

1982/83

ORISSA REVIEW

JULY, 1963

ALL ORISSA OBSERVED
The 55th Sradha Ceremony
OF
Late Utkalmoni
PANDIT GOPABANDHU DAS

On June 21, 1963

●
*Photo shows—Life-size Bronze
Statue of Pandit Gopabandhu
Das at the north entrance of
Orissa Legislative Assembly,
Bhubaneswar*



EFFORTS FOR PROVIDING COMFORTS TO THE PILGRIMS

This is the New Station Building at Puri, which was opened on 26-2-1963 by Shri Biju Patnaik, Chief Minister of Orissa. This building has been completed at a cost of Rs. 3.75 lakhs. 4 lakhs of bricks, 350 tons of

cement, 25030 cft. of stone, 83 tons of iron and steel and 1734 cft. of wood were required for its construction.

← OPENING OF THE NEW STATION BUILDING AT PURI

Shri Biju Patnaik, Chief Minister, Orissa is seen formally inaugurating the new Station Building at Puri on 26-2-1963



↑ During his recent 2-day visit to Tezpur, the Prime Minister Shri Jawaharlal Nehru, went round to meet the Jawans, in spite of incessant downpour.

Photo shows : The Prime Minister, accompanied by the Corps Commander, Lt-Gen. S. H. F. J. Maneckshaw, inspecting an armoured unit in the area.



Kumari Neeta Bahidar, Daughter of Sri N. Bahidar. Orissa Finance Service, Class-I, New Capital, is seen during the Cultural Show organised during the Chief Minister's recent visit to Baripada.



Mr. Alli, Superintending Engineer explaining to the Chief Minister, during the latter's recent visit to Baripada, details of Balanga Bridge while at the left of Sri Patnaik, the Engineer Contractor, Sri V. M. Patel looks on.

ORISSA REVIEW seeks to provide a condensed record of the activities and official announcements of the Government of Orissa and other useful informations. Many items appear in summarised form. Such items should not be treated as complete and authoritative version.

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As in previous years, the Vanamahotsava Week was observed in Orissa from July 1 to 7 this year.

Photo shows : The Chief Minister, Sri Biju Patnaik, planting a tree on this occasion at the Mukhya Sevika Talim Kendra near Bhubaneswar on the morning of July, 1.

INTEGRATED DEVELOPMENT OF THE RIVER BASINS OF ORISSA

Dr. A. N. Khosla, Governor of Orissa, gave a demonstration-talk on "some important development projects in Orissa" in the Secretariat Conference Room on June 27, 1963. Among those who attended the talk were the Chief Minister, Shri Biju Patnaik, other Ministers and Deputy Ministers, leading Pressmen and the Officials of the State Government.

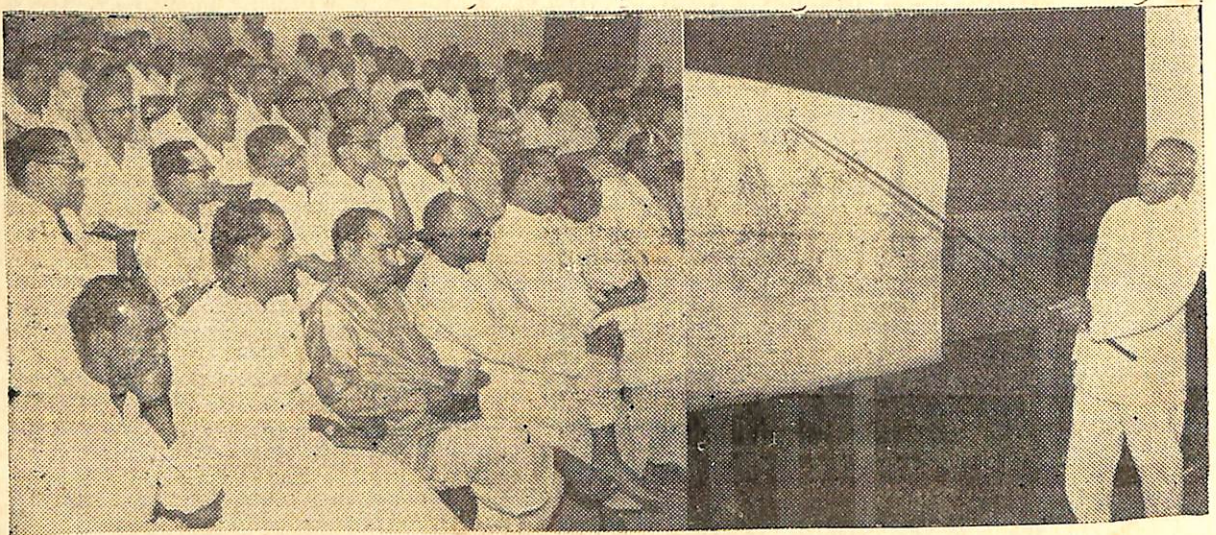


Photo shows : Dr. Khosla giving the audience an elaborate idea about certain power and irrigation projects with the help of a Chart.

ORISSA AND ITS PROBLEMS

Orissa mirrors the paradox of all backward areas—poverty amidst potential plenty. Orissa has untold wealth of natural resources—land, forests, water, minerals, a long sea coast; and a population of 17.57 millions. Yet it is the poorest and most backward State of India. Any plan of development of these vast natural resources which will help transform poverty into plenty in the State of Orissa may well serve as a model for other similarly situated areas in India and elsewhere in the world.

Floods and Droughts

For centuries, Orissa has been haunted by the twin spectre of flood and drought, and of these, the latter has been the most terrible. The distribution of rainfall and consequently of the river supplies through the year vary within wide limits. There is too much water during the rains and too little during the dry part of the year, with the result that Orissa continues to suffer devastation by floods, and starvation, misery and disease from droughts. Terrible famines occurred in the 14th, 15th and 16th centuries. In the memorable

famine of 1770 people were reported to have been dying by hundreds and thousands. Nearly a century later, came the great Orissa famine of 1865-66. The rainfall in 1865 was scanty and ceased prematurely. Food crops failed and it was estimated that nearly one million people died in the district of Cuttack alone. In the district of Puri nearly 40% of the population perished. Then followed the flood of 1866. Crops and property were destroyed and what the drought had spared was engulfed in the wide flood waters.

Only two years ago in 1961, serious flood damage occurred over 3,600 square miles of area; 650,000 acres of crops were damaged and 19 human lives lost. The expenditure on relief alone was Rs. 5.77 crores.

Severe drought conditions prevailed in most districts of Orissa in 1962 due to a failure of rains. Twenty-five per cent of the total cultivated area of the State was affected. The estimated loss of *kharif* crop was more than Rs. 60 crores.

FLOOD CONTROL AND IRRIGATION ARE, THEREFORE, THE TWO BASIC NEEDS OF ORISSA.

GENERAL FEATURES

Physical

The State of Orissa is situated in the north-eastern section of the Indian peninsula and extends over an area of 60,136 square miles. It is a maritime State with a coastline of 250 miles along the Bay of Bengal. It has a common boundary with West Bengal in the north-east, Bihar in the north, Madhya Pradesh in the west and Andhra Pradesh in the south. It can be divided into four main physical regions—the northern plateau, the central tableland, the Eastern Ghats and the coastal plain.

Climate

The mean maximum temperature is 91° F (33° C), rising to 101° F in April and May, and falling to 80° F in January. The mean minimum temperature is 70° F (21° C). The average rainfall is 59 inches. About 81% of this rainfall is received during the period June-September mainly from the Bay of Bengal branch of the south-west monsoon.

Population

According to the 1961 Census the population of Orissa has gone up to 17.57 millions, with a density per

square mile of 292. The increase in the total population during the decade 1951-61 was 1.99% per annum. The coastal district of Cuttack has the heaviest density of population which is over 600 per square mile. Adibasis, Scheduled Castes and other backward classes constitute nearly 67% of the State's population; the Adibasi population accounting for nearly 24%.

Living Standards

The *per capita* income of Orissa during 1960-61 was Rs. 212, against the all-India average of Rs. 330.

Natural Resources

The most important of Orissa's natural resources are its land, forests, water, minerals and marine wealth.

Land and Agriculture

The total area of the State is about 38.4 million acres, of which about 36% was cultivated in 1955-56. Orissa's main weakness stems from its poor agricultural base, archaic cultivation, vagaries of the monsoon and damage due to recurring floods, all resulting in low yields and uncertain harvests. The yield of rice, which is Orissa's chief crop, accounting for over 63% of the total cropped area,

is the lowest in India—514 lbs. per acre compared with 1,225 lbs in Madras and 806 lbs. for India as a whole. This can easily be doubled or more if adequate irrigation facilities can be assured. Eight out of every ten Oriyas subsist on agriculture.

Forests

Next to Madhya Pradesh, Orissa has the largest forest area amongst the States of the Indian Union covering 25,331 square miles or nearly 42.01% of the total land area. Apart from their effect on climate and their role in preventing soil erosion, forests provide valuable raw materials for industry and are an

important source of revenue to the State.

Water

Orissa has enormous water wealth in its many rivers which are fairly evenly scattered over the State. Between them they carry a mean annual flow of nearly 121 million acre feet or roughly one-tenth of the total runoff of the entire river system of India. The runoff is, however, very unevenly distributed through the months. There is either too much water during the monsoon period resulting in heavy floods, or too little during the dry season resulting in failure of crops (Table 1).

TABLE 1

1. River	Catchment area (square miles)	Mean annual rainfall (inches)	Mean annual run-off (inches)	Mean annual run-off (m.a.ft.)	Maximum flood discharge (cusecs)	Minimum* dry weather discharge (cusecs)
1. Mahanadi	51,270	57.36	27.51	75.25	1,580,000	60
Brahmani	14,000	58.93	27.45	20.50	800,000	30
Baitarani	4,000	58.93	27.45	5.86	500,000	10
	<u>69,270</u>			<u>101.61</u>		
2. Rushikulya	3,072	43.50	8.74	1.43	300,000	nil
Burabalang	1,736	56.28	22.55	2.09	200,000	5
Subarnarekha	7,047	56.28	22.55	8.46	600,000	10
	<u>11,855</u>			<u>11.98</u>		

ORISSA'S DECADE OF DESTINY

3. Indravati †	1,040	74	40.09	2.27	240,000	100
Kolab (Sabari)	1,200	70	33.02	2.12	260,000	120
Sileru †	1,855	70	38.02	3.28	323,000	190
	<hr/>					
	4,095			7.67		
	<hr/>					
Total	85,220			121.26		

* *Figures of minimum dry weather discharge are for the natural flow of the rivers before any storage dams are constructed.*

† *Above lowest dam sites in Orissa territory.*

The three major rivers carry a mean annual flow of 102 million acre feet and the three lesser rivers a mean annual flow of 12 million acre feet. The Godavari tributaries carry a mean annual flow of 7.67 million acre feet. Together they carry 121 million acre feet.

Minerals

Orissa has enormous mineral wealth. The resources so far known are considerable and diverse, and the potential mineral occurrences give promise of discovery of large deposits. Moreover, several occurrences are yet to be explored and about a third of the State remains to be surveyed by the Geological Survey of India. Taking all these facts together, Orissa would have perhaps the largest mineral resources among all the mineral-bearing States of India. It has iron ore, manganese ore, coal, dolomite, limestone, chromite, china clay, graphite and fire clay. The present estimate places the iron ore

reserves at about 10,000 million tons, and of coal at about 40,000 million tons.

Fisheries

Fisheries, both inland and marine, occupy an important place in Orissa's economy. 35,000 persons have fishing as their principal means of livelihood in the Chilka lake (450 square miles in area) where nearly 3,500 tons of fish are raised each year. The yield per acre from the Chilka lake is 75 to 100 lbs, one of the highest in the world for brackish water fisheries.

Orissa has a 250-mile long coastline which is covered in many parts by river-mouths and estuaries.

On an average the State produces a total of 23,000 to 25,000 tons of fish per year, of which about a third is sea fish and the remainder estuarine and fresh water fish from all the inland sources. Fisheries contributed roughly Rs. 1.76 crores to the State income in 1956-57. Considering that Orissa is a maritime State, the share of fisheries in the State income is low. There are hardly any fish-based industries in the State.

Coastal fishing is confined to a narrow belt of 3 or 4 miles over a relatively short stretch of the coast. On account of lack of proper berthing, landing and other harbour facilities, no off-shore fishing has developed in the State. It would be possible and profitable to use a large number of bigger boats and operate trawlers if proper berthing and harbour facilities were developed in suitable locations along the coast. There are rich fishing grounds in the sea off the coast of Orissa.

Industries

Orissa, one of the richest States in India in land, forests, minerals, water and marine resources, has remained industrially backward

because of the lack of cheap electrical power and adequate transport and communication facilities.

One sugar mill, a glass factory, a soap works, a few oil mills and a number of rice mills, comprised the entire industry of Orissa in 1945.

The First and Second Five Year Plans have, however, provided a much-needed impetus to the industrial development of the State with power becoming available from the Hirakud and the Machkund hydro-electric projects. The Rourkela Steel Plant, with an annual production capacity of one million tons of ingot steel, was put up during the Second Five Year Plan. A fertilizer factory, with an annual capacity of 50,000 tons of nitro-limestone, has been set up in the immediate neighbourhood of the Steel Plant to utilise the by-products of the steel works as raw materials. Ferro-manganese plants have been set up at Joda and Rayagada. An Aluminium Smelter, with an annual capacity of 20,000 tons, has been set up near the Hirakud Power Station. Orissa has 2 large cotton mills near Cuttack, three sugar factories at Aska, Rayagada and Singhpur Road, with three more coming up and three paper mills—

at Brajarajnagar in Sambalpur district, at Chaudwar in Cuttack district and at Kesinga in Kalahandi district.

Transport and Communications

Inadequate transport and communication facilities have been a major barrier to the economic and industrial development of Orissa. As against an all-India average of 31 miles of rail track for every 1,000 square miles of territory, the State has only 14 miles. Similarly, for every 1,000 square miles, Orissa has 53 miles of surfaced roads compared to 261 miles for Madras, 124 miles for Andhra, and 102 miles for West Bengal.

Ports

Despite an extensive coastline, Orissa will be having by the end of the Third Five Year Plan only one port—the Paradeep port—now under construction, which will handle 2 million tons of iron ore by 1965 and may be extended later on to handle 10 to 15 million tons per year.

Inland Navigation

Orissa has a network of small navigable canals—the Taldanda, the Kendrapara, the High Level, the Coastal and the Jajpur canals, totalling 154 miles in length, which provide the cheapest means of transport in the coastal areas of Orissa. These have been somewhat improved after the completion of the Hirakud Dam Project and the Delta Irrigation Scheme.

PLANNING FOR PROSPERITY

From many points of view, Orissa is probably the most backward region in the country. The poorer the region, the more urgent is the need for accelerating growth, but the greater also is the difficulty in raising internal resources for investment. The plan provision during the First, Second and Third Five Year Plans and the expenditure during the First and Second Plans are given in Table 2.

TABLE 2
OUTLAY AND CENTRAL ASSISTANCE—ORISSA

Plan	Plan outlay	Expenditure	State resources	(Crores of Rupees)	
				Central assistance	Total
First Plan (1951-56)	74.5*	68.1	8.0	60.1	68.1*
Second Plan (1956-61)	100.0*	84.0	18.3	65.7	84.0*
Third Plan (1961-66)	160.0		31.3	128.7 †	160.0

* Includes outlay and expenditure on Hirakud but excludes all Centrally sponsored Schemes.

† On the basis of the overall Central assistance of Rs. 2,375 crores available for all States.

Any plan for the overall development of this extremely poor but potentially rich State must give first consideration to the solution of the problems of flood and drought. Conservation of flood waters during the monsoon through storage and their utilisation through regulated releases during the dry parts of the year for purposes of flood control, irrigation, power generation, navigation and other facilities must, therefore, constitute the core of the plan.

PLAN OF MAY 1945

In May 1945 Dr. A.N.Khosla, then Chairman, Central Waterways, Irrigation and Navigation Commission (now Central Water and Power Commission) conceived the first Plan for the unified development of the Mahanadi basin as a first step in the overall integrated development of the basins of all the rivers of Orissa. This plan envisaged the construction of three storage dams on the Mahanadi at Hirakud, Tikerpara and Naraj, for securing complete control of the Mahanadi floods and for developing power, irrigation, navigation and pisci-culture facilities. The construction of the Hirakud Dam and power Plant was undertaken in 1949-50 immediately after the surveys and

investigations were completed and the project report was prepared and approved. This constituted the first stage in the plan of basin-wide development of the Mahanadi river. It was completed in 1957. The project for the construction of the Naraj Dam was substituted by that of a diversion barrage at Mundali nearby, which is now in progress. The project for the construction of the Tikerpara Dam, which constitutes the core of the May 1963 Plan, is now actively under investigation and preparation.

THE MAY 1963 PLAN

The May 1963 Plan, set forth in this paper, is a comprehensive integrated plan which covers the multi-purpose development of the basins of all the major and minor rivers of Orissa. It envisages a programme of development under 6 groups : (A), (B), (C), (D), (E), and (F).

Group (A) includes projects which were completed during the Second Plan, namely, the Hirakud Dam project for flood control, irrigation and power, and the Machkund Dam project for generation of power; and projects approved and taken up for

construction during the Third Plan, namely, the Balimela Dam project for generation of power and for providing irrigation, and the Talcher Thermal Station for generation of thermal power.

Group (B) includes the Tikerpara Dam and Gania Barrage project—the core of the entire integrated Plan—which will ensure almost complete flood control in the Delta, extend irrigation to bulk of the cultivated area, provide large quantities of hydro-electric power and a network of navigable canals extending from one end of Orissa to the other. This is separately dealt with later.

Group (C) includes relatively smaller projects, the Indravati and Upper Kolab in the western district of Koraput, and the Tikra project, a subsidiary of the Barakot project in the Brahmani basin; all three of these will provide for generation of substantial quantities of power and irrigation to large areas. Of these the Indravati project located in Koraput district is the most attractive. It will provide substantial irrigation in Kalahandi district which is relatively deficient in rainfall. Investigations on this project are in progress.

Group (D) includes the second major project of the Plan—the Barakot Dam project on the Brahmani and the Lower Kolab project in Koraput district. The Barakot project, besides providing for generation of large quantities of power and irrigation to large areas, will also provide navigable canals and reservoir connecting the Bonai iron ore deposits and the Rourkela Steel Plant with the Paradip port and the future Chilka lake port near Santrapur.

The Lower Kolab project will provide for irrigation and power generation in Koraput district.

Group (E) includes the Bhimkund Dam project on the Baitarani for purposes of flood control and power generation, the irrigation part of it having already been taken care of in full by the Tikerpara-Gania project. Investigations of this project have been already completed and a report prepared, but this project can have only low priority because of its relatively small benefits in the over-all context.

Group (F) includes all projects on the various tributaries of the Orissa rivers, mainly the Mahanadi, the information about which could

not be collected so far even in a preliminary way.

The salient features of all the projects except those under Group (F) are incorporated in Table 3. Apart from the Tikerpara project, of which the survey and investigations are well advanced, the planning for most of the other projects is based on 1"=1 mile Survey of India map, not supported so far by on-the spot ground investigations. The figures of runoff are a fairly close estimate. But the figures of cost are in the nature of the best guess because of the absence of field data which can be obtained only as a result of detailed field investigations.

COSTS AND BENEFITS OF THE TOTAL PLAN

Hydro (River Valley) Projects

All the Hydro projects taken together will involve a capital expenditure of Rs. 927.52 crores; and will achieve :

- (a) complete flood control;
- (b) installation of 8,520,000 KW of hydro power;
- (c) irrigation of 8,257,000 acres of cropped area;

(d) about 1,000 miles length of navigable canals and waterways connecting the Rourkela Steel Plant, the ore belts and the hinterland in general to the ports of Paradip and Chilka lake;

(e) 1,243,800 acres of reservoir areas for fish culture, recreation and tourism;

(f) a potential fresh water protected harbour covering nearly 150 square miles, in the western part of Chilka lake with about 36 miles length of fresh water canal, 40 to 50 feet deep, with a perennial discharge of 37,750 cusecs.

Thermal Project— the Talcher Thermal Power Plant

To the above costs have to be added the costs of thermal power generation, in stages at the Talcher Thermal Station (Table 4). The power station for the installation of units for 250 MW is under construction and will be commissioned by the end of the Third Five Year Plan. Additional units to bring the capacity to 500 MW will also be under installation by that time.

TABLE 4

TALCHER THERMAL STATION

Stage	Installed capacity in MW	Firm capacity in MW	Units generated in KWH with 95% availability	Total cost in crores of Rs.	Annual cost 7.3% of total costs in crores of rupees	Cost per unit generated		
						Coal	Annual cost in nP.	Total
I	250	250	$2,080 \times 10^6$	25	1.825	1.28	0.88	2.16
II	500	460	$3,828 \times 10^6$	45	3.285	1.28	0.86	2.14
III	1,500	1,380	$11,500 \times 10^6$	105	7.665	1.28	0.67	1.95
IV	5,000	4,600	$38,281 \times 10^6$	315	22.995	1.28	0.60	1.88
V	10,000	9,200	$76,562 \times 10^6$	615	44.895	1.28	0.59	1.87

* Quantity of coal required per unit generated = 1.435 lbs.

$$\text{Cost of 1.435 lbs of coal at Rs. 20 per ton} = \frac{1.435}{2240} \times 20 \times 100 = 1.280 \text{ nP.}$$

Talcher coal fields are said to have an estimated reserve of 40,000 million tons of coal. The Thermal Station will use only the low quality coals not required for metallurgical or other purposes. It can be expended by stages for 1,500; 5,000 and 10,000 MW, in integration with hydro power, to suit the power needs of the Eastern Region. In the ultimate stage, this in conjunction with the hydroelectric installations of 8,520 MW, will make up a total installed capacity of 18,520 MW, against 12.9 million KW, the target for the whole of India at the end of the Third Plan. This can meet not only the needs of Orissa but also those of the neighbouring States of West Bengal, Bihar, Madhya Pradesh, Andhra and possibly Maharashtra.

The costs of stage development at the Talcher Thermal Station will be:

	Stage	Cost in crores of rupees		
		Total	Stage	Total
Additional	500 MW	500 MW	45	45
Additional	1,000 MW	1,500 MW	60	105
Additional	3,500 MW	5,000 MW	210	315
Additional	5,000 MW	10,000 MW	300	615

These costs have to be added to the appropriate stage of hydro-electric development to get the figures of overall investment at each stage.

In the ultimate stage, the total investment involved in power development will be:

From River Valley Projects	..	Rs. 605.98 crores
From Talcher Thermal Power Project	Rs.	615.00 crores
Total	..	Rs. 1,220.98 crores

The cost of generation of the integrated system at full development, on the basis of assumptions made, works out to 1.85 nP per unit (KWH).

The Time Factor

The Total Plan will cost Rs. 928 crores for flood control, irrigation, navigation and hydro-electric power and Rs. 615 crores for thermal power, *i.e.*, a total of Rs. 1,543 crores. Out of this total outlay, an investment of Rs. 185 crores has already been incurred or committed on Group (A) projects. The balance of Rs. 1358 crores could well be spread over, say, five plans of five years each depending, of course, on the availability of resources. The Tikerpara-Gania project must, however, be taken up for implementation at once and completed as quickly as possible, but not later than 1973, at least in so far as the essential objectives of the Total Plan, namely, flood control and irrigation, are concerned. The

Tikerpara-Gania project is the core of the Total Plan, as it lays the base for all agricultural, economic and industrial advance. Its early completion will substantially help in finding resources both financial and technical for progressive implementation of the Total Plan.

THE TVA OF USA

The TVA today has 31 major hydro-electric dams and 10 steam plants producing 12 million KW, of which about 8 million KW is steam and about 4 million KW hydro. This generating capacity amounts to 8% of the 5 total U.S. capacity. The generation cost of its power is 2.1 mills or 1.01 nP against 4.2 mills of private utilities in U.S. The TVA has cost 1.757 billion dollars, the equi-

valent of 840 crores of rupees against 1,221 crores of the Orissa Plan for producing 18.5 million KW of power.

The TVA has tamed the once treacherous Tennessee river whose floods used to carry away top soil houses, horses and barns. The waters of this tamed river now provide one of the world's finest inland recreation areas and yield some 10 million pounds a year of fish. The main stem dams have navigation locks permitting the passage of vessels with 9 feet drafts. Over 13 million tons of traffic moved on this waterway in 1962.

The TVA transformed the entire economy and life of the people living in the Tennessee Valley covering 80,000 square miles in seven States. One of the most poverty-stricken and backward areas in U.S.A. in the thirties of this century, the Tennessee Valley has now emerged as one of the most prosperous areas and progressive in agriculture, power, industry, navigation, fisheries, inland recreation areas, and in living standards.

Financial Outlay

This project will cost Rs. 188.60 crores for the dam, power house and appurtenant works, and Rs. 215.89 crores for the barrage, 465 miles

The May 1963 Plan for Orissa provides for all the features covered in the TVA plan, namely, complete flood control of the equally treacherous rivers of Orissa, power, navigation, fisheries and recreation facilities. It does something more; it will provide irrigation to nearly 7 million acres in addition to the present acreage under irrigation. Given the resources, what the TVA has achieved for the Tennessee Valley, the Orissa Plan can achieve much more for Orissa and the adjoining States of West Bengal, Bihar, Madhya Pradesh and Andhra and possibly in a shorter time.

THE TIKERPARA DAM-CUM- GANIA BARRAGE PROJECT

This is the Project of Destiny, the project for the decade 1963-73. It must be built if Orissa has to emerge out of its age-long poverty and backwardness and make a worthwhile contribution to the economy of India. This project will lay a firm base for the take-off stage and transform the economy of Orissa from a stagnant to a buoyant one.

of irrigation-cum-navigation canals of Rs. 404.49 crores in all, the allocation of which may be as follows:

Flood control	Rs. 35.00 crores
Irrigation	Rs. 102.17 crores of which Rs. 18.53 crores is being incurred on already sanctioned projects.
Power	Rs. 267.32 crores
Total	<u>Rs. 404.49 crores</u>

Flood Control

This project, when implemented, will provide complete control of the Mahanadi floods and partial control of the Brahmani and Baitarani floods—the latter through partial diversion of their supplies through canals. It will enable large areas, now threatened by floods and debarred from growing *kharif* crops, to grow both *rabi* and *kharif* crops. The damage to crops and property will be almost completely eliminated.

In 1958 the Chief Engineer, Irrigation, Orissa estimated the cost of raising the level of flood protection embankments to give reasonable immunity against floods in the Delta area at Rs. 42 crores. The figure of Rs. 35 crores allocated for flood control would, therefore, be a reasonable figure as with this expen-

diture the necessity for any flood protection embankments on the Mahanadi area and partially on the Brahmani and Baitarani areas will disappear.

Irrigation

The total new area that will be brought under irrigation will be 2,118,000 acres, the cropped area irrigated being 3,389,000 acres. With a total allocation to irrigation of Rs. 102.17 crores, the cost per acre of cropped area to be irrigated will be Rs. 302.

The existing irrigation from all the projects in Orissa is 777,633 acres *kharif* and 311,765 acres *rabi*, or a total of 1,089,398 crop acres, of which 600,000 acres are in the Hirakud area and 489,398 acres in the Delta.

Power

Before the Tikerpara-Gania power units are ready for commissioning, 1,005,000 KW of hydro power units will have been installed under the Group (A) hydro schemes and 500,000 KW under the Talcher Thermal Scheme or a total of 1,505,000 KW in all.

Power from the right bank of Gania canal, which tails into the Mahanadi river above Mundali barrage, will be generated, even in advance of the construction of the Tikerpara dam, with the regulated releases below the Hirakud dam. A fall of about 93 feet is available above the Mundali barrage. This will give 8 MW at 100% load factor, or 270 MW at 30% load factor.

The power potential of Tikerpara-Gania project will be 1,295,000 KW at 100% load factor or 4,317,000 KW at 30% load factor. These units can be installed in stages in integration with the Talcher Thermal Station as needed, but in the cost estimate provision has been made for the installation of the entire 4,317,000 KW units estimated at Rs. 267.32 crores. While the necessary civil works including the Tikerpara dam, the Gania barrage,

the canals with their dams and fore-bays, penstocks, and essential parts of power houses must be built along with the dam structures, the final completion of power houses and installation of units can be undertaken as necessity arises. Thus only a portion of Rs. 267.32 crores allocated to power need be incurred in the earlier stages of operation.

The power generated at the Tikerpara-Gania-Talcher complex will serve the needs of West Bengal, Bihar, Madhya Pradesh and Andhra in addition to those of Orissa and the programme of development should take into consideration the collective needs of all these States.

Navigation

As a by-product of the Tikerpara-Gania project for flood control, irrigation and power, the main irrigation and power canals will provide 565 miles length of navigable waterways with a draught of 9 feet or more. These waterways will open up the hinterland and link up these areas with the Paradip port and later with the Chilka lake port near Santrapur.

The 36 mile length of tail-race channel (40 ft. to 50 ft. deep)

traversing through the Chilka lake will provide very large berthing facilities and enable a sheltered fresh water harbour, covering about 150 sq. miles, being developed in the western part of the Chilka lake where trawlers, ships, submarines and other naval craft could be housed, repaired, and if necessary, manufactured. This will give a boost to deep sea fishing. The excavation from the canal will be utilised to make a wide bank on the eastern side of the canal (fit for road and rail traffic) which will divide the Chilka lake into two parts—one about 350 sq. miles of brackish water and the other about 100 sq. miles of fresh water. This will encourage growth of industries along the lake particularly those connected with fisheries.

Fisheries and Tourism

The Chilka lake is already yielding about 3,500 tons of fish annually. These figures will go up with the above plan of development as also the returns in money as fresh water fishes fetch better price.

In addition, reservoir areas of 620,000 acres will be created for fresh water fish culture. These reservoirs will also provide unique recreational

facilities and become a veritable 'Tourist's Paradise'.

Areas Submerged and Rehabilitation of Oustees

The Tikerpara-Gania project will submerge 620,000 acres of land of which nearly 200,000 acres are estimated to be cultivated. A very liberal provision of Rs. 55 crores has been made for compensation and rehabilitation. It is proposed to reclaim government lands and forests, provide them with irrigation facilities, build townships and set up selected industries at each separate township, to all of which the oustees can go a year or two ahead of the actual date of evacuation. Thus there will be no human suffering during the transition period and the oustees will be moved to better surroundings where they will have much better opportunities of gainful employment on the farm and in industry than in their original homes.

This will take care of the human as well as the economic problem and incidentally help the cause of rural industrialisation and rural technical training over widely dispersed areas and pave the way for mass rural industrialisation and uplift.

FINANCING THE TIKERPARA-GANIA PROJECT

The total cost involved in the Tikerpara-Gania project is estimated at Rs. 404.49 crores, of which Rs. 18.5 crores are already being incurred under sanctioned irrigation projects, thus leaving a balance of Rs. 386 crores to be met under the new Plan. This may be split up as:

	(Rupees in crores)	(Dollars in Millions)
Flood control	35.00	73.0
Irrigation	83.64	174.5
Power	267.32	557.0
	<hr/> 385.96	<hr/> 804.5

The expenditure on flood control and irrigation is a MUST and will account for Rs. 118.64 crores (247.5 million dollars). Of this Rs. 55 crores is for compensation and rehabilitation. The additional irrigation acreage will be 3,389,000 or, say, 3.4 million acres over and above the one million acres presently under irrigation. This will be a tremendous boost in the drive for more food and increased agricultural output.

The expenditure on power can be incurred according to needs, integration with thermal power from

Talcher, keeping in view the demands of West Bengal, Bihar, Madhya Pradesh and Andhra and possibly Maharashtra.

Side by side with the implementation of the Tikerpara-Gania project, it will be necessary to include the next most attractive scheme—the Indravati project, which will provide irrigation to 350,000 acres in Kalahandi district where rainfall is relatively deficient, and power generation of 780,000 KW at 30% load factor, all at a total cost of Rs. 52 crores. At least the irrigation part of this project can be easily dovetailed into the Plan for the decade 1963-73 as the cost involved will be of the order of Rs. 12 to 15 crores only.

An outlay of Rs. 250 crores appears to be indicated for the period 1963-73 to achieve the essential objectives of the Total Plan, which objectives will, in the main, be achieved by the Tikerpara-Gania project, namely, flood control and irrigation and a substantial amount of power generation. Navigation, etc. will be incidental. This outlay will be in addition to what may be spent on the expansion of power generation.

The returns from the project will substantially help in financing the subsequent components of the Total Plan.

If this expenditure of the order of Rs. 250 crores (521 million dollars) is authorised during the decade 1963-73, the entire flood control and irrigation (3.4 million acres of new irrigation on Tikerpara-Gania and 0.35 million acres on Indravati)—the essential objectives of the Tikerpara-Gania project—can be achieved and power units for roughly half the total power potential (about 2 million KW) from this project can be installed. If at any stage the need for accelerated generation of power is established, an outlay of correspondingly greater amount will be justified. When this is done, the Tikerpara-Talcher complex of industries based on Talcher coals and Orissa minerals and power, the proposed factories in each Community Development Block and the allied technical schools can all take shape during this period, and Rural Industrialisation and Uplift can become a reality.

The finding of these resources, the investment of which is going to bring such handsome dividends, should not present an insurmountable

difficulty. If the Plan is pursued with understanding and vigour, it will make all the difference between poverty and prosperity in Orissa, between power famine and plenty in this and the adjoining States, and between stagnation and industrial boom in the entire Eastern Region.

Rs. 250 crores (521 million dollars) is no more than the cost of one Steel Plant. But an expenditure of this order over a period of 10 years will change the entire face of Orissa and to a large extent that of the Eastern Region. It will transform poverty into prosperity. It will lay a firm base for all agricultural, industrial and economic advance.

IMPLEMENTATION OF THE PLAN

An expenditure of the order of Rs. 250 crores in ten years will be well within the technical and managerial capacity of Orissa. Technical manpower and expertise in various fields have been steadily building up along with the construction of the Hirakud dam and the progressive establishment of industries. However, the power generation envisaged in the Total Plan as also in its unit III—the Tikerpara-Gania project—is on a gigantic scale and

of a national character and proportions. It will involve several complicated integration and transmission problems, initially, as between Orissa and the adjoining States of West Bengal, Bihar, Madhya Pradesh, Andhra and possibly Maharashtra and, later, as between this and National Power Grid. Also the final outlay on power generation alone may rise to much higher figures in view of the urgent necessity of accelerating the pace of power development to meet the chronic power famine situations in West Bengal, Bihar and elsewhere. It may, therefore, become necessary to entrust this large scale power generation and its high voltage transmission to receiving centres, in different States to an autonomous Central - Power - Corporation; the business of internal power distribution

as also that of flood control, irrigation navigation, etc., being left as, heretofore, to the State Governments concerned. This is a matter which will need careful and detailed consideration at the appropriate time. It is mentioned here to stress the national character of any large scale power development and that such newly created resources should be deemed to be a national rather than a regional or a State asset.

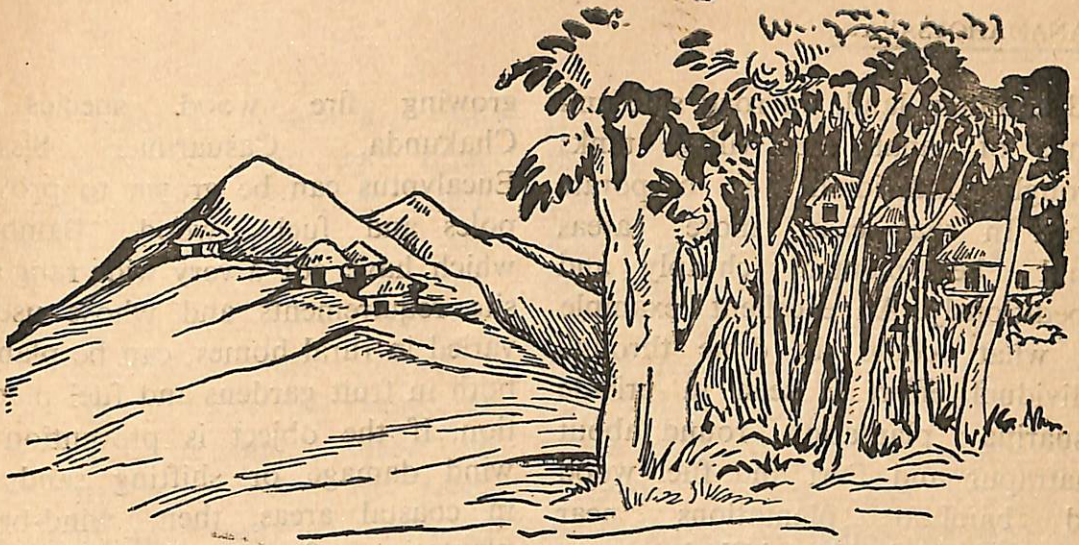
It is because of the immensity of resources of men, money and materials that will be pressed into service during 1966-73 to achieve the objectives of the Plan and of the far-reaching impact of such effort on the agricultural, economic and industrial advance of Orissa, that the decade 1963-73 has been called "ORISSA'S DECADE OF DESTINY".

RECORD EXPORTS Rs. 66.5 CRORES IN MAY THIS YEAR

India's total exports in May this year touched a record figure for any month at Rs. 66.5 crores. This was Rs. 13.7 crores more than the exports in May 1962 which was Rs. 52.8 crores.

The total exports in the first two months—April and May—of the current financial year reached Rs. 125.4 crores showing an increase of Rs. 21.9 crores over the exports of Rs. 103.5 crores in the corresponding period of 1962-63.

The total imports in April and May, 1963 were worth Rs. 181.6 ceores.



VANAMAHOTSAVA OR FESTIVAL OF TREES

The fourteenth Vanamahotsava week is being celebrated from 1st of July this year. As in previous years, people will be urged to plant trees on lands lying fallow. This annual ceremony, started in 1950, is already 13 years old and has created considerable awareness for tree planting amongst our people. The present emergency has added special significance to this year's celebration. With our preparation to meet the Chinese threats, the demand for wood and wood products has shown a steep rise. The existing state forest which is gradually shrinking in area to

provide land for agriculture and other uses, is unable to bear the additional strain on its resources. Part of this increasing burden could be taken off its shoulder by creation of small wood lots, scattered all over the countryside which could conveniently meet the timber and firewood requirement of the villages. Keeping this objective in mind, Government have sponsored the scheme 'Farm Forests' in Block Development areas. Considerable areas, both within Reserved Forests and outside, are planted annually with economically valuable species by the State Forest service. But much could be done by the villagers themselves by planting trees and bamboos on their own lands, on bunds of their paddy fields, on village wastes

and common land, on road side and banks of canals and village tanks through individual or corporate effort. In that case, more areas could be planted cheaply and expeditiously. An excellent example of what could be done through individual effort is seen in private casuarina plantation round about Chatrapur and Puri and fuel wood and bamboo plantations near Balasore, Bhadrakh and Bhubaneswar (photograph no 5 casuarina planting on private land Chhatrapur).

What trees to plant

Not every tree will flourish on every site nor can any tree be planted successfully anywhere. So choice of right species suitable to the climate and soil conditions is important. Amongst suitable species, which are often more than a few, the final choice will depend on the specific objective of planting. Around dwellings, fruit trees, shade trees and ornamental trees like mangoes, guava, Lomon, Jack fruits, Jamun, Krushna-Chura, Chakunda, Champak may be preferred while on roadsides, shade should be the first desideratum. On 'Bunds' of paddy fields, trees with light shade like babul is to be preferred against all, since it does not affect the crop yield. On wastelands, quick

growing fire wood species like Chakunda, Casuarina, Sissoo, Eucalyptus can be grown to provide poles and fuel wood. Bamboos which have got a very wide range of site requirements and whose use is varied in rural homes, can be planted both in fruit gardens and fuel plantation. If the object is prevention of wind damage or shifting sands as in coastal areas, then wind-break plantation of casuarina may be raised at right angles to the direction of wind. Such a wind-break very often protects land 30 times its height on the lee-ward side. (photo-6,7,8 sand stabilisation work at Chandipur and Ganjam). On sandy soil Casuarina should be the first choice while on loamy soil Sissoo, Eucalyptus, Chakunda can be planted. On hard laterites, Eucalyptus and Cashewnut will do well (Photo no 9). Babul and Neem can be sown on stiff black cotton soil. Some species like Eucalyptus (*Eucalyptus robusta*) does grow on areas which are likely to remain under rain water for 2 to 3 months in a year. Thus, tree species are there to suit diverse site conditions and a wide range of objectives.

How to plant

Once the species to be planted has been selected the next question is

'how to plant it'. There are some species which do well with direct sowing or dibbling of seeds. Babul, Cashewnut and Casia come under this category. This method is also the cheapest of all. In case of Babul it should be sown on lines preferably 8' to 12' apart. The line should be hoed deep, the soil loosened and worked up before rains and seeds sown along the lines. In case of Cashewnut, seeds two in number, should be placed in each planting hole duly covered with 1" of soil. The spacing of the holes may be 20' × 20'. If seeds are selected and are of good quality, one seed in each planting hole will do.

There are others, which are not amenable to this cheap method of sowing. Casuarina and Eucalyptus are first raised in nurseries (Photos 1 to 4—seed bed nurseries of Casuarina, Eucalyptus and Teak) called seed bed nurseries and then picked out and transplanted in planting pots where they remain for 4 to 6 weeks before final transplanting in the field. Under this method, the planting has to be planned out and nurseries raised in advance according to planting stock required. Planting stock (ready made) of Casuarina and

Eucalyptus are available, both in private and state nurseries at nominal cost, (10 nP. each at Chowdwar, Khurdhia, Bhubaneswar and Balighai Government nurseries. In private nurseries the rate is higher). The higher percentage of success under this method compensates for additional cost on planting stock. For individual planting, this method is the best since it enables the seedlings to be installed at its permanent site with the least disturbance of the root system. The planting pits should be 1 cube (length, breadth and depth all 1') and shall be spaced 8' × 8' or 10' × 10'.

Yet there is another method:—
Planting by stumps. Here the nursery plants, one year old, are uprooted and made into stumps (1" shoot and 8" to 9" of root) and the stump put into crow-bar holes, suitably spaced. This is a good method for sisoo and teak.

When to Plant

Time of planting is as important as the technique of planting. Planting should invariably be done at the commencement of monsoons. That is why the first week of July has been selected for the ceremonial planting. When planting stumps, the time may

conveniently be chosen during pre-monsoon showers which comes off by the middle of June. For Casuarina, which is usually grown in earthen pots or polythene bags, the planting can be done as late as November. But it always pays to plant early in July, so that the plants may make best use of the rains and growing seasons.

After-care

After-care of trees planted is more important than the planting, since lack of it will nullify all energy and money spent on raising planting stock and planting. So, never plant a tree which you are not prepared to look after. After-care consists of weeding, thinning, pruning, soil working, damage prevention against cattle and men and watering when required. The list may appear frightening, but the methods adopted are simple, known to every body and often cheap. In case of sowing along lines, the extra and undesirable seedlings are to be removed to ensure healthy and rapid growth of the rest, which are allowed to remain. Weedings and loosing the soil in lines or round about plants (in case of individual planting) will conserve moisture to be used by plants and

help it grow faster. Damage against cattle and men can be prevented by fencing which is costly or by creating livehedge of unpalatable thorny plants which are comparatively cheap. Watering during hot summer months may be necessary for some plants like casuarina which grows on sandy soil, whose moisture retention is poor. Pruning of side branches and thinning out some trees in regular plantation may be necessary when plants advance in age. The money spent on these are often paid back, leaving a surplus, since pruned and thinned stuff are saleable.

Benefits of tree planting

Trees both singly and in groups are useful to mankind. Trees bear fruits we eat, flowers with which decorate our homes, and offer to God. Trees yield timber for our homes, fuel wood for our hearths, pulp and fibre for printing papers and clothes. In short, we need them from our cradle to the grave. Yet, we are so unkind to them. We mercilessly fell them on any pretext and sometimes without any whatsoever. As a result, tree-clad hills have been made barren and eroded, fertile agricultural lands in valleys despoiled by infertile detritus, rivers and springs

have run dry, followed by degradation and desolation all around. Role of trees in conservation of soil and water resources is insufficiently realised. The effect of tree covers on the physical, social and economic aspects of a country is immense. Adequate tree cover reduces the rigours of climate, the flood peaks in river valleys, provides shade and shelter against the tropical summer and desecrating winds. In cities they are there to reduce the monotony of drab brick and cement. In villages they are there to provide shelter to the food crop and cattle and supply host of other rural needs. Sri K. M. Munsri, who first initiated the tree planting movement in a national scale in 1950 has very aptly summarised their benefits thus, "Trees have a rightful place in the general economy of every country. The Forest is not a handmaid of agriculture. Our forests are inexhaustible reserves for providing subsistence to our growing millions; for, trees mean water, water means bread and bread is life."

Tree planting in bulk, when they are last growing can be very remunerative. On marginal lands they can compete well against any other agricultural crop. In Ganjam district,

people earn more per annum from lands where casuarina and cashew-nut are grown together than from paddy lands closely. The 'Saving Bank' function of tree planting has yet to be realised by our people. In Finland, private forest owners, at times of need, cash in their planted trees to meet the dowries of their daughter and professional training of their sons.

Conclusions

Many trees are annually planted during Vanamahotsava and after, only to languish and die for want of after-care. So people should be educated and made to love the trees they plant. The village-level workers employed by blocks can do a good deal by initiating the people on this line. People should be urged to plant not occasional individual trees but in compact blocks, small wood lots of 5 to 50 acres, so that their management and exploitation will be cheap and efficient. Most of the villages are now covered by Panchayats and through them large scale planting on village common lands, on road sides, on canal banks on sandy wastes could be done. Alive to the dangers of wind erosion, the Panchayat Samiti of Rangeilunda requested the State Forest Service to

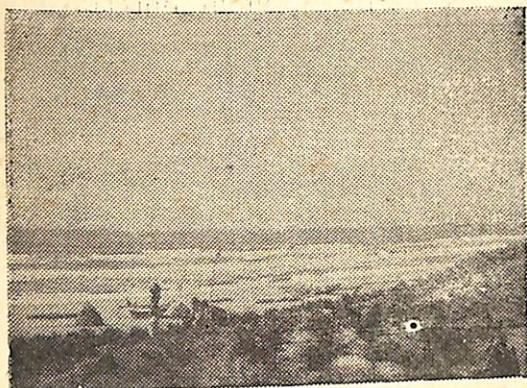
raise 10 acres of protective casuarina plants along Gopalpur Beach and provided necessary funds for the purpose. (Photograph Nos. 10 & 11—Panchayat plantation, Gopalpur). Other Panchayats may follow similar lines and may create their own fuel forests or protective forests in co-operation with the State Forest Department. There are about 351 miles of main canals and 1263 miles of subsidiary canals in the State. If two rows of trees could be planted with a spacing of 8' on both sides of the canal, the area thus planted will be equivalent to 2785 acres of regular plantation. Similarly many of our village roads and District roads are bereft of shade trees which could be planted. We have now numerous schools scattered throughout the country-side having a compound, big or small. The school children should be made to plant up suitable trees

inside the school compound, thus creating small "school forests" which will initiate them in Nature study and make them Tree lovers.

Most of our temples which we cherish so much as our national heritage, often stand in bleak and desolate surroundings. The konark temple has been successfully protected against sand blown by casuarina planting (Photo No. 11 Konark horse protected by tall casuarina). If some of these temples (as at Bhubaneswar) could have a tree grove round it, how beautiful and pleasant the surrounding will be.

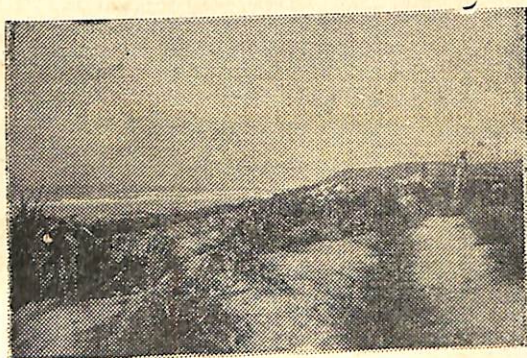
To plant a tree is to support the war effort, and with that objective in mind, let us plant up as many trees as possible this year and nurture them, to grow up sturdy and healthy, to proclaim our determination to fight the enemy now at our door.

Plantation of Forests



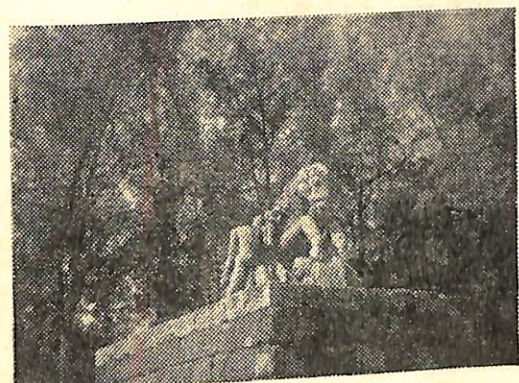
Casuarina planting to check sand drift at Gopalpur—plants are being watered

No. 10



Sand stabilisation by palm leaf fencing and planting casuarina Gopalpur

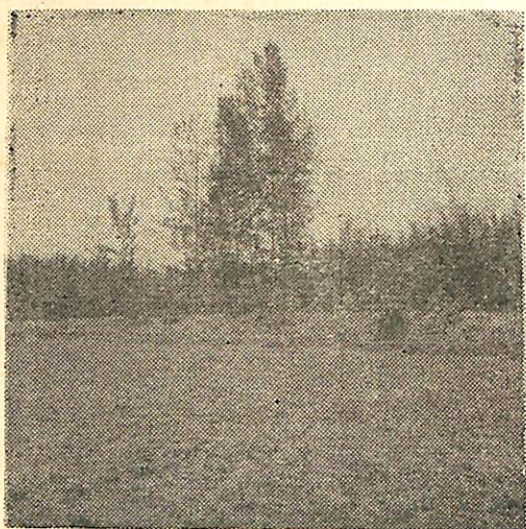
No. 11



Konark horse protected by tall casuarina against wind and sand

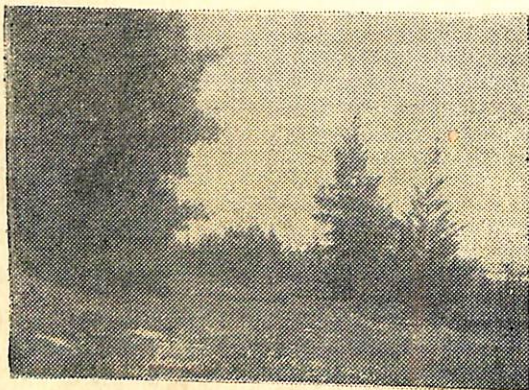
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Plantation of Forests



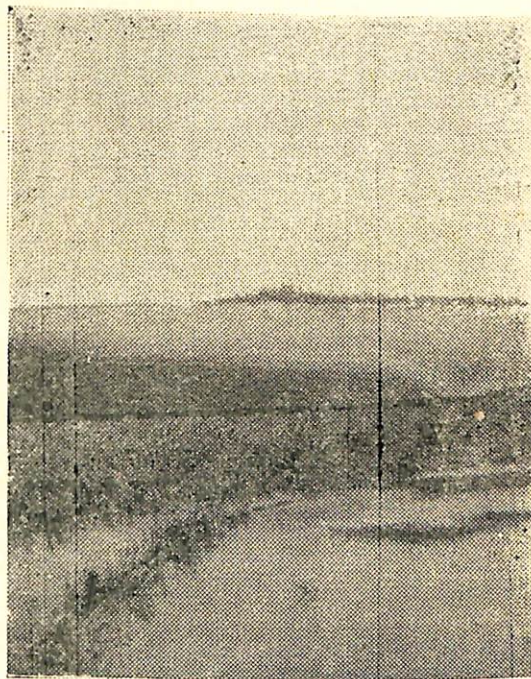
Casuarina plantation at Prayagi-Chilka. Mark private planting of trees on bunds

No 6



Casuarina planting to check sand-blow and bank-erosion at Budhabalanga mouth—natural regeneration of casuarina by seed fall

No. 9



Heavy sand-blow into agricultural lands and stabilisation of sand by planting casuarina at Hanskera, Balasore

No. 7

Plantation of Forests in Orissa
(See article on 'Festival of Trees'
on Page 19)



Seed bed nursery of casuarina
No. 1

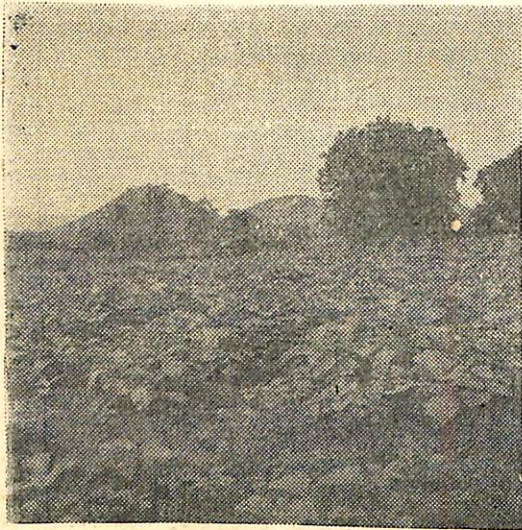
Pottile nursery of casuarina
No. 2



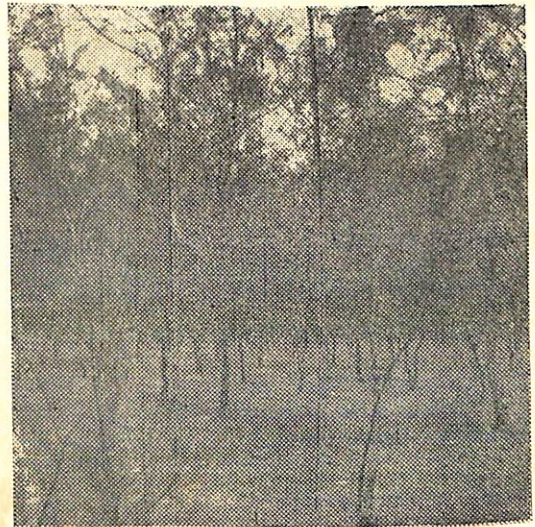
Plantation of Forests



Eucalyptus nursery
No. 3



Teak nursery
No. 4



Private casuarina plantation at
Chhatrapur—The side branches
have been pruned and sold
No. 5

A TALE OF HIMALAYAN SCRIFICE

Major

Braham

Sat's

Heroism



Many a heroic deed was recorded in blood all over NEFA during the Chinese invasion. There were numerous acts of gallantry in keeping with the glorious traditions of our country.

Major Braham Sat, who hailed from village Bhaproda in Rohtak District of the Punjab, was commanding a Field Battery in the Towang Region forming part of Brig. Hoshiar Singh's Brigade when the Chinese hordes landed on our territory. He was guarding the Towang Chu River near Jang, and the Chinese were kept at

bay for more than three weeks despite their large numbers. It was due to the leadership and technical ability of Major Sat that our guns were able to hit successfully as far away as Towang and forced the Chinese to desist from occupying the existing buildings there.

The enemy had perforce to burrow all around and take to fox holes. Later, when the harassed Chinese mounted a full-scale attack on his positions Major Sat brought down such accurate and heavy fire that four determined attacks were broken up

MAJ. BRAHAM SAT'S HEROISM

causing utter confusion among the enemy. The Commanding Officer of the covering troops said that our gunners created artillery terror and hell for the Chinese.

The next day Major Sat's Battery together with the covering troops was ordered to withdraw. He was leading the Battery when they suddenly came under heavy fire from almost point-blank range. His vehicle caught fire and he was himself wounded. But he did not give up and quickly formed

a small group and planned an attack by getting on the flank of the enemy position. Unexpectedly again, he came under heavy fire from quite another side when almost at the same time his own covering fire was silenced by the enemy. But, undaunted, Major Sat continued to engage the enemy when a short burst from a machine gun found its mark wounding him mortally. Major Sat who could not advance any more still did not give up. He directed his men and encouraged them until he died.

ORISSA OFFICER'S WORK APPRECIATED IN NAGALAND

Over 100 armed underground goonda elements have been convicted and sentenced under the Nagaland Security Regulations 5 of 1962 to various terms of imprisonment and fines during the last two months by the Additional District Magistrate and Additional District and Sessions Judge, Kohima, Shri P. C. Pattanayak, according to information received from the Public Relations Officer of Nagaland. Shri P. C. Pattanayak belongs to the Orissa Administrative Service whose services have been lent to the Nagaland Administration by the Government of Orissa. Such expeditious disposal of cases has been considered remarkable by the Nagaland Administration. As apart from the speedy clearance of long accumulated cases, this has appeared to have discouraged the criminal tendency among the anti-social elements.

The Nation Goes to School

The demand for education is growing faster than anticipated. During the first two years of the Third Plan, the targets fixed for primary education were crossed. The number of additional enrolment in the age-group 6-11 increased by 32 lakh—or nine lakh more than the target. In the second year also it is estimated to have exceeded the target of 32 lakh.

“We of the present generation in India can only hope to serve our country by our failures . . . The Bill, though thrown out today, will come back again and again, till on the stepping stones of its dead selves, a measure ultimately rises which will spread the light of knowledge throughout the land.”

So said Gopal Krishna Gokhale winding up the debate on the Bill on Compulsory Education he had moved in the Central Legislative Assembly in 1912.

The prophecy has come true. India has begun going to school in a big way. Soon it can be claimed that every boy and girl of primary school age is at school.

The first region in India to introduce a law for compulsory education was Baroda. Maharaja Sayaji Rao's

edict on the subject dates back to 1893. Mysore passed Compulsory Education law in 1913, followed by Kolhapur in 1917, Bengal and the Punjab in 1919 and Madras in 1920. Free and compulsory primary education is enshrined in the Indian Constitution as a Directive Principle.

Article 45 of our Constitution provides that “the State shall endeavour to provide within a period of ten years from the commencement of the Constitution, for the free and compulsory education for all children until they complete the age of 14 years.”

The pace, however, has been somewhat slower. Only six out of ten children of the age group 6—11 were going to the school at the end of ten years of the Constitution. By the end of the Third Plan, nearly eight out of every ten will be at school.

As for the 11—14 age group, which could be described as the middle school group, it will require a couple of more plan periods to achieve the objective of the Constitution.

Percentages do not bring out what has been achieved even now as the actual figures.

Two years ago, at the end of the Second Plan there were 343 lakh children at school. Of them 109 lakh were girls.

In three years' time the number of children in primary schools will have risen to 496 lakh—or nearly 5 crore—which is more than the *total* population of most countries of the world. (In fact there are only ten countries whose total population is more than 5 crore.)

If parents were less reluctant to send their girls to school, there would be as many girls as boys at school, and our schoolgoing total would have crossed the six-crore mark.

Schools are springing up everywhere. Around Chandigarh the new school buildings show the influence of new styles. In Kerala, they continue to be thatch-covered. In distant NEFA, the walls of school

buildings are a mere lattice of bamboo. In the forests where tribal people dwell, the school wall glistens with the same gloss of mud polish as the homes. In Delhi any number of schools are held in tents. When it is not rainy or too hot, the classes are held in the open, often under a tree and sometimes under the blue sky. In countless villages the parents and elders are cheerfully coming forward to build school-houses with free labour. Even when there are no regular buildings, however, there are schools—for the important thing is to transmit the magic of reading and writing, not to have walls.

The teacher has always been the bearer of knowledge and a highly respected, if poorly rewarded member of society. Today there are a million primary teachers. By the end of the Third Plan there will be twelve and a half lakh teachers in primary schools and another three and a half lakh in middle schools.

In terms of money, the total expenditure provided for expansion of primary education in the Third Plan is Rs. 209 crore, out of Rs. 497 crore for general education. This, it must be remembered, is for primary schools *newly* to be started between 1961-66.

The money being spent on schools in existence before 1961 is part of the general budgets of the Governments. Even in 1959-60 this came to Rs. 105 crore.

The outlay in the First Plan was Rs. 85 crore and in the Second Plan Rs. 87 crore. The fact that the Third Plan has provided nearly two and a half times the Second Plan outlay shows the importance attached to the speedier realisation of a cherished national ideal.

One reason for the slowness of progress so far, as we noted, was that the number of girls attending school has been fewer than that of boys. In 1960-61 four out of five boys, but two out of every five girls, in the 6-11 age group had been enrolled in school. It could be said that the percentage of girls in school provides a good index of the social progress of a State. Rajasthan, Uttar Pradesh, Jammu and Kashmir, Madhya Pradesh, Bihar and Orissa are particularly backward in this matter. Among the measures put into action to remedy this imbalance are: condensed educational courses to train women, stipends and houses.

The Third Plan provides Rs. 175 crore for girls' education, of which

Rs. 114 crore are for primary and middle school stages.

One of the most notable features of the national awakening is the keenness of parents that their children should live a better life than they themselves could. The Government has been able to push through its welfare programmes mainly by convincing the parents that their children should have a chance to be healthier, better informed and better placed in the matter of securing good jobs. Enthusiasm for education has been specially marked in classes and groups which had so far been under-privileged—the Harijans and the tribals. To attract parents and students, the courses of teaching themselves have been given a rural bias. Scholarships are given liberally. Many schools provide free books and mid-day meals. Some have radios where children can listen to the miracle box that speaks and sings.

The introduction of compulsory education has changed the Indian scene. That, indeed, is the intention. In members of the backward communities it has created the feeling that education is their birthright which brings in its train self-respect and equality. "I come here for study", said seven-year old Yashoda Kumari, a student of class III in a Delhi Corporation

School. Her father is a peon in a local office and her mother does a part-time job cleaning vessels in homes. "Was there anyone else in the family going to school?" "Yes, I have a brother", she replied, "he is in class VII of Municipal Higher Secondary School". For another little girl it was the first day in school. And she had brought a good number of books—mostly her brother's. Of the total number of students on the school roll 15 per cent come from backward communities. Yashoda Kumari and Bimla Devi come from homes where the father can read and write. But in many schools you will find children who have been the first individuals in their families to have broken the literacy barrier of many centuries. For this proud privilege the children walk miles on country path and in slush, in heat and beating rain, bare-foot and often bareheaded, with slates and books in a bag. Some, depending on the parents' capacity, have an umbrella, some carry little 'tiffin

carriers'. A few are happy to go to school merely to escape the drudgery of home and others because school means company. Some parents pack them off to be rid of mischief; few others in order to avoid questions from the Panchayat chairman. The children do not always get the best of teachers. Teaching standards are poor. All this is true. But, with time, with devotion, the standards will improve—and education being the key to progress, the standards of the whole country will improve. Something big is happening, and the outcome of India going to school in this big way is found to do the country a great deal of good—for democracy, development and welfare.

(Courtesy—Yojana)

Education is the most important single factor in achieving rapid economic development and technological progress and in creating a social order founded on the values of freedom, social justice and equal opportunity.

EDUCATION IN INDIA

The following provisional educational statistics as on March 31, 1962 indicate the progress and expansion of Education in the country :

Area and Population :

Area (in square miles)

		11,76,251		
Estimated population (1962) in Thousands	..	Males	Females	Total
		2,31,606	2,18,148	4,49,754

THE NATION GOES TO SCAOOL

		<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Estimated population (in Thousands) for the age groups	6-11 years	29,726	27,919	57,645
	11-14 years	14,519	13,863	28,382
	14-17 years	13,308	12,654	25,962

Number of Recognised Educational Institutions :

<i>Type of Institutions</i>				<i>Total number of Institutions</i>
1. Universities	..	..	..	45
2. Board of Secondary and/or Intermediate Education	..	..	..	12
3. Research Institutions (In Arts and Science only)	..	..	..	46
4. Arts and Science Colleges	..	..	..	1,118
5. Colleges for Commerce	..	..	..	55
6. Colleges for Physical Education	..	..	..	18
7. Teacher Training Colleges	..	..	..
(i) Basic	..	..	..	259
(ii) Non-Basic	..	..	..	280
8. Schools for General Education :				
(a) Higher Secondary Schools	..	..	..	4,320
(b) Multipurpose Schools	..	..	..	1,389
(c) High Schools	..	..	..	13,526
(d) Post-Basic Schools	..	..	..	49
(e) Middle/Senior Basic Schools	..	..	..	55,250
(f) Primary/Junior Basic Schools	..	..	..	3,49,789
(g) Pre-Primary Schools	..	..	..	2,209
9. Schools for Commerce	..	..	..	1,095
10. Schools for Physical Education	..	..	..	44
11. Teacher Training Schools :				
(i) Basic	..	..	..	853
(ii) Non-Basic	..	..	..	258
12. Pre-Primary Teacher Training Schools	..	..	..	32
13. Schools for Handicapped	..	..	..	153
14. Schools for Social Workers (Janata Colleges)	..	..	..	46
15. Schools/Centres for Adults	..	..	..	2,31,677

Number of Students by Stage of Education :

<i>Stage of Education</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
(1) University Stage			
(a) Ph. D/D.Sc./D.Phill./etc. (In Arts and Science only)	4,233	681	4,924
(b) M. A.	27,059	7,701	34,760
(c) M. Sc.	10,392	1,670	12,062
(d) M. Com.	5,333	48	5,381
(e) M. Ed.	972	424	1,396
(f) B. A. (Pass & Hons.) ..	1,39,034	52,841	1,91,875
(g) B. Sc. (Pass & Hons.) ..	1,11,638	19,027	1,30,665
(h) B. Com. (Pass & Hons.)	51,181	697	51,878
(i) Teacher Training (B.T./ B.Ed. and equivalent Diplomas):			
(i) Basic	3,238	1,550	4,788
(ii) Non-Basic	10,442	4,954	15,396
(j) B.P.E. (Bachelor of Physical Education) and equivalent Diplomas)	613	120	733
(k) Teacher Training (Under- graduate level):			
(i) Basic	14,603	4,696	19,299
(ii) Non-Basic	6,430	5,687	12,117
(l) I. A.	1,77,603	33,942	2,11,545
(m) I. Sc.	23,818	3,071	26,889
(n) Pre-University:			
(i) Arts	1,05,504	36,023	1,41,527
(ii) Science	82,671	8,965	91,636
(iii) Commerce	23,034	561	23,595
(2) School Stage:			
(a) Classes IX and above ..	24,69,165	5,81,773	30,50,938
(b) Classes VI-VIII	56,80,711	18,78,681	75,59,392
(c) Classes I-V	2,57,48,556	1,26,83,341	3,84,31,897

THE NATION GOES TO SCHOOL

(d) Pre-Primary ..	..	1,33,359	89,432	2,31,791
(e) Teacher Training (Primary)				
(i) Basic ..	..	85,477	29,124	1,14,601
(ii) Non-Basic ..	..	10,830	5,167	15,997
(f) Teacher Training (Pre-Primary)	..	178	1,661	1,839
(g) Commerce ..	..	78,271	14,897	93,168
(h) Physical Education ..	..	2,885	438	3,323
(i) In Schools for the Handicapped ..	..	6,723	1,885	8,608
(j) In Schools for Social Workers (Janata Colleges)..		3,243	507	3,750
(k) In Schools/Centres for Adults ..	..	14,97,389	8,01,156	22,98,545

Number of Teachers :

<i>Type of Institution</i>	<i>Men</i>	<i>Women</i>	<i>Total Trained</i>	<i>Untrained</i>
1. High/Higher Secondary/Multipurpose/ Post-Basic Schools ..	1,61,216 <hr/> 92,769	54,438 <hr/> 18,289	2,15,654 <hr/> 1,11,058	
2. Middle/Senior Basic Schools ..	1,81,668 <hr/> 90,295	70,777 <hr/> 22,634	2,52,445 <hr/> 1,12,929	
3. Primary/Junior Basic Schools ..	4,20,310 <hr/> 2,37,270	1,26,221 <hr/> 38,021	5,46,531 <hr/> 2,75,291	
4. Pre-Primary Schools	290 <hr/> 435	2,246 <hr/> 1,513	2,536 <hr/> 1,948	

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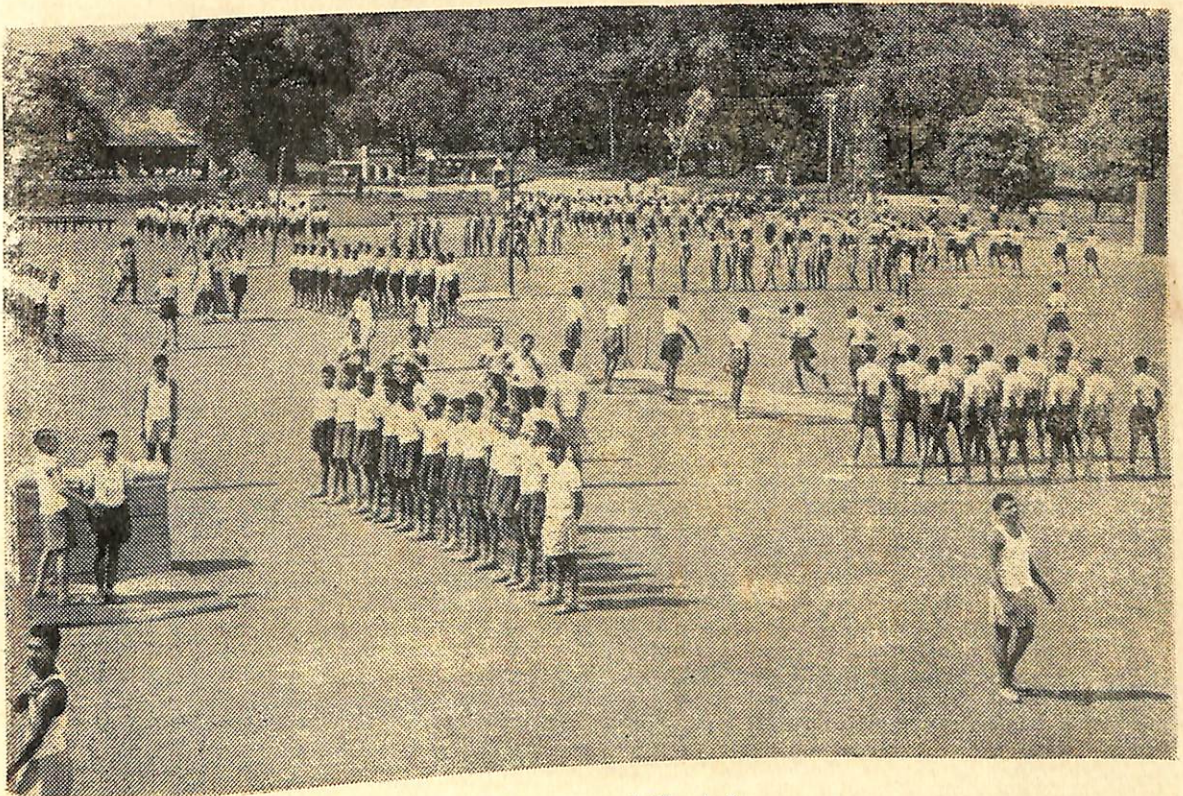
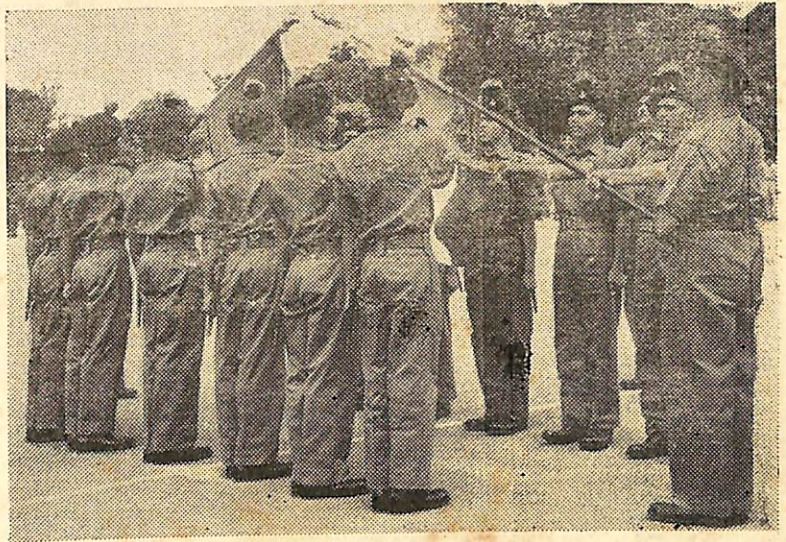
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Beehives of Activity

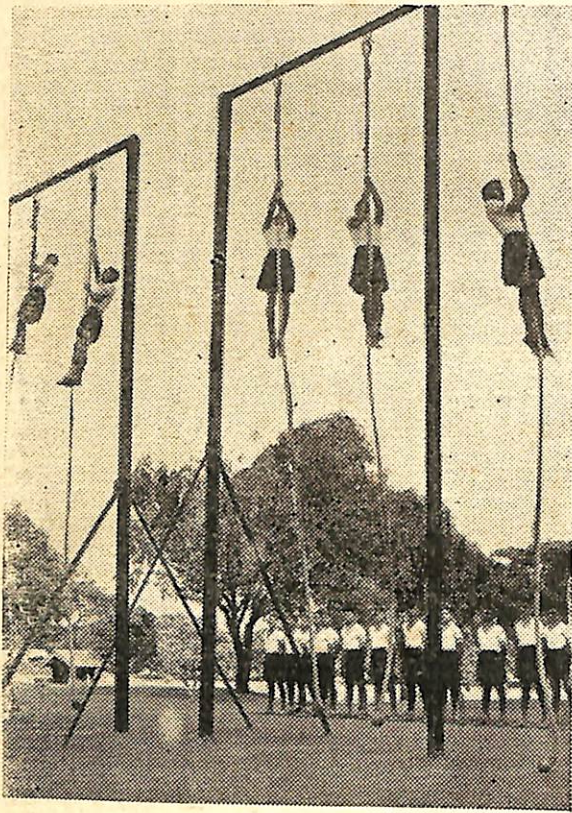
Training establishments of the Army have become beehives of activity where work goes on ceaselessly.

The training over, the new soldiers take the Oath of Allegiance according to their religion by touching the national flag and the standard of the Regiment.

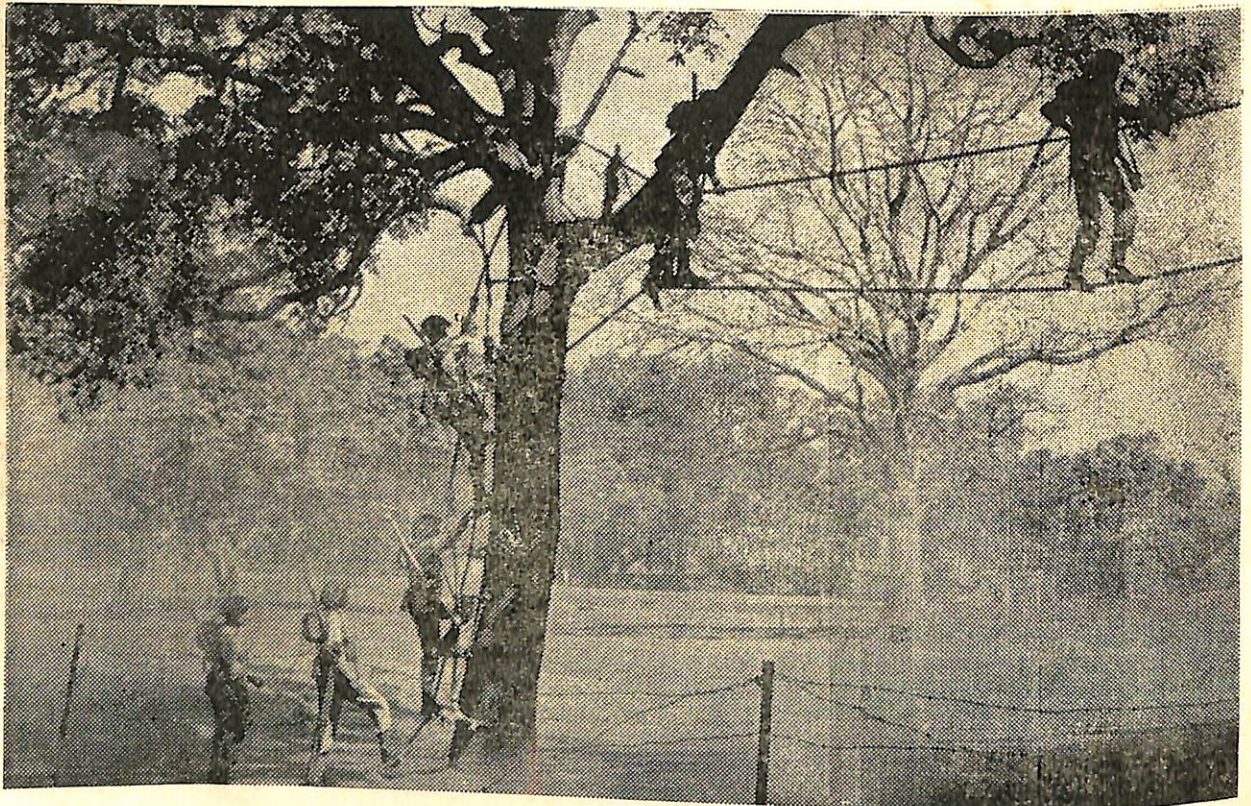


Recruits at Physical Training.

Beehives of Activity



Recruits climbing a rope.



Recruits negotiating a rope-bridge.

How India's Villages Face the Emergency

That the major object of the Chinese attack was to disrupt our programmes of planned development of national life and divert our resources from peaceful to military use, was seen through by the nation without any loss of time. As Prime Minister Nehru puts it, the Chinese aggression was not merely a violation of the country's territorial frontiers but an attack on our freedom, our democratic values and our national philosophy of peace and progress. The menace was, therefore, to be fought on the both fronts—military and civil. The best efforts of every citizen were to be mobilized.

As is well known, 82.16 per cent of India's citizens live in the villages. The Community Development movement that has already worked for a decade towards the transformation of economic and social life of the villagers, got, therefore, additional responsibilities to shoulder in the context of the crisis. The

upsurge and enthusiasm generated all over the land was to be mobilised for the defence effort as well as for the long-term objective of economic development.

Village Volunteer Force

One answer to the problem was found in the organisation of the Village Volunteer Force. With three-fold object of augmenting agricultural production, organising village defence and promoting mass education, the scheme was inaugurated on January 26, this year. While inaugurating the scheme, the Prime Minister said in his broadcast talk, "What are our villages, and mighty rural population that lives there, to do in these circumstances? Rural India feeds our nation, including the Army and the other defence forces. It provides strength to our nation. It gives us our brave soldiers. Rural India, therefore, must organise itself for this great effort." He added, "We

have now decided to have in every village a Volunteer Force which will devote itself to this great task. Every able-bodied adult in the five and half lakh villages of India should constitute himself a volunteer to serve his village and the nation."

The scheme took roots quickly and reports poured in from every nook and corner of the country that millions were getting enrolled as volunteers. The latest information from Bihar, for instance, is that some 30,75,000 people have joined the Village Volunteer Force, while in Kerala all the 922 Panchayats have introduced the scheme and have over 1,47,000 persons, including about a thousand women, on the list of the members of the Force.

Madras has organised a V.V.F. of 11,25,000. Of this, the women members constitute about 42,000. In view of their enthusiastic response the State Government has launched a separate intensive training programme for the women volunteers.

The number of volunteers enrolled in Andhra Pradesh is 2,63,000 and in Maharashtra 2,30,000.

India, in all, has over 97 lakh citizens, who have either received or are receiving training in the village Volunteer Force. The nation, thus, can rest assured that the Community Development task, thanks to the services of these sufficiently trained men and women, will not be let to suffer during the emergency.

Emphasis on Agriculture

In view of the emergency emphasis was put on agricultural development. As Mr. S. K. Dey, Union Minister of Community Development, disclosed in the Lok Sabha, the State Governments were asked to ensure that the Gram Sevaks should only concern themselves with agriculture and related matters like animal husbandry, minor irrigation and soil conservation and Co-operation in so far as it related to agriculture. An additional sum of Rs. 1 lakh was made available to every Stage-1 block, taken up in October last year or thereafter, in order to intensify agricultural work and raise productivity. This sum was to be raised by effecting economies in office expenditure and construction of buildings etc.

Defence Labour Banks

As an integral part of the mass mobilisation scheme, every Panchayat was required to organise a Defence Labour Bank based on the donation of free Labour at the minimum rate of one day per month from every able-bodied adult or monetary contribution in lieu. The resources of the Bank were to be used essentially for production programmes and for building up remunerative community assets, e.g., excavation of field channels, digging and maintenance of village tanks and compost pits etc.

It is calculated that the Defence Labour Banks in all the States and Union Territories have received labour donations of over 184 lakh man-days. Taking Rs. 1.25 per day as the average wage-rate throughout the country, the money value of the donations works out to more than Rs. 2 crores.

In Andhra Pradesh alone the number of man-days donated in the D. L. B. is 27,48,000, while the corresponding figure for Bihar is over 8,00,000. In Kerala the number of man-days donated is 74,470, while

cash donation in lieu of labour collected so far amounts to Rs. 23,000.

In Maharashtra the number of man-days donated in the D.L.B. is 19,14,000 and in Uttar Pradesh over 47,00,000.

A news report from Punjab stated that a 55-mile stretch of road had been built entirely by voluntary labour on the outskirts of Ludhiana, while Bihar Citizens' Defence Council proposed to construct 500 miles of metalled roads in the same way.

In view of changed circumstances Government of India proposes to spend Rs. 582 lakhs in respect of Community Development Projects, National Extension Service, local development works and Co-operation during 1963-64, while in 1962-63 the amount spent thereon was Rs. 563 lakhs.

Thus we find that the nation has resolved to bear the double burden of defence and development. Community Development work goes on, and goes on with an additional tempo, greater emphasis being placed on the long-term preparation of rural India to face the danger from across our borders.

An expanding source of Foreign Exchange

Indian aromatics have held sway the world over since many centuries past. According to one report, Mary, Queen of Scots, used delicate Indian scents to perfume her baths. That was about 400 years ago. But, even today, it is an Indian grass that helps perfume the costly toilet soaps used in many corners of the earth.

Cymbopogon flexosus, to give it its botanical name, grows wild in Kerala. It is also extensively cultivated in that State.

If a few blades of this grass are rubbed between the fingers, a sweet lemon-odour emanates from it. This smell gives the grass and the essential oil extracted from it their popular name "Lemongrass" (in Malayalam "Pul Thailam").

Lemongrass oil from India has been famous in the world markets as "East Indian" lemongrass oil for

over a century. Records show that as early as eighteen nineties over 10 tons of lemongrass oil were exported from Cochin and Quilon. Last year India exported 1,154 tons of the oil, worth over Rs. 2½ crores.

The United Kingdom is the major customer of our lemongrass oil, while the U. S. A., the U. S. S. R., Japan, West Germany and the Netherlands purchased more than 100 tons last year. India is meeting almost 80 to 85 per cent of the world's requirement of this oil.

Lemongrass oil is valuable for its main constituent 'citral', which is used in the manufacture of 'ionones'. Ionones form the base in the manufacture of a number of perfumes. The average citral content of lemongrass oil is 78 to 80 per cent. In recent years, more important uses have been found for citral, including the manufacture of synthetic Vitamin 'A'.

The domestic consumption of lemongrass oil has also grown in recent years. About 250 tons of the oil were used in the manufacture of Vitamin 'A' and ionones in India last year as against 50 tons utilised five years earlier.

In the past, the oil was obtained by distilling lemongrass grown wild. As its demand increased systematic cultivation of the grass was taken up in Kerala. Today over 70,000 acres are under lemongrass in that State. The Kerala Government have also established a Lemongrass Research Station at Odakkali where research is conducted on improving grass yields and the quality of oil.

The production of oil is largely carried on as a cottage industry. The plantations are scattered and the holdings generally small—only two to five acres. Moreover the grass cannot be stacked for long for fear of reduction in oil content through dryage.

Most cultivators have their own small crude direct fire stills for extracting the oil. The still is usually a truncated cone placed upon a copper cylinder with a manhole towards the bottom for charging and discharging

plant material. A mud-and-brick hearth serves as the furnace and the spiral condenser remains immersed in a huge open-top wooden barrel filled with cold water, lifted from a well or a nearby brook. The mixture of vapour and essential oil collects in a receiver; the oil floats on the top and is carefully skimmed off with a copper ladle and poured into bottles.

On an average the yield of oil varies from 0.3 to 0.5 per cent of the weight of the grass. The average yield of oil per acre works to about 20 Kilograms.

Until recently the industry was beset with many handicaps. The distillation methods were wasteful and equipment poor. Oil yield was consequently low and the quality below standard. This led to wide rice fluctuations which in turn resulted in plantations being abandoned.

A visitor to these plantations will almost always fail to distinguish another type of grass, similar to lemongrass, which grows frequently along-side. This grass does not yield citral and has no economic value.

Lemongrass plantation owners did not usually take care, in the past, to remove this "pseudo" lemongrass

from their fields. They cut and distilled its leaves along with those of real lemongrass, resulting in the yield of inferior oil and in low returns. The export trade was thus affected.

The Government of India, therefore, enforced strict compulsory quality control on the export of lemongrass oil from 1956. The Agricultural produce (Grading and Marking) Act specifies two Agmark grades of lemongrass oil—"Special" and "Grade A"; "Special" with a citral content of not less than 80 per cent and "Grade A" with not less than 76 per cent. From that year every consignment leaving the shores of the country has borne an Agmark label specifying the grade of the oil.

Compulsory quality control has had the desired effect. The confidence of buyers abroad in East Indian Lemongrass oil has been fully restored, and exports have risen considerably.

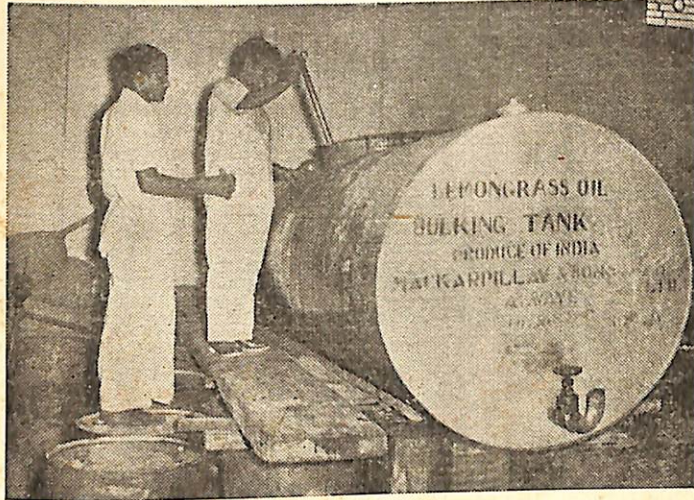
The Indian sub-continent abounds in aromatic vegetation and the essential oils extracted from such plants and attars prepared from them are popular the world over. Sandalwood oil was an item of India's trade with the Mediterranean countries several hundred years ago. Even now India holds a monopoly in the sandalwood oil trade. But pride of place among essential oils for earning the bulkiest foreign exchange packet goes to the oil of lemongrass.

RECORD TIN PLATE PRODUCTION

Rourkela Maintains Production Tempo

Having reached its full rated capacity, Rourkela Steel Plant is maintaining its tempo of production. During June 1963, the tin plate production of 1,476 tonnes is the highest achieved so far as against the previous record of 1,451 tonnes set up in May 1963. Similarly, tin plate despatches during the month were also the highest so far, namely, 1,339 tonnes; the previous highest was 1,220 tonnes during May 1963. The production of steel ingots during the thirty days of June 1963 was 80,583 tonnes representing 96.7 per cent of the rated capacity. The hot metal production in June was 83,195 tonnes. The production of plates was 15,159 tonnes which is 106 per cent of the rated capacity of the Plate Mill. The Hot Strip Mill produced 32,840 tonnes of hot rolled coils. The production of cold rolled strips was 10,175 tonnes. During June, 1963 a notable improvement has been made in the despatches of Tested Quality Plates. The despatches of these plates from Plate Mill have been stepped upto 73 per cent. These were at the level of 54.5 per cent during April and May 1963 and the previous maximum was at 60 per cent during March, 1963.

Indian Lemongrass Oil



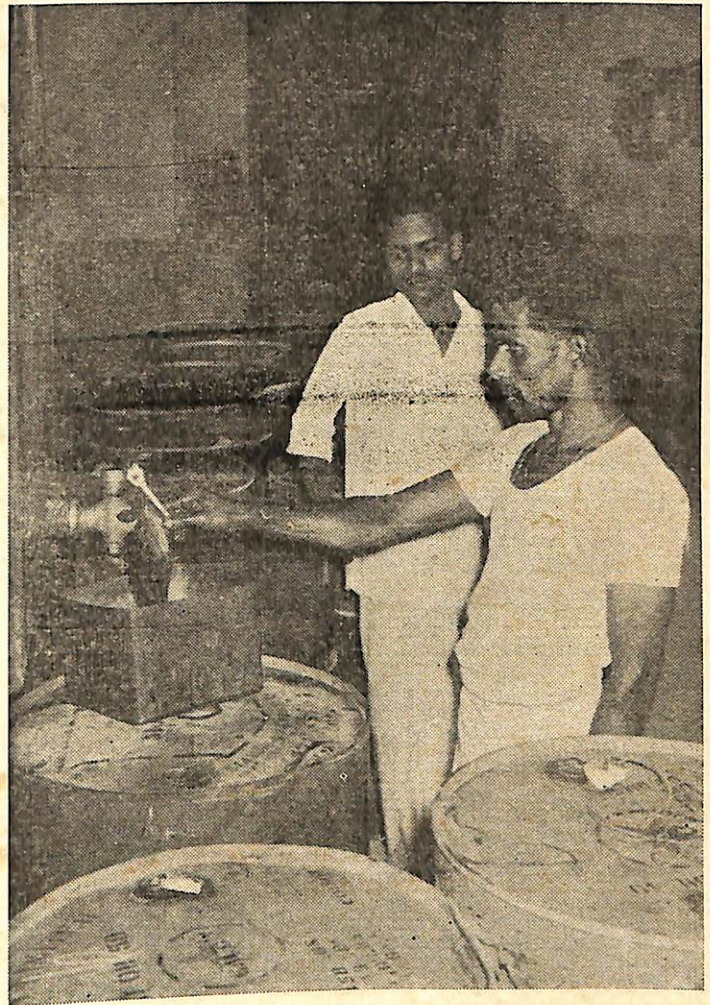
An Inspector of the Directorate of Marketing taking samples of Lemongrass oil from a bulking tank for test at the Cochin Grading Centre.

oil, exported last year earned foreign exchange worth Rs. 2½ crore.

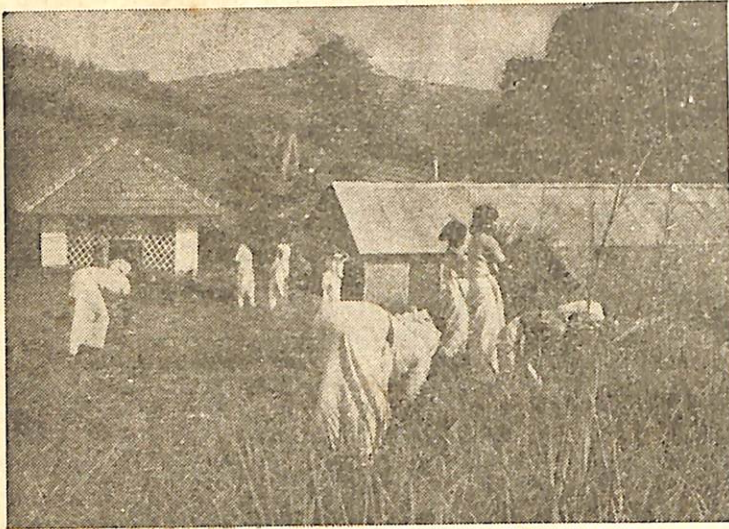
Over 70,000 acres are under systematic cultivation of lemongrass in Kerala, where the Central and the State Governments have taken steps to ensure better yield and quality.

Here are some pictures relating to the Industry.

Graded Lemongrass oil is filled in drums in the presence of an Inspector of Directorate of Marketing to ensure quality control.

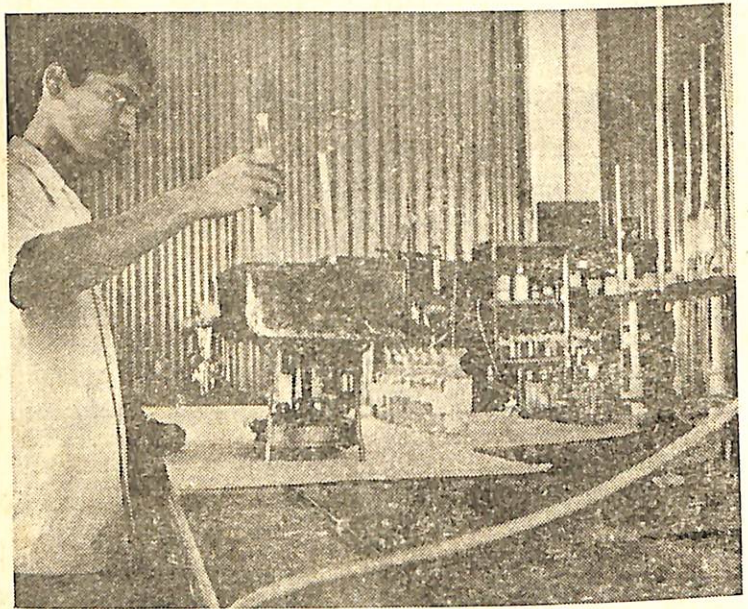


Indian Lemongrass Oil

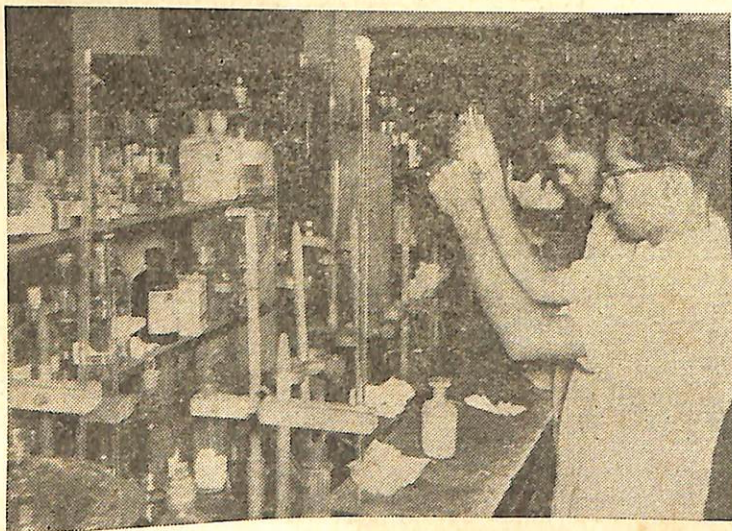


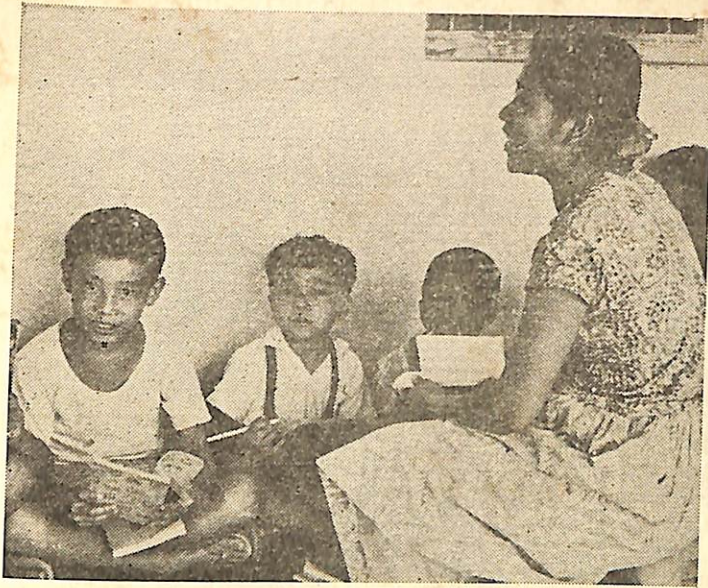
Lemongrass fields attached to the Kerala Government Lemongrass Research Station, Odakkali.

Testing in progress at the Essential Oil Laboratory, Cochin.



Chemists carrying out tests to determine the quality of lemongrass oil at the Grading Centre Laboratory, Cochin.





Internees at Deoli Camp

THE INTERNEES TREATED MORE
AS GUESTS THAN PRISONERS

Arrangements exist at the Deoli Camp for the education of the Chinese children. Slates, books and note books are offered by the Camp authorities, while instruction is given by the internees themselves.



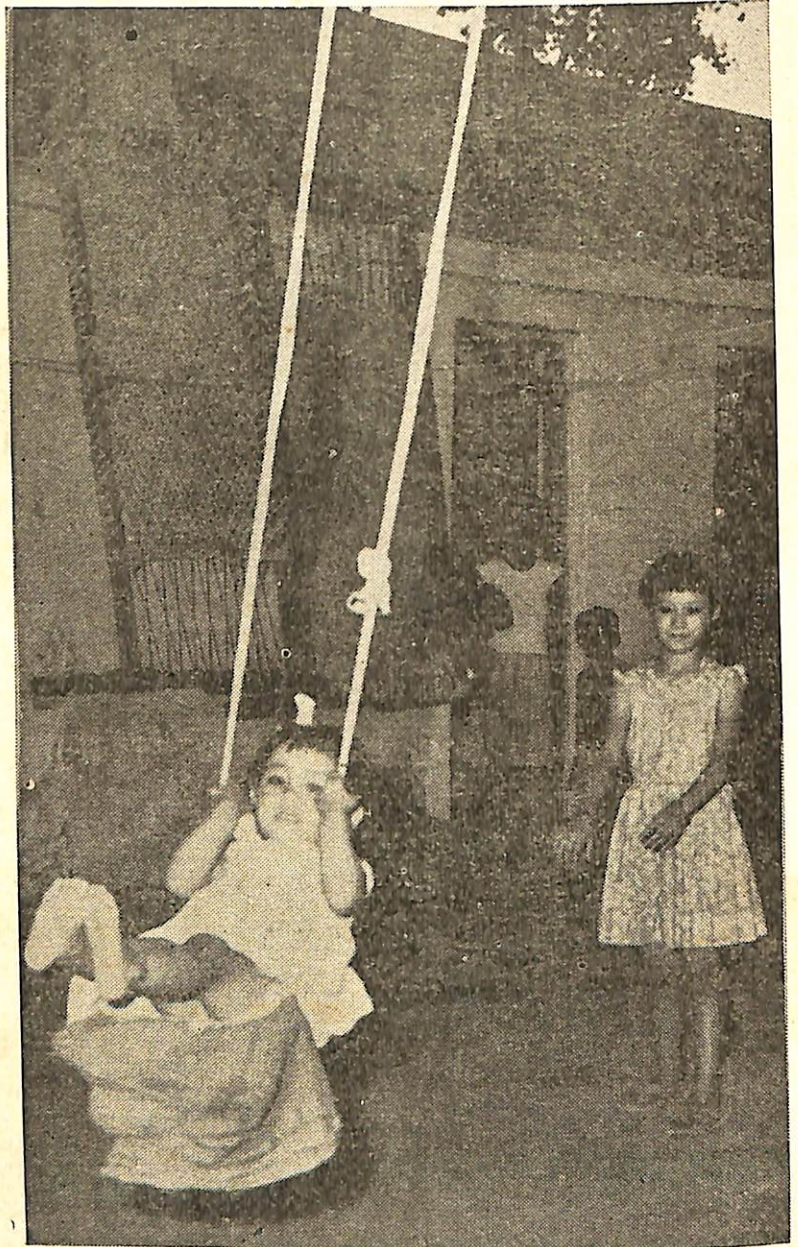
Religious service for the Internees being held in the church

Among Christian internees, there are both Protestants and Roman Catholics. Separate services are held for them.

Internees at Deoli Camp



One of the Chinese Internees returning from the canteen looks happy with his purchases. There is chicken for lunch.



This little Chinese child at the Deoli Camp has a swing.

Central Rice Research Institute Solves Knotty Problems

The Central Rice Research Institute is the first of its kind in South-East Asia and one of the world centres recognised by FAO for maintenance of genetic stocks registered by the rice-growing countries with the FAO.

The Central Rice Research Institute at Cuttack deals with a basic problem of rice culture in India; how to reverse the trend of low yield in a country which has about one-third of the world acreage under rice and grows as many as 4,000 botanical varieties against the total of 7,000 known varieties of rice.

The Institute, during the seventeen years of its life, has made valuable contributions towards the basic understanding of rice culture. Besides fundamental studies, problems of wide applicability, such as breeding for earliness and high response to fertilisers, disease resistance and introduction of varieties suitable for dry and rain-fed conditions, have been effectively tackled.

Through researches conducted in various divisions of the Institute, many new, cheap and easy methods of paddy cultivation have been developed. Farmers have been benefited by pest control measures and manuring methods. A technique of selecting plants with possible capacity for good response to heavy manuring has been suggested. A collection has been made of cultivated and wild types of rice to serve as a reservoir of germ plasm. The collection has been enriched with types procured from comparatively less explored regions such as Nepal, NEFA, Sikkim, Tripura and Manipur. Efforts are also being made to evolve a suitable breeding technique that may enable a rice breeder to handle a large amount of material with

limited resources without affecting the efficiency of selection. A process has been developed for identifying the different species of rice.

Work in Divisions

The Agronomy Division of the Institute works for the improvement of cultivation practices and soil management. Results of researches have shown that fractional application of ammonium sulphate in three split doses, viz. at planting, one month after planting and two to three weeks before flowering is more efficient than application of the entire quantity in one single dose. It has been proved that ammonium phosphate and ammonium chloride give as good a response as ammonium sulphate, which could be used as alternative fertilisers. A continuous application of compost at 100 maunds per acre for eight years gave cumulative effect. Inter-cropping of rice with dhanicha benefits the succeeding rice crop. For getting higher rice yields, eight-week old green manure crop has to be buried at the time of planting of paddy. Growing an early-maturing cotton or groundnut in sequence with rice gives a good economic return and can be included in rotation with rice where irrigation

facilities are available. Weed control also is a subject of study.

Rapid methods of analysis and tissue test suited to water-logged conditions of the rice crop are being standardised. Application of a new method, that is the mixture of lime, superphosphate and sodium molybdate greatly stepped up production. Burning of top soil brought an equal improvement in the yield.

The relative resistance to pests and the co-relation of morphological and anatomical characters of the rice plant with pest resistance are being experimented upon for evolving resistant varieties.

Emphasis on Mechanisation

Mechanisation of rice cultivation has received due emphasis in the research programmes of the Institute. Many simple implements for rice cultivation have been developed and a walking type land-master power-tiller and Ferguson tractor of medium size fitted with extension wheels have been used with satisfactory results. The Institute has also developed a paddy transplanter and hand harvester.

The Farm Division of the Institute tests the various methods of sowing such as broadcasting, dibbling, drilling and transplanting for their relative efficiency on a field scale. To study the economics of rotating paddy with sugarcane in medium lands, sugarcane has been planted. The technique of vegetative propagation in rice cultivation is being perfected and the economics of the adoption of this method in large scale cultivation is being worked out.

Growing of rice in saline conditions may become feasible in the not distant future. West Bengal's Port Canning is the place where a sub-station studies the problems of saline-resistance in rice. The study includes collection and investigation of types reported to be saline-resistant from different parts of India and abroad.

The technique of vegetative propagation recently initiated at this Institute has made the task of seed multiplication and maintenance of genetical purity easy. Work on various aspects of this important technique is being intensified.

The blast disease, which causes great damage to the rice crop, is being investigated. Attempt is also being made to evolve suitable antibiotics for use in the control of this disease.

Training Programmes

An essential aspect of the work here is the training of personnel. Among other things, the Institute conducts a National Training Course for Rice Technicians. The candidates are experienced agricultural graduates drawn from various State Agricultural Departments. The training course is for a period of six months. The Institute also offers post-graduate course to foreign students, and research scholars from Thailand and Japan have availed of the facilities in the field of plant breeding and crop nutrition. Farmers' training classes are held periodically for the cultivators of the intensive cultivation centres of Orissa and practical training is given to them on the improved methods of rice cultivation. Progressive cultivators from different States of India also visit the institution to acquaint themselves with the work in progress.

Panchayati Raj

Overall Progress in the Country

The number of Panchayats in the country now stands at a little over two lakhs, covering as many as 5,33,000 villages. This means that some 95 per cent of the rural population has been covered by the Panchayats.

The average number of villages per Panchayat varies from 22 in the case of Himachal Pradesh to 1.4 in the case of Madras. Orissa has 20 villages on an average under a Panchayat. The average population of the Panchayat also varies from 755 in U.P. to 11,996 in Kerala. The average for the country as a whole is 2.6 villages per Panchayat with a population of about 1400.

Panchayati Raj or Democratic Decentralisation is an attempt to effect transfer of power to the people. Various States have evolved patterns of Panchayati Raj suited to local conditions.

In Andhra Pradesh, Panchayats have been functioning under the Madras Panchayat Act (1956) in the ex-Madras area and under the Hyderabad Village Panchayats Act (1956) in the rest of the State. An intergrated Panchayat Bill has now been considered by the Joint Select Committee and is likely to be passed during the next session of the State Legislature. There are 15,098 Panchayats in the State covering the entire rural population.

Under the Assam Panchayat Act (1959), Assam has adopted a three-tier structure of local self-governing institutions with the Gaon Panchayats at the village level, Anchalik Panchayats at the Block level and Mohkuma Parishads at the sub-division level. All the villages in the State are covered by Panchayats, 2535 in all, on an average one Panchayat for seven villages.

The "tea-growing" areas in the State have, for the present, been excluded from the scope of the Act, but the State Government is considering its extension with suitable modification to these areas. Panchayats in 8 Blocks have taken up Rural Insurance work in this State.

The three-tier system of Panchayati Raj was adopted by Bihar in December 1961. The State Government proposes to launch Panchayati Raj in four districts on Independence Day this year and in the remaining districts by August 15, next year. Bihar has 10,641 Panchayats covering 67,406 villages. There are 6.3 villages per Panchayat with an average population of 3355.

An integrated Panchayat Act has been passed for the establishment of Gram Panchayats in Gujarat. A village with a population not exceeding 10,000 will form a Gram and will have a Gram Sabha. Panchayati Raj was introduced all over the State on April 2, this year. The State has 10,750 Panchayats covering 17,760 villages. On an average there are 1.7 villages per Panchayat with a population of about 1100.

The Jammu & Kashmir State has been covered entirely by Panchayats. There are 960 Panchayats with an average of 7.6 villages per Panchayat, covering a population of about 3000. Panchayati Raj is yet to be introduced in this State.

Legislation regarding the introduction of the three-tier system of Panchayati Raj is proposed to be implemented in Kerala shortly and general elections to Panchayats will be held in August, 1963. There are 923 Panchayats covering over 1600 villages in this State. Each Panchayat has, on an average, 1.8 villages with a population of 13,776.

An integrated Panchayati Raj Bill has been passed by the Madhya Pradesh State Legislature and the State Government has decided to set up higher tiers of Panchayati Raj bodies only after holding fresh elections to the village Panchayats, most of which have outlived their term. The elections are likely to be completed by the end of October, 1963. The Block and District level institutions are expected to start functioning early in 1964. Special provision has been made for the constitution of Adivasi Panchayats and Pargana Panchayats in the areas

where majority of the inhabitants are members of the scheduled tribes. An Adivasi Panchayat, constituted for any village or group of villages will consist of such number of elected Panches as may be fixed by Government and the Sarpanch nominated by Government from amongst the Panches. A Pargana Panchayat constituted for a group of Adivasi Panchayats consists of a Sarpanch and 4 Panches all nominated by Government. The State has 20311 Panchayats covering 71751 villages. On an average, there are 3.5 villages per Panchayat with a population of 1123.

In Madras, the Panchayat Act of 1958, enforced since January 1, 1960, provides for Panchayats at the village level and Panchayat Union Councils at the Block level. The Madras Panchayat Act 1950, formerly in force in the State, provided only for Panchayats at the village level. The three-tier system has been adopted since the new legislation was passed. There are 12583 Panchayats in the State covering more than 18,000 villages and a rural population of 2.26 crores. On an average each Panchayat has under its jurisdiction 1.4 villages and a population of 1796.

Gram Panchayats are functioning in Maharashtra under the Bombay Panchayat Act (1958), which was in force in the erstwhile bilingual Bombay State. The Gram Sabha with authority to discuss Panchayat budget, statement of accounts etc. is recognised. The Maharashtra Zila Parishads and Panchayat Samities Act has just been passed. There are 19399 Panchayats in the State covering as many as 38,176 villages. On an average, there are two villages with a population of 1242 under each Panchayat.

The Mysore Village Panchayats and Local Boards Act, 1959, envisages a three-tier system with Panchayat at the village level, Taluk Board at Taluk level and Development Council at District level. There are 7500 Panchayats in this State covering about 26,000 villages. On an average, there are 3.5 villages under a Panchayat with a population of 1986.

Under the Orissa Gram Panchayat Act, 1947, Panchayats have been in existence in the State covering nearly 97 per cent of the rural population. The State introduced the three-tier system under

the Orissa Panchayat Samities and Zila Parishads Act, 1959. The Act was enforced on January 26, 1961. The State has 2342 Panchayats covering about 48,000 villages. Each Panchayat has to control, on an average, 20 villages and a population of 5800.

In order to enthuse the Panchayats, the State Government has decided to award two prizes for Panchayats which establish rural industrial units.

In Punjab, prior to 1959, two Legislations on Panchayats—the Punjab Gram Panchayat Act, 1952, and the Pepsu Panchayati Raj Act were in force. The Punjab Gram Panchayat (Amendment) Act of 1959, repealed the Pepsu Panchayati Raj Act and extended the Punjab Act, with some modifications, to the entire State. The Gram Panchayati is constituted by direct election from adult voters of the village. Gram Sabha is recognised. The Sabha has the authority to consider the budget and draw up development plans. There are 13,466 Panchayats in this State covering 20855 villages. On an average, there are 1.5 villages under a Panchayat with a population of about 1000.

The Punjab Government has a scheme for encouraging unanimity in the elections to Panchayats. The entire land revenue of one year will be passed over to Panchayats where elections are unanimous.

Rajasthan introduced Panchayati Raj on October 2, 1959. The State has introduced a special scheme under which Samities with outstanding performances in selected fields are given substantial cash awards. The State Government has introduced a scheme to give a special annual grant of 25 nP. per head of population to every Panchayat for the full term of three years of its life, where the Sarpanch and 80 per cent of the Panches are elected unanimously. The State has 7393 Panchayats covering 34,440 villages. There are about 4.7 villages under a Panchayat with an average population of about 1800.

Gram Panchayats have been in existence in Uttar Pradesh since 1947. The Panchayat which has a five-year term is a directly elected body. Election is by show of hands. There are 72,333 villages in this State with about 1.5 villages per Panchayat. Each Panchayat has on an average a population of about 800.

In West Bengal, Panchayats are now being constituted according to a phased programme. A higher body called Anchal Panchayat has also been constituted for a group of contiguous Gram Sabhas. The Panchayat is to be directly elected by secret ballot for a term of four years. The West Bengal Zila Parishads Bill, 1962, was introduced in the State Legislature in December, last year. The Bill is now before a joint select committee. So far, only 38% of the villages and 37% of the rural population in West Bengal have been covered by the Panchayats. There are about 6100 Panchayats in this State.

Village Panchayats are established in the Union Territories of Delhi and Himachal Pradesh and are being established in the Andaman and Nicobar Islands, Manipur and Tripura. In order to introduce the Panchayati Raj system in the Union Territories, the Constitution has been amended to provide for Legislatures in Himachal Pradesh, Tripura, Manipur, Pondicherry and Goa, Daman and Diu. As the concerned Legislatures are empowered to deal with State subjects, it would be open to them when set up, to pass Legislation on Panchayati Raj.

TO DEFEND

IS TO

Consume Less

AND

Save More

A Dance-Drama on Srikrushna Balya Leela

A dance-drama named "Srikrushna Balya Leela" was staged by the artistes of the Utkal Sangeet Samaj of Cuttack at the Janata Rangamancha on June 25, 1963. Shri Santosh Kumar Sahu, Deputy Minister for Cultural Affairs, Orissa, graced the function as Chief Guest.



Photo shows : Shri Sahu amidst the artistes who participated in the dance-drama.

Srikrushna Balya Leela

- The most pathetic scene in the drama relates to when Srikrushna, on the eve of his departure for Mathura, was seen off by the Gopis, who, in thousands and amidst sobbings and tears, flocked round His chariot supplicating their beloved lord not to forget them.

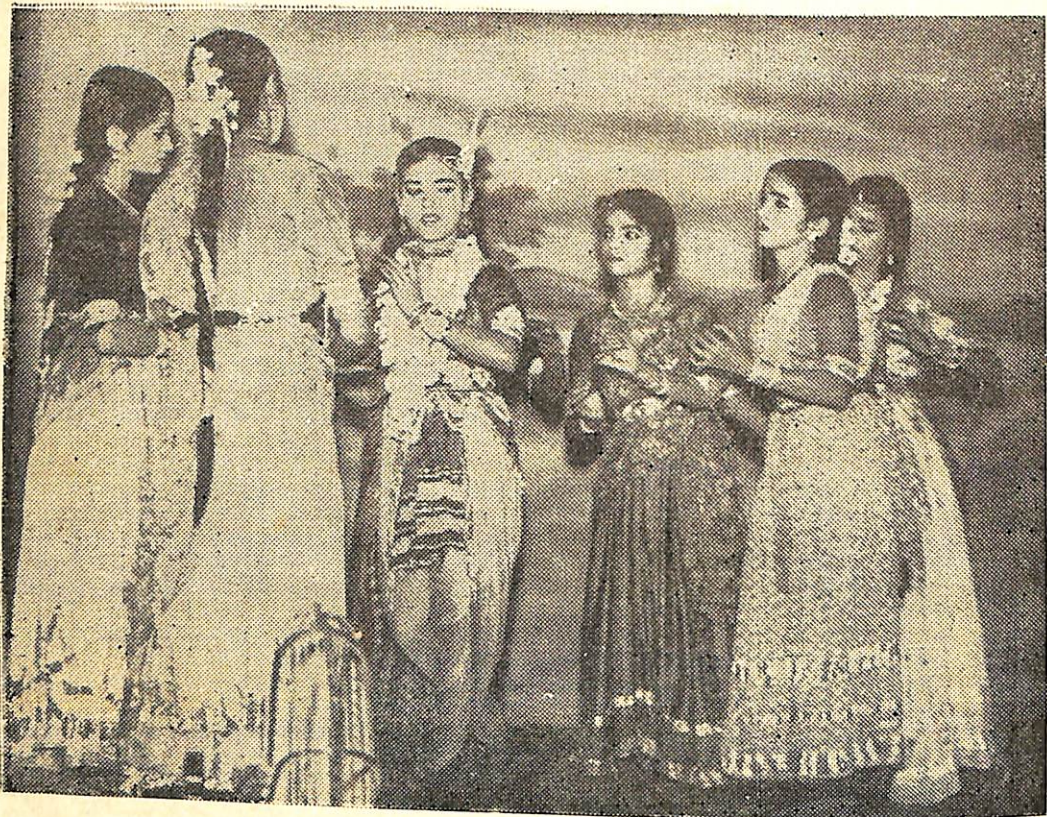


Photo shows : "Srikrushna bidding farewell to Gopis before he leaves for Mathura"—a scene from the dance-drama "Srikrushna Balya Leela."

Calendar of Events

MAY, 1963

INTERNATIONAL

- 1-5-63 Six Russian-built Tu-16 jet bombers roared over the KOTABARU town signalling the end of U. N. interim administration.
Uganda and Tanganaika have agreed on a mutual defence pact which will include Kenya when it attains independence.
- 2-5-63 Representatives of nine countries and the World Bank opened a meeting in Washington to decide on the amount of aid which will contribute to Pakistan's second Plan.
- 3-5-63 Mr. Gerard Piel-American science writer and publisher of the *Scientific American* has been awarded the International Kalinga Prize for the popularization of science.
Six Pro-Nasser Ministers have resigned from the Syrian Government.
Prof. Humayun Kabir, Minister for Scientific Research and Cultural Affairs arrived at Moscow to sign a plan of cultural exchanges between U.S.S.R. and India.
- 4-5-63 Negotiations are underway between Mysore Government and a leading Japanese porcelain insulator manufacturer on a 1,000,000 dollar plant.
The former Syrian President, Mr. Nazen el Kudri who was forced out of office in the Military revolt in March has been arrested in Aleppo.
- 5-5-63 M. Mohammed Khemisti, Algerian Foreign Minister, shot by an assassin last month died in Hospital.
The Heads of the State of Communist China and the neutralist monarchy of Cambodia signed a document binding them in friendship pledging support for each other's foreign policy.
- 6-5-63 Switzerland officially joined the Council of Europe.
- 7-5-63 Soviet and American experts held their first meeting at Geneva to discuss the technical aspects of a direct communication line between the American and Soviet Governments.

CALENDAR OF EVENTS

- 8-5-63 The U. S. National Academy of Sciences announced the election of Dr. H. J. Bhabha, Chairman of the Atomic Energy Commission of India.
- 9-5-63 India's Minister for International Trade, Mr. Manubhai Shah arrived at Paris for a two-day visit to explore the possibilities of increasing Indo-French trades.
- Sir Charles Vyner Brooke, who for 30 years ruled the North Borneo territory of Sarawak as the world's only White Rajah, died.
- 10-5-63 Prof. Humayun Kabir, The Indian Minister for Scientific Research and Cultural Affairs arrived at Berlin for a two-day visit.
- 11-5-63 Syria's Revolutionary Council announced, it had accepted the resignation of Mr. Sahab Bitar and had asked Dr. Samiel Jundi to form a New Cabinet.
- Indonesian youths burnt and smashed Chinese shops in several Indonesian towns.
- 12-5-63 President Kennedy has ordered troops to the vicinity of racially disturbed New Birmingham.
- 13-5-63 The Soviet Foreign Ministry charged five British and five American diplomats with spying and ordered those remaining in Moscow to leave the country.
- 14-5-63 U. S.-British agreement on establishment of Submarine Test Centre in the Bahamas was announced.
- 15-5-63 President Guide has accepted the resignation of Dr. C. M. Muniz, Argentina's Foreign Minister.
- 16-5-63 Italy's Premier Mr. Fanfani resigned.
- Astronaut Gordon Cooper made a safe splash-down in the Pacific after completing his scheduled 6,00,000-mile 22 orbits of the earth.
- Ministers of 60 nations opened a conference aimed at launching the biggest tariff-cutting negotiations and trade liberalization programme in history.
- 17-5-63 Pan American World Air ways and Trans World Air lines, increased their rates over transatlantic routes.
- Thai-Burmese agreement on border arrangements and co-operation was signed.

- The President Radhakrishnan received the honorary degree of Doctor of Literature from Teheran University.
- 18-5-63 China and the African Republic of Somalia have signed a trade and payments agreement in Peking.
- 19-5-63 The citizens of the historic cultural centre of Iran gave a big ovation to President Radhakrishnan.
- 20-5-63 Indonesia's Foreign Minister, Dr. Subandrio has sent a letter to the Prime Minister of Ceylone concerning the Sino-Indian border issue.
- 21-5-63 The 50-nation conference gave a swift approval to a far reaching action programme designed to expand the trade of under-developed countries. The Russian-born Zonist Mr. Zalman Shazar was elected new President of Israel.
- 23-5-63 More than 1,000 negro pupils expelled or suspended from school for participating in anti-segregation marches.
- 25-5-63 The International Development Agency announced a 20 million credit to India to implement the urgently required power development programme in Andhra Pradesh.
- 26-5-63 The Indian Minister for International Trade, Mr. Manubhai Shah arrived at Brussels.
The Rockefeller Foundation announced a grant of 3,20,000 dollars to Punjab Agricultural University in Ludhiana to aid in the development of two experimental stations, procurement of Library books and Laboratory equipments.
- 27-5-63 The Kenya African National Union (Kanu) led by Mr. Jomo Kenyatta won an absolute majority of 58 seats in the 112-member House of Representatives.
- 28-5-63 The Governments of Pakisthan and Afganisthan resumed diplomatic relations.
- 29-5-63 The strength of the Ceylone Cabinet has been raised to 12.
- 30-5-63 The Government announcement that the KANU leader Jomo Kenyatta would be assigned the responsibilities for Defence, External Affairs and Internal security in the proposed new Cabinet.

NATIONAL

- 1-5-63 The Speaker has appointed Mr. Arun Chandra Gupta, a Congress M.P. as Chairman of the Estimates Committee for one year.
- 2-5-63 Lok Sabha unanimously passed the official Bill to curb secessionist move impugning on India's territorial integrity.
- 4-5-63 Yugoslavia and India signed a five-year trade agreement provided for an increase in trade between the two countries from the present level of Rs. 30 crore both ways to approximately Rs. 50 crore by the end of 1958.
- The Rajya Sabha session has been extended till May 10.
- 5-5-63 A group of 447 Indian POWs was handed over by the Chinese Red Cross to the representatives of Indian Red Cross.
- Mrs. Indira Gandhi left for Paris to attend a meeting of the Executive Board of UNESCO.
- 6-5-63 Mr. Nehru informed the Lok-Sabha that India was free to move her armies wherever she liked in NEFA areas vacated by the Chinese invaders.
- 7-5-63 The Rajya Sabha passed the official languages Bill to continue the use of English beyond 1965.
- The Central Advisory Board of Education recommended the opening of more evening colleges in the States with Central assistance for a period of five years.
- 8-5-63 The Planning Commission has sanctioned the West Bengal Government's scheme to install the 150 MW power station at Durgapur.
- 10-5-63 Another 450 Indian prisoners of war including an officer were handed over by the Chinese to the Indian Red Cross.
- Mr. Ali Ahmed Sadigi, a famous revolutionary of Allahabad who figured in the Mandlay Conspiracy case in 1918, died of heart-failure.
- 11-5-63 A plan for the setting up of a plant in the country to manufacture asphaltic roofing sheets has been prepared by the National Building Organization of the Ministry of Works.
- 12-5-63 A three-member parliamentary delegation of British Labour party led by Mr. John Strachey arrived at New Delhi.
- The Kerala Government announced the grant of full school-fee concession to children of goldsmiths in standards nine to ten.

- 13-5-63 Mr. Sukumar Sen an elder brother of Union Law Minister, Mr. Ashoke Kumar Sen, died.
- 14-5-63 Dr. Raghuvira, 61, Chairman of the All India Jan Sangha died in Kanpur hospital.
General J. K. Bhonsle, Director-General of the National Discipline Scheme died.
- 15-5-63 In an eventful day of discussions, Mr. Swaran Singh rejected Mr. Bhutto's proposal for "internationalization" of the Kashmir valley.
The NCDC has approved plans for four new mines—three in Madhya Pradesh and one in Bihar.
- 16-5-63 A protocol was signed between India and the U. S. S. R. to make the completion of the delivery of equipment worth Rs. 36/- lakh to the Indian Institute of Technology.
- 18-5-63 The Union Government has agreed to give Orissa 20,000 tons of rice immediately to meet the State's shortage.
- 19-5-63 The Government has set up a high powered Committee headed by the Prime Minister, to go into the difficulties of cane cultivation and the problems facing the sugar industry and to make appropriate recommendations.
- 20-5-63 The Chinese, who claim they have withdrawn 20 kilometers from the Mc Mahon Line are now within six to seven miles of the line in the Kemang and Siang sectors.
- 21-5-63 The U.S.A. will provide India 8129 million dollars (Rs. 13.8 crores) for the expansion of a thermal power station in Andhra and augment the supply position of coking coal in Bihar under an agreement signed at New Delhi.
The President Dr. Radhakrishnan returned to Delhi.
- 23-5-63 India and Japan signed an agreement for an additional Rs. 7.14 crore Japanese Credit to India for the first two years of the Third Plan.
- 24-5-63 Mr. Raja Bahadur, Union Minister for Shipping inaugurated the Kalyanpur river bridge.
The Union Ministry of Education has initiated a scheme for the production of model books for new reading public during the Third Plan.
- 25-5-63 The longest Road-bridge in Maharashtra was opened at Ashti by the Chief Minister Mr. M. S. Kannamwar.

CALENDAR OF EVENTS

- 27-5-63 Mr. Minoo Masani the Swatantra leader, won the crucial by-election to the Lok Sabha from the Rajkot constituency.
- 28-5-63 Madras State has won the National award for being the best in the field of family planning for 1961.
- 30-5-63 U. P.s Minister for Information Mr. Banarasi Das has tendered his resignation to Governor of Uttar Pradesh.
- 31-5-63 The Union Ministry of Irrigation and Power has asked the State Governments to take flood control and flood relief measures.

STATE

- 1-5-63 A five-mile long canal linking Taladanda Canal with Atharabanki creek was inaugurated.
- 2-5-63 About a thousand of Chawkidars and Dafadars in uniform started 'Padajatra' from their respective villages from all corners of the Cuttack district and marched through the important streets of Cuttack City and met the Collector and the R. D. Commissioner to protest against the Government's decision to abolish Chowkidary system.
- 3-5-63 Large and lovely images of Hara, Parbati and Durga carved in chlorite stone were found in Balimela area.
- 4-5-63 The Union Minister Mr. G. L. Nanda has selected Orissa's Home and Labour Minister Mr. Nilamani Routroy to lead the Indian delegation to the 4th session of the International Labour Conference to be held at Geneva.
- 5-5-63 Students of Industrial Training Institute, Cuttack have gone on strike demanding summer vacation and certain other facilities.
- 6-5-63 The Orissa Government has appointed a committee headed by the Chief Justice of Orissa High Court to review the scheme of separation of the Judiciary from Executive, in the State.
- 8-5-63 The Government of Orissa has upgraded Sundergarh district in view of legal provision.
- 9-5-63 The Governor of Orissa, Dr. A. N. Khosla, Chancellor of Utkal University has issued an ordinance as a result of which professors and Principals who are Ex-officio members of the University Senate can stand for election for the Syndicate.
- 11-5-63 The Orissa High Court closed for Summer vacation.

- 12-5-63 A sum of Rs. 90,000 has been granted to the Baptist Mission Technical High School by the State Government for purchase of machineries and tools and construction of the school building.
- 13-5-63 Mr. Arun Kumar Pattanaik has been selected in the Emergency Commission for the Army.
- 14-5-63 A profit of Rs. 63,000 was made by rearing fish in Panchayat tanks of the Sambalpur district.
- 15-5-63 More than 34,000 factory workers in Orissa have been covered under the Employees' State Insurance scheme.
- 16-5-63 A new bus to run between Cuttack and Konark was introduced by the transport authorities.
Dr. P. V. Jaganath Rao, Orissa's Health Minister, visited Netaji Seva Sadan at Cuttack.
- 17-5-63 A party of 15 members of the Parliament arrived at Rourkela on one-day visit to the Steel Plant.
- 18-5-63 Mr. Bibhudhendra Mishra, Union Deputy Minister for Law arrived at Cuttack.
- 20-5-63 A training camp for warrant officers and part-time Cadet Instructors has been organised by the N. C. C. Directorate at Cuttack.
- 21-5-63 Prices of essential food articles like rice, wheat, sugar, edible oils, spices and kerosene has shot up.
Dr. K. L. Srimali, Union Minister for Education, inaugurated the Regional College of Education.
- 23-5-63 Government has sanctioned the opening of a new College at Basudevpur.
- 26-5-63 The Orissa Government has raised the retirement age of Government servants from 55 to 58.
The newly constructed 20 kw. Sambalpur Radio Station went into air transmitting programmes of Cuttack.
- 21-5-63 The Orissa Government have accepted the recommendations of one of its sub-committees for allowing a subsidy on the power tariff paid by a category of small-scale industries.
- 30-5-63 Dr. Harekrishna Mahtab left on a tour of Talcher, Rairakhole, Angul, Sambalpur and Titilagarh.
- 31-5-63 The State Government have extended the supersession period of the Puri Municipal Council for another year.

SAVE AND INVEST IN ANY OF THE GOVERNMENT OF INDIA
SMALL SAVINGS SECURITIES
AND HELP DEVELOPMENT PROGRAMME OF ORISSA GOVERNMENT
AND DEFENCE OPERATIONS

1. 12-Year National Defence Certificates—
Interest @ Rs. 6.25% on maturity.
2. 10-Year Defence Deposit Certificates—
Interest @ 4½% per annum paid annually.
3. 15-Year Annuity Certificates—
Interest (compound) @ 4.25% per annum.
4. Post Office Savings Bank Deposits—
Interest @ 3% per annum up to deposits of
Rs. 10,000/- (Rs. 20,000/- in case of joint accounts)
and 2½% per annum on the balances above
Rs. 10,000/- (Rs. 20,000/- in case of joint accounts).
5. Cumulative Time Deposit Account—
Interest @ 3.3% per annum (compound) in case of
5 year accounts, @ 3.8% per annum in the case of
10-year accounts and @ 4.3% per annum in the
case of a 15 year account.
6. Premium Prize Bond, 1963—
Attractive prize and refund of money with 10%
premium after five years.

The interest earned on 12-Year National Defence Certificate and C. T. D. Account, the annual interest earned on 10-Year Defence Deposit Certificate and Post Office Savings Bank, the monthly payments on Annuity Certificates and on Premium Prize Bonds are free of income-tax and super-tax.

The monthly deposit in a 10-Year/15-Year Cumulative Time Deposit Account earns income-tax rebate like Provident Fund Subscription and Insurance Premium up to 1/4 th of the total income or Rs. 10,000/- whichever is less.

INTERESTING TO NOTE

In your Savings lies your Security and your Children's Prosperity.

Your Savings will help strengthening Country's Defence.

For full particulars please write to:—

1. Regional Director, National Savings, Orissa, Cuttack

OR

2. Deputy Director, Small Savings, Finance Department,
Bhubaneswar.

OR

3. District National Savings Organiser of your District.

DEFENCE PLANNING FORGES AHEAD

"The strengthening of our defence potential against a renewed threat by China is a matter of vital importance"—said Prime Minister Nehru in the Lok Sabha. This article recounts briefly some of the important measures taken by the Government to expand and strengthen India's Armed Forces in a planned way.

Planning for defence has now come to stay. The Chinese in launching the sudden massive attack on India had the ulterior motive of wrecking the economy of our country by creating a situation in which, they thought, we would be forced to give up our Five-Year Plans. They have now found it, to their utter dismay, that we are determined, not only to go ahead with our development projects but also take immediate and effective steps to expand and strengthen the defence potential of our country. This determination of the Government to take up the challenge of Communist China is fully reflected in the Budget for the current financial year, which has now received the approval of the Parliament.

Rupees eight hundred and sixty seven crores for defence, in the present context of Chinese aggression, is not a big sum. But this is just a beginning of our defence efforts and, as our Defence Minister pointed out in his speech in the Lok Sabha, these

efforts will have to be made continuously from time to time, from year to year and confidence in our defence efforts will have to be permanently created in the minds of our people.

Four-fold Defence Planning

Our Armed Forces are essentially our defence forces. The world knows that we do not entertain any territorial ambitions. With a treacherous neighbour across our northern borders, we shall have to keep our defence forces on adequate strength and fully equipped, always ready to meet any emergency.

This cannot be achieved overnight or in a month or even in a year. This obviously needs long-term planning. However, our present needs being very urgent, a short-term plan for the expansion and strengthening of our defence forces has been drawn up and is being implemented vigorously.

The Defence Minister in the course of his reply to the budget

debate in the Lok Sabha described the short-term defence planning as four-fold, (1) expansion of the Army, (2) modernisation of the Air Force, (3) development of a strong production base and (4) expansion of ancillary services, such as, communications and transport.

Naturally, the programme for the expansion of the Army has been given top priority. Immediate steps have been taken to increase it to double its present size. This, by itself, is a tremendous task and the Government is determined to achieve it within the next two years.

Training in Mountain Warfare

Our recent experience on our northern borders has emphasised the need for specialised training for our Jawans in mountain warfare, and so the Government have now decided to raise five Mountain Divisions before the end of the current year. Our Jawans have already proved their mettle in carrying our operational activities in difficult mountain regions at high altitudes, though they were not specially trained for this kind of activities. The proposed Mountain Divisions, with intensive specialised training, will undoubtedly constitute a formidable force.

Apart from ability to handle specialised arms and equipment, development of physical fitness to inhabit mountain regions at high altitudes is also an important aspect of the programme of specialised training. This is being attended to with meticulous care. Our Jawans are gradually taken from one height to the other and ultimately led to the areas where they will have to function. Needless to say, in selecting men to man these Divisions, greater attention is given to their physical fitness.

Grooming the Officers

The fighting power of the Army does not lie in its numerical strength alone, even if they be well trained. It is imperative that they should be led by trained officers. Therefore, simultaneously with the recruitment and training of men for the other Ranks, attention is being paid to the recruitment and training of officers who will be capable of commanding the men and inspiring confidence among them.

In order to expand and strengthen the officer cadre in the Army, steps have been taken to grant Emergency Commissions to suitable candidates. Recruitment to this cadre is also open

to Ex-Servicemen in the Regular Army. All Ex-Junior Commissioned Officers of certain categories are also eligible for re-employment or re-enrolment provided they are medically fit and satisfy other conditions.

With a view to affording opportunities to all civilian young men and serving personnel with requisite educational qualifications, the Government have agreed to reduce the lower age-limit from 20 years to 19 years in respect of applicants for Emergency Commissions in the Army. Accordingly, civilians, including Government servants and serving personnel of the Regular and Territorial Army, who are between 19 and 35 years of age (effective from July, 1963 the upper age-limit will be reduced from 35 to 30 years) are now eligible to apply for the grant of Emergency Commissions in the Army. The time-limit of six months laid down for candidates rejected by the preliminary interview boards has been removed, and now they need not wait for six months before applying again.

Officers' Training Schools

For the efficient and effective functioning of the Army, close relationship between the Officers and men is very important. As was once mentioned by a great General, "There is no

good Army or bad Army. There are only good Officers or bad Officers; and the goodness or otherwise of the Officers depend upon the confidence that they can create in the men they have to lead". This aspect has been fully borne in mind in chalking out the programme of training for Emergency Commissioned Officers.

As the training facilities in the Indian Military Academy were insufficient to meet the growing demand for Officers, two new Officers' Training Schools have been opened at Poona and Madras to provide training for Emergency Commission Officers.

In the words of our Defence Minister, "We now face a deep crisis, in the sense that the Emergency may last for quite a some time. During the months ahead, it is the duty of every citizen, and especially the Defence Services, to prepare to meet the challenge posed by this danger to our borders". The heartning scenes of enthusiastic young men crowding in large numbers at recruiting centres in the various parts of the country to take up Emergency Commissions in the Army, are a sure indication of the readiness of our youth to take up the challenge of the aggressor.

INSIDE OUR STATE

Protected Water Supply in Villages

Piped Water Supply Scheme is being worked out in places like Anandapur in Keonjhar district, Dandamukundapur in the district of Puri, Bijepur in the district of Sambalpur and Chhatrapur in Ganjam. During the month of June progress of piped water supply at Chhatrapur had been quite satisfactory as two tubewells have been dug and more than 16,000 ft. of pipe lines have been laid. At Dandamukundapur, the work was held up as the land over which the pipe lines are to be laid could not be handed over to the Works Department by the local Sarpanch but water supply for six hours is made regularly in the area where pipe lines have been laid. Laying of C. I. Pipes in Anandapur and Bijepur is in progress.

Epidemics in Orissa

During the week ending the 22nd June there had been 12 attacks and 5 deaths in Orissa out of Cholera and 65 attacks with 12 deaths out of Small-pox. The attacks and deaths from Cholera were only found in Balasore district whereas outbreak of Small-pox was a maximum in Cuttack district.

Tour Programme of The Extra Assistant Recruiting Officer in Bolangir, Kalahandi, Phulbani & Ganjam Districts

The Extra Assistant Recruiting Officer, Berhampur will tour the different places of the districts of Bolangir, Kalahandi, Phulbani and Ganjam

in connection with mass recruitment in the Armed Forces. He will visit Bolangir on July 10 and 11, Bhawani-Patna on July 12, Phulbani on July 24 and 25 and G. Udayagiri on July 26. He will stay in Inspection Bungalows in these places.

A large number of vacancies exist in various highly technical categories for enrolment of Matriculates with Mathematics and General Science. Ex-servicemen upto the age of 45 years are also required in large for enrolment. Candidates found physically, educationally and medically fit will be enrolled on the spot provided their character and antecedents are verified and required vacancy is available at the moment. The age limit for categories like Dhobies, Barbers and Sweepers is upto 35 years.

The minimum qualification, age and physical standards :—

Category	Height	Weight	Chest	Education	Age
Army (Men)	5'-3"	47 Kg.	30"/32"	Class V to Intermediate	17 to 25 years

Contribution to the National Defence Fund Koraput Leads in Cash and Ganjam Leads in Gold

Contribution received from different districts of Orissa for National Defence Fund upto Week ending 14.6.63 amounted to Rs. 84,12,606.50 nP. and Gold 1,85,922.427 Grams. This include Rs. 26,58,582.48 nP. and Gold weighing 3,335.850 Grams received by the Chief Minister. Koraput District leads in collection of Cash and Ganjam in collection of Gold.

Details of collection in the different districts are given below:—

District	Cash	Gold
1. Cuttack	Rs. 3,37,153.54 nP.	14,656.570 Grams
2. Puri	Rs. 5,99,188.00 nP.	4,705.150 Grams
3. Balasore	Rs. 5,39,423.45 nP.	8,399.351 Grams
4. Mayurbhanj	Rs. 2,99,800.03 nP.	2,918.099 Grams

(Upto week ending 7.6.63).

INSIDE OUR STATE

5. Ganjam	Rs. 5,16,424.59 nP.	48,253.575 Grams	
6. Koraput	Rs. 8,79,859.45 nP.	12,295.192 Grams	
7. Phulbani	Rs. 2,30,492.02 nP.	11,579.000 Grams	(Upto week
8. Kalahandi	Rs. 3,63,809.66 nP.	21,135.093 Grams	ending 31.5.63)
9. Dhenkanal	Rs. 2,69,577.32 nP.	9,475.836 Grams	(Upto week
			ending 10.5.63)
10. Sambalpur	Rs. 7,64,407.02 nP.	4,300.251 Grams	(Upto week
11. Bolangir	Rs. 3,88,786.02 nP.	40,889.220 Grams	ending 7.6.63)
12. Keonjhar	Rs. 1,91,364.74 nP.	1,454.544 Grams	
13. Sundargarh	Rs. 3,73,738.18 nP.	2,524.696 Grams	
Total:—	Rs. 57,54,024.02 nP.	1,82,586.577 Grams	

Government of India merit Scholarships in Residential Schools, 1963-64

Government of India have decided to award merit scholarships in Residential Schools to children who have completed the age of 9 years but have not completed the age of 12 years on 1.1.1964. For award of these scholarships a Preliminary Screening will be conducted through written tests comprising one paper in the regional language and another in arithmetic. These tests will be held in centres located at the District Headquarters of each district. All applications for sitting in the Preliminary Screening tests must be submitted in duplicate in the prescribed forms, copies of which are obtainable from the office of the Director of Public Instruction, Orissa,

Cuttack-2. The completed application must reach the Director of Public Instruction, Orissa on or before 20th July 1963. The date and place of examination will be intimated to the applicants in due course.

Prescribed application forms will be supplied from the Office of the Director of Public Instruction, Orissa, Cuttack-2 on receipt of a written application together with postage stamps worth 10 nP.

Financial Assistance to Voluntary Educational Organisations

The Government of India in the Ministry of Education have decided to continue the scheme of assistance to Voluntary Educational Organisations in the field of Social Welfare, including children and women welfare

during the year 1963-64. Financial assistance will be given to the following types of Institutions/Organisations : (1) Schools—Pre-primary, Primary, Junior Basic, Middle, Senior Middle, Senior Basic, Post-Basic, High School, Higher Secondary, Multipurpose and Teacher Training; (2) Teacher Training Colleges, (3) Public Libraries catering to a population of at least 50,000.

2. Institutions / Organisations, working in the field of (a) Social Education, (b) Audio-Visual Education, (c) Child Welfare, (d) Social Welfare; (e) Vocational guidance; (f) Preparations and productions of educational literature and educational journals excluding text books and (g) Student welfare.

Institutions seeking the assistance may make applications in the prescribed form available from the Director of Public Instructions, Orissa, Cuttack so as to reach him by 25th July, 1963. Details about the scheme can be had from him on request.

National Loan Scholarship Scheme for Needy Students

Advisory Board set up by the State Government

The Government of India in the Ministry of Education have launched

a scheme called the "National Loan Scholarship Scheme" from the current academic year for providing interest-free loan assistance to the needy and meritorious students for prosecution of studies at post-matric levels. For successful implementation of the scheme in the State, the State Government have set up an Advisory Board to advise them on all matters relating to the scheme and assist them in making selection. The Advisory Board has been constituted with the following members:—

1. Minister, Education, Chairman,
2. Secretary, Education Department, member,
3. Vice-Chancellor, Utkal University, Member,
4. D.P.I. Orissa, Member,
5. President, Board of Secondary Education, Member,
6. Principal, Ravenshaw College, Member,
7. Principal, S. C. B. Medical College, Member,
8. Principal, College of Engineering Burla, Member,
9. Sm. Binodini Sarangi, Member,
10. Dr. Parsuram Misra, Ex-Vice Chancellor, Member,
11. Dr. S.B.Palit, Member,
12. Dy. D.P.I. Orissa (Scholarship) Secretary to the Board.

INSIDE OUR STATE

Assistant Commissioner for Linguistic Minorities will visit Orissa

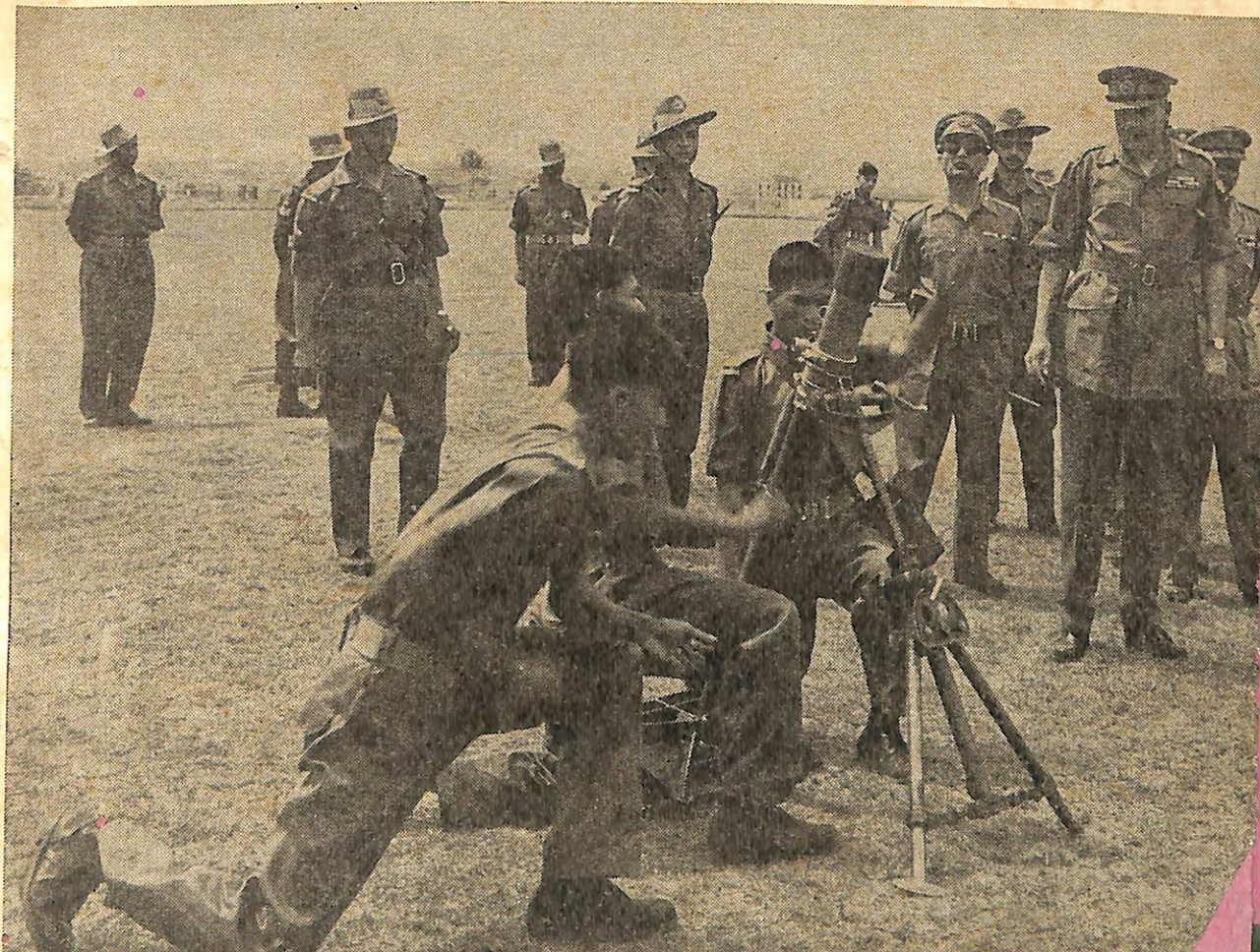
Shri D. N. Bajpai, Assistant Commissioner for Linguistic Minorities will be coming to Orissa for a 8 day tour of the State. He will arrive at Khariar Road on July 16, 1963. The Assistant Commissioner will meet representatives of Linguistic Minorities at Khariar Road

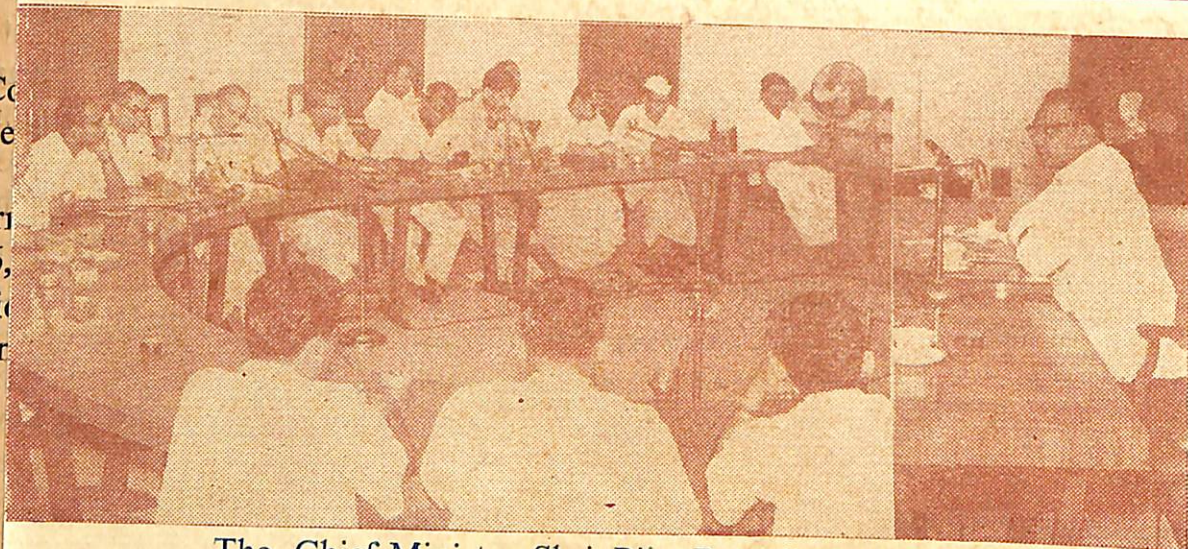
on arrival. He will meet the representatives at Chatrapur and Cuttack on July 18, and 20, respectively. During his stay at Bhubaneswar he will also meet the respresentatives of Linguistic Minorities on July 23, if there will be any. He will also hold discussion with State Government Officials including the Chief Secretary.



GENERAL CHAUDHURI IN NEPAL

General J. N. Chaudhuri watching the training of the
Royal Nepal Army at Chhauni, Kathmundu.
On the right of the Chief of the Army is
Major-General P. K. Kirpal, who is
the Chief of the Indian
Military Training
Advisory Group
in Nepal





The Chief Minister Shri Biju Patnaik held a Press Conference in the Secretariat Conference Room on 18-6-63

Photo shows : Shri Patnaik replying to Questions put by the Pressmen attending the Conference

T, B. HOSPITAL AT DANDAKARANYA

A thirty-bed T. B. Hospital (Picture on the right) has been built by Dandakaranya Project Authorities at MATHILI in Koraput District. Picture below shows Smt. L. J. Johnson, wife of the Chief Administrator of the Project formally opening the Hospital on June 14, 1963



