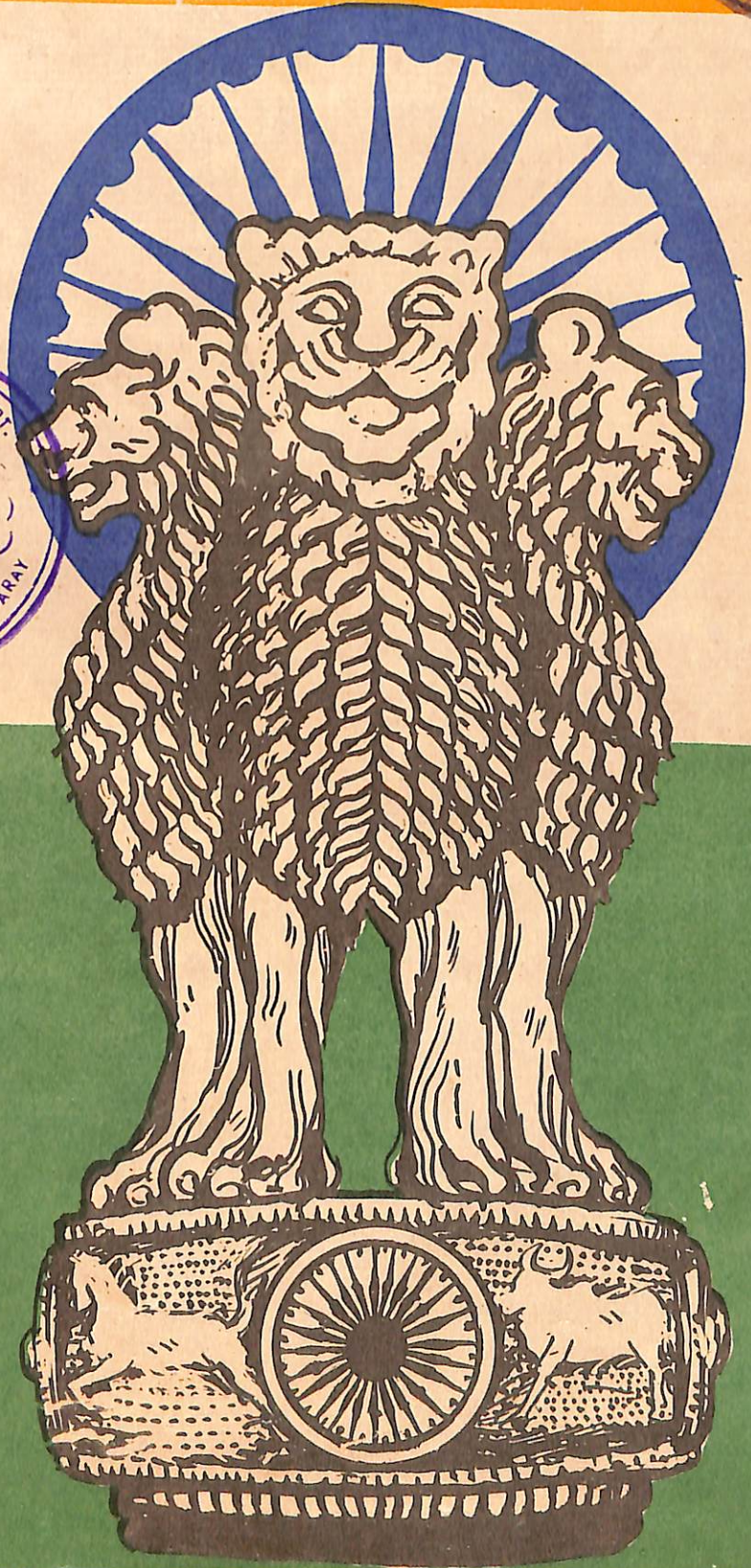


1962

ORISSA REVIEW



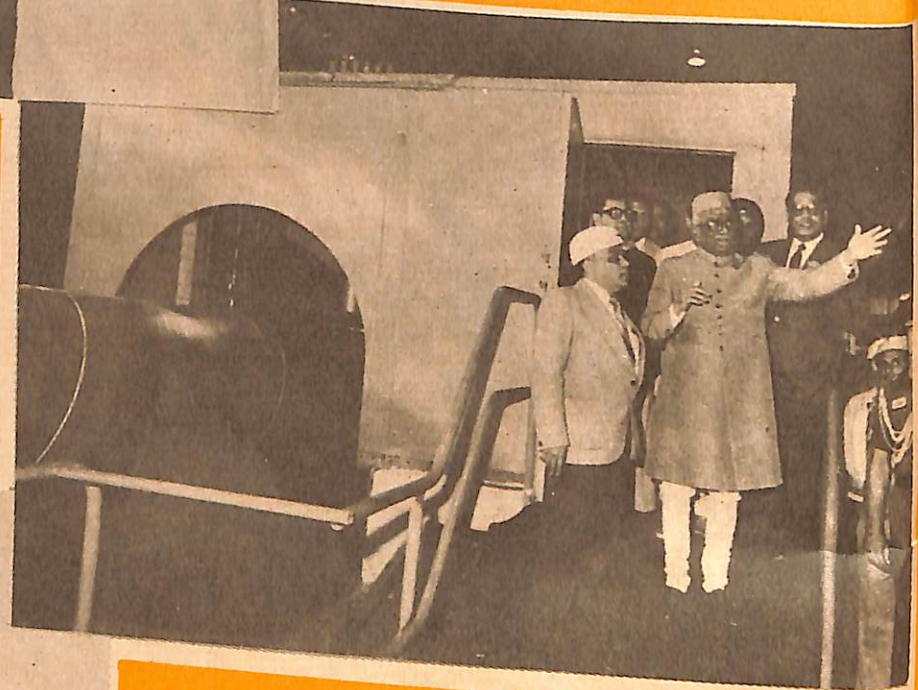
12/2/51





President of India Shri N. Sanjiva Reddy laying the foundation stone of Second Power Plant of Rourkela Steel Plant on January 7, 1982. Chief Minister Shri J. B. Patnaik attended the function

President of India Shri N. Sanjiva Reddy visiting the Autogenously welded Pipe Plant, Rourkela on January 7, 1982



President of India Shri N. Sanjiva Reddy visiting Lord Lingaraj Temple on January 5, 1982

Pausa-Magha
1903 S. E.
Vol. XXXVIII, No. 6

Orissa Review

January
1982
Special Issue

EDITORIAL BOARD

Director : M. K. RAO
Editor : B. B. PATNAIK
Asst. Editor : PRAHARAJ S. NANDA
Associate Editor : S. K. PATNAIK

Design by :
U. N. JENA

Printed at :
ORISSA GOVT. PRESS, CUTTACK

Published by :
INFORMATION & PUBLIC RELATIONS DEPARTMENT
Government of Orissa, Bhubaneswar

CHIEF EDITOR
SATYANANDA CHAMPATIRAY

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

Subscription :
Annual—Rs. 6.00
Per copy : Re. 0.50

Although published on behalf of the Government of Orissa, Information & Public Relations Department, the views in the items expressed in the "ORISSA REVIEW" are not necessarily those of the Government of Orissa.

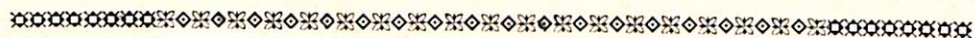
Contents

	Pages
Some Aspects of Agriculture Development	1
Essentials of Gandhiji's Teachings ..	4
Development of Tourism in Orissa ..	7
The Sacred Thread ..	9
Grass-root Occupation Cell—A novel experiment in—"Youth Movement" in Orissa.	11
E. R. R. P. Programme makes headway in Sundargarh.	13
Rail Transport in Orissa—Some Achievements.	17
Law and Social Reform ..	21
Preparing for the ASIAD 82 ..	23
Future Energy Demand and the Role of New and Renewable Sources of Energy in Orissa.	26
Salt-water Crocodiles—Are they man-eaters ?	29
The Broken Soliquy of Sun ..	31
Nature's Recuperative Force ..	35
Contribution of the Tribals to the Political life of Southern Orissa during the 19th Century.	37
Cult Varahi in Orissa ..	41
Mind and Matter ..	48
Human Rights Today ..	53
Public-cum-Subscription Libraries in Orissa Division during the last half of the 19th Century.	55
Urbanisation in Orissa—A case for the development of medium and small towns.	57
Education as a factor of Integrated Rural Development.	63
Urban Growth and the Informal Sector in Orissa.	67
Concept of Reality According to Madhva-charya.	75
Orissa Poised for a Breakthrough in Agriculture: New Strategy's Potential proved.	78
From the Editor ..	80

Some Aspects of Agriculture Development

SHRI J. B. PATNAIK

Chief Minister, Orissa



Agriculture is the foundation of our country's economy. The farmer stands at the fore-front in our struggle for ensuring better standards of living for our countrymen. During the last 34 years after Independence the edifice of agricultural development has been firmly established by late Pandit Jawaharlal Nehru and our Prime Minister, Smt. Indira Gandhi. Conscious strategy and endeavour in the successive plans have led to a remarkable break-through in agriculture—both in production and diversification. Foodgrains production has increased from 50 million tonnes to 130 million tonnes and self-sufficiency has been achieved contrary to many gloomy forecasts. Production of oil-seeds cotton, jute and other cash crops has picked up remarkably. Economists all over the world have acknowledged India's agricultural revolution nurtured under a democratic Government as the model for developing countries. The credit for this achievement goes both to the Government and the millions belonging to the farming community.

India's green revolution is the result of a well-co-ordinated and multi-faceted strategy. Our research institutions—Central Institutes and Agriculture Universities have played a dominant role in developing numerous high yielding and pest resistant varieties suitable for widely varying agroclimatic environments in the country. Improvement in agronomic and management practices and various aspects

of adaptive research have been evolved and standardised. Emphasis by the Central and State Governments on supporting infrastructure like irrigation, production units for vital agricultural inputs like fertiliser, pesticides and improved implements and on marketing and processing of agriculture produce has been a part of the overall strategy. A substantial part of the budgetary resource has been earmarked for the purpose on a sustained basis. The extension machinery has been fully geared to ensure that material and research inputs reach the farmers. The credit institutions, particularly after nationalisation of Banks, have substantially stepped up credit facilities. The Co-operatives have also played a very important role in this regard. Institutions like the Indian Council of Agricultural Research, National Seeds Corporation, A.R.D.C., NAFED etc. are landmarks in the country's march towards self-sufficiency.

Green revolution in India has exploded the so-called myth about tradition bound-inertia of the Indian peasant. The illiterate Indian farmers in the remote corners of the country have quickly responded to technological sophistication. The Indian farmer armed only with sturdy common sense and capacity for hard work, has worked miracles in the apple orchards of Himachal Pradesh, the paddy fields of Tanjore, the cotton patches of Gujarat,

the vine yards of Hyderabad, the cashew orchards of Kerala and the wheat fields of Haryana. Undaunted by the dwindling size of the holdings from generation to generation, the small and marginal farmer has amply proved that agricultural technology is size-neutral. He has established that small can be productive too.

Orissa, all these years, has been a silent witness to the rapid advancement of agriculture in other parts of the country. Agricultural productivity has remained more or less stagnant over a decade. Per hectare use of fertilizer and per capita agricultural credit have been among the lowest in the country. So is the yield rate of paddy, the principal crop. These stark realities have prompted us to embark on a bold and innovative strategy for rapid improvement of agriculture. An important facet of the strategy is our 'compact area programme' stepped up from 10,000 hectares last year to 2 lakh hectares during the current year. The programme follows the minimum yield guarantee approach under which inputs and management practices are made available at farmer's door steps under close supervision of hand-picked field functionaries. This has resulted in substantial increase in the yield rate. Other facets of the strategy include supply of certified seeds to sizeably increase the coverage under high-yielding varieties, supply of critical inputs like fertilizer, insecticides and credit, larger coverage by Co-operatives and intensification of extension support. Large expansion of coverage under oil-seeds and pulses has been programmed. To match the programme for setting up 10 new Spinning Mills a comprehensive scheme for cotton cultivation has been mounted. Similarly a programme has been initiated to develop cultivation of sugar-cane in the hinter land of two new sugar factories going to be put up shortly. A network of Oil Mills, a chain of cold storages and a large storage godown project with the World Bank support are part of our endeavour. Impressive expansion of coverage under cashew in marginal lands, coconut in the coastal belt and horticultural crops and coffee in tribal areas form vital component of our programme.

Concerted efforts for increasing agricultural production has yielded impressive results in the first year itself and the total food production has reached a record level of 59.77 lakh tonnes in 80-81 against the previous highest of 57.64 lakh tonnes. After many years, the average yield rate of paddy has increased to 10.40 quintals per hectare against the near stagnant level of 10 quintals per hectare. These efforts have been backed up by an ambitious programme for doubling the area under irrigation during the decade. We are confident that in the coming years Orissa, too, will achieve a real break-through in agriculture and would figure prominently among States with large marketable surpluses.

The success achieved in the national front in agriculture should not lull us into complacency. Our future strategy for agricultural development should be based on the recognition of a few stark realities, namely, rapid increase in population, fragmentation of holdings and continued dependance on the vagaries of monsoon. By the turn of the century our population may reach the staggering 900 million figure. To achieve self-sufficiency in food, we have to produce another 100 million tonnes by that time. Possibility of increasing land area being limited, the emphasis hereafter has to be on productivity-improvement, multiple-cropping in irrigated and assured rain-fall areas, improvement in dry land technology and the like. The scope for all these is vast since the present average yield for most crops is still exceedingly low. It is estimated that the absolute maximum production potential of India in terms of standard rain equivalent is more than 4,000 million tonnes. This potential has to be utilized not only for producing foodgrains but also a wide variety of commercial and industrial crops, fruits, vegetables, etc. I understand that we are not even harvesting 25 per cent of the yield potential available even with the present technology. Hard and sustained work and good management are crucial to efficient production. In Orissa our unique programme of economic rehabilitation of the rural poor has now established that agricultural labourers who had no experience whatsoever of

running a farm can produce enough from two acres of land to sustain their families provided that necessary support is extended to them.

The next problem is to find institutional mechanism for intensive agriculture which alone can benefit small farmers and for minimising the handicaps faced by them. These categories constitute more than 70 per cent of the farming community in India and with greater pressure of population and increasing fragmentation of holdings, their number will increase. A small and marginal farmer must have adequate resources to ensure maximum productivity. Access to credit would require expansion of credit infrastructure and greater motivation and involvement of its personnel. When the small farmer becomes still smaller, technology should be simple, inexpensive and entirely cost-effective. Of late, considerable attention has been paid to developing equipments

harnessing renewable sources of energy like sun-light and wind. But the cost of these equipments is rather high. Cheaper wind mills and solar pumps could form excellent individual or community assets in rural areas.

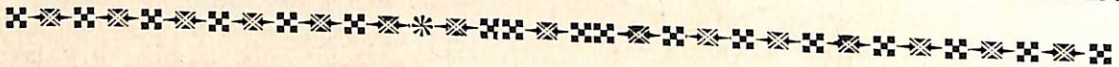
The country under Smt. Indira Gandhi has taken gigantic strides in many fields and has met many great challenges. We have shown to the world that India can achieve the same technological efficiency as the developed countries of the west—whether in the field of industry or agriculture or defence. Bringing the benefits of Science and Technology to the common man particularly to the small and marginal farmer throughout the country is an inspiring task before all of us.*

[*Address delivered on the occasion of Third Session of the Indian Agriculture Congress held at Bhubaneswar on Jan. 5, 1982]

—X—

Essentials of Gandhiji's Teachings

—PYARELAL



Gandhiji's is not an abstract philosophy, but a philosophy of action. Shri Pyarelal, Gandhiji's Secretary and Biographer sums up the essentials of Gandhiji's teachings in this article.

From the time Gandhiji left us there has been an undercurrent of feeling in our country, generated partly by the pressure of world opinion, partly by our national pride and in part by a genuine sentimental attachment to the memory of the Father of the Nation, to conserve, to pay homage to and, within certain discrete limits, to make use of his teachings in Nation-building.

It is now generally agreed that this approach has on the whole flopped. From lip service we came to indifference and from indifference to obfuscation and falsification with a view to rationalisation of our denial of him in practice, and ended up with denunciation and denigration when the contradiction between our behaviour and profession became too glaring to be camouflaged. An even subtler technique was to tamper with the essential values that Gandhiji embodied, under the cover of patronage.

Gandhiji's is not an abstract philosophy but a philosophy in action. To accept and pay homage to his teachings in principle and to dismiss them in everyday practice is to make nonsense of his teachings.

The truth of the matter is that Gandhiji's teachings have become some what of an inconvenience. We have fought shy of the exacting demands they make. The rising generation has noted the contradiction between the profession and practice of their elders and erstwhile national leaders, now become rulers or the elite in opposition, and is confused. It has lost faith in the elders and the values these elders profess and has become cynical.

Gandhiji used to say that even if the entire body of Hindu scripture were to perish and the opening verse of Ishopanishad alone survived, it would be enough to transmit to the posterity the essence of Hindu religion. But even that verse would not speak and would be of no use, he added, if there was nobody to live it and exemplify its message in his life and conduct. Today the teaching of Gandhiji falls flat upon the ears of the younger generation. And no wonder. Like "the linnet born within the cage/ that never knew the summer woods", it never saw that philosophy in action and has heard about it only from the lips of

those in whose conduct it fails to catch a reflection of what these worthies teach and preach.

In a measure Gandhiji foresaw this. "A time will come when you will say, when is this old man going to leave us", he once wrote and replied: "But this old man is not going to leave you, he will be alive in the grave and what is more speaking from it", if the faith that fills him burns bright, "as I hope it will, even if I stand alone". "Compulsion of circumstances will make you do what I am now telling you," he said on another occasion, and added: "I hope it will then be not too late." And that is what I find is happening today. What he gave us has entered into our blood and bone and continues to shape our lives and thought in many subtle unseen ways—sometimes even in spite of ourselves.

The worst danger that besets a search like ours for lost values is that, succumbing to the temptation of following the line of least resistance, we may be led to appropriate that part of a teaching which suits our convenience and suppress and explain away what is found to be inconvenient. It would be better by far to make a heroic attempt to realise the values that Gandhiji gave us and risk a failure or boldly to register our dissent if we feel that way.

No matter how our attempt ends and where our dissent leads us to, we and the country shall then be the gainers. Gandhiji never wearied of stressing the value and importance of "honest doubt" in which, as the poet sang, there is more faith than in "half the creeds."

THE SCIENCE OF LIFE

There is a science, the mother of all the sciences, from which all the sciences derive their meaning and direction—the science of life. In the case of Gandhiji this consisted in devising ways for the cultivation of what, in the absence of a simpler expression, may be called "goodness" and which—whatever the philosophical meaning it held for him—may be defined for universal acceptance as the arith-

metical ratio between love of self and love for others, measured in how much of the sweat of others we absorb and how much of it we give back in return. This is the only honest verifiable measure of goodness. All the rest is affectation and gloss. To Gandhiji this constituted the ultimate measure of all our striving. All our political, social and economic arrangements are but the means for the creation of an environment conducive to the achievement of this supreme goal of goodness and pattern of conduct and of human relationships co-ordinate with and contributory to its realisation. Put in secular terms, this would mean the cultivation of the values of truth, kindness, equality and justice and brotherhood and individual freedom. On this criterion all our plans, measures and abstract concepts underlying them must be tested.

GANDHIAN CONCEPTS

Examined in this perspective it will be found that a number of Gandhiji's teachings which are vogue today are not taken in the sense in which he meant but are as different from his concept of them as horse is from ass.

Let us take a few of the more important of these

(1) Rural development is today being interpreted as urbanisation of rural life—to provide to the rural population urban amenities in which the town-bred elite have grown up and which in consequence have grown upon them. "Rural revival" has thus come to mean forcing urban economies, and urban way of life on the village to the destruction of the many compensations that the rural way of life offers to the rural population. To Gandhiji rural revival meant freeing the rural population from the domination of urban values, urban finance, urban political control and, above all, the exploitation and drain of human and material resources as the price to be paid for the privilege of urbanisation.

(2) Decentralisation has come to mean fragmentation of large-scale enterprises and their geographical dispersion without necessarily any weakening of the

highly centralised financial and political control by an individual, a giant corporation or the State. Gandhiji's decentralisation meant restoring to the villagers the initiative and control in the matter of rural occupations to prevent the triple drain from the villages to the cities and to restore its primacy to rural India. It is as different from the decentralisation that is being attempted today as is the cosmic inverted banyan tree of the Upanishands from a prairie; the one has its roots in the sky which the villager can neither touch nor see; the other in the soil which the villager can work at himself with his own hands.

APPROACH TO CONSTRUCTIVE WORK

(3) Constructive work was not conceived by Gandhiji as a means of providing unemployment relief pure and simple, but as a means for the reconstruction of society, for the generation of non-violent power of the masses and for their non-violent organisation with the goal of developing in them the capacity to resist the abuse of power by whosoever was responsible for it. It was meant to bring power to the elbow of the Government if the Government appreciated its value and existed only for the service of the people and to put a brake upon it if it threatened to become master instead of the servant of the people. Constructive work, he warned, would lose its revolutionary meaning if it became too much dependent upon the Government. They had a claim upon governmental assistance but they should avail themselves of it only if it was forthcoming on their terms, not otherwise.

(4) Eradication of untouchability has become synonymous with the economic uplift of the backward section. Gandhiji gave the first place to a change of heart by genuine repentance on the part of those who were responsible for this great crime against humanity. Such was the importance that Gandhiji attached to this aspect that he put the direction and control of Harijan

Sevak Sangh not in the hands of Harijans, who were sinned against, but of those who had to make expiation.

(5) Satyagraha: The essence of Satyagraha is to put out of action the forces of violence. We have had "Satyagraha" so-called to force the Government of India to mount military action against the tiny enclave of Goa.

Then we have been saying that Satyagraha in the form practised by Gandhiji has become out of date in the atomic era. How many atomic bombs have rained on India since independence? But we have fought shy of Satyagraha and left the field to the forces of hooliganism, rapine and worse while we have helplessly watched senseless carnage, molestation of women, blinding of prisoners by the so-called keepers of law and order, the oppression of Harijans and hapless weavers belonging to the minority community on a scale that should make us blush and hang our heads in shame. This is what the pursuit of dogma divorced from practice has brought us to.

To the foregoing may be added two other items: Gandhiji's concept of socialism and the twin doctrines of Varnashrama Dharma and Trusteeship for its realisation.

From the way things are going, I am afraid that if we do not turn the corner and refurbish the weapon of Satyagraha which Gandhiji forged and armed us with—a weapon which no power on earth can deprive us of—we shall either lose our independence or pass under a dictatorship either of the right or of the left variety while retaining independence only in name. This is the ultimate and only surety and guarantee of genuine democracy. To wield this weapon we shall have to revert to the point from where we lost our way and went off the rails. It is a forbidding prospect that may well make the stoutest heart quake, but there is no escape from it. The longest way back may be the shortest way home.

Development of Tourism in Orissa

SHRI JUGAL KISHORE PATTANAIK

*Minister of State
Labour and Employment and
Tourism, Sports and Culture*



Tourism in Orissa has been a very popular activity since the olden days. From time immemorial great saints and savants, scholars and seekers of knowledge have paid their visit to this piece of sacred land on earth.

It was the religious faith which sustained the cross country travels in the past. The great Sankaracharya laid the foundation of "Domestic Tourism" by establishing four Maths (Monasteries) at four corners of the country. People of India have been travelling for pilgrimage to attend religious and cultural fairs. The "Pandas" of various religious centres and the local "Dharmasalas" and "Sarais" have been the forerunners of modern travel agents and Hoteliers respectively.

As the world has been shrinking in dimension due to technological explosion after the Industrial Revolution, facilitating faster and easier travels, people of one country fired by an astonishing zeal for pilgrimage, relaxation, pleasure and adventure are now going about visiting other countries of the world.

In this context Orissa has carved out a niche for herself in the Grabdhall of Indian Tourism.

Broadly speaking the concept of tourism has two aspects; viz. (i) International for the movement of people from one country to other countries and (ii)

Domestic for the movement within their own country from place to place. In India the Central Government has assumed for itself the responsibility to promote international tourism leaving that of Domestic tourism to the State Government.

Past experiences indicate that pilgrimage provides the strongest motivation for the domestic tourists to travel from one place to another. So the State Government have decided to open new Panthasalas for low spending groups of tourists at six pilgrimage centres of the State located at Aradi, Panchalingeswar and Chandaneswar in Balasore district, Dhableswar and Jajapur in Cuttack district and Gupteswar in Koraput district. While locating the places their proximity to the neighbouring State was also considered.

The hot springs of the State constitute another major attractions for the tourists. As many as four hot springs are considered to have enough of potential to attract the tourists namely: Atri, Taptapani, Deulajhari and Tarabalo. The water oozing out of the hot springs contain medicinal properties to cure skin diseases. At the same time, most of these hot springs are associated with religious shrines. So apart from their potentials of being developed as health resorts, they are also considered as minor pilgrimage centres of the State. Given

required infrastructural facilities, these centre will get a sizeable chunk of the tourists visiting the neighbourhoods. A beginning has been made by establishing a bathing complex at Atri. The work is in progress and the 6th plan period will witness its completion. It will be followed by construction of a similar complex at Taptapani where a Panthanivas is already available.

One of the modes of travel to the State is by road. The State is served by some important National Highways. They constitute the main arteries of State's road system because of the link, they provide with Calcutta on one hand and Bombay and Madras on the other. The volume of vehicular traffic on these Highways is very high. But unlike the National Highways of other States, these Highways of the State provide a journey known for its drudgery and monotony because of lack of passenger amenities on the way. As a result, a drive on these Highways distracts the tourists from visiting the places of attraction which are off the track. In order to make the drive a pleasant one and to motivate the motorists to visit the places of attraction in the State, it has decided to construct motels at strategic places on the way. As many as 19 places have been identified for the purpose. But as a first step, it has been decided to establish two motels, one at Bhadrak and the other at Anugul during the 6th Plan period.

Orissa has the unique distinction of having the largest brackish water lake of the country namely; Chilika. The lake is the playground of both indigenous and migratory birds. It also provides suitable water spread for water sports and cruising. There are already some motor launches at Balugaon and Barkul for cruising in Chilka. The O. T. D. C. Ltd. have programmed to station some more motor launches at Barkul. A jetty has already been constructed at Barkul to negotiate the share. Another one will be constructed at Rambha. It is under active consideration of Government to introduce water skiing here. At the instance of the Government, the Principal

of the Institute of skiing and Mountaineering Gulmarh has already visited the lake for a survey and has been impressed with its potentials for water skiing.

State Government have already identified Orissa Tourism Development Corporation Limited as its agency for developing the infrastructure for the middle and High spending groups of tourists in the State. The O. T. D. C. Ltd. have taken steps for the expansion of existing Panthanivases in the Golden triangle, *i. e.*, Puri, Konark and Bhubaneswar. To give a *d e q u a t e* accommodation facility to the tourists at various growth centres of Tourism, it has decided to construct new Panthanivases at Gopalpur, Sunabeda and Rourkela. For the high income group of tourists the O. T. D. C. Ltd. will construct three luxury Hotels one each at Bhubaneswar, being the first landing place for the tourists coming by air, Cuttack the chief commercial and cultural centre of the State and Paradeep, the only sea port of Orissa. These works will be completed during sixth five-year plan period. In collaboration with the I. T. D. C. Ltd. it will establish beach resorts at Konark and convert the Raj Bhavan at Puri into a luxury Hotel.

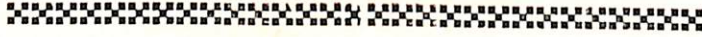
In the central sector, the I. T. D. C. have a plan to expand its Hotel Kalinga-Ashok at Bhubaneswar from 38 rooms to 100 rooms and establish a Forest Lodge at Similipal.

To provide recreational facilities to the Tourists, the State Government is mounting pressure on the Central Governments, to introduce Sun-*E*t-*L*umiers at Konark, Rope-way at Khandagiri and Udayagiri and to establish a tourist village near the Marine Drive during the Sixth Plan period.

Next to the mineral and water resources, the State abounds in tourism potentials. The location of Orissa is strategic from Tourism point of view inasmuch as it has a long coastal belt and a land mass endowed with natural beauties, historical monuments and great places of Pilgrimage. A dynamic policy for promotion and development of tourism is therefore being adopted during the Sixth Plan period to increase the tourist traffic to the State.

The Sacred Thread

Dr. J. L. BROCKINGTON



Yajnopaveeta (The Sacred Thread) is an apt symbol of the continuity and diversity of the Hindu religion operating through centuries. In a way its three strands may be explained as symbolising dharma, artha and kama or the three gunas, satwa, raja and tama. But what is striking, historically, is its completeness and flexibility as a symbol. It serves as a link between the past and the present signifying at the same time how Hinduism, through periods of history, has developed its characteristic adaptability to innovations.

The Sacred Thread is an insignia for the three *varnas*, namely the Brahmana, the Kshatriya and the Vaisya. These three are the retainers of the Hindu faith, and it is the Brahmana, who, by virtue of his practice and profession had to work as the mediator by way of transmitting the same to the society. In the Vedas we get both the personal system as well as the theistic system of religious practice. The Hymn of Prayer to Agni in the RK Vedas is an instance of the theistic worship. On the other hand Viswamitra's rigorous penance to become a Brahmana goes to prove that self-purification is essential to the Hindu faith. In fact, Hinduism evolved by the constant blending of the two elements viz. theistic rituals and development of spiritual power by sacrificial penance. The vedic religion which is inseparable from the Hindu religion implies that the ultimate powers are inherent in sacrifice and sacrificial power is necessary for the welfare of the world.

The 10th Mandala of the RK Veda contains a description of the nature of the universe, genesis of gods, creation of man.

his duty and dharma in society. The Upanishads contain both the spiritual and the theistic concepts which are the two dominating elements of the Hindu faith. The Brahmanas who took up the insignia of the Sacred Thread also took upon themselves the responsibility of acting as mediators of the Hindu faith for the rest of the society.

History tells us how the theistic form of worship came to be rigid at times and how reactions were launched to counterbalance its force. Rather than becoming mediators by transmitting the values of life the Brahmanas in course of time turned out to be monopolists and thus acted as barriers. Hence the reaction against Hinduism, Buddhism and Jainism aimed at rejection of the theistic worship. The orthodox views were replaced by the heterodox views. But it is significant to note that the tradition was not discarded, for in Buddhism and Jainism the importance of the ascetics and the efficacy of devotion are taken for granted.

The Dharma Shastra had to make an orthodox synthesis by formulating the details regarding Varnasharma Dharma. The Brahmacharya and the Sannyasa stages are given due importance, but the basic stage is that of grahastha. The Upanayan ceremony is the initiation into the Vedic studies, which used to acquaint the *Vidyarthi* primarily with the nature of society and the duty or dharma one has to practise therein.

The six systems of philosophy substantiate that the major developments of Hinduism are all linked back to tradition. The rationalistic doctrine of Nyaya and

Vaisheskika along with references to efficacy of sacrifice in the latter, the meditative theories of Sankhya and Yoga, the pragmatic approach of Mimansa and the identification of Atman and Brahman—all provide a link between the personal system and the theistic system. The Bhagabat System, the Saiva System, the Pancharatra and the Pasupata Systems expound different forms of worship but they all link back to the Vedic concepts of devotion.

but they all recognised the role of Brahman. The Brahma Samaj and the Arya Samaj emphasized the reinterpretation of Hinduism in fresh light but by way of harking back to the Vedic values of life. In the same way Vivekananda, Aurobindo and Gandhi, all tried to revive and revitalize the vedic tradition.

Hinduism is a great religion. Its history and development show that the theistic aspect i.e. love of Iswara in the form of



Exclusiveness of the Brahmanas evoked popular protests against Brahminism. The rise and growth of the Bhakti movement in the south is an instance. The Bhakti poets undermined the ritualistic formula, but advocated a devotion conforming to the Vedic pattern. The Lingayat movement started by Vasava denounced the sacred thread but accepted another symbol in lieu of it. These are egalitarian steps directed against the authority of the Brahmanas. The Vaishnava Philosopher like Ramanuja, Ramananda, Ballabha-charya and Sri Chaitanya, the Maratha saints of the Bhakti cult, Namadev and Tukaram, and saints like Kabir and Nanak tried to break the barriers of Brahminism,

Professor of Sanskrit,
Edinburgh University.

deity is flourishing. But personal worship goes side by side with it so that the two co-exist as form and essence. Traditional learning also plays an important part in it because understanding the tradition forms an important aspect. From time to time, whenever exclusiveness in religious practice set in, there have been philosophers, saints and seers who have reinterpreted the tradition by linking it with the past and looking forward to the future. In this context the Sacred Thread constitutes a symbol of continuity with the past and adaptability to the developing circumstances.

It has become a rallying factor of the basic values of Hinduism through centuries.

Grass-root Occupation Cell—A novel experiment in— “Youth Movement” in Orissa

SHRI FANIBHUSAN DAS

To-day's one of the basic problems is the management of youth. The avenue for harnessing the energy of youth must be explored for restoring and strengthening the social order. Considering the trend in the growth of population and pace of development, the urban centres in the settlement system; at no point of time can be able to provide gainful employment to all the eligible workers. The process of urbanisation to bring about socio-economic change in a predominantly rural society has not been very much useful. During the pre-independence period, by and large intelligent and industrious people from the rural areas migrated to urban areas in search of better opportunities. It appeared that urban culture represented the culture of the country, as the voice of the urbanites was only echoed. The socio-political system prevalent then was to a great extent responsible for manageable and limited urban growth. After independence with population explosion, the rural society was destabilised leading to rush of people towards towns and cities. These immigrants were mostly frustrated youths. They had lost sight of their goal in life and struggled for survival at the cost of humanity and all human values. The urban society became more and more problematic and complex. The leaders of management and administration of the country concentrated at urban complexes were fully captured by the urbanites only to serve their interest. But unfortunately there is no end to the dissatisfaction in the urban areas due to obvious reasons. Consequently the leaders could hardly devote any time for the welfare of the rural people. Thus now a situation has been created where urban areas are exploding with law and order problems affecting the socio-economic life in countrysides. The frustrated rural youth is thrown from frying pan to fire. The problem multiplies cumulatively with decay of urban scene and inadequate attention and action to reform and set right the rural front.

The right answer to the problem is to “hold back” the youths in the villages in gainful occupation. Rural migrants to the cities and towns should be those who have the ability to participate in healthy competition in a complex urban structure so that instead of becoming redundant members, they become assets to the society. Such an approach will ensure balanced rural-urban growth both socially and economically. In order to translate this concept into reality, the youths should be guided and motivated in the right direction. The crux of the problem before the present day youth is the “crisis of image”. What they will be? Whom they will follow? They wonder in total vacuum and end up in search of service and that too Government service which has become a scarce commodity.

With hazy ideas and ambitions, they fail to recognise real "matinee idols" of life and run after hallucination. The true and real "matinee idol" of to-day's youth is one who is not a parasite on the society; who dedicates himself to the wellbeing of his fellowmen with the idea of a society where there is perfect harmony of "give" and "take"; who contributes his might for the development of the society in return to what the society gives him; and last but not the least he should first discharge his duties with honesty, sincerity and devotion before claiming for rights.

A beginning has been made in this direction in Keonjhar—a tribal district in Orissa with full of mineral and forest wealth, having tremendous potentials of development. A Grassroot Occupation Cell (GOC) has been established with the objective of creating a set of self-employed radiant youths who will turn out to images

Collector, Keonjhar

of the frustrated modern generation. "Brain storming" sessions are held for the youth to motivate him to generate a spirit of self-help and to provide him gainful occupation according to his ability and capability. Spot decisions are taken by a team consisting of wings of administration, financing institution and techno-experts at a single contact point so that the youth is not pushed from post to pillar. He is also not left in the air. Systematic and constant personal approach is made by the members of the team till the youth is fully stabilised in the society. The transformation of the youth made by the Grassroot Occupation Cell in the district of Keonjhar is noticed. The "Youth Movement" experiment is fruitful and needs to be consolidated and developed into a "system" to achieve the end result of a prosperous and organic society.

— × —

Target "much more than fulfilled"

The J. B. Patnaik Ministry on assuming power in Orissa in June last year had coined a catchy slogan for rapid industrial development of the State : 'set up 1,000 industries in 1,000 days with an investment of Rs. 1,000 crores'.

The State Government has yet to complete 1,000 days in office. It has just covered about half that time span and yet the target has been much more than fulfilled.

Statistics show that about 2,600 small scale industries alone have come up with a

Rs. 18 crores investment providing employment to over 15,000 persons. Almost 200 medium and large industries with a total investment of Rs. 1,000 crores have been identified and 58 of them 17 large and 35 medium are nearing completion. These hold out promise of jobs for 75,000 people.

There is no gainsaying that even in this brief period that the present Ministry has been running the State, a favourable climate for industrial growth has set in.

Patriot, November 17, 1981

E. R. R. P. Programme makes headway in Sundargarh

SHRI H. PATTNAIK

CROPPING SCHEME AT PODABAHAL

The programme of Economic Rehabilitation of Rural Poor was started with a genuine concern for the upliftment of the poorest of the poor in our villages and the objective was sought to be achieved through realistic planning with a comprehensive framework. The programme, a brain child of our revered Chief Minister has the pride of place in the entire development programme of the state, and among different schemes envisaged under the programme, land based schemes are of special importance. The idea underlying the Annual Cropping Scheme is not only to give land, the primary means of production in an agrarian set up to the poorest of the poor, but also to create in the beneficiary the capability to cultivate the land, by necessary financial infrastructural and service support. The allotted land are made cultivable by suitable land development and reclamation, irrigation provided for growing two crops under irrigated conditions, cost of inputs, subsidised entirely and the beneficiaries work on their own fields getting wages and at the same time learning the art of cultivation under the expert guidance of agricultural field staff.

1,350 acres of land in 40 patches have been developed in Sundargarh district for coverage under Annual cropping schemes more acceptable to E. R. R. P. beneficiaries completed to plantation schemes. One such patch lies in village Podabahal in Kundukela Grama Panchayat of Sadar Block in Sundargarh district.

The Grama Panchayat has a mixed population of agarias a community very much advanced in agriculture, scheduled castes and schedule tribes, the percentage of SC and ST population amounting for about 50 per cent of the total population of the Grama Panchayat. The land patch was identified after a joint visit by Collector, S. D. O. Sadar, Block Development Officer, District Agricultural Officer and Assistant Soil Conservation Officer and taken up for reclamation and development on a war footing sometime in the month of December, 1980. Earlier September, 1980 ERRP beneficiaries were selected by Block Development Officer at village meetings in village Kundukela, Maintars, Dauli, Podabahal, Badabahal, and Masankiani. The selection of beneficiaries was done strictly on the basis of Government guidelines, i.e. the selected families should hold no land, their income would be less than 1200 and they would be the poorest in the village. The selection was generally by consensus among the villagers and the process of selection was supervised by Senior Officers including the Collector. 50 beneficiaries selected from these villages out of whom 33 are, from scheduled tribes and 13 from scheduled castes, have been accommodated in the hundred acre patch selected at Podabahal. Each beneficiary has been given two acres of land.

To begin with the land was undulated and full of busy forest growths. After demarcation of the external boundaries of about 100 acres land was given by

Tahasildar, Sundargarh, Soil Conservation Officer, Sundargarh, took up land reclamation and development works. Meticulous care was taken to ensure that the fertile top soils and not removed in the process of reclamation. The entire operation of bush cutting, land levelling and bunding were done manually and through the beneficiaries to whom this scheme was explained repeatedly by the Block Development Officer. The beneficiaries were paid wages regularly to maintain themselves. Simultaneously, the Block Development Officer took up execution of 14 dug-wells of 15 metre dia. at suitable points located by the Soil Conservation Officer as per the contour of the land. As sinking of wells involved some technical skill, it was necessary to involve some outside skilled labourers for the work. Fortunately, the water table was reasonably high and the wells struck water after digging about 15' but digging was continued in the late summer to ensure availability of sufficient water for rabi irrigation. The cost of digging 14 wells after staining came to Rs. 86,100 and the amount spent for reclamation came to Rs. 75,000. As 50 families have been allotted land in this patch of 100 acres the cost per family on account of land development and reclamation came to about Rs. 3,200 as against the norm of Rs. 3,000 per family fixed by Government. After development of the land line slag brought from Orient Paper Mills, Brajarajnaragar were applied to the soil. The wells are at present being fitted with electric motors and field channels are being provided and the expenditure is being met by diverting funds from other items under the scheme at the discretion of the Collector.

After proper soil testing, it was decided to take up a mixed cropping of groundnut, with arhar during khariff of 1980-81. Officers of the district concerned with the scheme evinced full involvement and the beneficiaries starting with a bit of scepticism gradually developed interest and during the agriculture season, they including their women folk worked in the field. The agriculture operation was carried on under the direct supervision of VAW attached to the patch and under direct supervision of District Agriculture Officer, Sundargarh. Seeds (AK-12-24)

variety of groundnut and krhar and fertilisers in recommended dose were supplied departmentally and supplied by the beneficiaries as per the package of practices, under the guidance and Supervision of VAW and A. E. Os. Proper agronomic practices were followed, required doses of fertilisers and irrigations when rains failed, were provided and proper attention was given to plant protection measures. Rs. 50,000 have been spent for the purpose of the mixed khariff crop of groundnut and arhar.

Harvesting has started after 120 days in the presence of Block Development Officer and the Officers of Agriculture Department. Each beneficiary has got about 7.74 quintals of groundnut (dry) on an average from his two acres of land which would fetch him around Rs. 2,325. Besides Rs. 300 is expected from the arhar crop, which is yet to be harvested. Pass books have been opened in the names of the beneficiaries and the income derived from the crop have been deposited in Post Office savings account opened in the name of beneficiaries.

The Honourable Chief Minister visited the patch on 31-8-1981 and was happy to see the crop and the interest of the beneficiaries. The Additional Chief Secretary and Additional Development Commissioner also visited the patch on 21-9-1981 and gave certain instructions which is a valuable guideline for implementation of the scheme. While taking the beneficiaries, the Additional Chief Secretary was impressed with their involvement when some beneficiaries on their own objected to the suggestion of the Block Development Officer for taking up of a crop of Onion during the rabi and suggested a potato crop. The A. D. C. desired that potato should be grown in the patch during Rabi and the agriculture department should procure the entire harvest of groundnut as seed. The instructions are being complied with. The interest shown by the beneficiaries, the involvement of the field Officers of different departments including the Block Development Officer and the inspiration and guidance provided by Government and Senior Officers would lead to unprecedented success of the patch, the scheme and the ERRP programme in the district as a whole.

PITAMAHAL FISHERIES SCHEME

Pisciculture is one of the fully subsidised scheme under the programme of Economic Rehabilitation of Rural Poor. The objective of ERRP programme launched under the able leadership of our reverend Chief Minister, being economic upliftment of the poorest families in villages, pisciculture schemes provide ample opportunity to achieve the objective particularly in the context of availability of ready market in large urban complex of Sundargarh district. While tank fisheries schemes involved renovation of tank, proper applications of manures and fertilisers and rearing of fries under the technical assistance of Fishery Extension Officer and general guidance and marketing and infrastructural assistance organised by the Block Development Officer Reservoir Fisheries Scheme under ERRP provide for stocking of fingerlings in big reservoirs supply of boats, nets and other fishing equipments to the beneficiaries on full subsidy training of beneficiaries and providing marketing and other infrastructural assistance to them. In the district of Sundargarh 49 ERRP beneficiaries have been covered under tank fisheries scheme so far but the real landmark not only in the execution of fisheries scheme under ERRP but also in the development of pisciculture in the district, has been coverage of 35 ERRP beneficiaries under Reservoirs Fisheries Scheme in Pitamahal Medium Irrigation Project.

Pitamahal is a Medium Irrigation Project situated at a distance of about 15 Kms. from the Steel City of Rourkela. The construction of the Dam with a catchment area of 103.6 Sq. Kms. and the water spread of Acres 1,243 at M. W. L. Acs. 277 at F. R. L. and Acs. 230 at D. S. L. was completed in the year 1975-76 and the reservoir was fully impounded in the year 1976-77. The Dam was ideally suited for Reservoir Pisciculture Scheme, particularly in view of the department of water spread area and availability of readymade market, for the catch in Rourkela city and its industrial hinterland. Fish used to come to Rourkela from distant places in Sambalpur district and even from the bordering States of Bihar and Madhya Pradesh and sold at very high prices. The

ERRP programme provided the opportunity to make use of the potentiality for pisciculture offered by Pitamahal Medium Irrigation Project.

Keeping in view the objective of the programme to benefit the poorest of the poor, selected by a concern of villagers and their coverage under specified schemes matching their aptitude and skill, meetings in different villages of Lathikata Block were organised by the Block Development Officer with the assistance of Fisheries Extension Officer along with other Extension Officers. After 10 beneficiaries from each village covered during 1980-81 were selected on the basis of their poverty (as they owned no land and as their annual income is less than Rs. 1,200) Block Development Officer, Lathikata with the assistance of Fisheries Extension Officer and under the guidance of Assistant Director of Fisheries selected 35 ERRP beneficiaries as the basis of traditional skill and attitude of the beneficiaries selected from a number of villages close to the reservoir. These beneficiaries were organised into five groups with a group leader for each group. A Fishermen Co-operative Society was constituted taking these 35 beneficiaries as members. ITDA, Panposh provided Rs. 3,000 at the initial stage as managerial subsidy to the society. The basic objective of the society was to market the entire catch from the reservoir in the nearby industrial area and thereby earn a reasonable income for members. Post Office Savings Bank accounts were opened in the names of members to promote the habit of savings among ERRP beneficiaries and at the same time monitor the benefits accruing from the programme.

About 3.5 lakhs fingerlings of different varieties including cattle major crop and common crop were earlier stored in the reservoir about a year back. After some initial training each of the seven groups of fishermen were provided with one country boat of 26' length and gill nets of size 330'×20' on cent percent subsidy basis. The entire cost for boats and nets come to about 65,000. One Deputy Superintendent of Fisheries and one Fishery Demonstrator were deputed to the

reservoir site to import managerial and technical assistance to the society and its members. Besides, the co-ordination effected by the Block Development Officers, Collector and other Officers visited very frequently to sort out the difficulties looked into the problems of the society and the beneficiaries. Due to inadequate rainfall during the current year water level in the reservoir has come down. As the cultivators clamoured for more water for paddy during khariff, sufficient water needed to be stored in the reservoir for the sake of ERDP beneficiaries. A balance has to be struck and in spite of drastic fall in reservoir level the scheme has worked reasonably well. It is also hoped that fishing will continue during the Rabi seasons, when there would be great pressure on the reservoir level on account of irrigation.

On 30-8-1981 the Honourable Chief Minister, Orissa inaugurated the scheme by

Collector, Sundargarh

handling over the boats and nets to the beneficiaries. The society started with modest beginning. However, by end of September, 1981 575Kgs. of different types of fish have been caught and after making payment to the members for their daily maintenance the society has a balance of about Rs. 2,000 in the Pass Book of members. This is not a mean achievement within a period of one month. The Society has sold fish at the rate of Rs. 10 per Kg. on an average in the markets of Rourkela and thus gained a total income of about Rs. 6,000 in the first month.

Thus on an average each member earns about Rs. 170 per month and there will be an annual income of Rs. 2,000 per beneficiaries. This income would substantially go up after the fingerlings released in the reservoir at different stages grow in size and when the society gets a better price for fish after marketing facilities are more organised.

—×—

Orissa's rural poor get land, artisan training

Orissa is nudging the landless poor into selfreliance by giving land and training in rural artisan trades.

The results are already evident. The new programme for economic rehabilitation of the rural poor is fast reaching out to project areas.

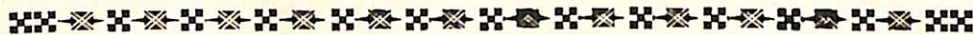
Casual farm hands are being given temporary rights to reclaimed land or bullock-carts, or an anvil, hammer and tongs to set up a blacksmith's shop.

In formulating the projects for uplifting the rural poor, the political leadership in the State has actually gone a few steps ahead of the Janata Government's "Antodaya" programme in serving the poorest of the poor in villages.

Now efforts are being made to find cultivable land. Government subsidy for producing two to three crops in total. Crop insurance is being introduced.

Rail Transport in Orissa— Some Achievements

SHRI SATAKADI HOTA



Orissa is rich in mineral and forest resources, but mineral and forest based industries have not developed according to the requirements of time due to lack of infrastructural facilities mainly on railway system. A massive investment to the tune of Rs. 5,000 crores is expected to take place within next 5 years for new industries in the Central Sector in the State, i. e. a shore-based Steel Plant with initial capacity of 1.5 million tonnes with provision for further expansion to 3 million tonnes, an alumina / aluminium complex in Koraput and Talcher, a Fertiliser Plant at Paradeep, etc. All these would require considerable infrastructural facilities. In this context, therefore, State Government have been pressing the Government of India and the Ministry of Railways to develop new lines in the interior of Orissa without which industrialisation of the State would receive a set back.

Orissa did not have its due share in the growth of Indian Railways either in pre-independence or post-independence era. It had only 1,300 Kms. of rail line against the national net-work of 53,956 Kms. till 1950-51, which works out to 2.3% only. The British rulers connected 3 major ports and other strategic places with the capital of India for perpetuating their hegemony and for exploitation of industrial resources for benefit of Great Britain. Orissa was not considered then as either strategically

or economically important. It was only after independence the importance of the railway system, as an essential infrastructural facility for both national and regional development was recognised by Government and the railway system assumed the role of bulk carriers of goods and passenger without which in a predominantly vast agricultural country like ours the growth of economy and social mobility could not have been sustained. Massive investments were therefore made in 5 year plans not only to rehabilitate the railway system battered by the stress and strain of the second world war but to convert it to a capable instrument to serve the requirements of a free country's developing economy. In spite of this, growth of railway in Orissa in post-independence era is also not up to the expectation. Only 648 Kms. of route extension could be made during this period (till 1979-80) bringing the over all percentage to 3 per cent only.

The Railway system passes through Orissa only at the rim and the whole interior remains untouched. Whatever Railway lines have been constructed since independence were to serve specific industrial projects. Barasuan-Rourkela line was constructed to serve the Rourkela Steel Plant and the Titlagarh-Sambalpur line, to create an alternative route to accelerate the movement of iron-ore flow towards Visakhapattanam port. Similarly

Cuttack-Paradeep line was constructed to connect Paradeep by a railway line. Except some of these project-oriented lines construction of no new line was taken in hand either to fill up the missing link or to develop a backward and potentially rich region. Even Paradeep was not linked to its rich hinterland and the export traffic of iron-ore had to be transported by rail from Bansapani-Barbil area via Tatanagar and Kharapur covering an additional distance of about 332 Kms. and thereby increasing the cost of transportation by about Rs. 30 per tonne.

Recent years have however seen the thrust of railway expansion in the right direction. Construction of two major rail links, i. e., Koraput-Rayagada (174 Kms.) and Jakhapura-Bansapani (179 Kms.) have started and the 3rd and the most important for emotional integration of western and coastal regions of the State, i. e., Talcher-Sambalpur rail link is under active consideration of Government of India, Ministry of Railways.

The first phase of Jakhapura-Bansapani rail link from Jakhapura to Daitari (33 Kms.) has already been opened to traffic since March, 1931 and second phase from Daitari to Keonjhar (95 Kms.) has been sanctioned. The third phase from Keonjhar to Bansapani (51 Kms.) will be followed by the second phase also. With completion of this line Paradeep Port will be opened to its rich hinterland and the distance between Bansapani and Paradeep reduced by 332 Kms. Besides several mineral as well as forest based industries along the line will come up in the economically backward district of Keonjhar. Government of Orissa have provided land free for the first phase involving an expenditure of about Rs. 32 lakhs and offered to provide land free for the 2nd phase also involving about Rs. 77 lakhs.

The link from Koraput to Rayagada (174 Kms.) is strategic to the development of the economically backward district of Koraput, Vizag Steel Plant and the proposed Alumina Plant at Damanjodi in Koraput district. This will open up Koraput district, almost equal to Kerala in size and predominantly tribal with plenty of national resources including huge deposits of

minerals like bauxite, and limestone and a rich forest to sustain industries for decades to come. In the words of National Transport Policy Committee a line from Koraput to Rayagada will enable opening up a mineral and forest resources in the Bailadila-Koraput areas by providing an alternative and by-passing heavily graded 'Anantgiri ghats'.

The survey for Talcher-Sambalpur rail link (160 Kms.) has been completed and is now under consideration of railway Ministry. Since a portion of the alignment passes through a rich coal bearing area. Ministry of Energy suggested to avoid the coal bearing belt and there-after Ministry of Railways have asked South-Eastern Railway for re-survey. This line is absolutely indispensable for emotional integration as well as economic development of the State which suffered greatly till now due to lack of direct communication between the coastal and western regions. This link would shorten the distance between western India and Eastern coast by about 470 Kms. and provide a direct link to Paradeep Port. This will reduce the distance between alumina plant being set up at Damanjodi and the smelter plant at Talcher by about 146 Kms. and give easy access to Talcher coal fields which have huge deposits of coal. In order to expedite construction of this important rail link Government of Orissa have offered to provide land, etc., free of cost and earth work under 'Food for works programme'.

A coach repair workshop has been recently inaugurated by the Union Minister for Railways. This is estimated to cost about 20 crores with a planned capacity to overhaul 4 coaches per day in the first phase. The capacity may be doubled in the second phase. This will meet the periodical overhauling requirement of coaches of South-Eastern Railways, Eastern and N. E. Railways. This would also offer employment to about 3,000 persons including qualified engineers and artisans while providing growth impetus for various ancillary industries. State Government have provided 314 acres of land in the vicinity of State Capital free of cost for this project.

Similarly for convenience of passengers going to New Delhi, Bombay and other distant places Nilachala, Kalinga and Konark Express train have been introduced in recent years to give direct connection to New Delhi and Hyderabad/Bombay.

Orissa had only 1,300 Kms. of railway lines up-till India attained independence and only 648 Kms. of railway line were added to the railway net-work in Orissa since independence (till 1979-80). With the sanction of Rayagada-Koraput (174 Kms.) Jakhapura-Daitari and Keonjhar (128 Kms.) and with the bright prospect for sanction of the 3rd phase between Keonjhar and Bansapani (51 Kms.) and Talcher-Sambalpur line (160 Kms.) Orissa is expected to have another 513 Kms. of railway line within next 5 years (from 1980-81) which by any standard will be unique in the railway development of the State. Yet there are many more things to be done. The narrow gauge lines from Rupsa to Bangiriposi and from Nuapada to Gunupur need conversion to Broad gauge. New lines from Khurda Road to Balangir

via Phulbani, Talcher to Bimlagarh via Barkote, Jeypore-Ambaguda-Kesinga via Jaipatna. Junagarh and Bhawanipatna and the links from Jeypore to Malkanagiri are very much necessary for development of backward areas of the State. Similarly there is need for introduction of more express trains to connect new growth centres to serve as intercity express and to connect the district headquarters with the capital. In this context, introduction of a fast express between Bhubaneswar and Howrah, conversion of Nilachala to a daily train an express train between Rourkela and Bhubaneswar/Puri via Sambalpur, Titlagarh and Rayagada, conversion of Puri-Assansol passenger to an express train with extension up to Baidyanath Dham are some of the long felt needs of Orissa. Over and above this, a separate Zone at Bhubaneswar and a new division in western Orissa and location of the railway service commission office in the State have been the demand of the State to remove deficiencies in the railway system in the State.

Commissioner, Railway Co-ordination
and Special Secretary to Government,
Transport Department, Bhubaneswar.

—X—

“ଉତ୍କଳ କମଳ ବଳସ୍ୟ ଦୀର୍ଘିକା

ମସ୍ତକ ମାଳିନୀ ନୀଳାମ୍ବୁ ଚଲିକା ।”

—କବିବର ରାଧାନାଥ ରାୟ

ଚିଲିକା

ପ୍ରକୃତ ସୁଖୀର ଓଡ଼ିଶାକୁ ଏକ ଅଯାଚିତ ଅବଦାନ

- * ଭରତର ପୂର୍ବ ଉପକୂଳରେ ଅବସ୍ଥିତ ଏହି ବିଶାଳ ହ୍ରଦର ଦୃଶ୍ୟ ଅତୀବ ମନୋରମ ।
- * ଏହାର ଦିଗନ୍ତ ବିସ୍ତାରୀ ନୀଳ ଜଳରାଶିରେ ନୌକା ବିହାର କରିବା ଏକ ଅତୁଲ୍ୟ ସ୍ୱତ୍ତ୍ୱ ।
- * ଶୀତରତ୍ନରେ ଏହା ବିଭିନ୍ନ ରଙ୍ଗ-ରୂପର ଲକ୍ଷ୍ମୀଧିକ ବିଦେଶାଗତ ପକ୍ଷୀମାନଙ୍କର ଛାଡ଼ାଭୂମି ।
- * ସର୍ବୋପରି ପ୍ରସିଦ୍ଧ ଠାକୁରାଣୀ “କାଳିକାଈ”ଙ୍କ ଦର୍ଶନ ଉକ୍ତ ପ୍ରାଣକୁ ଉଦ୍‌ବେଳିତ କରେ ।

ଚିଲିକା ଉପକୂଳରେ ବରକୁଳ ଓ ରମ୍ଭାଠାରେ ଓଡ଼ିଶା ପର୍ଯ୍ୟଟନ ଉନ୍ନୟନ ନିଗମଙ୍କ ଦ୍ୱାରା ପରିଚାଳିତ ପାଞ୍ଚନିବାସ ଓ ନୌକାବିହାରର ବ୍ୟବସ୍ଥା ରହିଛି ।

ଏହଠାରୁ ନିର୍ମଳଝର, ନାଗୟଣୀ ଓ ବାଣପୁର ଭଗବତୀ ମଧ୍ୟ ଦେଖିବାର ସୁଯୋଗ ଅଛି ।

ସବିଶେଷ ବିବରଣୀ ପାଇଁ—

ପର୍ଯ୍ୟଟନ ଅଧିକାରୀ ରମ୍ଭା, ଜିଲ୍ଲା-ଗଞ୍ଜାମ, ଫୋନ-ରମ୍ଭା ୪୪
କିମ୍ବା

ପର୍ଯ୍ୟଟନ ଅଧିକାରୀ, ଭୁବନେଶ୍ୱର, ୫-ଜୟଦେବମାର୍ଗ,
ଭୁବନେଶ୍ୱର-୭୫୧୦୧୪, ଫୋନ-ଭୁବନେଶ୍ୱର ୫୦୦୯୯
କିମ୍ବା

ମେନେଜର, ପାଞ୍ଚନିବାସ, ବରକୁଳ

ମେନେଜର, ପାଞ୍ଚନିବାସ, ରମ୍ଭା

ପର୍ଯ୍ୟଟନ ବିଭାଗ, ଓଡ଼ିଶା ସରକାର

Law and Social Reform

Dr. SHRADHAKAR SUPAKAR

From the days of Raja Ram Mohan Ray and Pandit Iswar Chandra Vidyasagar attempts have been made to bring about social reform in Hindu society by legislative measures. But the law to reform the Hindu society has not always been effective enough, and has sometimes produced undesirable side effect.

The Hindu Widow Re-marriage Act, for instance, was passed in 1856 A. D. but it was practically a dead letter till recent times.

The Child Marriage Restraint Act was passed in 1929 but child marriages continued unabated till recent times, when female education in the country spread and educated parents realised that it is better to educate the daughters up to a fairly high standard before they are married. Education and not the law is the real anti-dote to the evils of child marriage. We find that where there is no facility for educating the girls, child marriage cannot be effectively checked by law. Recently, we read the news of a minister in Rajasthan giving his child daughter in marriage in defence to the wishes of his father but in defiance of the law, though a minister is expected to be always on the right side of the law.

We read harrowing tales of murder and torture of young brides for not bringing adequate dowry to the bridegroom's family. The Dowry Act was passed in 1961. During the last two decades very few persons have taken advantage of this law. Many marriages have taken place in flagrant

violation of the law. Many brides have been murdered, more have been tortured for no fault of their own, mainly because the parents could not fulfil the demands of dowry.

The makers of the Constitution of India sought to bring about equality of right among all, citizens (as far as possible) without discrimination on the ground of sex. This is a fundamental right enshrined in our Constitution.

The Hindu Marriage Act, 1955, sought to improve the lot of Hindu women by abolishing (and penalising) polygamy. Since polyandry is not merely illegal but unthinkable, a male whose wife is living, cannot marry second wife. He is liable to be prosecuted and penalised for bigamy and his second marriage becomes void. But the criminal law on bigamy is so strict and it is so difficult to prove the second marriage that in many cases the bigamous bridegroom and the abetting parents or priests have escaped punishment, and the first wife is deserted in most cases.

Another important feature of the Hindu Marriage Act, 1955 is the right to apply for divorce either by the wife or the husband on sufficient grounds. It is said that it is better to dissolve an unhappy marriage. Previously, the orthodox Hindu Society did not permit divorce and a deserted wife was entitled to claim maintenance from her husband. Now that divorce has been legalised, a husband or a wife is free to seek divorce on grounds of desertion, adultery,

etc., of the other spouse. These days scheming in-laws usually persuade the obedient son to file a petition of divorce on dubious and got-up charge. A harrassed and tortured wife may also be forced to file a petition for divorce on the ground of cruelty of the husband. In either case, let us say, the court grants a decree of divorce.

What happens then ? Whereas it is possible and easy for a divorced husband to get a virgin bride with susuptuous dowry without much loss of time after the statutory period of limitation, can the divorced Hindu wife find a bridegroom, even if her character is not tarnished by the husband and the in-laws in the course of the divorce

proceedings ? Constitutionally, the wife has equal rights, in the above case, but socially, she becomes an outcaste for all practical purposes.

I do not underrate the role of legislation in social reform. Legislation is raising the social consciousness of the elite. There is no doubt about this point. But the most effective instrument of social reform is a growing consciousness and a growing concern among members of the society about wiping out corrupting social customs like dowry, child marriage, neglect of female children by parents, etc. Educational institutions and mass media have vital roles to play in this matter.

— X —

Orissa in for boom

Leading hoteliers in the country are making a bee-line towards Orissa. The Oberois, the Clarke Group, Asian, ITC and the India Tourism Development Corporation (ITDC) have all decided to set up five-star hotels in the State. The hotels will come up at Puri, Konark and Bhubaneswar.

Collectively, they will raise the availability of hotel rooms to 500 from 100 at present. The investment for each hotel is estimated at Rs. 4 crores.

These development are expected to give a boost to tourism in the State where the annual inflow of tourists is a bare 19,000 at present. Similarly, there has been a spurt in development of hotels for the tourists from the middle income group.

For this category, nearly 20 hotel projects have been approved by the State

Government at Bhubaneswar, Puri and Cuttack. The State Tourism Development Corporation is also expanding its

HOTEL INDUSTRY

present accommodation facilities at Puri, Konarka and Bhubaneswar.

On the slopes of the famous Dhauligiri at Bhubaneswar the Hokke Group, together with the Hotel Corporation of India, proposes to set up Japanese-type inns.

The sudden interest in the sector follows Orissa decision to declare tourism as an industry coupled with quick clearance of licences.

(Economic Times : 18-11-1981)

Preparing for the ASIAD-82

SHRI KEDAR MOHANTI



ASIAD, 1982, the biggest sports event for the country is a year away. But as one watches the preparations, the on goings in the stadia, where the competitions would be staged, the 12 month long period does not look longish. Fifteen thousand labourers are pulsating day and night, to complete the venues under round-the-clock guidance of engineers, designers and administrators. The fast progressing work at various stadia bears the testimony of how they are observed with the work, with dedication and determination.

To this date, nearly sixty-five percent of work, that include construction of new stadium, renovation of existing ones, are over. Seventeen different stadia are being prepared in the capital New Delhi, five of which are specially constructed for the Asian Games in line with international specification whomsoever I met, right from the Secretary-General down to wage-earners at these grounds thrilled me in their seriousness of purpose to complete the work even before the dateline. And dedicate those sports-yards to the nation, which the sports-lovers, the youth and the people would cherish for ever. After all, the building activities are shaped by indigenous man-power, material and expertise. These venues will be ready by the middle of next year, giving adequate time for the testing of all the facilities, and if possible, give scope to the competitors for practice, before the commencement of the ASIAD on the 19th of November, 1982.

The 1982 ASIAD, or the IX ASIAN GAMES, to be staged between the 19th November to the 4th December, will be the biggest ever with 21 disciplines in the competition Games. The first ever ASIAD was hosted by Delhi in March, 1951, where eleven countries fielded their 489 sports-stars to further the spirit of the Asian Games, that symbolises continents' striving for excellence and unity. It is exactly after 31 years, that 31 countries are participating in the 16-day long competitions. While twenty-one disciplines including two demonstration games will be in Delhi, Bombay is the venue for Yatching and Kharakvasala in Pune for Rowing.

Of the Delhi's seventeen venues, the most important is the brand new 75,000-capacity two-tier Main Stadium in Lodhi Road. Apart from Athletic events, the inaugural and closing ceremonies and the final events of football will be staged here. The Stadium will be equipped with Hungary-made two Electronic Score-Boards to disseminate latest results, recorded by the photofinishing camera from Japan. A computerised information system with terminals on all venues, has been planned for the Main Press centre located in this stadium.

Delhi ASIAD's master craftsmanship will be the indoor stadium at the Indraprastha Estate the biggest of its kind and one of the largest in the world. Situated on the Yamuna River front, when completed it

will look like some giant object from outer space, with its bowlshaped, shimmering aluminium outer-frame, making it an outstanding landmark of the city. With a provision for 25,000 spectators, the stadium will have unique feature of a sound-proof collapsible partition, that can be drawn as and when required to stage more than one event simultaneously.

The Cycle Velodrome is the newest attraction for the capital city of Delhi, coming up on the northern side of the Indraprastha Estate indoor stadium. Attached with a spectacular gallery for two thousand viewers, the Velodrome was long-awaited for ordinary people, whose dependable mode of travelling is a bi-cycle and day-to-day sport.

Construction of new stadium and renovation of Delhi's existing sports complexes, including the National Stadium that staged the First ASIAD, is costing nearly seventy crores. Certainly a big amount, but nevertheless wanted in the pursuit of sports, by a vast country of ours. The expenditure constitutes only one-fourth per

cent of nation's annual budget to translate into action many sports-promotion schemes lying idle for all these years. The investment brings about a very valuable capital asset for the sportsmen and women, and the future generation.

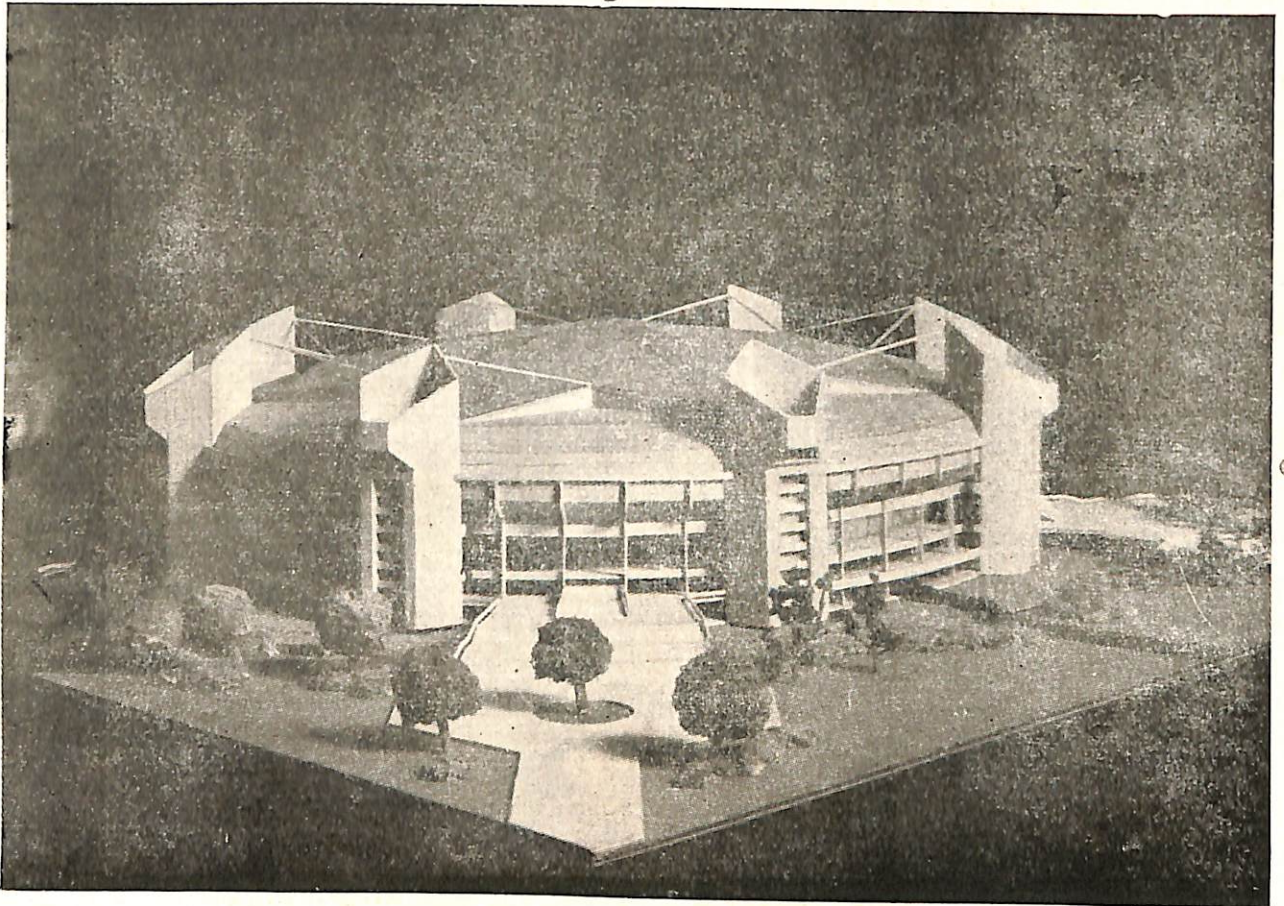
The Special Organising Committee assisted by twenty-seven specialised committees, is very much concerned about the accommodation of competitors and the sports-enthusiasts, who would throng the city. Delhi's population during the ASIAD fortnight would swell by sixty-thousand. Nearly five thousand competitors and sports-officials will make their home in the Asian Games Village, fast coming up at Siri Fort. Besides living accommodation in 703 flats of ten different categories, the village complex has practice area for various disciplines, a cultural-cum-community hall, mini-hospital, shopping centre, sauna bath tubs and interestingly a Tower-Restaurant-cum-Viewing gallery. For most of the visitors hotels, motels and rest-houses are being identified. Anyone going round Delhi now can see for himself the fast coming up hotels that would



Work in progress for the Indoor Stadium and Cycle Velodrome

change the shape of this capital metropolis. The Universities, colleges, State Government Bhavans are also to be involved in sharing this additional population. Another unique arrangement is by the ITDC preparing an approved list of paying-guest accommodation for those interested to lessen the burden on the official front. Visitors coming from distant places will be given accommodation on priority basis.

A year-long publicity campaign has begun from the 19th of November, to enthuse the people in and outside the country for the Games. Both the Government Media and the press are being actively involved in it. While Door Darshan plans showing films on the ASIAD, All India Radio would introduce regular sports magazines on the Games besides coverages in its daily bulletins. Journalists drawn



Indoor Stadium

Scramble for tickets will undoubtedly reach highest peak. The minimum being three rupees and maximum fifty rupees, with slightly higher rate for the opening and closing event. And as I gather the students will enjoy concessions at the minimum for two rupees. The peculiarity is perhaps the absence of 'Season Ticket' and distribution of tickets will be through the State Bank of India.

from far and near places would be taken round the venues at regular intervals for reporting in their respective sports columns weeklies or periodicals.

After all the biggest sports events of the country has to arrest the peoples' imagination. (END)

Indian Institute of Mass Communication,
New Delhi

—X—

Future Energy Demand and the Role of New and Renewable Sources of Energy in Orissa

RANSINGH NIRMALENDU RAY

There is a manifest common interest to set in motion a series of measures which will enable our country to be assured of the necessary supply for its development needs over the next few decades and possibly to move towards a greater degree of energy self-sufficiency. The rate of increase in oil consumption will have to slow down significantly as oil is likely to reach its peak as the dominant global energy source before the year 2000. Thus the world community will, sooner than previously visualized, have to make a relatively rapid transition to radically new energy mixes. So far, neither national-policy formation nor international co-operative efforts have been adequate to bring about the global changes required; planning, financing, priority-setting, popular acceptance and consultation all take time, and policy decisions are therefore urgently required to bring into use alternative sources of energy. Thus, a major challenge for mankind in years to come will be to implement a coherent series of policies at regional, national and world levels & during this transitional period, aimed at moving from present energy limited basis to a more sustainable and diversified structure of energy demand and supply,

It is generally estimated that the present contribution to the total energy supply, on a world average, amounts to some 15 per cent. However, this figure uncertain due to the unrecorded contribution of some commercial and non-commercial traditional

energy sources, particularly draught animal, power and biomass. Most projections contend that if even modest development objectives are to be realised, energy consumption in India, particularly Orissa will need to rise by about threefold in the coming twenty years and that the contribution of new and renewable sources to national energy supply will need to rise from the present level to about 25 per cent i.e. almost doubling the percentage contribution. In the coming decades this amounts to a five or six fold increase in absolute terms. The implications of this challenge are far reaching, involving structural changes in national economy, particularly with respect to financial flows and socio-economic and technological factors. This has profound implications for the rural sector where even a relatively small per capita increment will result in a major improvement in quality of life in terms of improved health, education and income for those billions who will be directly affected.

The use of renewable energy sources as solar and wind energy as well as biomass can play a significant role in rural areas of Orissa in the form of decentralised applications. But all over the world people are moving to live in urban areas. The fraction of people living in urban areas will increase significantly from today's 40 per cent to over 65 per cent in 2030 A.D. That means that about 3 to 4 billion people

will live in urban areas in developing countries. Out of this figure major contribution will come from India. Urban settlements typified by population densities of 1000 persons per square kilometer can not exist on the basis of distributed energy sources. Therefore, urbanisation will require energy supply infrastructures

that are mostly centralised to some extent. For example large scale solar plants could meet the need in urban and rural settlements. The table given below gives the list of documents in the frame-work of technical preparation of the United Nations Conference on new and renewable source of energy.

NCW AND RENEWABLE ENERGY TECHNOLOGIES AND APPLICATIONS

Energy sources (1)	Liquid transport fuels (2)	Centralised electric power (3)	Decentralised Power (4)	Heat (5)
1. Solar ..		Thermal Electric Photovoltaic solar pond.	Thermal Electric Photovoltaic.	Solar passive solar pond Solar flat plate Evacuated tube Solar Cookers Solar Concentrators.
2. Geothermal ..		Geothermal electric..	Geothermal small power.	Geothermal Direct heat.
3. Wind ..			Wind electric ..	Wind electric wind shaft.
4. Hydropower ..		Hydropower ..	Minihydro ..	
5. Biomass ..	Ethanol Methanol Vegetable oils.	Direct combustion ..	1. Diesel with liquid biofuel. 2. Diesel with producer gas. 3. Diesel with biogas 4. Direct combustion 5. Fuel cells based on liquid/gas fuel.	1. Direct combustion 2. Biogas .. 3. Producer gas ..
6. Fuel wood and charcoal.		Direct combustion		Direct combustion of wood and charcoal.
7. Oil shale and tar sands.	Syn-crude ..	Shale burning ..		Liquid fuel for cooking
8. Ocean energy..		Tidal OTEC Wave ..	Wave ..	
9. Peat ..	Methanol ..	Direct Combustion..	1. Direct Combustion 2. Gasification Traction and shaft power.	Direct combustion.
10. Draught animal				

Now Orissa is depending on hydro and thermal power for generating electricity. This will not be sufficient with increase in industries and population, within a few decade. The course of river changes due to climate disorder. Therefore, it is not wise to depend fully on hydropower. Similarly due to very limited sources of coal, the thermal powers can not be dependable. For oil Orissa is depending hundred percent on Centere, which again import a major amount from other countries. Therefore, keeping in view the future energy crisis, the

most dependable sources for Orissa, are solar and wind energy.

In Europe energy has been extracted from winds for centuries through the use of wind mills. In Denmark and Hungary 0.2 MWE wind mills generators have been successfully operated continuously for long periods. But these are huge, ungainly and relatively inefficient devices. Recent advances in using strong, light weight materials and sophisticated aerodynamic designs now make it possible to construct much more efficient

and smaller generators. It appears likely that for the State like Orissa, these new wind-driven generators will be used to provide power in many remote locations where electrical network has not yet penetrated and where relatively small amounts of power are required. On the other hand it seems unrealistic to suppose that a substantial fraction of our electrical power will even be generated by the winds,

Any solar farm that is capable of competing with conventional power plants in the production of electricity will necessarily be very large and it will be expensive. A 1000-MWe solar farm cost would probably be several times more than a nuclear plant. The projected cost of electricity delivered by solar farm is 3 to 4 times more than today's cost for electricity from nuclear and fossil fuel power plants. Thus at present utilization of solar energy on a wide scale is not economically feasible. This is because of high cost of solar cells. The best and most efficient solar cells are constructed from high purity silicon. This is the type of cell that has been used so successfully in the space craft. It is conceivable that increased production, coupled with new purification techniques, could substantially lower the material costs and provide sufficient converters for a solar farm.

The immediate application of solar energy for rural areas in Orissa are the solar pumps. They can be used in remote areas, where the cost of taking electricity will be more or the availability of fossil fuels are not adequate.

The analysis of the current energy situation shows the necessity to introduce non-conventional sources of energy into the energy balance. To accelerate the introduction of technologies for the utilisation of renewable sources of energy, it is essential to make these technologies more efficient, reliable and cost competitive. More research and development is required as well as the adaption of the technologies on the specific needs and preferences of potential uses. Also special attention should be spent to the social and cultural acceptance of new technologies. All the States in India should be encouraged to intensify the co-operation in the field of research, development and demonstration of new and renewable sources of energy. Greater emphasis should also be associated with transfer of know-how and the establishment of manufacturing infrastructure, so that equipments shall be designed and manufactured locally as far as possible, taking advantage of local skills and materials, as well as of locally available finance.

—X—

Salt-water Crocodiles— Are they man-eaters ?

SHRI SUDHAKAR KAR

Who is not afraid of crocodiles, particularly the Salt-water Crocodile (*Crocodylus porosus*), which is thought to be dangerous to the domestic animals as well as to mankind. The name man-eating crocodile (the other name of Salt-water Crocodile) creates a terror among the villagers living on the banks of the rivers, where these crocodiles dwell. Unfortunately, the crocodiles were killed mercilessly by the poachers and hide-hunters and now there are only a handful of crocodiles found in nature in India and possibly left in the world. Their bad reputation as man-eaters made their life miserable throughout the Asia-Pacific Range. Are they originally man-eaters or they are turned as man-eaters? Biologists and the wildlife lovers are endeavouring to protect them. Can we really protect them??

The past history of the man-eating crocodiles is most interesting and romantic. The old people of the locality narrate so many interesting stories. They recall "one day there were thousands and thousands of crocodiles in the rivers Brahmani, Baitarani, Dhamara, Bhitarkanika and Kharasrota". They had seen Gharial and Thantia *Gavialis gangeticus* (of course both are same species but in male Gharial there is a Ghari on the tip of the snout), Baula or Dinkia (both are local name of Salt-water Crocodiles) and Gomuha *Crocodylus palustris*. From these three crocodilian species, the Salt-water Crocodiles are very popular to the local people

as they think them most dangerous. According to the local people there were hundreds and hundreds of crocodiles basking on the banks of the rivers. It was really very interesting sight to see them. People close to river banks took their bath in the rivers with great fear. Sometimes, people prepared fence protruding to a distance of 100' or more (depending upon the tide level) into the river from banks into which the crocodiles could never enter either in low or in high tide. These help the people to take their bath with less fear and anxiety.

It had so happened sometimes that the crocodiles come to nearby villages at the time of high flood in rivers and a few stayed in the ponds and ditches after receding of the flood. People killed those crocodiles either for fear or for mere pleasure.

Forest Department/ Government of Orissa, declared Bhitarkanika as Wildlife Sanctuary (gazetted in April 1975) to save the Salt-water crocodiles and its mangrove habitat. Prior to this, people were felling the trees indiscriminately by which the natural habitat and the nesting grounds of the nesting female crocodiles were heavily and frequently disturbed. Throughout the day and night, people were busy in fishing inside the river and creeks using the nylon gill nets which proved to be most harmful particularly to the young crocodiles. A number of boats and dinghis were plying all the time

throughout the year for collection of either firewood or transporting fish to nearest markets. Again, people were disturbing the nest-guarding female crocodiles and also they got pleasure by damaging the eggs.

As their natural habitual, so-called 'abode' was much disturbed by the people and also they were frequently scared by the professional hide-hunters, the animals left their natural habitat and migrated to associated Bramhani, Baitarani and Kharasrota rivers for food and shelter. Here, they turned ferocious as they never got sufficient food and proper place for shelter. They started eating the domestic animals which arrive near the river banks either for food or water. Sometimes, the human beings were also victims of these hungry crocodiles. The 'man-eater' crocodiles belief spreaded and ultimately those were killed.

In the year 1975, State Forest Department, took leading role for the conservation of this archic reptile through the assistance from Government of India. This Conservation Programme is also getting assistance from Food & Agriculture Organisations of the United Nations Development Programme. A Salt-water Crocodile Research and Conservation Project has been initiated since mid-July 1975, which is located at Dangmal close to the river Bhitarkanika. The prime aim of this Project was to acquire first hand

knowledge about the ecology of this crocodilian species through intensive research both in captivity and in the remaining wild population in the Bhitarkanika Sanctuary for Conservation of this endangered Crocodile.

Full protection has been given to the Bhitarkanika river and its associated creeks and nullahs with a view not to disturb the natural habitat of the Salt-water Crocodiles. Fishing is totally banned inside the Sanctuary and also no one is allowed to enter into the forest for collection of firewood. So, since last six years there is not a single case of attack on man by the crocodiles. All the surviving adults, sub-adults and juveniles are living freely inside the Sanctuary. They are not migrating to other associated rivers as had happened before 1974. They are seen either swimming in the Bhitarkanika river and creeks or basking/resting on the mudbanks close to mangrove vegetation.

"As happens in case of man eating tigers" so also the Salt-water Crocodiles have been inherited a very bad reputations as 'man-eater' actually, they live on fish food but all times circumstances make them ferocious and they run after the easy prey and ultimately man is the last target.

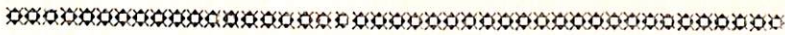
Now, Crocodiles are very safe in their home —the Sanctuary, and it is our duty to protect this unique reptile not only for ourself but also for future generations.

Research Officer
Bhitarkanika Sanctuary
Dangmal-754220

—X—

The Broken Soliloquy of Sun

SHRI PRASANNA KUMAR PATSANI



II

Days of festivity Maghasukla*
robed upon a saree of pleasure
all in picking it in music
Shamba tears his passion
a foam of repentance crowds the time.
Orissa peeps through the culture
flame buoyant the face of nature.
Memory polished the lap of Spring
Clutching the knot of fear

A sort of adventure emblemizing
my deep rest of life, Konark
rolling like a colourful vision
to the blind horizon my eye.
It pays to the salt of sea
and blood veiled with its mum.
My imagination shadows to sun
butterfly like to the lass of violet.
Sculptors turn into the echoes of clouds
casts a bower in the sky.

* A month of winter

Broken pieces of ivory
bends with the essence of culture
Konark roam you in the gambling of the fraude
the pearl of elephant crumbled into pleasure
the snail of sea forged to the lime of culture.
Sit on the tearful eyes you
twisting their lips to hell,
Sounding cataract of fragrance of musk
from the dear, you charm in the blood.
Drops by drops of fever binds the robe
of your pleasure.

I gaze in wonder to the horse
breaking the span of time
the elephant and lion adoring
the mask of mercy and justice
swing in the art. Ramachandi*
coffined near by you, a sweat
from your body on earth. O' Konark
I feel the blood of that heritage.

Dethroned from his victory
*Kalapahads comes, a stormy night
from the core of his drum beating.
Mine blood provoked to that
visible fluid of art. Rain swings in faith
He scatters the dread of the corps
in the weather of the human skin
wind thrills a river of wisdom.
A winter, a foggy winter
he belching out the norms of his desire
a silent music of his lust.
He twisted my memory, to the soil
of winking star. Morning closes its face,

Ramchandi becomes a scar of desire
On his face, smiling to the nectar of her breast
a storm rushes like a stranger.
She bears his face with a
host of lust tinged in the juice of
China rose. She flames in sea of blood
and a dawn locked up in his desire.
Bleeds she to his stress, Kalapahada

* A goddess as Old culture

* A king who conquered Orissa

Hails the motive of his drum
rainbow of his hopes fades.
Counts he her departing days
like a star to the season of earth.
Craves not she more a moment
her wisdom crippled a living monument.

A siren song, memory of the art
edges her eye for her lost days
Kalapahad enters like a darkness
to the stone. Cropped not she
in had of cruel time, Prajapati*
adding a bliss to it. A range of
difference stands the two pillars
of gate-way and temple
two vibrations of a lion and elephant
a lady swing in them a look to the
pomp of the past. The lady weaponed with
courage, mane of the lion and string
of the elephant, she holds to her love.

Konark sits over a bed of granite
a seat of dark night with a
stand of statues of sanyasis.
Clouds become a lock with a shadow
of human agony. Veda in sublime print
in milky-way, a sacred thread.

Konark, sits on truth with
a glaze of the ornaments, injured
never by the lust of gold. it adorns
a lady of century, a string of shame
falling from the sarees. Knee stands
for opinion, a keen hand recited
the flow with a spontaneity of breast.
Sun stands like throne, the sky altar.
Sorrow leaps up a weapon, lotus a pleasure.
a tide of clouds addressed
sun roams in seven colours
to the sphere of life evading
a touch to moribund of time.
Nature plagued to hollowness
with a rider of seven horses

*Mahabharat recited the sun
a bird of lost feet
quenched a blessing to it
*Kashyap offered a boon
*Binata swear for two children
Kadru a mother of hundred Nagakanya
Sun a bird of half romantic nature
a bond of zealosity of Binata.

Poem mine sings a bird to the sun
restless from one to other corner
of ever golden colour. The cobras
isolated roam in the crevices of their gift
holds the sun on head/looks the sky for an affinity
the faint twilight its witness.
The poisons cold to the best
a shadow become the blue of a sky raped.
pearl play in sun, affinity baffling the race.

A scale releasing the glory
the isolation plea to it.
Cobra comes at night
sun adores their love
a union palsied not in time.
Pigeon comes with their breath
a step forward in peace
from the crevices of stone
their eyes dance in sense of erotica
wings flicker in day broad light.
Cobra looks to the void
in a glance of anguish.

(To be continued)

-
- * The old epic of India, which sings the glory of Lord Krushna
 - * A Rishi
 - * A disciple to kashyap
 - * A disciple to kashyap
 - * A daughter of Cobra

Nature's Recuperative Force

Dr. A. K. MAHAPATRA



Man has in him a miniature universe. He is literally much more than mere chemical conglomeration of solids, water and the air. All changes in him are isotonic with a variety of changes in the universe. Different seasons are active cyclic processes to purify nature; for, the universe gets affected with unwanted quantity of heat, air and many toxic substances. The provisions of the Sun, the Moon, the air, the summer days, the rainy days, the winter days are intended to maintain the status quo in the universe.

To elucidate further : every pathological growth in the universe is effected by the accumulation of pollutants. The whole universe, in an attempt to get rid of such toxic substances, brings in it shower, storms, clouds, dewdrops, etc., Manifestation of these conditions may be slowly developing or abrupt. These conditions are outcome of degeneration, and can be compared with the appearance of diseases, either, acute or chronic, in man. As is the case with the universe, the human systems are exquisitely designed to instantaneously respond to the pathogenesis of human body. This phenomenon proves the efficacy of our internal organs to combat any such pathological growths. Hence, it is imperative to strengthen the organs and to stimulate their functions so as to keep the whole body fit.

Therefore, man depends on the nature. His body systems are designed to obey the natural laws. His body is capable of

accepting only the natural substances. In the event of any such pathogenesis, man can resort to the natural therapeutics which ably reverts the body to the status quo. The nature is all sovereign in this respect.

The nature is a well-systematised, well-organised, well balanced force a vital Force. It generates and destroys; it nourishes and nurtures; it is defensive and offensive.

Site—It lies in blood and lymph, inside cells and outside cells; it lies in tissue fluids, gland juices, and in hormones and enzymes; in proteins and cells. It lies in body and mind—in soma and psyche.

Nature of nature—The nature exists in life, promotes life, and it is life. It is harmony, it creates harmony, it remains in harmony and culminates in harmony. It starts with the first breath and ends with the last breath of life. The nature plays the fiddle in intrauterine life and goes on doing so till death, even after death-(Molecular death).

Broad Spectrum definition—Nature is, thus, a complex, homogenous harmonious physic-chemico-environmental process, wholly biological, modulated through cellular, molecular harmonal path-way.

Functions—It heals, protects, generates, vitalises, galvanises, stimulates. It removes, destroys, cleans. It detoxicates, dilutes, diffuses. It normalises, harmonises, tacclamatizes, synchronises and vitalises.

Disease, Death, Decay and Dissolution—Disease takes hold when nature's function becomes weak. When nature fails to heal, diseases advance and at least extinction of the life occurs. Protective agents, curative measures work through the mantle of nature and all these fails when nature fails or falters.

Decay advents when nature decays. In short, when the magic of the nature fails the tragic end comes.

Every useful factor, may it be, food or medicine, physical or chemical action, electrical or radiation—all mediate through

nature. Hence, if nature fails, tragedy comes, and nothings cures. Nature nurtures, and cures.

Now coming back to the concept of the Universe the COSMOS, the world, and the animation-plant Kingdom and animal Kingdom-including human. The nature is infinite and the mystery of its function is unimaginable and ill-conceived. Man's exploration of the interior, meaning the nature in his system in Soma and Psyche—far interior to his exploration of the exterior—the external nature. Nature vibrates in harmony, rhythm and symphony.

×

Contribution of the Tribals to the Political life of Southern Orissa during the 19th Century

Dr. BHASKAR DAS



In the Southern tract of Orissa, comprising of the Ganjam, Koraput and the Phulbani districts, the Kondhs and the Savaras constitute an important segment of the total population of Orissa.¹ The area of Kondhs is known as the Kcdhmals,² including the tributaries of Orissa, Bouch, Dasapalla and Nayagarh. The Kondhs are numerically superior in the district Koraput while in between the border of Koraput and Ganjam, the Savaras inhabit in the interior hills on the banks of river Bansachara and Mahendratanya. Apart from the Ganjam maliahs, the Savaras are also found on the river banks of Godavari in Bhadrachalam. In Orissa an isolated section of the Savaras live in Keonjhar.³

The chief occupation of both these tribes is cultivation. The type of cultivation is known as 'Kumeri' or 'Podu'. The people mostly for their life depend upon the forest products of their places. Their inability in numerical accounts and general isolation from the majority section of the civilized people are the chief causes of their long poverty and suffering. The Kondhs though prove much better than of the Savaras, in carrying out their business on forest products, both equally suffer lacking trade tacit. The Kondhs seem to be in a good economic position than of the Savaras. The misery of the Savaras is due to their incapacity to assimilate and accept a fusion of culture, mostly on account of their likeness to remain independent of any control and as such to survive as an identical society. But this problem would have been

overcome, had there been no language barrier. The language the Savaras speak has no script. It is an oral language. So also of the Kondhs. But the Kondhs attitude to life had been changing since British rule, and they had been enjoying an advantage of intercourse of culture with the civilized people. In course of time they have picked up the Oriya script, have been using that in writing, retaining their language spoken, which the Savaras could not. Though the Kapu and Godia Savaras have been influenced by the Telegu society in the Vizagapatam district and by the Oriya society in the Parlakhemundi area in the Ganjam district, respectively, their sense of acquisition, in the past, was not so high as in the case of the Kondhs. In spite of some socio-economic drawbacks, these tribes contributed much to the political unrest of the region during the nineteenth century.⁴

In the nineteenth century, the Company government came in contact with the Kondhs, during the period of Ghumsur war.⁵ Not that the Company government did not know that a people so savage then, were living in the region, but it was ignorant about their social and religious life. During the early period of its rule, it had no chance to come in close contact with these people because of the internal system of government, which the company took time to understand. Towards the later part of the company rule it was beset with problems both political and religious that prevented in knowing these tribes better than it knew through the Meriah agents.

The meriah mission in course of its work, conceived education as the only effective and wide media that could help these tribes to bring a change in their social and religious outlook, and their practice of sacrifice associated with their god or goddess.⁶ It was only the kondhs who had offered human lives, and as such 'Meriah' was prevalent in that community. The savaras did not have any such practice.⁷ Moreover, in the year 1855, the meriah agent came in contact with the Savaras. So it can be conceived that the Kondh society had much advantage than of the savaras received the humanitarian service of the west that brought the former to the lime light of civilization.⁸ Facts like that the place of inhabitation was inaccessible and the non-existent of the institution of Meriah in the savara community had substantial reasons to account for the non-association of the western government with this tribe for a considerable time. As such the impact of civilization on these two tribes varied comparatively. Development of communication facilities, economic penetration and migration of these aboriginals to different parts of the country too had certain impact on their out-look, and these enabled economic contacts.⁹

Whatever might have been their social and economic position, the political unrest of the region during the nineteenth century owes much to these tribal people. The East India Company, on assumption of authority over the tract in 1765, faced the chivalrous and war like hill rajas of the tract. Most of these rajas, apart from their regular paiks in their military services, had a good number of tribal people under different denominations, such as Bissoys, Patros and Muthadars, etc. If the rajas of the tract were said to have risen against the East India Company, it was only relying upon the tribal strength and faithfulness which was motivated politically.¹⁰

The political unrest of the region can mainly be attributed to the rigid enforcement of the revenue laws. The permanent settlement was introduced at a time when the rajas were yet to render their due obedience to the Company authority. The people had a greater regard and obedience to their rajas. Any interference of the company in the administration of the zamindars was viewed

an attempt to deprive them of their hereditary right to hold the zamindary. This the people took not a personal cause of any raja, but of the people in general. The stream of such notion prevailed in the mind of the people throughout the century. Gradually, the concept of British interference the people felt in their social and religious life. When interference in religious life was felt,¹¹ which the Company Government did not conceive at any time, but to take up some reformatory measures it effected certain administrative changes association of the tribal people with the political movements became direct. In the sense, they mobilised their own tribal force against the British Government. In order to vindicate their right, they rose in rebellion from time to time, viz. the Parlakhemundi rebellion in 1832, the Ghumsur rebellion in 1832—36, the Kondh rising in 1853 and 1857, the savara rebellion 1864, the Kotia rising 1866, the Cottigido rising 1877 and the Rampa rising in 1880. Of these the most important were the savara rising of 1864 and of 1866. The later could not be much successful due to the outbreak of great famine. However, the 1880 movement spread from Godavari to Khurda in Orissa, in which the participants were mainly Kondhs and some savaras, who were mistaken for plunderers.¹²

Long before the Parlakhemundi rebellion of 1832, the Savaras had associated in the movements against the Company under Gudiapalli Lutchana, during the rajaship of Pratap Deb. Pratap Deb was given engagement of the zamindary, after his father Durga Rauz died. In between 1814—1818 Lutchana, an illiterate savara gave leadership to the people of this zamindary. His military valour aspired even Gopinath Patnaik, a member of the well known family of poet Gopal Krishna Patnaik, who secretly negotiated on behalf of the zamindar, in consultation with the other rebel leaders of the tract for a united attack against the company.¹³

Similarly, the kondhs of the Moheriy zamindary were organised under the leadership of Gopinath and Sursing Maratha or Mahurta, against the Company Government for illegal attachment and sale of the zamindary in 1810. Of course, earlier, a movement against the company led by Majhi

Deo and Sano Deo proved futile. However, the raja of Ghumsur, through Sursing and other rebellious leaders of Orissa, could assemble a handsome number of Kondhs to partake the paik rebellion of Orissa in Khurda in 1816.¹⁴ The humiliating policy of the Company government against the raja of Ghumsur had united the Kondhs under a general interest to demonstrate their feeling towards the ruling party. The rising from 1836—47 was headed by Dora Bisoy and Chakro Bisoy. It had a political significance.¹⁵

With the introduction of the police system in the maliahs of Ghumsur in 1852, the kondhs of Lankagar demonstrated a minor rebellion in 1853 and in 1857. Behind these rising worked the motive of challenge to the work of the meriah agency.¹⁶

In 1862 the meriah agency was abolished. To make the message against meriah more popular, police system was effectively organised. This added much to the discontentment of the kondhs. It was partly from their dislike to confine their conduct to any sort of rule under a foreign government. Finally, this gave a rising known as the 'kootia rising' of 1866. Many kondh villages joined the movement. Originally, the movement started in the Jeypore country. In 1864, certain proceeding of a Police Inspector brought on a petty insurrection among the savaras in 1865. It was suppressed momentarily, with the help of Ganjam police, but was followed by the 'Kootia rising'.¹⁷

But the affair continued till 1877 under different forms and names. The rising of 1877 was known as the 'Cootigodo rising'. The general discontentment, apart from the causes of police indiscipline in administration, was due to the government vetty work during the cultivating season. This was checked. Two years later, in 1879, the Rampa, otherwise known as 'the fitoory conspiracy' broke in Godavari district. It spread into the Jeypore zemindary and Malkanagiri early in 1880. This movement penetrated into Orissa as far as Khurda, through the Ganjam Maliahs¹⁸. The failure of these movements was not due to the imprisonment of the rajas, but of the tribal leaders. The spark of revolution was not

extinguished at the arrest, trial and life sentence of these leaders, but the action of the company government illuminated the spirit of challenge in other tribal leaders, outside the region, among whom prominent was Taman Dora, the leader of the Rampa rebellion of 1880.

These rising had certain impact upon the policy of the British administration. At least, the Government could amend certain laws concerning Abkari and land revenue, so far the tribal people were concerned. Though these proved of little beneficial to these people of the tract, these could satisfy them timely. Because of these early movements a wider and greater association of tribals under the general quit-movement could be possible in later years.

REFERENCES

- (1) Circuit Committee report Vol.-18-B. (report of Mr. Oram on the Zemindary of Parlakhemundi).
- (2) Standing information of the administration of Madras Presidency 1893. PP-53-9.
- (3) The Kondhs of Koraput—By Dr. K. C. Jena. (The Indian Journal of Social work—Vol.-XXIII. No. 1 P. 57-58.
- (4) Descriptive Ethnology of Bengal E. T. Dalton. P. 331.
- (6) Orissa District Gazetteers—Koraput, By R. C. S. Bell. P-71.
 - (a) Ganjam Manual—T.J. Maltby
- (6) Report of the Meriah agents
- (7) *Ibid*
- (8) Annual report on the administration of the Madras Presidency 1855-66.
- (9) Ganjam Manual—T. J. Maltby
 - (a) Report of the meriah agents
- (10) Thackery's report 1819—on Moherry, Ghumsur & Ganjam.

(11) *Ibid*

(a) Letter to Chief Secretary from H. Spootiswood dated the 25th January 1817.

(12) Report on the administration of Madras presidency 1879-80 P-14,

(13) Cit opp.-11

(14) Cit opp.-11.

(15) Annual reports on Madras Presidency—1836—46

(16) *Ibid*

(17) Annual report on the administration of Madras Presidency 1164—68.

(18) Report on the administration of Madras Presidency 1880—81.

Berhampur University
Bhanja Vihar, Berhampur-7

—X—

“I am absolutely convinced that to return evil for evil leads nowhere. To return good for good is no virtue. The true way is to return good for evil.”

—Mahatma Gandhi



ORISSA CEMENT LIMITED

RAJGANGPUR

ORISSA

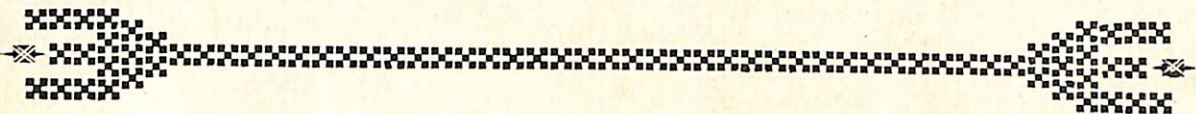
Manufacturer of

Konark Brand Cement

Quality Refractories and Spun RCC Pipes.

Cult of Varahi in Orissa

Dr. H. C. DAS



The worship of Varahli by a tribal lady does, necessarily, never speak of its folk-origin. Rather the dream to propitiate her at the place in 'Vana Durga-mantra' is indication of the loss of Varahi Puja at the place by the time. The worship ordained to be done with the common Vana Durga-mantra, which is not found in Tantra Sara etc., but employed in the worship of Durga, is more or less a speciality of Orissa. Folk origin can then only be attached to Varahi if ample evidence of the worship by the tribal people is found at other places of our country.

—Chief Editor

Varahi, one of the fiercest manifestations of the Mahadevi, one of the prominent mother goddesses, a ramification of sixty-four Yoginis and the counterpart of Varaha Visnu, was created from the energy of Varaha for annihilation of the demons—Chanda, Munda, Sumbha, Nisumbha, Raktabija and their king Mahisāsura. Varahi along with other mothers like Brahmani, Mahesvari, Kaumari, Vaisnavi, Indrani and Chamunda assisted Ambika in her fight against the demons. Since she is propitiated with seven or eight mother Goddesses her origin is linked with them in a particular period of reflection.

Similar to other gods and goddesses of the Brahmanical pantheon the origin of Varahi is traced to Puranas, which are the

last great authority on Indian religion. The Skanda Purana, Markandeya Purana, Matsya Purana, Devi Purana, Brahma Vairavata Purana, Devi Bhagavata, Varaha Purana, Linga Purana have lucidly described about the origin of the Matrukas, their iconographic features, their number (which of course differ from Purana to Purana) and their role in the religious worship. Of numerous mothers enumerated in the Puranic texts usually seven have been accepted, supported by the iconographic data.

The antiquities of the mother goddesses is veiled in obscurity, though the scholars have attempted to trace the prevalence of their worship to the Indus civilization flourished in the third millennium B. C. In fact, worship of Siva and

Sakti in Indus civilization was prominent as is reflected from the excavated remains. While speaking about the religion of the Indus sculpture Sir John Marshall emphatically indicates that Sakti worship was of great antiquity in India; it originated out of the mother goddess, and it was closely connected with the cult of Siva. But it is not definitely known the position held by the mother goddesses in the religious patheon that developed after the decline of the Indus valley civilization till the epic period or the Puranic age. I am of the view that the cult as a manifestation of Female principle might have continued to flourish during this period. Had the cult not continued during this period the Puranas which contain accounts of the creation of the universe, its successive generations, genealogies of the kings, the royal dynasties, religion and mythology, origin of gods and goddesses, it could not have been recorded so nicely in glowing terms. Purana, therefore, as the last great authorities in matters of religion systematised all the thoughts of the previous age. Hence in my discussion I rely on the Puranic accounts in regard to origin of the mother goddesses and deal with the development and spread of the cult with reference to the available archaeological data. Of the different Puranic stories relating to the origin of the Matrukas I am tempted to cite a few interesting ones. The Markandeya Purana narrates that these deities were born from Brahma, Visnu, Siva, Skanda and Indra to help the Mahadevi in fighting the demons like Sumbha, Chanda, Munda and Raktabija, who were endowed with the character of multiplying into demons equal to himself in strength and prowess no sooner drops of blood oozing from the wounds on the person of the Asuras touched the ground. Varaha Purana relates Siva's combat with the powerful demon Andhakasura. To assist him in the battle Siva created from his energy the goddess Yogesvari out of the flame that issued from his mouth and similarly the other major gods also created their Saktis to help Siva. It was with the assistance of these goddesses (Matrukas) Siva caused annihilation to the demon. The story is recorded in a different way in the Matsya Purana. The account runs that when Siva discharged his Pasupata weapon against Andhaka numerous demons of similar stature sprang up from the blood gushing out of his body. Siva created 134 goddesses of formidable countenance to drink the blood till the demon was killed. After this event the goddesses started their campaign of destruction of the whole universe. Siva prayed to Narasimha who appeared instantly with his claws besmeared with the gore of Hiranyakasipu, his tongue flapping out like a spark of electricity, with his formidable fangs and long teeth, full of mighty energy and roaring like rumbling clouds, agitated by the fearful wind, that blows at the time of the destruction of the world, thundering like oceans, with his mouth wide open, his nails hard like thunder-bolts, with his eyes gleaming red like sun, burning with fire of fury, wearing fine ornaments and garments, spreading his lustre all over the universe, shining like the fire of blaze, yet with his beautiful and illuminating face. He created thirty-two divine mothers to overpower the goddesses already created by Siva. All these Matrukas subdued them and all created by Siva and Narasimha took refuge with the latter who advised them to foster and guard the universe as men and animals look after their children. The story indicates the motherly aspects of the divine mothers. Various other stories found in the Puranas indicate the significance of Matrukas as mother goddesses. But the peculiarity in their iconographic feature is that they are never depicted in the position of fighting the enemies like Mahisamardini, rather they are seated in case associated with child. However, so far their characteristic features are concerned they bear the forms and the cognisances of the gods whom they are named after. In accordance with Markandeya Purana the Sakti of the individual gods are characterised by the respective forms, ornaments and mounts of those gods. "These are the Female counterparts who are armed with the same weapons, wear the same ornaments and ride the same Vahana and carry the banners as the corresponding male gods do. Accordingly Brahma should sculpture like Brahma, Maheswari like Maheswar, Vaisnavi like Vishnu, Varahi a short woman with the face of a boar, a robust body with bulging belly like Varha-Vishnu, Indrani like Indra and Chamunda repre-

sented as skeleton in appearance—flesh dried up bones showing through the skin, eyes sunken and abdomen contracted with hair standing with the shape of flames tied with snakes, with the teeth and tongue protruding out, wearing a garland of skulls dressed in tiger skin having a dead body or an owl or a vulture as her vehicle.

It is peculiar that the statues of the Matrugas are not represented as war goddesses assisting Siva in his fight against Andhakasura or Ambika against Sumbha, Nisumbha and Raktavirja or drinking the blood of the demons oozing out of their bodies rather they are depicted in standing or sitting pose. They are either two-armed, a four-armed, usually held in the Abhaya in the Varada poses and with Ayudhas accompanied by their Vahanas and the children. The usual iconographic characteristics of Varahi run as follows—"Varahi has the face of a boar and the colour of the storm cloud. She wears on her head a karanda-mukuta and is adorned with ornaments made of corals. She wields the *hala* and the *sakti* and is seated under a *Kalpaka* tree. Her Vahana as well as the emblem on her banner is the elephant. To this description the Vishnudharanottara adds that she has a big belly, according to this authority, she has six hands, in four of which she carries the *danda*, *khadga*, *Khetaka* and *pasa* the two remaining hands being held respectively in the *abhaya* and *varada* poses. The *Purvakaragama* says that she carries the *sarnga-dhanus*, the *hala* and the *musala* as her weapons. She wears on her legs *nupura-anklets*."

Leaving aside the archaeological remains of the mother goddesses retrieved from Harappa and Mahenjodaro we come across the reference of Matrikas for the first time in the Gangaadhara stone inscriptions of Kumar Gupta I. In chronological sequence the inscriptions of the early Chalukya rulers refer to seven mothers. The Bihar Stone inscriptions of Skanda Gupta associate the Matrugas with Kartikeya. Hence it may be pointed that the mother goddesses in group or in individual form figure prominently as an important aspect of Sakta tantric cult from the Gupta epoch, when the Great Puranas were systematically compiled. In subsequent period, as will be noted in the

succeeding pages, the cult of mother goddesses became so prominent that they crept into the fold of Buddhism and Jainism and spread in all parts of India.

So far Orissa is concerned it has been a prominent centre of Sakta tantricism from the early stage of afflorescence. According to Hevajatantra (7th century A. D.) Sakta tantricism flourished in four great centres—Uddiyana (Orissa), Purnagiri, Kamarupa, Jalandhara. In the list of Sakta pithas enumerated in Puranas and in Tantras, Orissa is figured prominently, of course in different names. In some tantras and inscriptions Udra (a visaya or district) in Uttar Tosali, comprising the present regions of Dhenkanal, Talcher, Balasore districts, North Cuttack and Midnapur. Kalika Purana compiled in the 11th century A. D. in substantiating the statement of the earlier texts emphasises that the first Brahmanical tantric pitha in India originated and developed in Uddradesa, the presiding deities of which were Lord Jagannath and Goddess Katyayani. The author in further highlighting the fluorescence of the Sakta tantrism in Orissa has remarked in his book "Tantricism—A Study of the Yogini Cult" in the following statement. His view point is based on the survey of the cult images in Orissa and the literary evidences. "The existence of a large number of Sakta tantric and saiva temples in Orissa, particularly in the coastal belt substantiate the statement of this Purana. These are concentrated mainly at Bhubaneswar, Puri, Jajpur and the Prachy Valley. They include two-sixty-four Yogini temples, 12 sets of Saptamatrugas in a group as well as individual shrines at Varahi, Chamunda and Indrani".

That the Sakta tantric cult had a very long career in Orissa is proved by the existence of numerous Sakta tantric works in palmleaf manuscripts. This includes Uddisa Tantra, Kriyoddisa Tantra, Uddamereswar Mahatantra, Tantra Chintamani, Saradarchanapaddhati by Godavara Mishra, Bhubaneswari Pujapallava, Durgochhava by Gajapati Purusottam Deva, Durgochhava Chandrika by Gajapati Rama Chandra Deva, Durga Yajnadipika by Jagannatha Acharya, Tararchana Tarangini by Ramachandra Udgate,

Tarinikula Sudha Tarangini by Ramachandra Udgata Jnanavalli Tantra and Sivarchhāna Paddhati by Lakshesvara Rath, Vanadurga puja by Raghunath, Shyamarchanapaddhti by Pattajoshi Vasudev Rath, Shri Vidya Padhati by Krushna Mishra, Ugratara Padhati by Damodar Nandi, written by the scholars of Orissa along with three hundred palmleaf manuscripts on tantra written by scholars of other parts of India now preserved in the Orissa State Museum, Bhubaneswar. Several important works in Oriya such as Kalika Purana, Chandi Purana of Sarala Das, Bata Avakasa, by Balarama Das, Mahabharata by Sarala Das and manuscripts dealing with magic composed in different periods up to the 18th century clearly establish the continuity and prevalence of Sakta tantricism in Orissa.

The archaeological evidences reveal that the cult of Saptamatrukas vis-a-vis the cult of Varahi flourished in Orissa from 6th-7th century A. D. The earliest group of Saptamatrukas along with their associates Ganesa and Virabhadra is noticed on the northern wall of the Parasurameswar temple (650 A. D.) at Bhubaneswar. The images of Matrukas here are four armed. Varahi in this group holds a lotus and a fish in her right hands and a vase with left. The pedestal also contains a seated human figure with two tripods. The fish in the hands of Varahi indicates the tantric aspect of Panchamakara. The matruka figures in the Vaital Temple (8th century A. D.) at Bhubaneswar come next in order of chronology. Chamunda is the presiding goddess of the shrine locally known as Kapali and the temple enshrining her belongs to Khakhra variety specifically meant for the sakta goddesses. The images are seated in Yogasana on full blown lotuses. The sow headed Varahi here holds a fish and battle-axe are in her hands associated with a devotee. The matrukas in the ceiling of the Jagamohan of Mukteswar Temple contains beautiful figures of Saptamatrukas, each occupying a petal of the eight-petalled lotus forming a sort of canopy. Here we come across for the first time babies in the arms of the matrukas (except Chamunda). Contemporaneous of this group are the Saptamatu-

kas on the edge of the Markandeswar tank (Puri), at Jajpur (Two sets), one on the Dasaswamedha Ghat and the other in the compound of S. D. O., the miniature matrukas in the lintel of Durga temple at Sergarh (in the district of Balasore), at Kundeswar near Jagatsinghpur and the matruka figures of Belkhandi in the district of Kalahandi, the figures of Dharmasala now preserved in the Orissa State Museum, dancing matrukas preserved in Balasore Museum, image of four-armed Varahi holding a Gada in the right upper, Panapatra in left upper, a child in the left forearm and the right forearm in vyakhana mudra seated on a lotus pedestal (Devoid of Vahana). It is interesting to note that the image of Varahi in the S. D. O. compound of Jajpur



Varahi, in the S. D. O. Compound, Jajpur

seated in Lalita pose associated with a child on her left lap (right hand from elbow broken) and her Vahana, a crouching buffalo is the biggest ever discovered in India. In consideration of the workmanship, inscriptions

evidences, historical accounts and other corroborative facts, the above noted images are assignable to Bhauma epoch (736—940 A. D.). The Saptamatruka figures now preserved in the Khiching Museum (10-11th century A. D.) with Chamunda as the presiding goddess now worshipped as Kichakeswari bespeak the flourishing stage of Sakta tantrism in that area bearing the Bhanja art tradition.

Leaving aside the worship of Varahi in association with six other mothers she is propitiated individually as a cult. The image of the goddess worshipped at Chaurasi of Prachy valley in the district of Puri, is an instance of fluorecence of



Varahi, in Varahi temple of Chaurasi, Prachi Valley (Puri district)

the cult. The image "made of chlorite, the two armed image (6 ft. 1" in high and 2 ft. 9" in wide) of the enshrined deity, Varahi which is in a perfect state of preservation, is bold in execution seated in Lalitasana on a cushion placed

on a plain legged seat, with her hanging right leg resting on a crouchant life like buffalo, the figure holds in its left hand a cup and in its right hand a flesh. Decked in finger-rings, anklets, valayas (one on each hand), armlets, two kinds of hara, large ear-studs and a fiara over the hair which rises upwards in spiral coils, the three-eyed deity is pot-bellied and is clad in a dhoti. The plain halo is oval, and the back side of the figure is cut out of the oblong back-slab which has at the top corners a vidyadhara, with a garland in hand, flying through the clouds. The image placed on a pedestal 5ft. 6 in. by 2 ft. 9 in. excluding the projected chanel) is partially fixed into the back wall." The temple enshrining the colossal image of Varahi comes in the order of khakhra and bears a resemblance to the Gouri temple of Bhubaneswar. On stylistic consideration the temple appears to have been slightly earlier than the Mukteswar. Its surface is embellished with lavish carvings, narrative panels of Ramayana and the erotic couples. The architecture bears the characteristic features of Bhauma age. In the Jagamohan of the temple are seen two loose images of pot-bellied Varahi seated in Maharaja lilasana, one having a skull cup in the left hand and a fish in the right and the other four-handed holding in the lower left hand a skull cup, upper left hand, a rosary and lower right hand a water pot (upper right broken) associated with her mount buffalo and two devotees. These two images probably were enshrined in separate temples. In addition to this there are several images of Varahi in Prachi valley indicating the significance of the cult in the hoary past.

An image of Varahi (3½×2 ft. 2 in.), two armed seated in Raja-lilasana with fish and a wine vase in the hands at Banchua in Anandapur subdivision of Keonjhar district is worshipped as pithadevi drawing a large following from the neighbourhood. Mention may be made of a colossal figure of Varahi at Narendrapur of Bhadrak subdivision, a beautiful such figure in the collection of Lakshmannath Ray Mahasay (Balasore district), a four-armed Varahi in Balusahi of Puri town and

several other in the coastal belt of Orissa. It will be further interesting to note that the Matrukas come in the group of sixty-four Yoginis at Hirapur in the district of Puri and at Ranipur-Jhari of Balangir district.



Varahi at Balusahi, Puri

lilasana holding each matsya in right hand and wine vase in the left associated with a seated figure below. The figure associated one with the four images looks like a child but can be identified as a devotee. The figures are in fierce pose having pot belly, sow face well ornamentation seated in simhasana. The shrine has no history but is associated with



A manifestation of Pancha Varahi, Satbhaya (Cuttack district)

The Cult of Pancha Varahi is the speciality of Orissa. The custom of worshipping of five Varahi in a single shrine is not traceable any where in India except Orissa. The images of Pancha Varahi worshipped in modern temple located in the village Satvaya on the sea shore of Cuttack district furnish the singular instance in the religious worship of India. Of the five images one is lost and is replaced by another unidentified sculpture. The Pancha Varahi here are popularly known as Panchurai. The first image in the group (original image being lost) is known as Batakumari, the second (4 ft. 2½ ft.) as Panchu Varahi or Panchurai, the third as Vimalai (of the same size), the fourth as (same size) Kamalai and the 5th one as Janjali seated in Maharaja

an interesting tradition. The legend current in the area runs as follows. In the deep forest of Kanika stretched up to the sea Pancha Varahies were staying unnoticed by the people. The animal clad deities while wandering in the forest thought of spreading their fame for the welfare of the people. They exhibited themselves in the shape of blazing flames rising to the sky. The people residing in the neighbourhood were surprised at the unusual blazing of fire. When this

continued for days together, people were stuck with fear. They proceeded in a group and intimated the interesting happenings to the king, who was fortunately seen in the forest in a hunting expedition. The king was also surprised to hear such unusual event and instantly ordered his minister and courtiers to proceed to the site. The people and the officials of the palace cleaned the way and arrived at the spot. Being aware of the approach of the people, they subsided the fire and hid themselves under the earth. The people and the officials could not find any sign of the blazing fire but heard the musical sound coming from within the earth. At the order of the minister the site was dug out and the five images of Varahi were recovered. The goddesses told the king in a dream to propitiate her at the place with devotion as Vana Durga. A house was constructed for her at Satvaya, the place of the origin of the goddesses. As ordained by them animals were sacrificed. The priest and other service castes were attached to the deities. The Brahmi priest who was so engaged

was infatuated to see the goddess in the shape of a beautiful maiden. When he wanted to touch her for fulfilment of his passion the goddess cursed him turning him to a piece of stone. The stone was kept on the edge of the pond for use by the people. The goddess directed the king in a dream to worship her by a tribal lady and never by any male priest." Since then a tribal lady has been in the services of the deity.

The significance of worship of the shrine by a tribal lady reminds us of association with the tribals who probably inhabited the area densely in the past. It appears that the cult was originally in folk form and later on was superimposed by the Hindu sculptures. The tradition noted above was attached perhaps after installation of the goddess in iconic form.

A short survey of the Varahi images indicates that the cult rose into eminence in a group of mother goddesses or in individual form during the time of Bhaumakara rule. Most of the images so far discovered belong to this era. The cult is still in existence as an important manifestation of Female Principle.

Superintendent,
Orissa State Museum, Bhubaneswar

— × —

Orissa poor gaining ground

A visit to Baniapada village in the Gondia Block of Dhenkanal district revealed the achievements of the ERDP Scheme. Instead of harvesting the economical paddy as in the past the 60 selected families were growing several annual as well as cash crops—maize, cotton, groundnut, brinjal, chillies, banana to their benefit.

Nagpuri Behera, an agricultural worker was given a plot. That he was working since December last on a daily wage of Rs. 5 for every day of work. He disclosed that he had been able to earn Rs. 2,000 from his yield of brinjal and Rs. 500 from chillies. He already had 100 bunches of

banana from which he expected to earn an average of Rs. 1,500. He was thus able to buy a cycle and keep Rs. 400 in a nearby savings bank. This contrasted with his past when he worked for only two to four months in a year and was left with nothing to fall back upon.

Dhruba Charan Bhuyian, who was earning a daily wage of Rs. 3 for the month or two in a year. Now he had his own land and made Rs. 500 from maize and Rs. 250 from groundnut.

(From The Patriot : November 15, 1981)

MIND AND MATTER

SHRI DEBAKANTA MISHRA

The Bivalent Psychic Selves

To understand the nature of the human-self and to discover the links it has with the whole of the universe, there exists a double circuit of knowledge. On the one hand, human-self obtains information about the universe through a channel of the senses, which we call the sensory knowledge. On the other hand, man is composed of living elements and primary corpuscles that are co-extensive with the whole universe, so has an intuitive knowledge of the whole. The language that applies to our sensory knowledge is called objective, for it is based upon the discontinuous nature of objects. The language structuring our intuitive knowledge is on the other hand symbolic and is meant to describe the real and continuous aspect of things which underlies their known and discontinuous aspects.

Considering the human-being as consisting of all the links that unite him with the cosmos, it has been found that the self is split up into two parts; namely, the conscious-self and the unconscious-self.

The conscious-self is composed of all structures, each being succeeds in building up by creating relationships between all the items of information he receives from the universe. In practice, this consists of arranging the relationships in a language. Whereas the unconscious-self constitutes an unformulated know-

ledge, because it has not yet been structured that is to say, it has not yet become conscious. From all the masses of experiences contained in the unconscious network, there finally emerge broad revolutionary trends which are of considerable importance to each one of us because they are the fruits of immense exploration of space and time undertaken by life. Dr. Carl Gustav Jung, doctor and scientist, visionary and thinker, who ranks with Albert Einstein and Sigmund Freud as one of the great thinkers of twentieth century has coined the term; '*archetypes*' for these broad evolutionary trends.

Man is 'bivalent' by reason of his self, both conscious and unconscious. The link between the conscious-self and the cosmos are abstract in character. The conscious-self abstracts a certain amount of information coming from the cosmos and classifies it according to a certain number of postulates. This results in taking actual cross-sections through the universe; whereas the universe needs to be considered as a whole and not through the medium of cross-sections. The limitations of our sensory organs is incapable of collecting all the information from the cosmos to activate the conscious-self to give us adequate comprehension about the underlying reality of the cosmos.

On the other hand, the archetypes which are the dynamic nuclei of the unconscious psyche, guide our behaviour

drawing upon all life's past experience and throw light not only on the past but on the future. By acting directly or indirectly upon man the great evolutionary archetypes finally break through in the form of *symbols* into the human conscious.

To comprehend the hidden reality of the known universe based upon sensory knowledge, the archetypes of the unconscious-self guide the conscious-self in either of the following two ways:

- (a) Man analyses his environment by observation, structures it by language, and finally pushes this structuring to the point of discovering symbols which are a translation of the archetypes.
- (b) Man is besieged from within by the archetypes and this ends by producing conscious symbols translating these archetypes.

II

Koestler's Pill to Co-ordinate the two selves

The question arises: why is it not possible for the archetypes to manifest themselves in the conscious-self to enable man to comprehend the cosmos in its totality? Why is it not possible for the sensory knowledge to blend together automatically so as to give us a true picture of underlying reality of nature and to guide us to follow the evolutionary trends? Arthur Koestler has found the answer in modern science. Papez-Maclean theory states that there are fundamental differences in anatomy and functions between the archaic structures of the brain which man shares with the reptiles and lower mammals and the specifically human neocortex, which evolution superimposed on them without, however, ensuring adequate co-ordination. The result of this evolutionary blunder is an uneasy co-existence, frequently erupting in acute conflict, between the deep ancestral structures of the brain (identified with the unconscious self), mainly concerned with instinctive and emotional behaviour and the neocortex (identified with the conscious-self) which endowed man with language, logic and symbolic thought.

Arthur Koestler in his latest magnum opus, 'Janus: A Summing up', writes, "We, thank God, have a solid corpus callosum which integrates the right and left halves (of the brain), horizontally; but the vertical direction, from the seat of conceptual thought to the spongy depth of instinct and passion, all is not so well. The evidence from the physiological laboratory, the tragic record of history on the grand scale, and the trivial analogies in our everyday behaviour, all point towards the same conclusion". Koestler believes that modern medicine may correct evolution's glaring blunder so that reason may be reconciled with emotion. In this context he writes, "To neutralise these pathogenic tendencies does not seem an impossible task. Medicine has found remedies for certain types of schizophrenic and manic-depressive psychoses, it is no longer utopian to believe that it will discover a combination of benevolent enzymes which provide the neocortex with a veto against the fallies of the archaic brain, correct evolution's glaring mistake, reconcile emotion with reason and catalyse the breakthrough from maniac to man". It is to be noted that Koestler's thesis is based on some findings from physiological laboratories, which have not yet been corroborated by any findings from micro-biological researches. Science has yet to give a final answer as to whether our genetic code incorporates within itself the remedial measures that Koestler's enzyme combination is expected to heal. Even his thesis has been strongly refuted from ethical and sociological points of view. In an article entitled "Arthur Koestler's Theodicy: On Sin, Science and Politics" (Published in the February, 1979 issue of Encounter), Stephen Toulmin, the eminent philosopher of science, has convincingly explained that psychopharmacology is no answer to this evolutionary blunder. Even if Koestler's pill is made available, it holds no hope of building a rational World order. As Toulmin has aptly pointed out, "The general availability of Koestler's drug would only accelerate the coming of W. B. Yeats's new Behemoth. Failing the creation of new and powerful institutions of international Co-operation,

it would lead to a situation in which "the best" finally lost the last of their "conviction", while the 'worst' retained their passionate intensity".

III

Microphysics and Parapsychology: A Parallelism.

Relativity and quantum mechanics are the epochmaking discoveries of twentieth century. Relativistic quantum mechanics and quantum electrodynamics have altered man's views about the microphysical world. The great iconoclast, Werner Heisenberg, has uprooted the casual determinism in physics by his celebrated 'Principle of Indeterminacy', which is as fundamental to modern physics as Newton's laws of motion were to classical mechanics. This principle states that the more accurately the physicist is able to determine the location of the electron, the more uncertain its velocity becomes; and *vice versa*. This indeterminacy is not caused by the imperfection of our techniques of observation, but by the inherent nature of the electron as both particle and wavelike, which makes it both theoretically and practically impossible to pin down. This implies that at the subatomic level the universe at any given moment is in a quasi-undecided state, and that its state in the next moment is to some extent indeterminate or free. Because of this fuzziness of particles, physicist's statements about subatomic particle can only refer to *probabilities*, not to uncertainties; in the microworld, the laws of probability supplant those of causality. Another important concept in modern physics is Niels Bohr's idea of complementarity. Modern microphysics has discovered that one can only describe light by means of two logically opposed but complementary concepts: the idea of particle and the wave. In a simplified way we may state that under certain experimental conditions light manifests itself as if it were composed of particles, under others, as if it were a wave.

Principles of indeterminacy and complementarity have led modern physicists to conclude that the observer must choose his experimental set-up, by doing so he excludes some other possible set-up and its results. Furthermore, the measuring apparatus has to be included in the description of events because it has a decisive but uncontrollable influence upon experimental set up. Thus, where classical physicists saw determined causal natural laws of nature, modern physicists now look only for statistic laws with primary probabilities. The fundamental lesson which bubble chamber and other sophisticated instruments teach physicists is that on subatomic level our concepts of space, time, matter, conventional logic no longer apply. Thus, two particles may collide and break into pieces, but these pieces may turn out to be not smaller than the original particles because the kinetic energy liberated in the course of collision has been transformed into mass, as predicted by the historic equation $E = mc^2$. Or, a photon, the elementary unit of light, which has no mass can give rise to electron-positron pair which does have mass, and the pair subsequently collide, and by the reverse process transform into a photon. These fantastic events in the bubble chamber have been compared to the dance of Shiva, with its rhythmic alterations of creation and destruction. How to theoretically predict the behaviour of such dancing particles? Physicists are using quantum—statistical methods to predict the behaviour of such particles, which are considered as stresses or singularities in the continuum of the physical field. Physicists are only concerned about the chance or probability of occurrence of a certain event. Calculating the primary probabilities from their wave-mechanical equations, physicists can only state whether such-and-such event is likely to occur in certain physical situations.

Bohr's idea of complementarity is specially interesting to Jungian Psychologists, for Jung saw that the relationship between the conscious and unconscious mind also forms a complementary pair of opposites. Each new content that comes

up from the unconscious is altered in its basic nature by being partly integrated into the conscious mind of the observer. Even dream contents (if noticed at all) are in that way semi-conscious. And each enlargement of the observer's consciousness caused by the dream interpretation has again an immeasurable repercussion and influence on the conscious. Thus the unconscious can only be approximately described (like the particles of microphysics) by the paradoxical concepts. What it really is 'in itself' we shall never know, just as according to the principle of indeterminacy we shall never know this about matter.

To take the parallelism even further, Jung called the archetypes could as well be called 'primary probabilities' of psychic reactions. Jung has explained that there are no laws which could determine the specific symbols in which archetypes might appear in the conscious self. According to him, there are only tendencies, which again enables us to say only that such-and-such event is likely to occur in psychological situations.

Wolfgang Pauli, the eminent quantum-physicist and conscience-keeper of modern physics, collaborated with Jung to explore a possible ultimate oneness of psychology and physics, i.e., two great minds tried to explore the psychological oneness of all life phenomena. Jung was convinced that the unconscious is somehow linked up with the structure of the inorganic matter. This unitarian idea of reality was called by Jung the '*unus mundus*.' He pointed out that an archetype shows *psychoid* (i.e., not purely psychic but almost material) aspects when it appears within synchronistic events. The synchronistic events are chance events concerned with inner psychic world and outer facts which occur when an archetype is activated.

Many eminent mathematicians, physicists and psychologists are now following the footsteps of Jung and Pauli to explore the parallelism between microphysics and psychology. They want to create new symbols to describe the underlying realities of nature. The famous

American psychologist William James once pointed out that the idea of an unconscious self could be compared with the 'field' concept in physics. His words are now echoed in the statements of the eminent physicist, Gerald Feinberg who suggests in this book 'The Prometheus Project', that psychic transmissions may be limited to as yet undiscovered elementary particles, so called *psychons* or *mindons*.

Does psychic energy help as carrier of archetypal symbols from the unconscious to the conscious and as the carrier of psychons from one mind to another? Does the transformation of psychic energy to other known forms of energy occur and vice-versa? Do the psychons work as photons in the transfer of psychic waves? Scientists are now trying to find answers to such questions.

IV

Is Science on the verge of another Bold Paradigm ?

Recent advancements of science invoke a model of scientific progress proposed by Thomas Kuhn, who agrees in his magnum opus, 'The Structure of Scientific Revolutions', that science is not cumulative, but that it collapses and is rebuilt after each conceptual shift. *Paradigms* is the word he uses for those over reaching models and theories, according to which each new area of science conducts its normal, day-to-day operations. Copernicus, for example, established a new paradigm of science with his heliocentric universe, overthrowing the old. Newton did likewise, and so did Einstein. Following such fundamental changes, 'normal' scientists go back to work again, but with a different sets of assumptions. Maslow pointed out that it is these 'normal' technicians who created the stereo-type of scientists as mechanical men with narrow vision. The innovative, imaginative paradigm makers, "the eagles of science", are another breed entirely. Is science on the verge of another such paradigm? Convinced that it is such, physicist David Finkelstein of New York, Yeshiva University

has been searching for a link between particle physics, relativity and human consciousness. It seems reasonable to rely upon the researches of the paradigm-makers of the future to learn about the true nature of human psyche than accepting

the thesis of Koestler. The paradigm-makers lead to the ascent of human consciousness, which may eventually enable us to know our intellectual limit, thereby enabling us to know about ourselves.

Reader, Ravenshaw College,
Cuttack-3.

—X—

Orissa's Progress Evident

Official claims apart, Orissa does appear to be moving fast towards industrialisation, it was felt by the newsmen who visited some of the industrial complexes in Bhubaneswar, Cuttack and Mancheswar. The entrepreneurs and industrialists have taken advantage of the liberal policies to set up their units.

A case in point is that of Vice Admiral S. N. Sarma. The admiral has set up a unit for manufacturing electrodes with the help of the State agencies including the Orissa State Finance Corporation, Industrial Infrastructure Development Corporation, the State Bank of India and Industrial Promotion and Investment Corporation.

The small-scale unit, set up with an outlay of Rs. 28 lakhs is well on its way to commercial production. The unit, when in full production, will provide employment to 45 persons.

Mr. S. K. Mahapatra, an Engineer, is another entrepreneur who has set up a unit in Mancheswar. He proposes to manufacture structural heavy fabrication and engineering assemblies and sub-assemblies. The unit, with an investment of Rs. 120 lakhs (equity Rs. 26 lakhs and

term loan Rs. 80 lakhs) will commence commercial production in September 1982. Its installed capacity is 3,200 tonnes.

These are just two examples of the development which the State is witnessing. These, as some of the other entrepreneurs one met explained, could be attributed to streamlining of procedures, setting up of a single point contact forum (industrial co-ordination bureau), assurance of help in marketing the products and subsidies provided by the State Government for setting up units.

Another encouraging feature is that the State Government helps the entrepreneurs in construction industrial sheds, provides housing facilities for industrial workers besides financial incentives. One of the major incentives, it was explained by the entrepreneurs, was the reimbursement of the entire cost of the feasibility reports of their projects. This was subject to a maximum of one per cent of the fixed assets (when that was less than Rs. 1 crore) or Rs. 1 lakh plus a half per cent of the additional fixed assets beyond Rs. 1 crore (subject to a maximum of Rs. 3 lakhs).

(Economic Times, Calcutta, 16-11-1981)

Human Rights Today

SHRI ANJAN K. SAHU

Protection of fundamental human rights among the members of human family in recognition of inherent dignity is the basis of natural justice and rule of law. These inalienable and indivisible human rights encompass the whole human being. Hence, every Government must agree that human rights have no nationality, religion, colour, ideology or political system. International measures alone are not effective for the protection of human rights but good sense of Governments is also inevitable.

Since the adoption and proclamation of the Universal Declaration of Human Rights much progress has been made, little has been accomplished and very much still remains to be materialised.

The concept of "better life for all" does not only mean the growth of material resources but also the physical, moral, intellectual and cultural development of human person and a world wide preservation of human dignity.

The incredible findings of Amnesty International—which was awarded the Nobel Peace Prize in 1977—published recently is believed to be the first of its kind. The report provides a country-by-country survey of the methods by which over five lakhs political murders in the last ten years have occurred in no less than 134 countries. The modus operandi of execution range from the guillotine in France and the electric chair and gas chamber in USA to hanging in South Africa and the firing squad in Ghana and Syria,

Amnesty quotes official sources in India as putting the number of execution in India between 1971 and 1975 at 200. It is a deplorable fact that in India there is an excessively long period between sentence and execution. Besides, the severe ill-treatment during interrogation and prison deaths in India exposes the ineffective legal safeguards, harsh interrogation methods and bestial jail conditions. The system is notoriously callous if not deliberately cruel.

According to the international covenant on civil and political rights—which more than 50 countries have now signed the penalty may be imposed "only for the most serious crimes" But in many countries, the law allows execution for such diverse offences as adultery, drug peddling, destruction of army property, sabotage, hoarding, embezzlement and illegal currency dealings.

So far only 18 nations have completely done away with the penalty by mid-1979. Another eight countries have abolished the penalty in peace time but retained it during war.

India's commitment to human rights far antedated the Universal Declaration of Human Rights. And it still playing an active and crucial role in Africa—a regime where human rights are violated in contemptuous defiance of world opinion. A wide spectrum of constitutional and legislative enactments is the need of the hour to ensure that our laws are in consonance with the consensus of the world community.

Social and economic evils like casteism and exploitation of under privilege are to be overcome to make human rights a reality—these evils being generated by politicians and educated class. There are scores of States without law and justice where usurpers hold office and tyrannise over their citizens without hindrance. But there is no other big country than Pakistan where the top elite is invited to witness and applaud barbaric punishments for relatively minor offences.

The monstrous cruelty of capital punishment, barbarous casteism, resurgence of political killings, maim or dispose nefariously of human flesh, lashings in public and stoning to death—are not simply routine violations of freedom of conscience, but defiant acts by in-humane and uncivilized rulers around the world.

Mrs. Thatcher's policy on immigration, Pakistan's violation of human rights with a vengeance, mass executions in Iran and White House's ultimate object to extend foreign aid on the basis of scrutinizing the recipient's human rights record is regrettable.

The advances made at the international level in the promotion of human rights become real only when they are reflected in action at national and local levels. In our age there is one particular developing trend which is positive and strong: the feeling of solidarity and social responsibility which no ideology or political party can ignore in a modern society. This feeling has created quite broad agreements in the domestic political life of many States and has also influenced their approach to the problems of other States. Further, one would think that the time has come for defining and conforming a more human

content of the right of privacy. Moreover, the right of political refugees to request asylum in a foreign country has been the subject of controversial discussion. It would not seem impossible to lay down the necessary safeguard preventing a State granting asylum.

The international declaration and conventions do not represent a complete catalogue of human rights whose form and substance have been determined once for all. Neither they provide for any implementation machinery. Since the Declaration of December 10, 1948 is not a binding legal document, all attempts to set up an international court for human rights have proved abortive so far.

It is time that each nation should launch a national programme of education on human rights and responsibilities with special reference to the Universal Declaration.

Each of us must aim to draw attention to those areas in our national and local life where human rights are not fully observed, and to take steps to ameliorate the situation. We shall expect that as a result of the combined efforts of many organisations, national and local, in cooperation with the Government, bring about changes in social attitude and approach, practice and law.

In order to mark the 33rd Human Rights Day all public-spirited organisations should determine to prepare and carry out through their own channels, Programmes of education, publicity, practical projects and social and political action for achieving the objectives of the historic Declaration.

Blue Gate
Aurobindo Nagar
Jeypore-764001

Public-cum-Subscription Libraries in Orissa Division during the last half of 19th Century

SHRI KHIROD PRASAD MOHANTY



What we mean public library is a library which is freely open to all, irrespective of age, profession, race, sex colour or creed and in it there is free access to any literature required. It is in the words of William Ewart, founded by the people, supported by the people and enjoyed by the people and is established by law and maintained at public expenses out of local rates and some times by State taxes. A public library may be local or regional that does not matter. It is a product of political democracy and belief. In other words we may say that a public library is a social institution born in civilized literate society, grows and develops in response to social conditions and needs for equipping the people with the necessary proportion of accumulated knowledge and preparing them for co-operative social life. Its objectives are:—

- (a) to afford access to all to its resources free direct charge, free from physical barriers or from interference from political or religious authority.
- (b) to make its stock reflect all the present and potential needs of the community, free from any load of censorship, crediting the reader with the ability to make up his mind and arrive at a balanced decision;
- (c) to afford facilities for free research Individual culture and to help

each individual to grow up according to his own needs, interest, abilities or capabilities and to form independent judgement by self culture.

- (d) to create a living and socially integrated service of ideas and information in society.
- (e) to provide suitable materials and services in aid of research, culture and information;
- (f) to aid formal instruction. As the heart of instruction the public library helps to broaden the students comprehension of the subject and to stimulate him to master the subject he studies through some independent work in a library instead of depending on lectures;
- (g) to create life long habit of reading through well stocked books for catering various needs and tastes;
- (h) to supply information in the management of practical affairs and
- (i) to promote popular enlightenment culture and spiritual development of all the people and prepare them for co-operative living in a democratic society.

Though primarily intended to serve the needs of informal education of adults, it also supplement the work of the school in developing the reading tastes of children and young adults and to help them to become mature adults who can use books with profit and appreciation.

This modern concept of the public library is something new in India and more especially in Orissa. Though Libraries have been in existence from time immemorial the idea of the public library may be said to be an innovation which took its root only after British contact with India.

In the later half of the 19th century we find Commissioners Office Library, Office Libraries in district and Subdivisional headquarters, many other libraries attached to the educational institutions and some one or two public libraries in this Division. In the year 1881 on 16th October an attempt was made by Baboo Fran Kissen Ray, Nando Kishore Das, Dinonath Banerjea, Hari Churn Banerjea and Obinash Chunder Chatterjea for the purpose of establishing a public Library in the town of Katak 1.

As a result from the 19th October 1881 a library had been situated on the eastern side of the Cuttack Ravenshaw College, and it was to be denominated as the "Town library, Katak". News papers (English, Bengali, and Uriya) and books (English, Bengali, Sanskrit and Oriya) were to be kept in the library for the use of the public.

But we find no trace of it in General Administrative Report. Another noted

1. Utkal Dipika, 29th October 1881

2. Annual General Administration Report Orissa Division, 1897-98

Orissa State Archives, Bhubaneswar

attempt was made during the year 1897-98. Only one public library was started viz. in Kendrapara Town in the Cuttack district on 22nd June 1897 and this in commemoration of Her Majesty's Diamond Jubilee. A library gift of more than 100 copies of English and Vernacular books valued at Rs. 200 was made to the library by a Zamindar of Kendrapara, Babu Braja Sundar Mardhraj. Raja Baikuntha De Bahadur of Balasore, had promised to pay Rs. 3,000 towards providing a building for the Library. A building was then under construction. Raja Jadunath Deb of Aul had promised to pay Rs. 500 out of which he had already paid Rs. 200 for the maintenance of the library. The Library was to be a public one where books, magazines and newspapers might be read free of charge while persons wishing to take books to their houses would pay a subscription of so much per mensem. The number of such subscribers was 78 and their monthly subscriptions totalled Rs. 40 at the close of 1897-98.² Besides these two between this interval from 1881 to 1897 many libraries sprang up attached to the social Clubs, Zilla Schools and many other educational institutions. Few of them were thrown open to the public on deposit system which did not serve the best purpose of a public library.

There were no technically trained librarians, books were not properly classified according to a classification scheme, catalogues what we mean were a mere list, the services rendered to the readers by the libraries were not so much impressive. All these were admitted facts no doubt yet their very existence in a critical juncture when the country was under British rule, can not be ignored.

Urbanisation in Orissa— A case for the development of medium and small towns

SHRI L. N. P. MOHANTY

Urbanisation, singularly a phenomenon of the modern civilisation, implies the migration of the people from the rural places to the urban areas with a view to availing better employment opportunities and a decent standard of living. The increasing rate of growth of urban population clearly indicates that the urbanisation as a process is getting accelerated day by day. Due to the over exodus there is a gradual deterioration in the living condition of the people settling in those areas. They have been facing manifold and appalling problems like housing, sanitation, pollution, water-supply and transport. The already deplorable condition of the urban compartments witness a further deterioration when the low income group migrate and overcrowd the slums. Besides, even today, the growth of urban areas means the growth of cities only. But, unfortunately the medium and small towns remain neglected as before. Hence, it proves to be a lop-sided growth which may bring about disastrous effects in future. The cities swell up gradually even to the bursting point like a river overflowing its banks during the rainy season when it fails to contain excessive water that passes through it. This imbalanced concentration of population, a disquieting offshoot of the urbanisation process has been causing deep concern to the national Government, the State Governments, urban

local authorities and the planners. Therefore, the question arises as to how to save the crowded cities from the chronic maladies of over-population. In this context the focus should be laid on the development and growth of the medium and small towns which will provide the best remedy and can act as a counter magnet to the sprawling increase of population in the cities.

The staggering growth of the urban population in India is due to the steady increase in rural population, absence of the proper development in those areas, lack of proper employment avenues and the continuance of Rural-Urban disparity. The provisional census report indicates that in 1981, 23.73 per cent of the population in the country lives in the urban areas as against 19.91 per cent in 1971¹. The last decade has witnessed an increase of 50 millions in the urban population in the country, making the rate of growth very explosive. It is also evident from the above report that 44.56 per cent of the total urban population lives in the 12 cities or urban agglomerations, i.e., Calcutta, Bombay, Delhi, Madras, Hyderabad, Ahmedabad, Bangalore, Kanpur, Pune, Nagpur, Lucknow and Jaipur.

In contrast, the growth of urbanisation in Orissa which had its beginning in the ancient

time, is yet to be geared up. It progressed with a very slow pace in Orissa when in India it is moving with a supersonic speed, mainly due to concentrated industrialisation. The present population of the State is 2.63 crores out of which 31.05 lakhs constitute the urban population (11.82 per cent as against 8.41 per cent in 1971). Hence, compared to the all India figure Orissa

appears to be less urbanised whereas Maharashtra has the highest urban population of the country with 35.03 per cent of the total urban population and Himachal Pradesh is the least urbanised having urban population of 7.72² per cent. From the table given below the growth of urban population of Orissa and that of India is indicated from 1901 to 1981 :—

Year	Total population		Urban population and percentage of total population				
	Orissa	India	Urban population (in lakhs)	Orissa		India	
	(In lakhs)	(In lakhs)		Percentage of total population	Urban population (in lakhs)	Percentage of total population	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1901	103	2,363	2.54	2.47	260	11.02	
1911	114	2,521	2.75	2.42	260	10.32	
1921	112	2,541	2.81	2.52	280	11.16	
1931	125	2,790	3.17	2.54	340	12.19	
1941	138	3,187	4.12	3.00	450	14.11	
1951	146	3,611	5.94	4.06	620	17.17	
1961	175	4,392	11.09	6.32	790	17.98	
1971	219	5,470	16.85	7.68	1,090	19.91 ³	
1981	263	6,581	31.05	11.82	1,560	23.73 ⁴	

It is observed from the above table that the urban population of Orissa constitutes a very small percentage of the State and is far less than that of the all India average. It also appears from the above figures that during the last 80 years from 1901 to 1981, the urban population of the State increased from 2.54 lakhs to 31.05 lakhs. The percentage of urban population to the total population remained almost the same from 1901 to 1931. It witnessed a slight

increase during the decade 1931—41 and in the following three decades the increase was considerably larger. The growth was the largest during the last decade, i.e., 1971—1981 when the number of towns increased from 14 to 108.

The growth rate of urban population of Orissa as compared to that of India from 1941—1981 is given in the table below (1941 taken as base year) :—

Sl. No.	Year	Orissa		India	
		Total urban population (in lakhs)	Growth rate	Total urban population (in crores)	Growth rate
(1)	(2)	(3)	(4)	(5)	(6)
1	1941	..	4.12	4.5	100.00
2	1951	..	5.94	6.2	137.78
3	1961	..	11.09	7.9	175.55
4	1971	..	16.85	10.9	242.22 ⁵
5	1981	..	31.05	15.6	346.66 ⁶

time, is yet to be geared up. It progressed with a very slow pace in Orissa when in India it is moving with a supersonic speed, mainly due to concentrated industrialisation. The present population of the State is 2.63 crores out of which 31.05 lakhs constitute the urban population (11.82 per cent as against 8.41 per cent in 1971). Hence, compared to the all India figure Orissa

appears to be less urbanised whereas Maharashtra has the highest urban population of the country with 35.03 per cent of the total urban population and Himachal Pradesh is the least urbanised having urban population of 7.72² per cent. From the table given below the growth of urban population of Orissa and that of India is indicated from 1901 to 1981 :—

Year	Total population		Urban population and percentage of total population				
	Orissa	India	Urban population (in lakhs)	Orissa		India	
	(In lakhs)	(In lakhs)		Percentage of total population	Urban population (in lakhs)	Percentage of total population	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1901	103	2,363	2.54	2.47			
1911	114	2,521	2.75	2.42	260	11.02	
1921	112	2,541	2.81	2.52	260	10.32	
1931	125	2,790	3.17	2.54	280	11.16	
1941	138	3,187	4.12	3.00	340	12.19	
1951	146	3,611	5.94	4.06	450	14.11	
1961	175	4,392	11.09	6.32	620	17.17	
1971	219	5,470	16.85	7.68	790	17.98	
1981	263	6,581	31.05	11.82	1,090	19.91 ³	
					1,560	23.73 ⁴	

It is observed from the above table that the urban population of Orissa constitutes a very small percentage of the State and is far less than that of the all India average. It also appears from the above figures that during the last 80 years from 1901 to 1981, the urban population of the State increased from 2.54 lakhs to 31.05 lakhs. The percentage of urban population to the total population remained almost the same from 1901 to 1931. It witnessed a slight

increase during the decade 1931—41 and in the following three decades the increase was considerably larger. The growth was the largest during the last decade, i.e., 1971—1981 when the number of towns increased from 14 to 108.

The growth rate of urban population of Orissa as compared to that of India from 1941—1981 is given in the table below (1941 taken as base year) :—

Sl. No.	Year	Orissa		India	
		Total urban population (in lakhs)	Growth rate	Total urban population (in crores)	Growth rate
(1)	(2)	(3)	(4)	(5)	(6)
1	1941	..	..	..	..
2	1951	..	..	..	..
3	1961	..	..	..	..
4	1971	..	..	..	..
5	1981	..	..	..	..
		4.12	100.00	4.5	100.00
		5.94	144.01	6.2	137.78
		11.09	268.99	7.9	175.55
		16.85	408.69	10.9	242.22 ⁵
		31.05	770.63	15.6	346.66 ⁶

From the above table it is noticed that in spite of higher growth rate of urban population in Orissa compared to all India figures, it continues to be in a nascent State of urbanisation for the last 4 decades.

The percentage of increase in urban population in Orissa as against the increase in the total population of the state is mentioned in table below :—

Decade (1)	Total population increase (2)	Urban population increase (3)
1921—31 ..	11.09	12.2
1931—41 ..	10.2	14.7
1941—51 ..	6.4	26.6
1951—61 ..	19.08	90.2 ^s
1961—71 ..	22.3	51.9
1971—81 ..	20.5	83.5

From the above table it is indicated that there was a steady increase of 90.2% of the urban population in the state during the period from 1951 to 1961. The decade 1971—81 also witnessed a high increase of 83.5%.

The number of towns in the state were 14 in 1901 and it increased to 81 in 1971. From 1971 to 1981 the towns again rise

up to 108. During the last decade one town was degraded to the status of a village and 28 new towns were included in the urban framework. It was almost 8 times increase in the number of towns from 1901 to 1981. According to the size of the population, the towns have been classified into 6 categories and the number of towns falling under each category is given below (from 1951—81):—

Classification of town (1)	Population size (2)	Number of towns			
		1951 (3)	1961 (4)	1971 (5)	1981 (6)
Class-I ..	1 lakh and above	1	1	4	6
Class-II ..	50,000—99,999	1	3	2	8
Class-III ..	20,000—49,999	5	8	20	26
Class-IV ..	10,000—19,999	8	22	23	40
Class-V ..	5,000—9,999	23	25	30	25
Class-VI ..	Less than 5,000	1	3	2	3
Total ..		39	62	81	108

Orissa did not have a Class I town till 1951. Cuttack with a population of more than 1 lakh was included in the above category only in 1951. In 1971 three other towns—Rourkela Steel Township, Berhampur and Bhubaneswar—were elevated to the above status. Sambalpur and Puri are included in the said category only in 1981. It is a noticeable feature of our urbanisation that three urban agglomerations—Cuttack, Rourkela, Sambalpur and three towns—Bhubaneswar, Berhampur and Puri—constitute 41.63 per cent of urban population of the State. These towns have witnessed an alarming increase of population of 5.48 in the last decade⁹. Though our population in these urban areas is far below than that of the metropolises, we have to find out a

suitable strategy by which an automatic lever will be provided for arresting the flow of rural migrants to the towns like Cuttack, Bhubaneswar, Rourkela Steel Town and Berhampur. Plans and policies in the appertune hour will save them from the manifold and complicated problems that the metropolises suffer from today. The magnitude is less but these places suffer from some problems. As a result of the exodus, the living condition of the people in these areas are gradually becoming deplorable due to inadequate housing facilities, lack of good sanitation, increase in the pollution, hazards of water-supply and mushroom growth of slums. The statement below mentions the percentage of urban population in the various towns according to their size and class.

Class of towns	Number of towns	Total Urban population, 1981	Percentage of total urban population of the State in 1981
All Classes ..	108	3,105,635	100.00
Class I ..	6	1,292,899	41.63
Class II ..	8	396,387	12.76
Class III ..	26	677,807	21.83
Class IV ..	40	528,743	17.03
Class V ..	25	196,001	6.31
Class VI ..	3	13,798	0.44 ¹⁰

In these Class I towns no steps had been taken till the 3rd Five-Year Plan for the infrastructural development and no provisions were made to check the future infiltration. Measures were introduced at the Central and State level regarding urban development, which emphasised the need for town planning as a corollary to the national economic development policies and programmes. With the financial assistance made by the Central Government, town planning units were set up at Bhubaneswar, Cuttack, Berhampur, Sambalpur, Jeypore and Balasore. The various town planning authorities sped up their machinery in preparing the master plans for different towns with a view to arresting the wild

growth of the slums and providing the towns with basic amenities of civilised life. By the end of 5th year plan, master plans were kept handy for the different urban areas. To accelerate the process of urban development Government of Orissa framed laws for the creation of Improvement Trusts. Initially one Improvement Trust started functioning at Cuttack and gradually, three others were set up at Bhubaneswar, Berhampur and Sambalpur.

However, in 1971 the Central Government framed an integrated policy on urban development which aimed at channelising the trend of urbanisation in a very effective way. It is an appropriate step in a big

direction. This inspired the State Governments and they passed various legislation to streamline the process of urbanisation. Again in this context a centrally sponsored scheme was introduced in the 5th Five-Year Plan for the integrated development of 31 cities in the country. The scheme envisaged the improvement of the cities having a population 3 lakhs and above and each city got the assistance of 44 million rupees¹¹. But Orissa was unfortunate not to avail the opportunity because none of the class I towns satisfied the above condition. Hence, they remained neglected and untouched and fell victims to the one sided policy of the Government. Though it attempted to ameliorate the wretched condition of the cities, the medium and small towns including the class I remained quite neglected.

A new urbanisation policy for the nation was laid in the revised 6th Five-Year Plan which clearly mentioned the objectives and emphasized the strategies to be adopted to the effect. It maintains that the (thrust of the urbanisation policy during the next decade will be to increase the rate of growth of the medium and small towns and to slow down and if possible, reverse the growth of the cities)¹². The middle towns are supposed to have a population of 50,000 to 1 lakh and the small towns a population of 10,000 to 50,000. It was observed by the Central Minister of Works and Housing that "we should decentralise the industries and other activities from the cities and equip the middle and the small towns with adequate infrastructural development to enable them to perform their role both as growth centres for rural hinterlands and to deflect the migration flowing to the larger cities"¹³. With an aim of achieving the above objectives, the Government of India has recently introduced a new central sponsored scheme for the integral development of medium towns with a population less than 1 lakh in various States. Under this scheme the Central Government has taken up 241 identified towns. A sum of 241 crores of rupees will be spent by the Central Government, State Governments and the local bodies for their infrastructural development. Each State under this scheme will nearly have the quota of 4 to 5 towns. The centre will advance the State, loans and assistances and the matching shares

are to be made by them from their own resources. The total expenditure in a town will approximately amount to 1 crore of rupees. "In Orissa 8 towns having a population of 50 thousands to one lakh are classified as the medium towns according to the 1981 census. They are Balasore, Bhadrak, Jharsuguda, Balangir, Jeypore, Baripada and Rourkela civil town. Sambalpur and Puri have been included in the category of the medium towns because their population was less than one lakh when the scheme of the Government was implemented. Under the above-mentioned scheme five towns have been selected for their infrastructural development. They are Sambalpur, Puri, Balasore, Jeypore and Rourkela civil town. This policy of the Government evokes a high degree of appreciation and is very encouraging. It is sure to curb the overdose of migrations in to the bigger urban areas like Cuttack, Bhubaneswar, Berhampur and Rourkela steel town.

Under the new urban policy formulated in the 6th Five-Year Plan, the Government wants to arrest the growth of population in the larger urban areas in the following ways :—

- (a) by granting incentives to shift industries to the new urban centres;
- (b) imposing a ban on setting up of new industries within a certain larger cities;
- (c) encouraging the growth of cottage industries under rural industrialisation programme in towns having 25,000 population;
- (d) devoting attention to the development of tiny industries in towns with population of less than 50,000;
- (e) putting bans on the further establishment of offices, commercial establishment, Centres of entertainments and cultures in the big cities;
- (f) shifting the Central and State Government offices to the less congested areas;
- (g) ensuring economic measures for depressing the demand in the infrastructural facilities in big cities.¹⁴

The above measures of the Government are indeed encouraging, because these will surely deflect the population from the larger urban areas to these medium and small towns, since they will be widening the employment opportunities when industries will grow up there.

According to my opinion urbanisation is to be considered not as a concomitant of industrialisation but should be viewed with agricultural development and rural transformation. Since 76.27 per cent and 88.12 per cent of the total population live in the villages in India and Orissa, respectively¹⁵ and since their economy is based on agriculture, steps should be taken to improve agriculture along with the establishment of industries medium and small. The establishment of agro-based industries are to be encouraged. The villages are to be made more habitable with certain minimum amenities. Hence the rural folk will not feel inclined to migrate to be congested cities and towns. Secondly, the Govern-

ment should provide housing facilities to the low income group and the middle income group in the medium and small towns to eradicate the slums. In this regard the activities of the State Housing Board should gather momentum. Thirdly an awareness should be created in the minds of the people intending to move to the cities and the people should be made aware of the ill effects of shelter, environment, congested livings, polluted atmosphere and unhygienic surrounding plaguing the cities. Lastly, there should be an over all development of planning strategy. In this regard, the town planning organisation is to be strengthened which can provide directions to the growth centres and make for investments on priority basis. The medium and small towns should be so planned as to account for the development of the region as a whole and to serve the agricultural interlands at the same time. Thereby, urbanisation can become instrumental in bringing about social and economic changes in the country in an integrated manner.

REFERENCES

1. Census of India, 1981, Series 16, Orissa, paper I of 1981, Supplement.
2. *Ibid*
3. Report of the State Municipal Finance Commission, Orissa, 1975, part I.
4. Census of India, 1981, Supplement, Series 16, Orissa.
5. Report of the Orissa Local Body (Urban) Administration Enquiry Committee, Orissa.
6. Census of India, 1981, Supplement, Series 16, Orissa.
7. Report of the State Municipal Finance Commission, Orissa, 1975 part I.
8. Report of the Orissa Local Body (Urban) Administration Enquiry Committee, Orissa.
9. Census of India, 1981, Series 16, paper I, Orissa.
10. *Ibid*
11. Address by Mr. P. C. Sethi, Minister of Urban and Housing, at a Seminar on principal issues after the National Urban Policy, Urban Research, Vol. I, No. 1.
12. Urban Research Vol. I, No. 1
13. *Ibid*
14. *Ibid*
15. Census of India, 1981, Supplement, Series 16, Orissa.

Lecturer in Political Science,
Deogarh College, Deogarh,
Sambalpur.

Education as a factor of Integrated Rural Development

SHRI G. RAJGURU



Integrated Rural Development must be viewed not only as technological improvements but also in terms of structure and functions of the rural society. The social structure, man-land relationship, social mobility and the smooth flow of available resources to various socio-economic group's need to be taken into consideration while planning for integrated rural development. This integration to the vast majority of people need to be conceived not only horizontally but also vertically. This call for institutional changes and innovative infra-structural patterns.

The elements involved in the whole gamete of rural development for agriculture, small and cottage industries based on agriculture, social services such as education (both formal and non-formal) and also institutional changes to ensure mass participation of people in integrated rural development programmes. Only through mutually reinforcing measures connected with these elements will make it possible to realise the fullest production potentials of the local resources like human, material and natural. Agriculture, industry and trade are inter-related not only in terms of supply of raw materials but also in terms of consumption, marketing and changes in employment patterns. Increase in productivity in both these sectors is possible only if a minimum standard of education and social services are ensured to the mass of rural people.

The draft sixth plan has proposed that the planning should be geared towards achieving objectives as follows:—

- (1) The removal of unemployment and significant reduction in under-employment.
- (2) An appreciable rise in the standard of living of the poorest section of the population.
- (3) Provision of basic, social and physical need by the State for the landless and the rural poor.

These primary objectives have to be kept in view while planning for integrated rural development in rural areas. In this connection, emphasis should be given on four major areas, viz., agriculture, cottage and small industries, area planning and provision of minimum resource to achieve the 6th plan objectives.

In view of this programme the integrated rural development should cover all these areas as far as possible. With this emphasis and allocation of 43 per cent of the total plan outlay for rural and agriculture sector, it should be possible to make a dent on rural poverty, provided this investment is well utilised and the programme are implemented with mass participation of the people.

It is understood by all that there is no comprehensive or all encompassing model

for analysing the integration between the economic and the socio-political changes that are observed in diversified situations of the country. It is, however, accepted that integrated rural development needs a truly multi-disciplinary and multi-dimensional approach for planning and implementation of its programmes. A revamping of the Panchayati Raj system will be a great help in achieving the objectives of integrated rural development. For this purpose, the political leadership at the district and local level should delegate authority to the actual lay leaders (representing different local professional areas) for effective implementation of the integrated rural development programme. This will definitely help in the growth of the monomorphic leadership and easy diffusion of innovations throughout the spectrum of the rural society. From our past studies we have observed that lack of popular enthusiasm is perhaps the biggest lacuna in our implementation of rural development programmes. Another important social dimension of rural development is disparity or imbalance among various sections of the society. In villages various antecedent factors react with programme messages to cause change in the behaviour of persons living in different socio-economic strata. Hence, there is inter-dependence of these two factors with that of resource use and adoption of innovations. The differences in socio-economic levels has let to strange social relations among the dominant and suppressed class of people in rural areas. A rational balance between the higher and lower class of people in rural areas need to be brought about by judicious planning and operation of rural development programmes.

Education as Related to Integrated Rural Development.

In the present paper I want to confine myself with the factor, education as related to integrated rural development. It is an established fact that the core of any development is related to the man and his activities. Modern science and technology cannot canalise his potentials with the same speed and efficiency as it can do in harnessing the physical aspects of nature. An integrated package of services to the rural people, therefore, include investment

in man. Various studies have indicated that functional education is the pivotal factor in achieving rapid socio-economic changes in rural societies. Programmes of such education are basic in creating the bonds of common citizenship, in harnessing the energies of the people and in combining the natural with that of human resources efficiently. Mahatma Gandhi, as a realist recognised the importance of education and emphasized basic education in the vocational form.

In the context of generation of gainful employment, for the vast human resources in rural India, the educational policy of the Government have not been adequately realistic. They provide an example of lack of vision when they emphasized a type of education not much related to requirements of the rural people. It provides only external symbols of emancipation from social ostracism but, unfortunately, add to a glut of applicants in "genteel" jobs. This is the reason why the educated youths even in professional areas rarely wish to stay in rural surroundings and serve the down trodden people for their development. On the other hand, the rural youth is not provided with the right type of education to suit to the situation in which he is living. Hence, an accelerating growth of unemployed and underemployed youth are seen in the rural areas of the country. This has created not only a burden but also a danger for growth and development of the country in future.

Education and Productivity

Resources for the massive programme of functional education cannot be generated without relating it to productivity, so that expansion in education leads to an increased national income and growth. Education and productivity can constitute a rising spiral whose different parts support one another. In all functional educational programmes, therefore, a well-founded linkage need to be established between education and productivity. If this is lost sight of, the meagre resources available to the rural poor for investment in their business may be filtered away without yielding favourable results. In this context the integrated rural development programme should emphasise on: (i) Technology as a basic component of education.

(ii) Vocationalization of education, especially at the functional levels, (iii) Involving work experience through appropriate demonstrations and area planning, (iv) Agriculture extension should be geared to train new skills to the clientele concerned and (v) Adult literacy for inculcating understanding of communication messages of rural development.

In the current context of integrated rural development, highest importance need be attached to the first two category of aforesaid items. If there is one field more than another for which we require a crash programme and a nation-wide campaign, it is that of the liquidation of functional ignorance and generation of new ideas to suit to the need and resources of rural people. We must see that within the sixth plan period, all rural youth and adults, between the age group of 15 to 40 acquire functional education on modern technology and the facilities for utilisation of this knowledge in their own situation. For this purpose, we require a vast army of trained personnel who are suitably trained and oriented to impart functional education to the rural people.

The work experience in education has the advantage of integrating technology generated by the scientists with that of the practical followed by the people. This is essentially so in the countryside which must make use of science-based technology for removing its age-old poverty. In traditional societies, anti-thesis between application of technology and work is usually postulated partly because techniques of production are primitive and do not require much of technical skill and partly because work in general is manual, low paid and akin to drudgery. Integrated rural development programmes thus should place adequate emphasis on the development of technical skill in the people through functional education.

It is worthwhile, therefore, to examine what measures are necessary to link an educational effort in the rural areas with that of integrated rural development programmes. It is axiomatic that urgent development needs of the country-side can not wait for the emergence of a climate

favourable to science and technological growth. Keeping this in view, planning for functional education in rural areas should have the following aims—

- (i) To teach the youth and adults about scientific methods and their technical applications so as to acquaint them with its important role in life.
- (ii) To encourage observation and field demonstrations in rural areas with the objective of arousing interest in physical and natural phenomena.
- (iii) To intensify functional teaching of science and technology and relate them to social situations.
- (iv) To acquaint the rural people with the new fields of knowledge and stimulate them to apply the knowledge in their own business.
- (v) To promote and develop monomorphic leadership in rural areas for smooth diffusion of innovations through inter-personal communication process.

In this context, functional education for every villager now has become a necessity for a number of reasons. For one thing, the demand for the type of worker using only his hand in barely manual work is rapidly decreasing with technological development. Secondly, individual efficiency of a person increases with acquisition of functional knowledge and skill. Thirdly, education as it is, appears to be a political necessity because of accelerated growth and collective action warranted for rural development through planned change. Economic and social development in modern India can become meaningful only if all rural people participate in socio-economic development process of the country. Hence, integrated rural development should pay proper attention to make the mass of rural people educationally fit to take up this challenge.

VOCATIONAL TRAINING

The programme for development of cottage and small scale industry in rural areas emphasises the strategic importance of

vocational training which must be arranged with utmost rapidity. It is also necessary that this type of training should be offered in strategic rural areas which will facilitate training on trades insitu. To make this programme more effective peripatetic teams of trainers may be assigned with the responsibility of imparting short range training to the village youth and adults on the trades relevant to the village situation. At present sandwich training courses are being introduced in many of the trade schools so that the trainees are able to fit themselves in the stresses of production and are not completely new to the process of industrialization. In this context, the programme of apprenticeship training are of vital significance because the apprentices learned by associating themselves with master craftsman and technicians and their training and learning is best suited to actual production. This mixed system of vocational training has been very successful in Israel and Japan which has played a key role in the Human Resource Development of these two countries. Hence, for future development of our rural areas, integrated rural development should give due emphasis on vocational training of a mixed system.

EDUCATION IN AGRICULTURE & ALLIED SECTORS

Education for agriculture broadly covers all extension and informal education meant for those who practise a vocation and for those who support it in various ways. Primarily, the worth of agricultural education has to be judged by its effectiveness and as an instrument of national development. It should aim at fostering a sense of enquiry and inquisitiveness regarding the

problems of agriculture and to find out solution for the same. Various commissions and committees set up to enquire into this aspect have only emphasised on streamlining higher education and have not given due attention on the method of understanding the farming problems and the strategy that is required to transfer the technical solution to the clientele concerned. To carry the message of the modern technological advances to the field, a large number of technicians and skilled workers are needed at all levels. For that, diversification in agriculture through proper agricultural education may create many more opportunities for gainful employment of the rural people. This means that the farmers must be better educated to understand and practise modern agriculture in their farms. The programmes of integrated rural development are also creating opportunities in ancillary services such as repair of agricultural machinery, marketing of inputs, post-harvest technology, horticultural nursery, and small and cottage industries based on agricultural produce. It is well established that modernization of agriculture is a dynamic process which calls for flexible training system to prepare rural people to handle emerging situations in the field of agriculture. The role of extension education at various levels is a necessary to forge missing links in our educational system and to upgrade the knowledge and skill of all those who are already practising the art of agriculture. It must be recognised that there are tremendous potentialities for increasing production in the fields of agriculture and allied activities through the application and promotion of modern technology by streamlining the programmes like Training and Visit system and Integrated Rural Development.

Education, O. U. A. T.

—X—

Urban Growth and the Informal Sector in Orissa

Dr. B. SAHOO



"Planned urbanisation is a necessary component of the infrastructure of economic development as towns provide, *inter alia*, a variety of centralised services for surrounding rural areas"¹. With the growth of population urbanisation grows faster and this produces certain disquieting features in urban area. Two most disturbing features of urban growth in a developing country like India have been (I) Rapid growth of metropolitan cities and (II) Growth of the informal sector.

The proportion^m of population in class I cities of India to the total population in 1971 was 52.41 per cent against 48.37 per cent in 1961. In the period 1961—71, population in these cities recorded a rise of 49.35 per cent, much above the growth rates in other cities. Migration of rural population to cities that forms the unorganised labour market, recently known as informal sector, has become a matter of concern for the urban authorities. Hence, decongesting the cities and reorganising the labour market have become the urgent need of the town planners.

The paper attempts to review the growth of urban areas in Orissa and analyse the problems of the urban informal sector.

I

The Census of 1971 has divided towns in Orissa into six classes and has introduced the concept of standard urban areas and urban agglomeration. The standard urban

areas refers to areas with a core population of not less than 50,000 where the contiguous area made up of urban and rural administrative units have close mutual socio-economic links with core town and where the entire area has a possibility of getting fully urbanised within a period of 2-3 decades. The urban agglomeration refers to areas where around a core city or a statutory town have grown up large railway colonies, University campuses, port areas or military camps which, even though, fall outside the municipal areas cannot be realistically treated as outside rural areas.

The standard urban areas of Orissa comprise Sambalpur, Rourkela, Balasore, Cuttack, Jeypore, Berhampur, Bhubaneswar and Puri and urban agglomeration includes Sambalpur, Rourkela, Cuttack, Phulbani, Titilagarh, Bhawanipatna, Jajpur Road, Jatni². As per 1981 census there are agglomerations such as Sambalpur, Rourkela, Cuttack, Baripada, Jatni, Titilagarh, Jajpur Road and Talcher.

According to the census a town is a continuous group of houses usually inhabited by not less than 5,000 persons making the density of population at least 1,000 per square mile and marking the place as a centre of trade, administration and human association and having not less than 75 per cent of the male working population pursuing non-agricultural profession as a means of livelihood. Besides this, all places with a Municipality and Notified Area

Council were treated as towns³. Accordingly, as per 1971 Census, Orissa has 81 towns with its urban population forming 8.41 per cent of total population against 62 towns in 1961 with urban population forming 6.32 per cent of total population. As per 1981 census, 11.82 per cent of population live in urban areas as against India's, 23.73 per cent⁴.

Tables 1, 2 and 3 show the number of towns, classification of towns and the share of different classes of towns in total urban population. From these tables the following broad features are deduced;—

- (i) The increase in number of towns during 1951—61 was slightly greater than that during 1961—71. Urban population during 1951—61 recorded an increase of 86.79 per cent against 66.30 per cent increase in the period 1961—71 (vide Census of India 1971, Orissa page 170).
- (ii) Compared with other districts relatively greater urban growth is found in the districts of Ganjam, Sundargarh, Koraput, Sambalpur and Keonjhar over the last two decades.
- (iii) There has been greater increase, number and populationwise, in respect of class II. and Class III towns in comparison with other towns.
- (iv) In spite of the increase in absolute number and population of towns, the latter's proportion to total State population has remained very low, being 8.41 per cent against the Indian counterpart of 19.9 per cent.

These changes suggest (a) that areas experiencing greater industrialisation, mineral development and river valley projects have greater proclivity to urbanisation, (b) that there is a tendency to concentrate on big cities creating problems of congestion, shortage of housing accommodation and other amenities.

With the growth of towns there occurs the growth of the unorganised urban sector, popularly known now-a-days as 'Urban informal sector'. Growth of this sector is the cause as well as effect of many an evil associated with the growth of population

unmatched by the development of the rural and organised urban sectors of the economy.

The term "informel sector" was first used in a study made by Keith Hart entitled "Informal income opportunities and urban employment in Ghana" published in *Journal of Modern African Studies*, London, March 1973. The urban informal sector comprises that portion of urban labour that falls outside the organised labour market. It includes self-employed persons like street vendors, beggars, small tradesman and loose and unskilled Workers whose employment is casual and irregular. The sector also includes workers in building industry, small artisans and domestic servants.

The sector includes both blue-collar persons engaged in enterprises employing not more than four persons or whose income is below the legal minimum wage.

Hart characterises this sector as unorganised and unremunerated sector. Dipak Mazumdar labels it as "unprotected sector". Guy standing divides this sector into (i) an irregular sector having low status and fringe benefits like begging and casual labour and illegal activities and (ii) Informal sector proper, comprising small economic activities carried on wage or by family labour. In a sense the informal sector refers to the economic activities experiencing market imperfection, low labour productivity, labour intensity and hostile policy environment.⁵

The sector possesses the following characteristics:—

- (i) It is a sector to which entry is relatively easy.
- (ii) Enterprises in the sector rely on indigenous resources and are family owned.
- (iii) Enterprises are of small scale, and face unregulated and competitive market.
- (iv) The enterprises adopt labour intensive technology.
- (v) The employees acquire skill outside the formal sector.⁶
- (vi) With fragmented supply price fixation is impossible. This reduces the possibility of good profit, capital formation and expansion.

Some economists, however, discard the urban dualism seen in formal and informal concepts, and distinguish the various parts of the urban economy in terms of different articulated production relation, which can be found within the economic system of the third world countries in varying degrees.⁷ The enterprises fall somewhere in between the two systems. There is a continuance with enterprises ranging from the informal to formal sector.

The informal sector lies on the bottom layer in the hierarchy of activities corresponding to the structural heterogeneity of the urban economy. People belonging to the lower socio-economic group propelled by the growing tension flood the informal sector. If the working population is divided into four marxian groups, such as (a) labour employed with regular employment, elite, (b) Petit bourgeois, (c) Sub-proletariat, (casual and unskilled workers, employees of small scale enterprises) and (d) paupers, the last two would constitute the informal sector.

The magnitude of the informal sector reflects, on the one hand, the dualistic character of our economy with its preponderance of self-employment and urban poverty and inadequate education, on the other hand. The informal sector reflects the migration of rural poor to the urban areas in search of jobs and livelihood. In that sense it reflects the spill-over of rural poverty. The informal sector acts as a buffer-stock for the formal sector in as much as workers are recruited from the informal sector and workers dismissed from formal sector take refuge in informal sector. However, it may be noted that workers in the informal sector do not constitute any separate social class or economic component. Heterogenous make-up of the sub-proletariat forming the informal sector exclude the possibility of the growth of class consciousness.⁸

The probe into the informal sector, to identify the income, employment and other characteristics of the workers therein has been felt necessary for taking appropriate measures for targeted groups with a view to promoting employment, development and equity in the economy. The findings of the L. L. O,⁹ led to the conclusion that the aim

to the world employment programme might be best served by focussing attention on a target group defined as 'informal' Studies made for latin America and other countries show the sizeable share of the informal sector in the urban labour force, In Latin American countries income share of the sector varied from 24 to 41 per cent and employment share from 39 to 61 per cent (vide table IV) In India too a very large part of the urban multitude is dependent for their very existence on employment in the informal sector." "If roughly half the population of the large metropolitan centres where the modern enclaves can be found are employed in this sector, it may safely be assumed that per centage will be even higher in the smaller forms."¹⁰

Studies relating to Latin America reveal certain characteristics of the workers in the informal sector which may act as eye-opener to Indian condition. They are—

- (a) High rate of employment of women in informal sector compared to the formal sector,
- (b) High percentage of least educated and functionally illiterate engaged in the sector. (In San Sakavader 75 per cent),
- (c) High concentration of younger and older in the sector,
- (d) The workers are largely made of people migrated to the cities from depressed rural areas or towns,
- (e) High percentage of the workers in the sector are family heads.

III

With this prologue of a world picture of the urban informal sector we may now have a glimpse into the characteristics of the informal sector in urban Orissa. At the out-let it may be stated, that with no empirical study made of the informal sector in any town of Orissa statement of their features and problems will be mere speculation than authentic. None-the-less it may be useful to State something on the basis of the census data to draw the planners' attention to this neglected but growing sector in urban Orissa.

As stated earlier urban population of Orissa is only 11.82 per cent of total population. The occupational pattern of urban population in Orissa is such that a small percentage of workers belong to formal sector. Manufacturing other than household industry and mining and quarrying form 13.99 per cent and 2.95 per cent of urban population.

Table V shows that 62.32 per cent of workers are engaged in tertiary sector and 28.0 per cent in secondary sector. According to a seminar held by U. N. and UNESCO on the economic causes and implications of urbanisation of countries in Asia and Far east "many of the tertiary activities in Asian cities are in forms of under-employment and symptomatic of low level of living rather than indices of big economic development. "Barring a few, most towns in Orissa have grown not for industrial and commercial reasons but for being centres of civil administration. Studies show that 60 per cent of employed persons experience unemployment from 1 to 6 months and 39.5 per cent for 7 months or more".

The distribution of workers in Class I towns is given in table VI. This table too indicates the low percentage of total workers engaged in concerns which are organised and therefore form formal sector. Except Rourkela, other cities have small percentage of workers engaged in manufacturing and processing other than the house-hold. All these point out that in urban Orissa informal sector provides largest opportunity of employment to work seekers.

Considering the importance and problems of the informal sector, appropriate measures should be undertaken to make the sector contribute effectively to the planned growth of the towns and the economy as a whole. The policy measures required may be stated as follows—

- (1) The development of the informal sector should be fitted into the frame-work of the development strategy for the entire economy.
- (2) The branches of activities in the informal sector which provide differentiated and market goods should be reinforced.

- (3) Where the conditions militate against competition the handicaps of the informal sector should be removed. Supply of credit and training facilities to the workers in informal sector should be removed. Supply of credit and training facilities to the workers in informal sector will be of great help.
- (4) Efficiency of the sector can be increased if measures are taken to organise small enterprises in such a way that the auxiliary services are available to them without any sacrifice of economic growth.
- (5) Complementarity between formal and informal sector should be developed. Gross sector sub-contracting should be promoted.
- (6) Supply needed by informal enterprise and supply made by them should be channelised through state purchasing and marketing organisations.
- (7) Diffusion and adaptation of appropriate technology along with manpower training measure should be undertaken. The development workers within the sector, imparting of managerial skill and provision of incentives through infrastructural amenities are other measures to promote the sector. The informal sector has played and continues to play a vital role in employment generation in urban areas notwithstanding the generally hostile attitude of Government policies¹².

'Informal sector' is to stay in our urban economy. It provides widest employment opportunities. Hence, town and economic planners have to think seriously how to develop this sector consistent with the planned development of the town and the economy as a whole. They have to acquaint themselves with the problems of the informal sector.

This requires detailed study of the various issues relating to the informal sector such as (a) Impact of education and development activities on the growth of this sector, (b) Social, political and economic impact

of the informal sector, (c) Vitality of this sector as a link between urban and rural economies (d) The nature and composition of this sector and their place in the future development of our economy.

This finding will pave way for new development strategy oriented towards employment generation and more equitable distribution of income.

REFERENCE

1. Draft Five-Year Plan 1978-83
2. Census of India 1971, Series 16,-Orissa Part II-A, PP.-9-10.
3. Ibid P. 19
4. Census of India, 1981, series 16 Orissa P-35
5. Paulo R. Souza and Victor & Tikman "The informal urban sector in Latin America" International Labour Review

- Vol-114 No. 3, November-December 1976, P. 354.
6. S. V. Sethuraman "The urban informal, sector, concept measurement and policy" International Labour Review July-August,-1976.
 7. Jan Breman "A Dualistic Labour System" E. P. W. 1976-P.-1942.
 8. S. V. Sethuraman "The Informal sector in developing Countries" on The Indian city—Alfraed, de souza.
 9. I. L. O—World Employment programme, Research in Retrospect and prospect" Geneva, 1976,
 10. Jan Breman, "A Dualistic Labour E. P. W. November 27, 1976 P.-1475,
 11. Applied Economic studies, Bureau of statistic and Economics Vol. II 1967. Page-89.
 12. S. V. Sethoraman opcit P.-13.

TABLE I
Number of Towns

State/District (1)	1941 (2)	1951 (3)	1961 (4)	1971 (5)
Orissa ..	29	39	62	81
Sambalpur ..	4	4	7	11
Sundergarh ..	..	2	4	5
Keonjhar ..	1	1	2	4
Mayurbhanj ..	1	1	2	2
Balasore ..	2	2	5	4
Cuttack ..	3	5	7	8
Dhenkanal ..	3	3	4	4
Boudh Khandamals ..	1	1	1	2
Balangir ..	4	5	5	6
Kalahandi ..	1	1	3	5
Koraput ..	2	5	7	10
Ganjam ..	6	6	10	15
Puri ..	1	3	5	5

Source—Census of India 1971, Series-16 Orissa P. 21

TABLE II
Number of Towns in each Class

Classes	1951	1961	1971	1981
(1)	(2)	(3)	(4)	(5)
Class I ..	1	1	4	6
Class II ..	1	3	2	8
Class III ..	5	8	20	26
Class IV ..	8	22	23	40
Class V ..	23	25	30	25
Class VI ..	1	3	2	3

Source—Census of India 1971, Series-16 Orissa, P. 165
Census of India 1981 Series-16 Orissa P. 37

TABLE III
Percentage of town in each class and percentage of population in each class to total number of towns and total urban population respectively

Classes	Percentage of towns			Percentage of population			
	1951	1961	1971	1951	1961	1971	1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Class I ..	2.57	1.61	9.88	17.26	13.19	38.28	41.63
Class II ..	2.56	4.84	1.23	10.49	20.55	3.94	12.76
Class III ..	12.82	12.90	23.46	23.24	20.27	29.17	21.83
Class IV ..	20.51	35.49	25.92	18.15	27.99	15.47	17.03
Class V ..	58.98	40.32	37.04	30.03	17.13	12.69	6.31
Class VI ..	2.56	4.84	2.47	0.83	0.87	0.45	0.44

Source—Census of India 1971 and Census of India 1981 series 16 Orissa P.38
Series—16 Orissa, P.166.

Notes—

Class I	..	Population	..	1 lakh and above
Class II	..	Population	..	50,000—99,999
Class III	..	Population	..	20,000—49,999
Class IV	..	Population	..	10,000—19,999
Class V	..	Population	..	5,000—9,999
Class VI	..	Population	..	Below—5,000

TABLE IV

Informal sectors share in Urban labour force in Latin American countries (In percentage)

Countries	Income share	Employment share
(1)	(2)	(3)
Brazil ..	24	..
Chile (1968) ..	..	39
Elselvador (1974) ..	41	46
Mexico (1970) ..	27	57
Paragnag (1973) ..	..	61
Venezuela (1974) ..	..	44

Source—Paul R. Souza, victor E. Tikman "The Informal Urban Sector in Latin America" *Int. Lab. Review*, November-December 1976, P. 358.

TABLE V

Occupational pattern of urban population in Orissa and India

Occupation	Orissa	India
(1)	(2)	(3)
1. Cultivation ..	7.34	6.54
2. Agricultural Labour ..	2.32	3.47
3. Minning & Qurring ..	2.95	2.51
4. House Hold Industry other than manufacturing ..	7.25	7.02
5. Manufacturing other than house hold industry ..	13.99	20.97
6. Construction ..	3.82	3.65
7. Trade & Commerce ..	11.33	16.30
8. Transport, storage communication ..	7.91	8.04
9. Other services ..	43.08	30.60

Source—Census of India 1961 Col-xii Orissa, Part-II—General Population Tables and Census of India Paper No. 1 of 1962.

TABLE VI

Distribution of workers in Class I Towns of Orissa 1971

Town	Total worker	Culti- vator.	Agr. Labourer	Live-stock fishery hunting etc.	Mining	Manufact. at house hold	Manufact. processing other household	Constr.	Trade commerce	Transport const.	Other service	Non-work
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Rourkela steel Town.	41,601	267	305	722	31	110	16,975 (40.87)	477	5,006 (12.03)	2,524 (6.0)	15,185 (36.5)	83,825
Cuttack City. ..	57833	314	446	1,236	19	2,680	80,96 (13.9)	1399	15,046 (26.0)	7,502 (12.9)	21,095 (36.4)	136,255
Berhampur ..	32,496	1,305	1,261	575	12	2,250	30,86 (9.4)	1177	7,819 (24.06)	3,031 (9.32)	12,040 (37.0)	85,166
Bhubaneswar ..	33,818	1,420	2,185	1,357	156	415	10,78 (5.5)	1742	5,636 (16.6)	2,558 (7.5)	16,471 (48.77)	71,673

Source—Census of India 1971, Series, 16, Orissa

Concept of Reality According to Madhvacarya

SHRI NILAKANTH PATI



There are some Indian Philosophers who are monists and idealists, some are plurelists and realists and some are pure momentarians. With this divergence in this speculation of the ultimate structure of reality, how is it possible to determine its true character? This is possible only when we are in possession of a criterion by which we can know the real and its distinction from what is unreal or an appearance, the semblance of reality. So says K. Narayan² "Truth can be known and distinguished from its negation only when a criterion warranting its existence and differentiating it from falsehood has been well comprehended". The very word 'Real' contains two chief meanings, i. e., when a man finds out that the object in front of him is really a post and not a man,³ he feels that he was still then under a delusion and the object of knowledge was unreal. The meaning which he attaches to the word unreal is that the knowledge of the object did not actually correspond with the true character of that object. The first meaning of the word 'Real', therefore is that the presentation of an exterior—object to our knowledge is incomplete agreement with the true character of that object.

True knowledge presupposes the existence of objects in space and time and thus realism as the expression exists in space and time is an inevitable corollary to the epistemological stand of Shree Madhva Carya. Reality of objects therefore consists in their existing at some place and sometime. When it is impossible to say that an object existed at sometime and some place the object is then said to be unreal. Like the horns of a human-being, are unreal, the son of a barren lady, the water in a mirage. But when, what we experience or observe as a piece of silver is a piece of silver, the knowledge is said to be true and if it is a piece of shell the knowledge is said to be false. So now for knowledge to be true the object before us must be silver, i. e., the object before us (in space) and now (in time) must exist as silver. What does not exist in space and in time cannot be real and hence unreal. In case of the illusion, i. e., the snake in a rope, the snake is unreal, because, it does not exist at the time of perception in the place occupied by the rope. The snake has no co-ordinates of space and time. Hence it is unreal. Now how can an object be revealed as it is unless it be

1. उभयतः पाशवद्वन्द्यायेन (In two horn of dilemma)
2. According to the view of K. Narayan in his 'Madhva Philosophy'
3. 'सविकल्पकज्ञानकाले स्थाणुर्वा पुरुषेयम् ।'

real ? Only if the object is real, i. e., only if the object exists in space and time, can we know the object to be as it is and can distinguish a knowledge relating to it to be as it is or, appear as it is not.

The distinction between real and illusory can be other than 'being unsublated' and 'being sublated'. This is averred by experience. When I want to know, if what I saw on the road at dead of night as the face of tiger to be real, I want to know whether the face of the tiger existed on the road (in space) and at dead of night (in time). If his face had the co-ordinates of the space and time as the road and dead of night respectively the tiger was real. Reality of objects thus amounts to existence in space and time. It is however not necessary to be 'real' an objects should exist at all times. Only eternal object exists at sometime or other. An evanescent thing like a lightning is as real as myself although the former is only transient and the latter enduring. *So whatever has co-ordination with space and time is real.*

Reality has therefore been succinctly defined as 'that relative to which it is impossible to predicate negation in time co-ordinates past, present and future 'त्रैकालिकनिषेधाप्रतियोगित्वम्' "Therefore perception cannot be negative by mere reasonings not based on some-other and a more powerful perception.' Moreover the basic nature of reality claimed for perception in this case is not based on considerations of its temporal priority or logical dependence for purposes of negation only but upon an intrinsic dependance established by rigid tests'. The capacity to stand such a practical test is lacking in the 'silver in the shell. But in respect of our normal experience of the world, all practical

conditions of validity are fulfilled. They cannot therefore be regarded as illusory with any justification." So as the followers of sruti and smruti we must have to admit something real, otherwise we will be no more than the nihilist (शून्यवादी).

But in the case of mounists the whole perceptual world is unreal. But it has been severely criticised by Madhvacharya. i. e. they say that the world is an illusion only besides the Parabrahma every thing which we perceive is quite false. It has neither existence nor reality. Then the question arises that, how do we observe the worldly phenomena. That why they say that the world is perceptible only because it is an illusion (आरोपितम्) on the Brahma, like the snake in a rope. It disappears when the reality of Brahma, is perceived. Though the world is unreal from the stand point of paramarthika still it appears before us as real (प्रातिभासिकम्). It happens only because of Maya or 'Anirvacaniyakhyati'. But Madhvacharya's statements are to be found in abundance in the Dvaita literature which declare that the world is as real as Brahman though dependent on Him. Madhvacharya refuted the doctrine of—'Anirvacaniyata' as something which is different from both real and unreal. The definition of 'Anirvacaniyata' is quite self-contradictory and isolates the law of excluded middle and is, therefore, illogical'. Also apart from this if we enquire about the relation between the Maya and Brahman the vedantin would either avoid this question by contending that because Maya is not real, the enquiry about its relation with Brahman is either futile or would answer in a way which would ultimately establish the truth of the doctrine that Maya is nothing but His power. As a matter of fact, as Madhva would contend, the conception of as Maya a real power of God is the only valid conception that is justifiable on the basis of Sruti and Smruti.

1. 'तथाहि न तावदुक्तप्रत्ययस्य सर्वथाऽसद्विषयकत्वं वक्तुं शक्यम् । शशशृंगादीनामपि प्रतीतिविषयतापत्तिः बाह्यमतप्रवेशाच्च । नापि सद्विषयकत्वम्, नेदं रजतमपितु शुक्तिः । नेदं जलमपितु मरीचिका-इत्यादिना वाधदर्शनात् । परमात सदसद्विलक्षणं तात्कालिकं रजतप्रत्ययगोचरमनिर्वचनीयमेवेति सिद्धमिति चेत्, असदेवेदं रजतमभादिति पूर्वोक्तप्रत्यक्षस्यासद्विषयकत्वादिति केचित् । तत् तुच्छम्, असत्त्वे तजज्ञानस्य प्रत्यक्षत्वासिद्धेः, इन्द्रियसन्निकर्षाभावात्, नहि 'शशशृंगं साक्षात्करोमि' इत्यनुभूयते कैश्चिदपि ।'

2. 'Philosophy of Madhvacharya'—By Dr. N. K. Sharma

'अध्यासपरपक्षगिरिवज्रम्'

Madhva refutes the monists by establishing his concept of realism. The monists contend that only the almighty Parambrahma is absolutely real and besides Him all are phenomenally real. But here the doctrine of Madhva carya teaches us that there are three things before us, which are absolutely real like the Parabrahma. They are, the Isvara, Jiva and Jada. Not only those are the real things but also their relations are real too. So the contrast between the Jiva and Isvara, Isvara and Jada, each Jiva with another and the each Jada, with another.¹

The mouists say that the world is illusion as it disappears by the Knowledge. But this is not at all correct, only the antiknowledge goes away by the true knowledge.² More over, what they say, the real one can not be negative and the unreal one cannot be perceived, that is why the world is

phenomenally perceived as an illusion like the knowledge of snake in a rope and which vanishes by the true knowledge and that is called as Anirvacaniya 'सदसद्भ्यां विलक्षणमिति' is quite wrong. Because i. e. we can get rid of the heinous since like killing Brahmins, etc. (ब्रह्महत्यादिपापेभ्यः). Which are absolutely real. by the darsan of setu (सेतु). On the otherhand we can posses the concept of skyflower and the horn of the man, etc. Which are quite unreal. Hence, there is no definite rule about the badha of sat and the apratiti of Asat. They blindly tell that the whole world is on illusion³. By Binigamana⁴ (one sided look) argument if we will consider this world as on illusion or phenomenally real then all the srutis will be false and the advices of the Acharyas i. e. 'Tell, what thou see.'⁵ 'The learned and scholarly sages advise the divine knowledge⁶ as well as the knowledge of the disciples will be false.

Gaudbad Sahi,
Near Guru house
P. O./District, Puri
Pin : 752001

-
1. 'जीवेश्वरभिदा चैव जडेश्वरभिदा तथा, जीवभेदा मिथश्चैव जडजीवभिदा तथा ।
मिथश्च जडभेदोऽयं प्रपञ्चोभेदपञ्चकः ।'

—'मध्वसिद्धान्तकणिका'

2. 'जगज्ज्ञानेन निवर्तते इति न नियमः, अपि तु विरोध एव नियामकः, ज्ञाननिवर्त्यत्वे न तावत्सत्यं मिथ्यात्वं वा नियामकम्, अपितु ज्ञानविरोधि—त्वमेवेति सिद्धम्'—'अध्यास परपक्षगिरिवज्रम्'—P-658.
3. 'असत्यमप्रतिष्ठन्ते जगदाहुरनीश्वरम्'—'पद्म पुराणम्' ।
4. 'विनिगमना—एकतरपञ्चपातिनीयुक्तिः ।'
5. 'यत्त्वं पश्यसि तद्वद, कठ. उप.—अ. 2, म.-14.
6. 'उपदेक्ष्यन्ति ते ज्ञानं ज्ञानिनस्तत्त्वदर्शिनः'—म. गी.— अ. 4, श्लो—34.

—X—

Orissa Poised for a Breakthrough in Agriculture : New Strategy's Potential proved

Orissa in the coming years would achieve a real breakthrough in agriculture and would figure prominently among the States with large marketable surplus, said Shri J. B. Patnaik, Chief Minister, Orissa while addressing the Third Indian Agriculture Congress at Bhubaneswar on January 5th. The Congress was inaugurated by Shri N. Sanjiva Reddy, President of India. A bold and innovative strategy for rapid improvement in agriculture in the State had been undertaken to get over the humps like stagnation in agriculture productivity and low use of agricultural inputs like fertilizers, pesticides and credits etc. An important facet of the strategy was the compact area programme—whose coverage had been stepped up from 10,000 hectares to 2 lakh hectares during the current year, said the Chief Minister. Giving details Shri Patnaik said that the programme followed the minimum yield guarantee approach under which inputs and management practices were made available to the farmers at their doorstep and the programme was subjected to close supervision of hand-picked field functionaries. This had resulted in substantial increase in the yield rate. Other facets of the strategy included supply of certified seeds to sizeably increase the coverage under high yielding variety, supply of fertilizers and insecticides and credits, larger coverage by co-operatives and intensification of expansion support. Large expansion of coverage under oil-

seeds and pulses had been programmed to match the programme for setting up 10 new Spinning Mills and comprehensive scheme for cotton cultivation has been mounted. Similarly, a programme had been initiated to develop sugarcane cultivation in the hinterlands of the proposed two sugar factories. A network of oil mills and chain of cold storages and a large godown with World Bank support were part of the State Government's endeavour.

Concerted efforts for increasing agricultural production said the Chief Minister, had yielded impressive results in the first year itself and the food production had reached a record level of 59.77 lakh tonnes in 1980-81 against the previous highest of 57.64 lakh tonnes. After many years the average yield-rate of paddy had increased to 10.40 quintals per hectare against the near stagnation level of 10 quintal per hectare. This effort had been backed by an ambitious programme by doubling the area under irrigation during the decade.

The Chief Minister referred to a few stark realities such as population increase, fragmentation of holdings and continued dependence on the mercy of rain God which should be taken note of while planning the future strategy for agricultural development and said that since the possibility of increasing land area being

limited the emphasis hereafter had to be laid on productivity—improved multiple cropping in areas under irrigation and assured rain-fall areas, improvement in dry-land technology and like. The scope for all these was vast since the present average yield for most crops has still exceedingly low. The production potential of India in terms of standard grain equivalent was more than 4,000 quintals. This potential had to be tapped at all cost for producing not only foodgrains but also a wide variety of commercial and industrial crops, fruits and vegetables, etc.

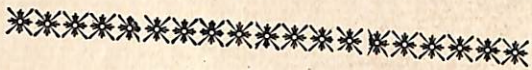
Hard and sustained work and good management were essential to efficient production. Orissa's E. R. R. P. programme had established that agricultural labourers who had no experience whatsoever could produce enough from 2 acres of land to sustain their families provided that necessary support was extended to them. A small and marginal farmer must have adequate resources to ensure maximum productivity.

"Access to credit would require expansion of credit infrastructure and greater motivation and involvement of its personnel. When the small farmer becomes still smaller, technology should be simple, unexpensive and entirely cost effective," said Shri Patnaik.

At the outset the Chief Minister outlined the sea-change that had come over Indian agriculture during the last three decades. Indian agriculture to-day, he said owed a lot to Pt. Jawaharlal Nehru and Smt. Indira Gandhi for their pragmatism, initiative and drive. If foodgrain production today has reached 130 million tonne from 50 million tonnes and self-sufficiency achieved the credit goes to these two leaders and to millions of farmers toiling hard on the field. Economists all over the world have acknowledged Indian agricultural revolution nurtured under a democratic Government as a model for developing countries. Credit for this achievement goes to the Government and the millions of our farming community, said the Chief Minister.

— X —

From the Editor



Orissa Review greets the Readers on the occasion of the Republic Day, 1982 and wishes each of them prosperity and wealth.

The Constitution of India is a fundamental document of great importance. It has stood the turbulent times and spirit of the growing Nation ably and continues to be a great binding force. The Constitution is supreme and this is the gift of Pundit Jawaharlal to the Nation. Any and every Indian cherishes this Constitution.

But this is not a static document. In a fast moving world, with the changing values of society, the Constitution does change to bring the cherished desires of India to its people. These changes are certainly welcome to the common millions. On this Republic Day "Orissa Review" salutes the unfurled Tricolour with a sense of respect and expectation.

On this occasion our memory goes back to the hallowed Mahatma, who brought Life to a moribund nation. We produce an article by an eminent Gandhian on the teachings of the Father of the Nation.

Agriculture is the keystone to our future. Ninety per cent of us live by agriculture and India will continue to be an Agricultural Nation for several decades. We publish the thoughts of Shri Janaki Ballav Patnaik on this issue and hope the readers will appreciate his view-point.

Satyajandas Champertiray

—X—



Shri C. M. Poonacha, Governor of Orissa with Mr. A. V. Hayday, British Deputy High Commissioner in Calcutta at Raj Bhavan, Bhubaneswar on December 13, 1981



Minister Shri J. B. Patnaik inaugurated the Cultural Exhibition at Bhubaneswar on January 1982. Shri Patnaik is going round the exhibition



The foundation stone of the Industrial Estate and Industrial Area, Khurda being laid by Shri J. B. Patnaik, Chief Minister, on December 21, 1981



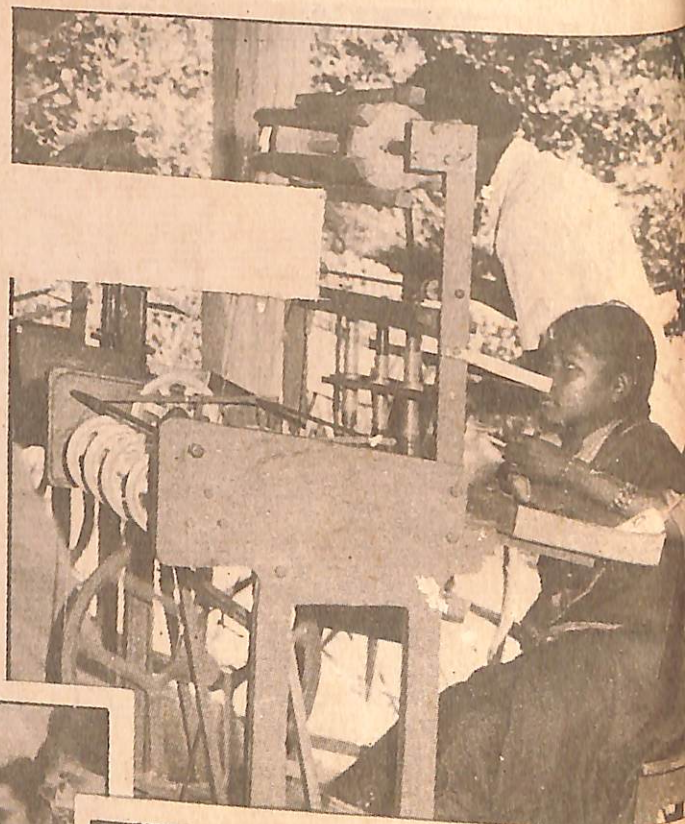
Chief Minister Shri J. B. Patnaik laying foundation of Women's College, Phulbani on December 10, 1981

1982

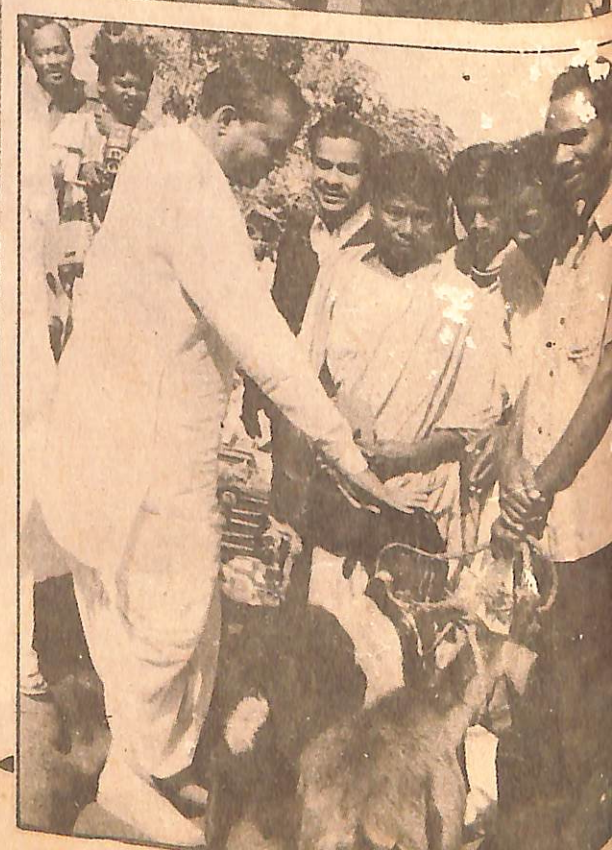
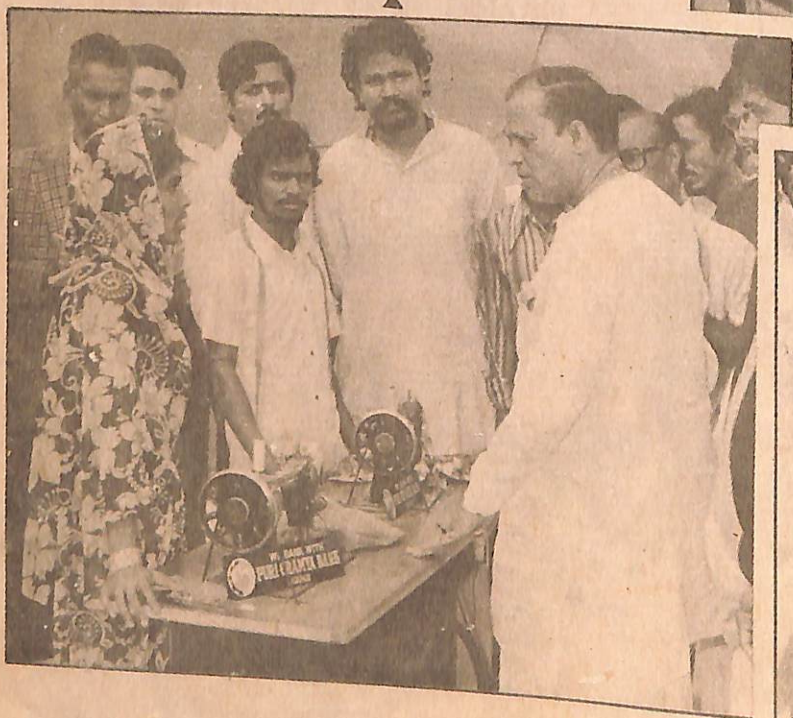


Oh my beloved son I
Thou art the friend of the poor indeed I
Laden in basket and carried on shoulder
I am come to see your face with my sinful eyes.
▶ Before death snatches me away
You have certainly cared for my subsistence ;
But how long am I to survive !
Spirit of service to the poor
May enliven your heart.

I have neither time to play with wooden dolls
Nor leisure to build a house of sands
Our Government has found work for me
To spin Tusser with my hands.



THEN Time heavily hung on us
Giving rise to worry
Now it's the first casualty
Thanks to sustained employment
We are always in a hurry.



To wipe out poverty of the rural poor
'Manik' comes forward to help them ever.