandhi's voice was drowned in the din of the battle carried on by frenzied narrow communalists."

In this timely study, Prof. Yadav gives a diagnosis of this deep-seated malady, its conception, its metamorphosis and the detrimental effects this language octopus has produced on the economic stability, national integrity and communal homogeneity.

Substantiating his arguments by irrefutable facts and figures, he deduces that the language problem has been kept in the centre of political activity and it is the sagacity or short-sightedness of the Indian political leaders that exercises decisive influence on the people and not the expert advice of the distinguished linguists or educationists.

Anti-English Agitation

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does not doubt that the *way* the whole protest was carried out was all wrong. Issues, as our Prime Minister said, cannot be decided on the streets. On the other hand, about the measures to be taken to stop hooliganism, she widely disagreed with the others. Let us take the example of the anti-agitation peace march which was planned. The administrators of the faculties of Arts and Sciences urged that the anti-agitation march had to be essentially apolitical. It is not our business to influence the decisions of the Parliament. This was something which the student-intellectual could not very easily swallow. At the same time he realised that the only way in which the vandalism could be effectively counteracted was to take out a peace march without political inhibitions. This was specially because the agitators had strong affinities with political parties. But a crowd is made up of individuals. Even though the peace-makers had more or less agreed that their march would demand only restoration of order and, therefore, be non-political, the organisers never really shed off their political affinities and came into contradiction with each other. To have or not to have a political character became the issue for argument. Naturally, the move failed because, unlike their rivals, the peace-makers did not have a common ideology. The intellectuals, in short, begged to differ.

To return to the vandalism. This was reintroduced (ever since the violent strike of 1948) by the law students' strike last year and since then stones and sticks (not to forget fire !) have been mightier than the pen. As Mr Mohinder Singh so well put it, with the excuse of not wanting to learn one language the students are refusing to be taught at all ! Every day for nearly a week they came and stopped the classes of the Arts faculty. If there is one thing that the student intellectual would never be deprived of, it is the right to work. He saw with alarm the large number of M.A. students that came and disrupted the various classes shouting unimaginative slogans. He wondered how the administrators of the Hindi department could allow such lawlessness. He realised how the ideals of teaching had failed. The teachers of the Hindi department have forgotten that their pupils are not only the students of their own department but the students of other departmetns too.

One of our well known professors had once remarked that the University of Delhi was a national university. Today it seems that even this university (like those of Allahabad and Calcutta) is heading for regionalism. Everyone, from the Vice Chancellor to the ordinary lecturer, is worried. Is language issue the cause of it ? No. And the fault is not in our stars. It is in us. Now is the time when the student-intellectual has to rally if the university has to be saved from growing parochialism. And this it can do only by radical and rational thinking. V.V. Giri has said that it is the students who shape the intellectual forces of a country. What is needed from the student is awareness, understanding, and balanced thinking. The student-intellectual has all these; but as the editor of a journal once remarked, our country is full of individual brilliance and collective mediocrity; the intellectuals, when together, fail to act as an effective force. One hopes that this is only a temporary failing.

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Capital Market in a Planned Economy. N.C.A.E.R. April 16.
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INTERVIEWS

Kerala Chief Minister. April 16.
Madras Chief Minister. April 30.
Bihar Chief Minister. May 14.
S.R.S. Hoysala by T.S. Nagarajan. May 14.
Mysore Chief Minister. L.K. Inamdar. May 28.
Dr S Chandrashekhar. July 9.
Gujarat Chief Minister. August 6.
An Assamese Farmer by P.D. Saikia. August 6.
Dr Vikram Sarabhai. October 1.
Prof D.R. Gadgil. October 29.
G.B. Lal. January 7, 1968.

Heavy Electricals (India) Limited has completed the manufacture of receiver chassis for 132 K.V. air blast circuit Breaker. The receiver tubes of the imported chassis for the first 40 Air Blast Breakers were made from seamles drawn tubes.

Heavy Electricals (India) Limited have already completed the main turbine assembly for 21,000 horse power (metric) peton turbine for Basi Power Station in Himachal Pradesh. It is for the first time such a water turbine has been manufactured in the factory. The main turbine assembly comprises four spear servo motors, top covers, deflectors, levers and connecting rods etc.

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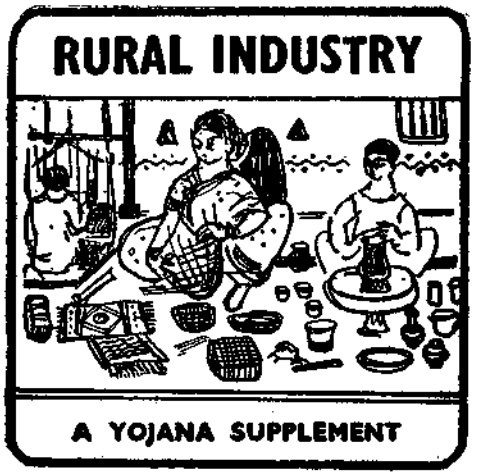
Business Manager

PUBLICATIONS DIVISION

Old Secretariat (P.B. 2011) Delhi-6

Narasraopet Project

A BASE FOR AGRO INDUSTRIES



NARASRAOPET rural industries project, one of the three in Andhra Pradesh, comprises five panchayat samities (Narasraopet, Santhamagulur, Nandyndla, Phirangipuram, Rajupalem) and two municipal towns (Narasraopet and Chilakaluripet) in Guntur District. Covering an area of 1028 sq. miles and a population of 4.78 lakh, the project has a predominantly agricultural economy with paddy, jowar, bajra, chillies, tobacco, groundnut, castor, cotton and turmeric as chief crops. The project offers good scope for development of agro-industries especially in view of the fact that canal irrigation is being extended to vast areas under the Nagarjunasagar Ayacut Development Scheme, and the crop pattern in the region is likely to undergo a change for the better.

PROMOTIONAL ACTIVITIES

During the five-year period 1962-67, a total expenditure of Rs. 19.74 lakh has been incurred on various promotional activities in the project area. Of this amount, Rs. 6,47,050 is accounted for by loan assistance, Rs. 5,84,144 by common facility centres, Rs. 3,31,249 by departmentally run commercial schemes and production centres, Rs. 2,06,093 by subsidy and grant schemes, Rs. 1,74,300 by establishment and Rs. 24,431 by training programmes.

Various promotional efforts have resulted in the development of small-scale units and resuscitation of cottage type units and industrial co-operatives. Before the inception of the project, there were few small-scale units in the area as the people depended for all their requirements—agricultural implements, consumer goods, repairs and services—on Guntur, the district headquarters. But since the project came into being, 72 new small-scale units have been registered.

2670 UNITS ASSISTED

Under the loan assistance schemes, a total of 2670 (33 small-scale and 2637 cottage-type) old and new units took advantage. Among the small-scale units there are four worker-owned general purpose engineering workshops as also units engaged in the manufacture of consumer goods, such as folding furniture, wooden furniture, portable canvas bags, bricks, chalk crayons, agricultural implements, stone chips, footwear, steel cabinets and steel trunks, medicinal preparations, mosaic tiles, etc. These units employing 302 persons produced goods worth Rs. 5.6 lakh in 1966-67. Among the 2637 cottage-type units which received financial assistance, 525 are engaged in handloom weaving, 442 in carpentry, 917 in leather goods, 296 in pottery and cement products, 258 in carpentry-cum-blacksmithy, and 151 in bamboo and rope making.

INDUSTRIAL COOPERATIVES

There are 17,000 traditional workers in the project area out of whom 9,000 are weavers and the rest carpenters, blacksmiths, cobb-



Demonstration of improved potters' wheels in Vipperla village



A carpenter in Narasraopet Project who has improved his skill and is now making musical instruments

lers, bamboo workers, brick makers and potters. In pursuance of the objective to bring these traditional workers into the co-operative fold, 18 industrial co-operative societies have been formed, of which 13 with a membership of 338 are functioning at present. Financial assistance of about Rs. 40,000 (Rs. 10,240 to individual members for their share money and Rs. 28,060 as grants for construction of worksheds, or as technical and managerial subsidy) has been given to help the poorest sections of the society.

The scheme for distribution of improved tools to artisans has helped them to settle down confidently in their respective trades. So far, 1154 artisans have benefitted from kits of improved tools and equipment and in a number of cases the income levels and productivity of the beneficiaries have increased appreciably. In quite a few cases, power driven equipment such as drilling machines, sanders etc. have been distributed.

How the outlook of rural artisans is changing is illustrated by the demand for improved potters' wheels : so far 220 potters have been supplied with improved wheels, but the demand is still growing. In Vipperla village all the 20 potter families have taken to the improved method of production and the yearly earnings of each family have increased to Rs. 1,000.

Under a Project Scheme, stipends ranging from Rs. 75 to Rs. 100 per month are given to artisans and workers to improve their existing skills or acquire new skills. The trainees are deputed to Government institutions and private factories in and outside the State for a fixed period. On completion of training, they are given financial and other assistance to enable them to take up that particular line. So far 75 persons have received training and most of them have been absorbed properly.

COMMON FACILITY CENTRES

A general engineering workshop has been set up at Narasraopet as a departmental unit to provide common facilities for trades like carpentry, blacksmithy, foundry and machine shop jobs.

The semi-mechanised carpentry section is working in full swing giving employment to 28 workers-25 piece-rate and three regular. The average monthly income of a piece rate worker here is Rs. 150. This section also provides training facilities.

On the advice of the State Agricultural Department, the workshop has undertaken the manufacture of certain improved agricultural implements. Apart from this production activity, the workshop is rendering useful service to the local artisans and small-scale industries units.

In Phirangipuram panchayat samiti, there is a concentration of about 1,000 weavers who mostly produce coarse cloth on their old-fashioned pit-looms. A dye house and designs extension centre has been established here to demonstrate to the weavers the superiority of the improved looms and the monetary advantage of taking up finer varieties of cloth with designs. There are seven looms in the centre on which weavers are encouraged to work on piece-rate basis. Their average daily earning comes to Rs. 5 as compared to the Rs. 2.50 daily income of a traditional weaver.

A common facility centre has been started at Santhamagulur for the benefit of traditional tanners. A tanning shed has been constructed at a cost of Rs. 16,000 where a demonstrator holds practical demonstrations.

SIDELIGHTS

Bee-keeping serves as a subsidiary occupation for poor farmers who can supplement their income without much extra effort or investment. In Narasraopet Project, this activity has been ardently taken up by the enlightened and comparatively well-to-do sections of the public which include lawyers, college lecturers, medical practitioners, students and even priests. An advocate extracted 14 Kgs. of honey in a year from his three bee-boxes while a medical practitioner got 23 kgs. from four boxes. Students of two colleges at Narasraopet are in great competition with one another in the matter of bee-keeping and honey extraction. So far 68 bee-hive boxes have been distributed on subsidised rates.

* *

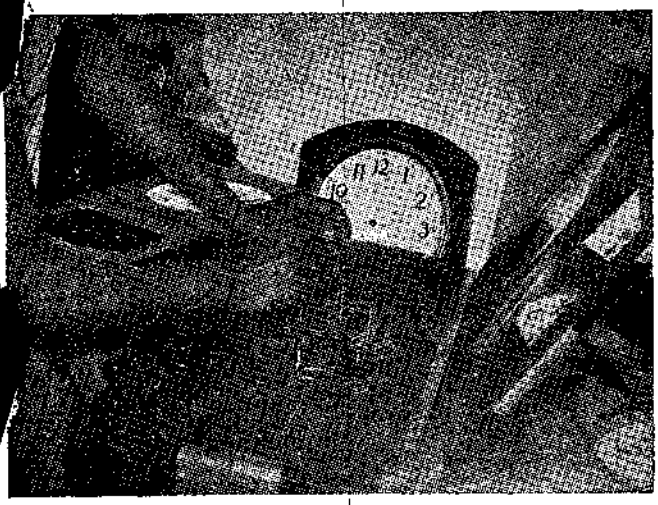
The poor bamboo workers of Edlapada village find their work lighter and pleasanter when they weave baskets and winnowers in the workshed constructed with the project aid. The reason : a radio set installed in the common shed by their co-operative society out of its profits. The society with a membership of 17, purchases bamboos in bulk from Nallamallai forest at a distance of 110 miles, and distributes them in the village among its members at comparatively lower rates. Sweet melodies and cheaper raw material have, it is averred, increased the earnings of workers by at least 50 per cent.

* *

The Project has made a notable contribution to settle nearly 40 Lambadis who are by nature nomads, at Sattanapalli. A prominent local social worker organised them into a co-operative society for weaving ropes from sun-hemp and jute. The khadi Board gave them a loan of Rs. 2,350 for working capital, and a grant of Rs. 900 for equipment and training. The project agency made an out right grant of Rs. 4,000 for purchase of land to construct a common workshed. Another grant of Rs. 600 was given from the fund to the sale depot of the society. At present a group of two elders and one youngster is earning Rs. 5 daily during off-season and Rs. 8-9 during the season.

AROUND THE PROJECTS

Kozhikode (Kerala)



TIME CHANGES FOR A WATCH REPAIRER

MR. E. Sadanandan, 33, of Kozhikode Project who started is carrier, 17 years ago, as a watch pairer at Rs. 60 a month, is now he managing partner of a unit set at Beypore for the manufacture of spare parts of clocks. He has ambitious plans to expand the unit into a full-fledged clock manufacturing factory after consolidating his initial success.

Early in 1967, Mr. Sadanandan approached the Project authorities for financial assistance to establish his proposed unit. A loan of Rs. 5,000 was sanctioned with which he purchased machinery such as spray painter, sander, case heater, motors and some sundry accessories and equipment. In May, he started manufacturing, in a rented building, clock cases with the locally available jack wood as also clock parts like dials, hands, pendulums, etc.

There has been a steady increase in the demand for these items which gave him the necessary impetus to purchase land at Beypore to set up a well-planned factory which is now in the making. He has since applied for a factory loan of Rs. 35,000, and supply of machinery worth over Rs. 10,000 on hire-purchase terms. After completing this phase he intends to approach the National Small Industries Corporation for import of machinery valued at Rs. 3 lakh which would be necessary to undertake the manufacture of complete clocks.

At present the unit provides work to nine persons with a monthly wage bill of Rs. 1500. After meeting all expenses, Mr. Sadanandan is able to make Rs. 500 to 600 for himself.

MACHINERY FOR TILE FACTORIES

A hereditary blacksmith who worked as a foreman for 26 years in a tile factory has, in less then two years, trebled his income by setting up a unit for the manufacture of machinery used in tile factories.

The entrepreneur, Mr. K. K. Ayyappan, was employed on a monthly salary of Rs 300 by a tile factory at Feroke. Early in 1965, he put up a scheme to the Rural Industries Project, Kozhikode, for starting an engineering unit. In October the same year, he was supplied with machinery (two lathes, a drilling machine, a shaping machine, transformer welding set together with accessories) valued at Rs. 20,505 on easy hire-purchase terms. In the meanwhile the entrepreneur purchased a site. 8 kms south of Kozhikode, and put up a factory out of his own resources.

The unit started production on a modest scale providing employment to Mr. Ayyappan's eldest son and five other relatives who are also skilled blacksmiths. But soon he secured such a large number of orders for machinery items from nearby tile factories that his limited resources would not allow him to cope with them. The Project Agency again came to his help by arranging towards working capital a credit limit of Rs. 40,000 from the State Bank of India. In August 1967, he was advanced another sum of Rs. 5,000 to expand his factory. Supplementing this amount with his own resources, he put up a foundry for casting jobs, and purchased a 10-ft. lathe valued at Rs. 9,500.

The unit which is manufacturing de-airing pugmills and other tile machinery now employs 20 skilled workers disbursing each month Rs. 2800 as their wages. Its capital formation during the last two years has been of the order of Rs. one lakh. The entrepreneur is having a monthly income of Rs. 1,000 after meeting all expenditure.

Alleppey

AGRICULTURAL IMPLEMENTS UNIT

Though known as the rice bowl of Kerala, Kuttanad depends heavily on towns like Alleppey and Kottayam for meeting its requirements of agricultural implements and their servicing. Mr. Joseph Job, member of an agriculturist family of Kuttanad, who was serving as an engineering representative of a firm at Alleppey, saw good scope for an engineering unit in his locality to meet a part of this demand. The Project Agency supplemented his resources by advancing Rs. 7,000 towards the cost of land and building, Rs. 5,000 as working capital, and Rs. 21,400 for purchase of machinery in total investment of over Rs. 80,000.

The financial assistance has been well assimilated, and in a plot of 20 cents at Kavalam, about 15 Kms. from Alleppey, there has come up a flourshing agricultural implements factory employing a dozen hands. The unit which also undertakes repair and servicing jobs, manufactures agricultural implements like iron ploughs, sickles, manvetti, garden tools, estate forks, etc. worth Rs. 60,000 a year.

Aijal (Assam)

A TALENTED MIZO

D. R. DATTA

Pu Kaia (short for Mr. Kailianchhunga) of Republic Avenue Aijal is a talented Mizo artisan who has won great reputation all over the Mizo Hill District of Assam for his mechanical innovations. Kaia, 50, with medium height and an emaciated look, has been running a small workshop for aluminium casting and repair work alongside his tea shop for the last quarter of a centruy.

During the second World War many aeroplanes which were shot down crashed inside Mizo Hills District, specially along the borders of Burma on the eastern side. Mizo blacksmiths utilised the aluminium scrap from plane wreckages in their smithy shops. Gradually these blacksmiths became professional aluminium workers producing various types of aluminium utensils.

Pu Kailianchhung by virtue of his natural inclination and instinct was instrumental in effecting great improvements in the aluminium casting industry in Mizo District. He has so far trained 15 persons from all parts of the District, and most of them are carrying on this industry in their interior villages.

But Kailianchhunga was not satisfied with this achievement. He found that the Mizos were experiencing great difficulty in securing G. I. sheets which were in short supply. And so he put his mechanical skill to full use in devising a hand-operated machine for corrugating G. P. Sheets. The machine consists of two wooden grooved rollers of 24" diameter fitted with a fly wheel to serve as a handle. Three men are required to operate this machine ; one man to turn the wheel and two men for pulling and pushing the corrugated sheets between the rollers. Although the machine requires a good amount of labour while operating, yet it is a popular machine in Aijal, for it adequately meets the requirements of the local people.

Pu Kaia was encouraged to participate in the All Assam Industrial Exhibition held at Gauhati in 1965. His stall attracted much attention and he was awarded a special prize. The Rural Indus Project took him on a study t to small-scale industrial unit five important towns of As in 1964 and the entrepreneur, return, proved his worth by grading his work-shop int small-scale unit. He is now sole registered manufacturer of Barua Loom which is being introduced in Mizo District, Nagaland, and NEFA.

APPROPRIATE TECHNOLOGY

Anand Sarup

Today it seems more sensible to many economists and technologists that we should take recourse to a level of technology called "intermediate" which as the term implies, is somewhere in-between the highly capitalised labour saving techniques of production employed in the "developed" countries and the outmoded techniques in vogue in many of our rural or cottage industries. Such a technology may be more suitable or appropriate to meet our needs for goods without suffering the shock of sudden transition from unsophisticated to highly sophisticated methods of production, as also to conserve and employ our meagre capital resources on more vital aspects of the economy.

Industries, whether in the rural or the urban areas and whatever their scale, are likely to survive only on the basis of their economic viability. Whether the existing structure of rural, cottage or small-scale industries can be retained or enlarged can be found out only by experimentation and innovation with the techniques and scope of production in this sector.

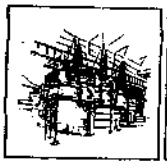
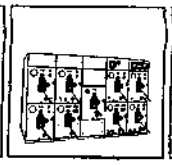
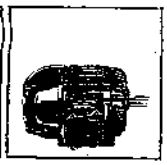
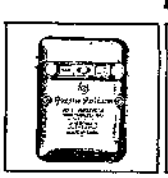
There is no dynamic agency which would constantly innovate, improve, promote and demonstrate the viability of small scale or decentralised production. In a number of cases, particularly in the agro-industrial sector and the production of cycle parts, sewing machines, agricultural implements and hosiery goods, decentralisation and techn cal innovation have established th economic viability of this approac at nominal cost. These develop ments, however, have taken pla without any systematic experime tation, mostly through the resilien and inventiveness of individu entrepreneurs or technicians. Fo all we know, systematic experi mentation in many other fields production will yield similarly encouraging results. Hence the need for establishing centres o agencies for the promotion "Intermediate Technology."

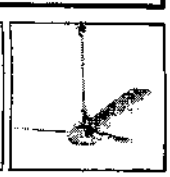
It is absolutely essential that while recommending a particular technology the interests of rural artisans and small-scale entrepreneurs should be safeguarded by testing the economic viability of technically feasible schemes through initiating pilot projects which would operate on commercial lines. It is, therefore, strongly advocated that an agency set up for studying, innovating and advocating "Intermediate" or (more appropriately) "Appropriate" Technology should be practically and pragmatically oriented and committed not only to the general concept but also to specific techniques of production upto the point of the demonstration of their economic viability in real life conditions.



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MUSIC KNOWS NO EAST, NO WES



MUSIC, like humanity, knows no frontiers : it transcends narrow national considerations and touches the soul of man. It was, therefore, in the fitness of things that the 19th anniversary of the adoption of the "Declaration of Human Rights" (December 10, 1967) was marked by a concert by Ravi Shankar, *sitarist*, and Yehudi Menuhin, violinist, in the U.N. General Assembly Hall in New York.

The event was significant not only because of the first appearance together of the two *maestros* in America; it also marked the climax of Ravi Shankar's single-handed effort to make Indian music understood and acceptable to Western audiences. Today the *sitar* and other Indian musical instruments can be heard in the records of the Beatles and other popular music groups in the West.

The growing popularity of Indian music is evident in many ways: whereas Indian music groups were formerly booked in small, obscure theatres, they are packing such well known ve like the Royal Festival Ha London and New York's Ph monic Hall. One large sto the United States selling gr phone records reports tha Indian music section is one best-selling departments. An large European and U.S. citi whole new generation can be discoursing learnedly in the bulary of the genre—*alap*, *jo* *jhala* of the *raga;* ' the v *talas*.

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