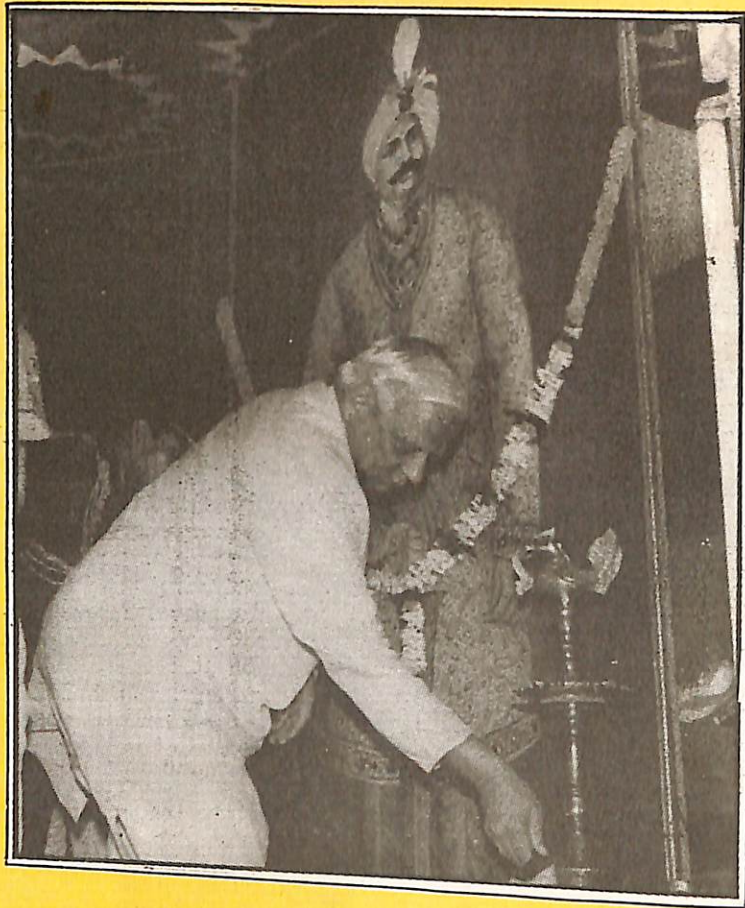


ORISSA REVIEW

JUNE 1992





Hon'ble Governor Shri Yagya Datt Sharma inaugurates one-week long Birth Centenary Celebration of Maharaja Krushna Chandra Gajapati Narayan Deo at Berhampur on April 20, 1992.



Shri Biju Patnaik, Chief Minister of Orissa is giving awards to the eminent Artists of Orissa in Silpi Sambardhana organised by Orissa Sangita Natak Academy at Soochana Bhawan on 27-3-1992. Minister, Information & Public Relations, Shri Sarat Kumar Kar is also present in the programme.

ORISSA REVIEW

Vol. XLVIII No.11
JUNE, 1992

Editorial Board.....

SHRI K. K. RATH
Director, I. & P. R.

SHRI BISWAJIT DAS
Editor

Cover
Baladev Maharatha

The Orissa Review aims at disseminating knowledge and information concerning Orissa's socio-economic development, art and culture. Views, records, statistics and information published in the Orissa Review are not necessarily those of the Government of Orissa.

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Contents

- Gopabandhu : The Harbinger of Nationalism
in Orissa 1
Debi Prasad Mishra
- Food Grain Cultivation in Orissa : An Analysis 4
Sadhu Prasanna Pati
- Consumer's Movement and Public
Consciousness 6
R. C. Patnaik
- Profitable Cultivation of Upland Rice in Orissa 9
Dr. Subodha Kumar Sahu
- Food Adulteration and Housewives 11
Trupti Mohanty
- Poetry in Sandstone 15
Bibhuti Mishra
- Pandit Nilakantha Das : His contribution to
Orissa Politics. 17
Jayashree Tripathy
- Marketing of Agricultural Products in Orissa 20
Dr. R. C. Mishra
- Social Forestry and Wastelands
Development in Orissa. 30
Dr. R. A. Sharma
- Children's Literature : Some
Reflections. 38
Maheswar Mulia
- Writing for Children's Radio Programmes 40
Dr. Jagannath Mohanty
- Pages from a Reporter's Diary—
"The Day I worked like a Scotland
Yard Police." 44
Ramahari Mishra

GOPABANDHU : THE HARBINGER OF NATIONALISM IN ORISSA

Debi Prasad Mishra

Utkalmani Pandit Gopabandhu Das belonged to the first generation of India Nationalist leadership which appeared during the outbreak of freedom struggle in India and gave real shape and impetus to Oriya Nationalism. He was the Chief motivating spirit of the Congress Movement in Orissa. He was associated with the Utkal Union Conference for a long time. But after returning from Nagpur session of the Congress, Gopabandhu formed the Orissa Provincial Congress Committee with himself as its President.

The Indian National Congress took the final decision to launch the Non-Cooperation Movement in India and Gopabandhu as a Congressman decided to withdraw himself from Bihar and Orissa Legislative Council as non-co-operator. He called upon the Utkal Union Conference to accept the Congress ideology. In its Chakradharpur Session of the Utkal Union Conference Gopabandhu told the Oriya Nationalists not to remain aloof from the main stream of national consciousness and to join the Indian National Congress. He did not distinguish between Oriya nationalism and Indian nationalism. In his view Orissa was an integral part of India and its progress was possible only through the integrated development of the other parts of the country.

With the launching of the Non-cooperation Movement by Gandhiji, Gopabandhu became the apostole of the Congress Movement in Orissa. He established provincial Congress

Committee at Puri in December 1920. Then he organised Congress Committees in each district of the state. In his weekly 'Samaj' he appealed the Oriya not to stand aloof from the mainstream. By publishing this weekly Gopabandhu filled up the vacuum in the field of Oriya journalism and also rendered valuable service in creating national consciousness among the people of Orissa. The Youths in Orissa came out spreading the message of the congress and its creed of non-co-operation. Gopabandhu swayed the masses by his oration and his passionate feeling for his country as never before. More and more people now came under the sway of these ideas.

Gopabandhu converted his Satyabadi School into a national school. Hundreds of youths including Nilakantha Das, Godavarish Mishra, Niranjan Patnaik, Harekrishna Mahtab, Nabakrishna Chaudhury, Jadumani Mangaraj, Chandra Sekhar Behera, Bhagirathi Mohapatra and Dibakar Patnaik were among the first band of followers who stood solidly behind Gopabandhu. Many of them left schools and colleges with their educational career incomplete. Lawyers gave up practice at the bar and Government servants resigned their jobs in protest. The institutions known as 'Swaraj Ashram' at Cuttack, 'Alakashram' at Jagatsingpur and 'Swaraj Mandir' at Balasore were set up for training the congress volunteers and workers. Gopabandhu also founded the 'Utkal Swaraj Sikhya Parishad' (National Education Council) at Cuttack for working out the

programme of non-co-operation and enrolling volunteers for the movement. Godavarish was sent to Chakradharpur and Nilakantha to Sambalpur to take charge of national schools established there.

The non-co-operation had gathered a great momentum throughout Orissa. Thousands voluntarily courted arrest. Gopabandhu had a feeling that an Orissa tour by Gandhiji would give a moral boost to the movement. He had therefore invited Mahatmaji in the Nagpur session to visit Orissa. Mahatmaji accepted the invitation of Gopabandhu and came to Cuttack on March 23, 1921. Gandhiji had felt that his visit would not only spread the congress ideas in Orissa, he would have an opportunity for direct contact with the poverty-stricken people of the province. He visited different places of Orissa with Gopabandhu. His speeches in the public meetings were translated into Oriya by Gopabandhu. There was one such meeting on the sands of river Kathjuri at Cuttack in which Gopabandhu had addressed the mass :

"The Mahatma is now present before you. XXX XXX Great men from Buddha upto Kabir, Ramanuja, Sankara, Nanak, Chaitanya and others who have lived in India, have their symbols in Orissa. About 300 years ago on this very day of Holi, Chaitanya Dev had preached the Doctrine of love on these sands. Today 300 years after on that very day, another great man is here to preach the doctrine of political love. X X X X There is no place for diplomacy in the politics of the Mahatma. I appeal to you to imbibe the message of Gandhiji in full recollection of the ancient glories and catholicity of the Oriya people."

After spreading his message among the citizens at Cuttack Gandhiji left for Bhadrak, Satvabadi, Puri and Berhampur within six days. He had spent a day at the Grove school at Satyabadi. It was Gandhiji's first visit to Orissa. Gopabandhu was always with him during his tour. Gandhiji was well acquainted with the problems, flood famine and poverty of her people. He knew Gopabandhu during famine of 1917 in which he had helped the relief operation in the province by men, money and materials collected from other

parts of India. His mission was also to propagate the congress ideal of non-violent/non-cooperation.

During the visit of Gandhiji in Orissa he hoped at least one lakh of people should be enrolled as congress members in Orissa before June 1921 and the people of Orissa should subscribe three lakhs of rupees to Tilak Swaraj Fund to be spent for the management of national schools, Panchayat systems, Khadi and such other constructive works. Accordingly Gopabandhu organised the 'Tilak Swaraj fund' in Orissa and to build up the finances of the congress with a subscription of only 1 pice from each person and collection for this fund made the common man an active participant in congress activities. About Rs. 22,000 were raised for this fund in Orissa. With the active role of Gopabandhu the congress members in Orissa could raise upto forty thousand and 16,000 spinning wheels were introduced in Orissa.

Gopabandhu had also formed the Utkal Independence Service corps in order to enlist the youths for the service of the motherland. It is due to the efforts of Gopabandhu, the congress was well established and organised properly in Orissa and enthusiasm was generated among the people for the cause of independence.

Though Gopabandhu was prevented by police to address meetings organised by the Congress yet he went to different places of Orissa to address public meetings. Kendrapara, Balasore, Chakradharpur, Sambalpur, Chainbasa, Jharsuguda, Vizagpatam and Madras were among those places where he had attended congress meetings and organised the Oriya people to achieve independence from foreign hands. Many times he had courted arrest. In September 1921 he paid a visit to Calcutta where he presided over a rally of Oriya workers in Jute and Cotton mills. Wherever he went he spread the message of the congress.

Gopabandhu including other six members from Orissa attended the session of All India Congress Committee at Bombay towards the end of July 1921. It was resolved to emphasize several programmes of the movement like

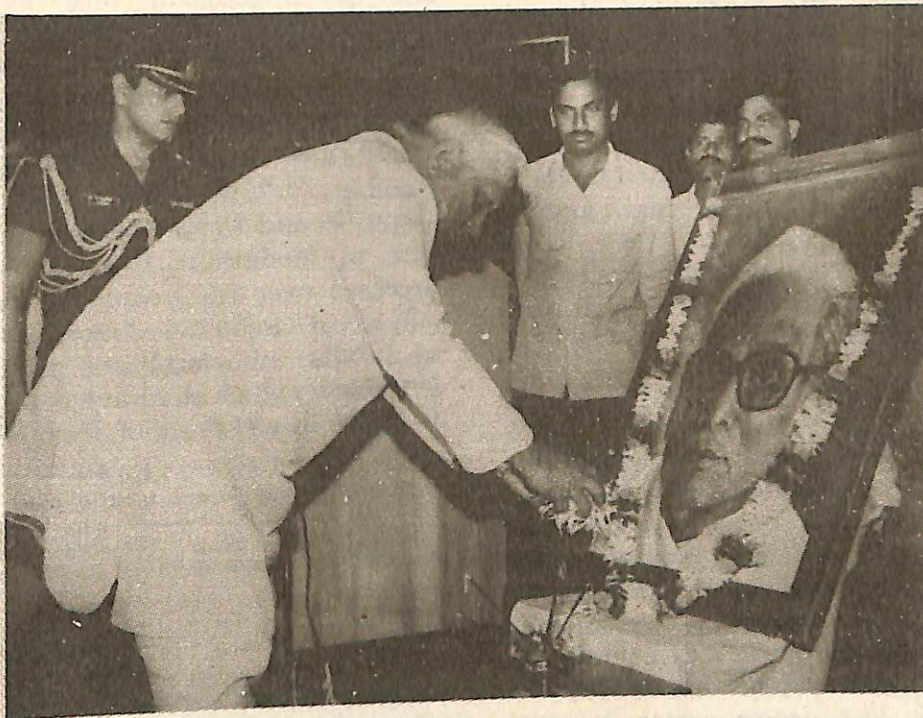
boycott of Prince of Wales, prohibition of foreign goods and using of charakha etc. Gopabandhu tried his best to inculcate the new spirit in the minds of the people of Orissa. After his return from Bombay, he made vigorous attempts to propagate the congress ideals amongst the people.

Gopabandhu Das, the foremost leader of Orissa in the earlier phase of Gandhian movement, played a conspicuous role in the province for long three decades of the 20th century. He held an unique position not only in the freedom struggle but also for strengthening the socio-economic condition of Orissan people by introducing Gandhian principle of self-employment. He raised voice against the exploitation of the policy of British Government through the programme of the Indian National Congress.

Reference :

- (1) Orissa Review, December 1987
- (2) The Orissa History Congress Journal, June 1990.
- (3) Utkal Sammelani Sabha, 1903-20
- (4) Annual Adm. Report, Bihar and Orissa, 1920-21.
- (5) Orissa Legislative Assembly Proceedings - Vol. I, 1937.
- (6) Sadhanar Pathe - H. K. Mahtab
- (7) Pandit Gopabandhu - S. C. Das
- (8) Orissa State Legislature and Freedom Struggle, 1912-47 -K. M. Patra.

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Shri Yagya Datt Sharma, Hon'ble Governor of Orissa is offering flowers at the photograph of Binod Kanungo at the memorial meeting of Binod Kanungo held at Soochana Bhawan on 22.6.1992.

FOOD GRAIN CULTIVATION IN ORISSA: AN ANALYSIS

Sadhu Prasanna Pati

The thrust of economic development in Orissa is on agriculture for 75 per cent of the total workers of the state are cultivators and agricultural labourers. In Orissa a variety of crops are grown but the cultivation of foodgrains assumes utmost importance because the farmers here prefer these crops in preference to commercial crops. In successive years, the foodgrains always dominated the cropping coverage pattern of the state. The area under foodgrains account for more than 80 per cent of the gross cropped area in the state. The term foodgrains cover cereals, millets and pulses and hence include crops like rice, wheat, maize, ragi, jowar, bajra, arhar, mung, kulthi, etc. The cultivation of these crops are spread over the entire state and some are cultivated as khariff and others as rabi crops.

At present, the study of goodgrain efficiency, sufficiency and deficiency is of vital importance in Orissa where population explosion is taking place. The population has increased from 26.9 millions in 1981 to 32 million in 1991. This figure is projected to be 40.10 million by the year 2001 A. D. In 1955-56, the per capita availability of foodgrains was 413 grams which reached 669 grams in 1985-86. Due to low purchasing power, foodgrains always constitute a higher proportion in the daily diet of the people of Orissa and hence a detail analysis and understanding of its cultivation is of vital importance.

The cultivation of goodgrains in terms of its area, production and yield depends primarily on timely rainfall. A year of adequate rainfall gives better harvest. The area under foodgrains increased from 44,54,000 hectares in 1955-56 to 69,08,000 hectares in 1980-81 and reached an all-time record of 70,72,000 hectares in 1990-91. This became possible mainly due to good rainfall and timely supply of irrigation water.

The production of goodgrains increased from 24,28,000 tonnes in 1955-56 to 69,72,000 tonnes in 1985-86. This figure stood at 79,73,000 and 69,62,000 tonnes in 1989-90 and 1990-91, respectively. The yield rate of foodgrains have shown consistent increase over the years. Several factors like success of 'Green Revolution', adequate supply of inputs and fertilizers, timely supply of irrigation water, etc. have contributed for the increase in yield rate of foodgrains.

TABLE 1
Area, Production and yield of foodgrains in Orissa

Year	Area (000' Hect.)	Production (000' tonnes)	Yield (Kgs./Hect.)
1955-56	4,454	2,428	545
1965-66	5,371	3,684	686
1975-76	6,484	5,571	859
1980-81	6,908	5,978	865
1985-86	7,043	6,972	990
1989-90	6,971	7,973	1,144
1990-91	7,072	6,962	985
1991-92 (target)	5,348	7,514	..

Source : Agricultural Statistics, Directorate of Agriculture, Orissa.

POSITION OF RICE :

Rice is the most important crop grown in Orissa. In 1984-85, it alone contributed 74.4 per cent of total foodgrains production in the state and contributed about 11 per cent of the whole country's output of rice. This crop is cultivated as a part of age-old family tradition rather than as commercial proposition.

TABLE 2
Area, Production and yield of rice in Orissa

Year	Area (000' Hect.)	Production (000' tonnes)	Yield (Kgs./Hect.)
1955-56	3870 (87)	2102 (87)	543
1965-66	4,232 (79)	3240 (88)	766
1975-76	4684 (73)	4532 (81)	968
1980-81	4191 (61)	4301 (72)	1026
1985-86	4196 (60)	4880 (70)	1163
1989-90	4391 (63)	6284 (79)	1431
1990-91	4403 (63)	5275 (76)	1198

Source : Agricultural Statistics, Directorate of Agriculture, Orissa.

NOTE : In the table the figures in parenthesis indicate percentage of rice to the foodgrains area and production in corresponding years.

From the above table, the position of rice in terms of area and production to the corresponding figures of total foodgrains can easily be understood. In 1955-56 rice contributed 87 per cent to the area under foodgrains of the state. This percentage has shown slow decline over the years and reached 60,63 and 63 % in 1985-86, 1989-90 and 1990-91 respectively. This indicates that the farmers in general are switching over to the cultivation of other remunerative foodcrops and the state is witnessing more diversified cropping coverage pattern. In terms of production, rice contributed more than 70 per cent to the total foodgrain production in all cases. It contributed 87 per cent to the total foodgrain production in 1955-56. In 1985-86, 1989-90 and 1990-91, the contribution of rice to the total foodgrain production was 70,79 and 76 per cent, respectively. The contribution of rice to the

total foodgrain production has remained almost constant around 75 per cent although in terms of area such contribution has shown progressive decline. In 1955-56, rice was cultivated in 38,70,000 hectares and this figure was 41,96,000, 43,91,000 and 44,03,000 hectares in 1985-86, 1989-90 and 1990-91, respectively. The production has doubled during the period 1955-56 and 1990-91. Similarly, in terms of yield rate the state has achieved tremendous progress in case of rice. The yield rate of rice was 543 kgs/ hect. in 1955-56 which increased to 1198 kgs/ hect. in 1990-91, thus increasing by more than two-fold.

CONCLUSION :

The place of foodgrain cultivation in the agricultural calendar of the state cannot be ignored. There is absolutely no need to disturb the existing agricultural environment but steps should be taken to make foodgrains competitive with other commercial crops both in terms of quality and quantity. In general, the foodgrain production in the state is not bad but some areas are to be provided with better infrastructure like pump sets, fertiliser and improved quality seeds. The government has taken the right decision in this direction. Due to the various schemes undertaken by the government it is expected that the foodgrain cultivation can serve as an example to the entire country.

REFERENCES :

1. Census of India, General Population Table, Part-III A, Orissa, Series-16.
2. Agricultural Statistics, Directorate of Agriculture, Orissa.
3. The War for Food Security-B. S. Raghavan, The Hindu, Oct., 1990.

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CONSUMER'S MOVEMENT AND PUBLIC CONSCIOUSNESS

R. C. Patnaik

Unfair practices in trade and commerce were prevalent even in olden days. Priests in Sumatra and Babylon are on record to have lent money to the needy people at higher rates of interest. During the period of Tudors there were the practices of pushing up prices by buying up supplies before they reached the market. Thus exploitation at market place is not a new phenomenon.

In common with growing legal systems in other parts of the world, new horizons have been emerging in Indian law specially after this country attained independence. In India with its vast population and relatively low level of literacy, the awareness of the consumers about their rights was rather inadequate. In view of this, there was considerable exploitation of the consumers in both the urban and rural areas. The Consumer Movement in India gained momentum in the Eighties.

With a view to protect the consumers from exploitation and to provide for redressal of their grievances, the Consumers Protection Act came into force in 1986 and our State Government implemented the Consumers Protection Rules w. e. f. 15th March, 1988. In accordance with Section-9 of the Consumers Protection Act a consumer disputes Redressal Forum known as the District Forum shall consist of a person from the Senior Judicial Service to act as its President, a person of eminence in the field of education, trade or commerce, and a lady social worker.

A complaint in relation to any goods and services may be filed in the District Forum by (1) the consumer to whom such goods are sold or delivered (2) any recognised consumers association, whether the consumer to whom the goods sold or delivered or service provided is a member of such association or not (3) the Central or State Government.

On receipt of complaint the Forum prefer a copy of the complaint to the opposite party directing them to give their version of the case within a period of thirty days and further extension of time not exceeding fifteen days. Where the opposite party denies or disputes the allegations contained. In the complaint represents his case within the time granted by the District Forum shall proceed to settle the dispute. Where the consumer's alleges defect in goods which can not be determined without proper analysis or test of the goods, the District Forum shall obtain a sample of the goods, seal it and refer to appropriate laboratory with the direction to report it's findings to the District Forum within 45 days of receipt of the reference. Before the sample is referred to the laboratory, the District Forum may require the complainant to deposit to the credit of the Forum such fees as may be indicated for payment to the appropriate laboratory for carrying out necessary tests. This is deposited by the Forum to the laboratory. On receipt of the report from the laboratory, the District Forum shall forward a copy of the report with remarks of Forum to the opposite party. If the opposite party disputes the correctness of the

findings or the methods of analysis, the District Forum shall require the opposite party to submit in writing his objections. The District Forum shall give reasonable opportunity to the complainant as well as the opposite party of being heard as to the corrections and issue judgement under Section 14, if the complaint received by it relates to any services. District Forum refer a copy of such complaint to the opposite party directing him to give version of the case within a period of thirty days and further 15 days granted by District Forum. The opposite party on receipt of the complaint referred to him denies or disputes the allegations or fails to take any action to represent his case within the time limit shall proceed to settle the consumer dispute on the basis of evidence brought to its notice by the complainant.

If after the proceedings conducted under section-13, the District Forum is satisfied that the goods complained against suffer from any of the defects specified in the complaint or any allegations contained in the complaint about the services provided, the District Forum shall issue an order under Section-14 to opposite party directing him (i) to remove defects pointed out by the appropriate laboratory (ii) to replace the goods with new goods of similar description free from defect (iii) to return to the complainant the price of the goods paid by the complainant (iv) to pay such amount as compensation to the consumer for any loss or injury suffered by the consumer due to the negligence of the opposite party.

Where the cost of goods or services is below one lakh rupees, the complaint is to be given in the concerned District Forum. In case it exceeds more than one lakh and below ten lakhs then the complaint is to be filed before the State Commission. But when the cost of the goods and service exceed ten lakhs rupees the complaint should be filed before the National Commission. Since there is no involvement of Court fees or any other expenditure the complainant or his authorised person can file the petition whether in person or by post. There is no need of engagement of Lawyer for filing or pleading the Case. While filing the complaint the following should clearly be indicated,

1. Name, address of the complainant & other information.
2. Name & address of the defendant.
3. Details of complaint, how it originated, etc.
4. Supporting written documents in favour of the complaint,
5. Nature of orders or assistance prayed,
6. Full signature of the complainant or his authorised person.

Any person aggrieved by an order made by the District Forum may prefer an appeal under Section-15 against such order to the State Commission within a period of thirty days from the date of the order. Similarly if a person is aggrieved by an order made by the State Commission may appeal to the National Commission within a period of thirty days from the date of the order.

Some of the judicious orders passed by the Forum recently are as follows : In a case filed by Sarthak Bahuria and others against the Orissa State Housing Board & others, the Forum ordered on 24th November, 1990 that "whether deficiency in service rendered by Housing Board maintainable disputes relating to defects in construction report of the defects delay in delivery of the house to be allotted warrants compensation claims in respect of each of the complainants are allowed as given hereunder :

- (i) cost of rectification of major defects
Rs. 60,000.00
- (ii) Interest on Rs. 2,20,000 for one year from 1st January, 1988 to 31st December, 1988 at the rate of 7 1/2 per cent.
- (iii) Cost of frequent travel at Rs. 500 only.

In another case filed by Niranian Das & others against the New India Assurance Co. Ltd. and other, the Forum ordered on 27th January, 1990 that "Complainant, owner of the Truck bearing No. OSC 8521—the vehicle met accident on 6th September, 1987. The complainant produced all required documents by 15th March, 1988 the Surveyor assessed

the damages at Rs. 31,063.46 paise-claim not settled inspite of several representations of the complainant-The services of the opposite parties as Insurer was hired by the complainant for consideration-No justification for delay in payment of the amount assessed-deficiency in service established complainant is entitled to be paid Rs. 35,000 within 2 months.

Consumer's Protection Laws and their implementation in Orissa is still in a fundamental stage and lot more has to be achieved in the coming years for the success of

the consumer's protection movement. Consumers day should be launched for at least week long drive every year for spreading consumer's awareness. Apart from the role of voluntary organisations, the media has also an extremely useful role in spreading the consumers movement. Press, Television and Radio can also contribute towards success of the Movement.

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Shri Biju Patnaik, Hon'ble Chief Minister is teaching an adivasi lady to start writing on the occasion of inauguration of literacy campaign at Keonjhar on 22.6.1992.

PROFITABLE CULTIVATION OF UPLAND RICE IN ORISSA

Dr. Subodha Kumar Sahu

Orissa is one of the major rice growing states of the country. The State occupies 6.62 million hectares of cropped area, out of which 4.37 million hectares are under rice cultivation. The rice cultivation in the state is practised both under upland and lowland situations. Upland rice occupies 0.87 million hectares in the state. Rice grown in these lands are taken up during Kharif under rainfed situation.

Typical uplands are those where standing water is not impounded 48 hours after cessation of the rain. The upland rice fields are either bonded or unbonded. The fields may be slopy or flat on. Rice grown under uplands in farmers' fields does not exceed 6.5 q/ha.

The causes of such low productivity in uplands of Orissa are due to (i) soil acidity, (ii) toxicity due to Al and Mn, (iii) high phosphate fixation, (iv) Soil erosion in slopy and terraced lands, (v) loss of applied N due to run off and deep percolation, (vi) iron deficiency in black and calcareous soils, (vii) soil moisture stress due to erratic distribution of rainfall causing draught, (viii) heavy weed infestation, (ix) use of low yielding local varieties, (x) lack of seed dormances, (xi) difficulties arised during harvesting, threshing and drying in the event of heavy rains in September and October and (xii) biotic stress caused by insect pests like termites, gundhibug mealybug stemborer, nematodes etc. and diseases like brownspot, blast and sheath blight.

A rice yield of an average 20 q/ha. can be obtained in farmers' fields under upland situation by adopting following improved production technologies.

(1) Crusting is a burning problem of upland red and laterite soil of Orissa. Deep ploughing across the slope with improved plough breaks hard pan, loosens sub-soil, conserve soil moisture in wet season, allows rice roots to penetrate deeper layer for extraction of moisture from sub-soil and checks weed population.

(2) Acid soils cause aluminium toxicity and decrease fertiliser use efficiency by upland rice. Application of lime at 1.5 to 2t/ha. once in three years ameliorates soil acidity and detoxify the adverse effects of aluminium and manganese. Paper mill sludge containing 75% CaCo₃ in a cheap source of liming materials. In absence of lime application of ground rock phosphate twice the required dose for upland decreases phosphate fixation and adverse effects of Al. Rock phosphate should be broadcast two weeks earlier sowing seeds with available soil moisture.

(3) Bounding and contour terracing checks surface runoff and soil erosion. Storage of rain water saves the crop by irrigating during critical stages of crop growth.

(4) Annual application of organic manure and compost at 5t/ha. improve soil structure, increase water retention and soil fertility.

(5) High yielding rice varieties such as Kalyani(65), Heera(68), Kalinga III(85), Vana prabha(90), Neela(90), Pathara(90), Keshari(95), Parijat(95), Annapurna(100), and suvadra(105) do well in upland situation yielding 20 to 25 q/ha. Depending upon the effective rainy days extra early (65-85 days) and early (86-105 days) varieties should be selected.

(6) A speed rate of 80-100 kg/ha., depending on seed size, should be sown before on set of rain. Sowing behind the plough at 20 cm apart at 4-5 cm deep ensures right plant population and facilitates inter cultural operations. Seed treatment with Bavistin at 2 gm/kg seed makes seedlings disease free.

(7) Application of fertiliser on soil test is highly remunerative. A fertiliser does of 40-20-20kg. N, P and K/ha. along with FYM at 5t/ha. is recommended for upland rice. Soils having low to medium soil test values an addition of 25% extra fertiliser over recommended does is required. All the P and K containing fertilisers are applied at sowing behind the plough. Single super phosphate is the best source of P for moderate acidic to neutral soils. Mixture of S SP and R P at equal proportion on P basis proved superior to SSP alone in these soils. Muriate of Potash is the only source of K as straight fertiliser.

Rice varieties having duration of 62-85 days should receive full recommended N at sowing. varieties of above 85 days should receive 2/3 of recommended N at sowing and rest 1/3 at 21 days after sowing. Urea and ammonium sulphate are the two important straight nitrogenous fertilisers. NPK complex, D A P and gromor have proved efficient for upland rice. These fertilizers are applied at sowing only and any shortage of N is adjusted with application of Urea.

(8) Weed is a menance for upland rice. Application of saturn or butachlor at 1.5 kgai/ha. in 1000 litre of water after first shower of rain before germination checks nearly 75% of weed population.

(9) Harvesting of grains at 80% maturity checks shattering and indoor threshing protects the grains from getting damaged due to rain.

(10) Large scale adpotion of these above practices in rainfed upland rice areas may help increasing and stabilising average grain yield of 20 to 25 q/ha.

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Shri Sarat Kumar Kar, Minister, Information & Public Relations is addressing at the closing function of 100 days camp organised by Chinta-O-Chetana near Bindusagar tank, Bhubaneswar on 25.5.1992.

FOOD ADULTERATION AND HOUSEWIVES

Trupti Mohanty

In a country like India food adulteration has created havoc among its ever increasing population. Shortage of food stuff and spiralling price have aggravated the problem and have added to the cause of adulteration. The practice of quick gain along with high profit has hinted the merchant towards this malpractice. Even the retailer has been tempted towards such unethical practice forgetting the sole motto of business. To sum up with, the ethics of quality business has been totally wiped out from the marketing scenario in our country. This food adulteration not only leads to high morbidity but also sometimes proves to be fatal. On this line it is well suited to quote the comments of an UN expert who says that, "whole generation of Indians has grown up not knowing the taste of unadulterated food."

The term food adulteration includes intentional addition, substitution or abstraction of substances, which adversely affect the quality of the food, incidental contamination of food with deleterious constituents, such as toxins, insecticides, pathogenic bacteria and fungi, etc. Due to ignorance, negligence or lack of proper storage facilities and lastly a contamination of good with harmful micro-organism during production, storage and handling. As it has rightly been said by someone that "woman is the owner of kitchen" the housewives have to play an important role in avoiding or devoiding such things and finally presenting the adulteration.

Except the raw vegetables, perhaps all other food items which are available in today's market are adulterated. Even in some cases these vegetable items do not get rid of the adulteration. It is because, when these vegetables, while growing in the fields are being subjected to heavy insecticides or fungicides sprays, develop some sort of adulteration with the residual effects of these aforementioned chemicals, the level of adulteration in some other items like vegetable oils, cereals, spices and tooth pastes is staggering. In our Orissa condition, particularly in the semi-urban and urban areas, which are generally overflooded with duplicate items which includes fifty per cent of our available food stuffs, are adulterated due to this duplication.

The different modes of adulteration like mixing of water to the milk, stone to the rice, castor oil to refined groundnut oil or to the mustard oil, palm oil, to coconut oil and to vanaspati, moisture to packet butters, etc. cause temporary harmful effects, which can be easily overcome; but in case of adulteration like addition of coaltar dyes to pulses, lead chromate to termeric and kerosene to vegetable oil are not only harmful, but also causes serious injury to human health, which further are proved to be fatal.

We can have a glance of these veciferous and henious activities of adulteration, which are now have become a common practice with the traders and retailers, from the following table.

TABLE-1

Sl. No.	Food stuffs	Adulterants	Toxic effects
1.	Rice and pulses	Polished talc	Stomach cancer
2.	Pulses	(i) Khesari dal (ii) Polished with metanil yellow-a cheap coaltar dye.	Lathyrism Testicular degeneration in the male.
3.	Vegetables oil	(i) Poisonous Agrimone oil. (ii) Mineral oil and non-edible oil.	Epidemic dropsy Impaired liver function, liver cancer, nausea gastro-intestinal apsts.
4.	Whole termeric	Coating of lead chromate or coal for dye.	Stiffness of limb or paralysis.
5.	Termeric powder	Starch coloured yellow with coaltar dye.	Impaired liver function and cancer.
6.	Many cheap sweets, sherbet of variety of colours, ice-fruits.	Many non-permitted coaltar dyes.	Impaired liver function, cancer, ulcer and permanent damage to several vital organs.
7.	All food items	Contaminated with rat poison barium carbonate.	Violent peristalsis, convulsion.
8.	Acid foods	Contaminated with tarnished copper ware.	Vomiting, diarrhoea abdominal pain.
9.	All food items	Infected with pesticides.	Damage to liver, kidney and brain etc.

COMMON FOOD ADULTERANTS

Sl. No.	Food Stuffs	Common Adulterants
1.	Milk liquid	Water, Removal of fat and addition of refined oil.
2.	Milk Powder	Starch
3.	Cream	Other fat
4.	Butter	Moisture, hydrogenated fat
5.	Curry powder	Starch coloured brown by coaltar dyes, saw dust.
6.	Chilli Powder	Saw dust, starch colour red by coal tar dye.
7.	Mustard	Argemone seeds
8.	Cumin	Artificial jeera like product
9.	Black pepper	Dried papaya seeds
10.	Cinnamon (Dalchini)	Cassia bark which resembles cinnamon in taste and odour.
11.	Cloves	Essential oils may have been removed

Sl. No.	Food Stuffs	Common Adulterants
12.	Asafoetida	.. Resins or gum, scented and coloured
13.	Black jeera	.. May contains grass seeds coloured with charcoal dust.
14.	Gur	.. Metanil yellow
15.	Bajra	.. May be infested with ergot
16.	Coffee	.. Chicory, roasted husk or date seed or tamarind seed powder.
17.	Tea	.. Other leaves with added colour, exhausted tea leaves.

The final outcome of food adulteration have proved to be very dangerous. A survey of Union Health Ministry has admitted that "every third eatable commodity available in the market is either substandard or adulterated". To site one of the glowing testimonies of this adulteration, few years back the National Institute of Nutrition, Hyderabad claimed to have made a detail analysis of Kesari dal and confirmed that it causes lathyrism in just two districts of M. P., Rewas and Satna, nearly 60,000 men, women and children mostly landless Harijan and Adivasi were incurably crippled by consuming Kesari dal which continues to be the currency of their wages and is otherwise freely sold in the market of M. P., U. P. West Bengal, Bihar and in elsewhere usually mixed with other costlier dals. Nothing so lucrative has been yet done to ban the cultivation of this deadly dal in our country, except banning its cultivation in U. P. only.

Therefore, a big question mark arises in the food horizon, which has no satisfied answer yet. Still then, to get rid of these giant adulteration animal, which every now and then sprawling its paws on the ever growing population of our country, as well as our State. Something befitting has to be done in this case. The role of the housewives are immense. The queen of the kitchen should be aware of these substandard, spurious and low quality product. They must be sufficiently educated and trained regarding these types of adulteration and how to overcome these adulteration. Our housewives should be trained with the food legislation act and also the consumer protection act, which provides for the better protection of the interest of

consumers, calls for the establishment of consumer councils for the settlement of consumer disputes and allied matters. It protects the consumer against the marketing of goods, which are hazardous to the life and property. It also establishes their right to know about the quality, quantity, potency, purity, standard and price of goods, so that they are guarded against unfair trade practices under the act. Consumers can also seek redressal against unfair trade practices or unscrupulous exploitation and also enjoy the right to consumer education. The educated housewives besides all these things must go for the food product with ISI, Ag mark, and FPO certified products to ensure the purity and quality. It may be mentioned here, the educated housewives should also help in educating the training the illiterate and ignorant housewives of semi-urban and rural areas. It is because a housewife can better understand and interpret the feeling and lacunae of another housewife. Apart from the families, the educated women must help in nourishing these causes in institutions like Hospitals, Schools, Colleges, Hostels and in Prisons. They also can gear up movements to moot out these causes against a sleepy Government, who is acting callously in this issue, on behalf of the public the housewives can create an atmosphere of consciousness and awareness for consuming quality and pure products, thereby illustrating the vagaries of the adulterated products. Besides the Government, the social organisation and the social workers should take up the responsibility for promoting the cause of quality and unadulterated food stuff. The housewives in a forum can catch hold persons who are busy in adulteration and can get

them punished by taking the shelter of law.

The benign providence has created this earth and endowed it with food stuffs necessary for men and beasts. It is believed that the man is the manifestation of the God and *vice versa*. The God has created the man in his own replica. The food that is being consumed by men and women must be that pure which will manifest their thoughts and

actions symbolising the creator. The question of any type of adulteration to eat is totally ruled out. For this both men and women, rather the women in a more elaborated form are responsible for an adulteration free family, which alternately furthers the cause of nation-building.

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Shri Jagannath Mallik, Minister, Agriculture is addressing at the 10th foundation day function of OIL ORISSA at Bhubaneswar on 21-5-1992.

POETRY IN SANDSTONE

Bibhuti Mishra

An Orissan temple is just not a place of worship; the elegance of its architecture and the exuberance of its sculptural decoration are sublimely moving, touched as they are with a rare lyricism. An important landmark in the progressive course of temple architecture in Bhubaneswar, the city of temples, is the Muktesvara temple. Datable to circa 900 A.D. this exquisite little temple marks a transition point between the early and the later phases of Kalinga school of architectural movement. In it was combined many old features with some new conceptions, and the delicacy, refinement and beauty of its decorative designs have made it known as the 'gem of Orissan architecture'.

Its height which is a more than 10.5 metres, points to the fact that it was built at a time when the Orissan temple architects had not yet attempted the colossal structures that mark the later phase of temple building. Some other features like a *torana* (gateway) to the temple, the latticed windows of the *jagamohana* (porch), the low octagonal compound wall, and the *jagamohana* with the pyramidal roof link it with the early phase designs. But there are many interesting innovations too. The developing pyramid of the *jagamohana* shows a radical change from the earlier style as it becomes a *pidha-deul*, a structure in its own right. But the absence of the usual crowning elements shows that it was still in an experimental stage. The *pancha-ratha* (five-ribbed) plan of the *deul* (tower) and the five mouldings of the

prabhaga (base) are also common features to be found in later temples. Some changes in iconography are the absence of haloes around the heads of the divine images, the introduction of Ketu as the ninth planet, the association of Kartikeya with the cock and the appearance of the mouse as the mount of Ganesha.

Both the *jagamohana* and the *deul* are now on a low platform. The *deul*, square in ground plan, has five pilasters on each facade. The pilasters are entwined by *naga* or *nagi*. Each facade appear to have contained *parsva-devata* (side deities) in the manner of the early temples, but today the niches are empty. For the first time the principle of carving images in *alto-relievo* is noticed here; in earlier temples images have been carved in shallow niches or medallions. The top portion of the spire is topped off by the usual crowning elements.

The ornamentation on the wall of the tower is repeated on the body of the *jagamohana*, which has a starlike ground plan. It is a *pidha-deul* with its pyramidal roof rising in tiers; though it is crowned by a *kalasa* there is no *amalaka* as in the later *pidha-deuls*. It contains latticed windows on the north south walls for light. But the most remarkable thing about the *jagamohana* is the sculptural decoration of its interior. The decoration on the ceiling has been ingeniously conceived as a canopy with an eight-petalled lotus at the centre, each petal

having a deity. All these deities, known as *sapta-matrikas*, excepting one hold babies in their arms. On the outer edges of the lotus are several panels of sculptures treating scenes involving Parvati, Ganesha and Karttikeya etc. Though these sculptures are masterpieces of Orissan art they have not got the exposure they deserve as they are the interior of the porch which is not sufficiently lighted by the windows.

Almost all the sculptures of this lavishly decorated temple are wonderful in conception and execution. But interestingly what gets prominence here are not the images of gods but the images of *alasa-kanya* (indolent damsels), *Naga-kanya* (serpent maidens), *sala-bhanjikas* (lovely dryads) and other nymphs. So while the images of gods like the nine planets, Lakulisa and other divinities are small and almost hidden, in the exquisite and sensuous carving of beautiful belles there has been a glorious celebration of the feminine figures and postures. The artists also seem to have been imbued with a sense of humour as is evident in the humorous carving on the window of the *jagamohana* of a series of scenes from monkey-life, presumably taken from the *panchatantra*.

The extraordinarily beautiful *torana* (arched gateway) in front of the *jagamohana* is an oddity as no such structure is to be found in any of the existing temples at Bhubaneswar. However the arch of a similar *torana* was excavated in a nearby paddy-field sometime back and the remains of it are now preserved in the Orissa State Museum at Bhubaneswar. Like Muktesvara *torana* it was built in sections with an arch supported by two pillars. The basements of the pillars supporting the arch at Muktesvara contain on each face a miniature temple and the arch itself has been masterly decorated with elaborate scrolls, graceful female figures and figures of monkeys and peacocks etc.

Another oddity here is the low, octagonal compound wall with offset projections and sculptured exterior. The existence of a variety of divine images including that of Buddhist and Jaina images on the outer face of the wall in this shaivite temple point to the religious synthesis that was a hallmark of Orissan life and history. To the east of the wall is a sacred tank, known as *Marichi-kunda*, which is believed to cure barrenness of women.

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Shri Biju Patnaik, Chief Minister is addressing at the Harijan Welfare Advisory Board meeting at Bhubaneswar Secretariat on 25-5-1992.

PANDIT NILAKANTHA DAS :

HIS CONTRIBUTION TO

ORISSA POLITICS

Jayashree Tripathy

The role of Pandit Nilakantha as the builder of modern Orissa is significant. He devoted all time and energy of his life in enriching Orissa politics. He joined ardently the non-cooperation movement of Gandhiji right from the beginning and went through all the stages of fight for freedom. In the prolonged course for the amalgamation of the Oriya speaking regions, he played a prominent role and it was he, who first moved a resolution in the Central Assembly in 1927 for a separate Orissa province. As a legislator, he earned wide appreciation. It is difficult to enumerate all his achievements and contribution in the political field.

As a student along with Gopabandhu, Nilakantha took an oath on the bank of river Bhargavi "we will not serve the Government after completion of our studies. we will work for the country and see our country more developed when we die than what we saw our birth". With this end in view, Gopabandhu and Nilakantha started a school, Vana Vidyalaya at Satyabadi. History records of few who could equal Nilakantha in his endeavour to create a better citizen through patriotism.

Indian Polity : Nilakantha's jail life and Orissa

The struggle for freedom was yet to start. But Gopabandhu and Nilakantha were prepared for the great event. Nilakantha left Satyabadi and became a Professor in Calcutta University on an invitation from its Vice-Chancellor Sir Ashutosh. But soon

thereafter the Mahatma gave the call for the struggle for independence. The call was irresistible for Nilakantha.

On the 6th January, 1921, Pandit Nilakantha Das resigned from the University of Calcutta to join the Non-Co-operation Movement. He was then thirty-seven years old and over forty years of active participation in politics lay ahead of him.

The non-cooperation movement had been launched on the 1st January by the Indian National Congress at its Nagpur session. Work in Orissa began immediately by Gopabandhu Das and Nilakantha. They had provided a base in Orissa for the Indian National Congress by turning the Utkal Sammilani into the Utkal Provincial Congress. In September he was called to Cuttack, to take active part in the affairs of Utkal Congress in Cuttack and Puri areas. On the 30th November, Nilakantha was nominated to the working committee of the reorganised provincial congress. Nilakantha was arrested on 16th February, 1923, on a charge of intimidation against Government. He was sentenced to 4 months imprisonment in Hazaribag jail.

On being released from jail, Nilakantha joined the 'Swaraj Party'. He propagated the policy of opposing the British Government from within and was elected to the Central Assembly in November, 1923. He became also the Secretary of the Congress (Swaraj) Legislative Party under the leadership of Motilal Nehru.

In 1926 election, Nilakantha won the support of the Orissa Congress and was elected again to the Central Assembly with a thumping majority. In 1928, Pandit Gopabandhu Das died, leaving the leadership of the Orissa Congress to Nilakantha. Nilakantha strove to meet his many obligations as a legislator, the head of Satyabadi group, a constructive social worker and a political leader.

In the Central Assembly, Nilakantha had demanded total abolition of salt tax in 1929. When the salt campaign was started in 1930, he resigned from the legislature as a disciplined congressman. He was arrested at Satyabadi on 30th May 1930 and was sentenced to 6 months imprisonment in Hazaribag jail. After his release 22-12-1930, he again joined the salt campaign in Puri District and was arrested on 19-1-1931. This time he was sentenced to 2 months imprisonment in Puri jail. He was released before due date on 10-3-1931 as a result of Gandhi-Irwin pact. The longest period, Nilakantha was jailed for 1 1/2 years, when Indian National Congress was declared unlawful.

In 1934, Nilakantha was elected President of the Utkal Congress and remained its uncontested head for five years. When Madhusudan died in 1934, he bore the double burden of Gopabandhu's legacy and Madhusudan's ambitions, and continued to serve the state both as a Central legislator and the congress leader.

In 1935, December, Nilakantha was again elected to the Central legislative Assembly. He became the Secretary of the congress block in the legislature. In 1936, Nilakantha was at the peak of his power both in Orissa and in Delhi. He was the President of U. P. C. in 1939 at the outbreak of world War II.

Amalgamation of all the Oriya speaking lands together and the creation of the province of Orissa.

Nilakantha was elected to the central legislature from Orissa in 1924 and used his position there to further Oriya interests. The unification of Orissa speaking areas in a single homogeneous unit was a cause, Nilakantha

made his own very early in his career. He was inspired by a passionate love of his own language and culture. It is not easy to separate his national All India figure from that of the Orissa politician. His efforts to further the formation of a separate province for Oriya speaking areas and the articles he published in important papers of Calcutta, Bombay, Delhi and Madras, illustrate this very well. In the process, the formation of provinces on linguistic basis became an All India issue and was accepted by Mahatma Gandhi and the congress. After encountering many other obstacles, he saw the creation of a separate state for the Oriyas in 1936. It was not a small achievement for Nilakantha and his leadership.

Nilakantha, as legislator :

The late twenties and early thirties were a time of great activity for Pandit Nilakantha, who rose to the height of eminence as a parliamentarian and true leader. In the Central Assembly, on 4th February, 1927, Nilakantha made a name in opposing the public safety bill. On the 8th February, 1927, he raised the demand for amalgamation of all the Oriya speaking lands together and put them under a separate administration. On 7th March, 1929, Nilakantha demanded for reviving the salt manufacture in Orissa and its free trade, where it was there long since as a cottage industry. On 22nd March, he moved for remission of Salt Tax.

Needless to say that Nilakantha took very active part in the deliberations of the Central Assembly and spoke on most of the important Bills having all India importance and concern. In view of the highly important views, expressed in his speech we will mention only four of them as described above (1) the Public safety Bill (2) Salt manufacture in Orissa and its free trade (3) Remission of Salt Tax and (4) Amalgamation of the Oriya speaking lands.

Nilakantha : A great politician of Orissa

In 1937, the first election to Orissa state legislature was held. The hold of the congress over the state, at that time was weak. His forceful and enchanting speeches won for the congress 36 out of 37 seats, it contested for. National Congress - was stunned at this

achievement and conveyed its thanks to Nilakantha. Twice he got the chance to lead congress and lead it to victory. The victory of congress bore the stamp and greatness of Pandit Nilakantha.

When the 2nd World War broke out, on the request of Netaji Subhas Chandra Bose, Nilakantha could be able to instal a coalition Ministry in Orissa inspite of great opposition by the congress. One thing that is worth-noting is that, be it a congress or a coalition ministry, the king-maker in his time was always Pandit Nilakantha.

In 1951, Nilakantha founded his own party and won four seats. Godavarish and Nilakantha were among the four elected with their presence in the opposition bench, a healthy trend of opposition and criticism was initiated into Orissa politics. Nilakantha never believed it to be proper to oppose just for the sake of opposing. While criticising the Government on its lapses and flaws, he never failed to appreciate the constructive work of the Government.

In 1957 election, Nilakantha got elected uncontested from his favourite constituency Satyavadi and was the speaker of the Assembly. As speaker, he was intolerant towards the tradition of keeping the speaker's Secretariate subservient to the Home Department with his efforts the searetariate of the speaker was elevated and freed from Government control.

Again, the important constitutional tradition that, with the dissolution of the Assembly, the speakership is automatically dissolved, was broken through Pandit Nilakantha's great efforts. He cited constitutional interpretation and fought with the Government of India. It was decided that Pandit Nilakantha was right. Nilakantha, who was treated not to be in office since the

day Orissa ministry fell, was allowed to continue till a new speaker was elected. A new precedence was created for the whole country.

Pandit Nilakantha was a politician of rare calibre. Justice Harihar Mohapatra had said about him very beautifully "mud slinging and back biting was not Nilakantha's cup of tea and he was above groupism. He was rather a symbol of sincere dedication to the cause of congress".

Pandit Nilakantha Das stands before our admiring gaze in the full glory of his final achievement as a politician, a national figure to whom the country is rightly proud. He was far above the ordinary freedom fighter or petty politician. In a word, Nilakantha as a politician was superb. He exerted himself tirelessly to mitigate the sufferings of hundreds and thousands of grief-stricken Oriyas, by involving himself in national and Orissa politics. He will certainly be remembered as a great politician by all Oriyas of present and future generations together.

Reference :

1. A study of History of Orissa - Dr. A. C. Pradhan Cuttack-1985.
2. An Advanced History of Orissa (Modern Period) - K. M. Patra and Bandita Devi, Kalyani Publishers, New Delhi, Ludhiana-1983.
3. History of Orissa - Dr. N. K. Sahoo, Dr. P. K. Mishra and Dr. J. K. Sahu, Nalanda Publishers, Cuttack-1980.
4. The formation of the Province of Orissa S. C. Patra, Punthi Pustak, Calcutta-1979.
5. Pandit Nilakantha Das, (Life and Achievements) Lila Ray, Published by Pandit Nilakantha Smruti Samiti-1985.

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MARKETING OF AGRICULTURAL PRODUCTS IN ORISSA

Dr. R. C. Mishra

The accelerated growth of agriculture depends on the provisions of the farm and non-farm services. Among the non-farm services marketing is most important one. The Royal Commission on Agriculture rightly pointed out that "unless the cultivator can be certain of securing adequate value for the quality and purity of his produce, the effort required for an improvement in these will not be forth coming." Proper marketing facilities are, therefore, the sine-qua-non of rapid agricultural progress and development. Hence the marketing of agricultural produce is as important as the production itself. In view of its dynamic function, it has been described as the most important multiplier of agricultural development.

This paper makes an attempt to give a brief view of system of agricultural marketing in Orissa. A brief view of Co-operative, regulated markets with the role played by Government agencies in agricultural Marketing are given here to have a clear picture of marketing of agricultural produces in Orissa.

Structure of Marketing in Orissa

In Orissa markets are generally classified as primary markets (weekly hats) secondary wholesale markets (daily markets) situated at district head quarters or near railwaystations) and terminal markets (where the produce is assembled for further distribution within the state or for exports). There are 1,400 village hats, 74 wholesale markets and 2 terminal markets in Orissa.

System of Marketing in Orissa

Rice

Orissa is a major rice producing state. The total sale of paddy within and outside the village by different categories of cultivators is 44.20 per cent of production. Major quantity of the produce (56 per cent) is sold within the village.¹ Small and medium cultivators sell major portion of their marketed surplus within the village while the large cultivators sell a major portion of their marketed surplus outside the village. Even in the case of large cultivators the village sale is as high as 45 per cent.²

Total sales in the post-harvest period are larger than those in the rest of the year. Large cultivators can hold on their stocks for a larger period whereas medium and small cultivators can not do so as they do not have that much of with-holding capacity. This reduces the share of small cultivators in total sales during the rest of the period to less than 10 per cent.

The analysis of the quantities sold by different categories of cultivators to different agencies reveals that most of the sales within the village is made to private traders (71 per cent). Other agencies particularly the organised agencies like the co-operatives (4.69 per cent) and F. C. I. (2.89 per cent) accounts for the purchase of a very meagre portion of the total disposal by all categories of cultivators within their villages. The traders play an important role in the assembling of the

produce from small (75.21), medium (67.09) and large (73.96) cultivators.³

Even in the case of disposal of paddy outside the village, private traders are by far the most important agency for purchase of produce sold by cultivators. Of all the agencies buying the produce sold by the cultivators outside the village, 80.48 per cent is sold to the traders, 2.96 per cent to the co-operatives 7.09 per cent to F. C. I. and rest 9.47 per cent to other agencies. The organised agencies of marketing namely, the F. C. I. and the co-operatives play a very minor role in total purchase of produce directly from the cultivators.

Hence, out of the total sale made by cultivators within and outside the village the largest sale by all categories of cultivators are made to private trade (75.27 per cent) followed by consumers (9.70), F. C. I. (4.73), Co-operatives and other agencies.

Pulses :

Other commodities exported except rice are pulses, jute, groundnut, turmeric and coconut. Among pulses mung, biri, kulthi are important in the state. The production of pulses is inadequate to meet the internal requirements of the state⁴ still pulses are exported outside the state by railways from stations such as Berhampur, Dhenkanal, Cuttack, Jatani and Jajpur Road. There is no market exclusively for sale of pulses and it is marketed alongwith other commodities of the state. The agencies mainly responsible for assembling the marketable surplus are growers, village markets, land lords and big wholesalers. The distribution channel are similar to those of paddy and rice.

The quantity of pulses transacted by the cultivators and village merchants are estimated at 58 per cent⁵ of the total quantity available in the distribution channel. The producer who sell the produce to the village merchants or agents of wholesalers, play an important role in the distribution of pulses to the wholesale merchants.

Jute :

Jute is mostly grown in the district of Cuttack. It accounts for 75 per cent of the total production of the state. The producer, sellers

and the village merchants play an important role in assembling the produce. The important assembling centres are Jajpur Road, Dhanmandal, Chhatia, Bayree, Kendupatana, Marsaghai, Danpur, Pattamundai, Kalapada, Mahanga and Chandol. Producers also sell the produce in the villages which are purchased by the village merchants and despatched to the assembling markets. The cultivators' share in assembling of produce is 5 per cent, village beparies 50 per cent, Arhatidars 25-30 per cent and co-operative society 1.8 per cent.

Groundnut :

Groundnut is the most important oilseed, about 75 per cent of which are exported outside the state. It is mostly grown in the districts of Cuttack, Dhenkanal, Ganjam and Sambalpur. This is marketed through the village merchants, wholesale merchants and the agents of oil mills.

Turmeric :

Turmeric is grown mostly in the district of Boudh-Khandamals (50 per cent), Koraput and Ganjam (25 per cent in both districts). The rest 25 per cent is grown scattered in different districts and do not strictly appear in the market and are grown mostly for local consumption and as such has no commercial importance. The major portion of the produce is exported to states such as Madhya Pradesh, West Bengal, Bihar, Andhra Pradesh, Maharashtra and Tamilnadu.

Assembling of turmeric takes place in two ways namely through the growers and other assembling agents. Among the assembling agents the main functionaries are petty village beparies, village merchants, agents of wholesale merchants. Out of the total marketable surplus about 15 per cent of stock is brought to the assembling centre direct by the growers and 70 per cent by beparies in village markets and another 15 per cent by wholesale merchants or their agents.⁷ The main agencies which function in the assembling centres are wholesale merchants and their agents and commission agents or pucca adtiyas who purchase turmeric on behalf of the principals located in the distributing markets either inside or outside the state, while wholesale merchants and their agents handle about 75 per cent of the stock,

commission agents handle 15 per cent to 16 per cent and rest 0-10 per cent is handled by co-operatives.⁸

At times the tribals who are major growers of turmeric are exploited because of their ignorance and poverty. Tribals in some cases commit their crops to money lenders even before it is harvested. The producers net share in the consumers price gets reduced with the increase of intermediaries in the market channel of turmeric.

Coconut :

Coconut is grown mainly in the coastal districts of the state. The Sakhigopal of Puri district is famous for coconut in the state. From Sakhigopal coconut is despatched to Sambalpur, Jharsuguda, Rourkela inside the state and Madhya Pradesh, Bihar and Uttar Pradesh which are outside the state. Coconut is a cash crop. The agencies which are responsible for assembling of coconut are producer, growers who collect the nuts of others, village traders, wholesalers and retailers.

Village merchants (50 per cent) and itinerant traders (27 per cent) play a dominant role in assembling coconut in Sakhigopal regulated market accounting for about 77 per cent of the total market arrival. The remaining 23 per cent is shared by the producers. On the other hand growers assemble 50 per cent and 75 per cent of the produce in Satasankha and Pipili markets (both unregulated) respectively. Village merchants and itinerant traders

assemble 50 per cent in Satasankha and 25 per cent in Pipili market.⁹

Institutional agency engaged in Agricultural Marketing :

(a) Government Agency :

Government of Orissa is engaged in the marketing of paddy and rice in conformity with the food Policy of Government of India. The State Government procures paddy at the procurement price announced by the state. The Food Corporation of India has been entrusted with the procurement of rice as the Government agent in eight districts of the state. The state consumers marketing federation has been appointed as the second procurement agent for the state Government for the remaining five districts. To ensure a reasonable fair price to producers and to constitute a buffer stock to meet the requirement of public distribution system, the state has fixed a procurement target for rice to be procured by Orissa state. Table 1 shows that the procurement of rice during 1974-75 to 1989-91 on an average was 2.62 of production. The procurement of rice in Orissa from 1965-66 to 1976-77 was also as low as 5.18 per cent of production.¹⁰ In this connection it should be noted that according to the National Commission on Agriculture, procurement should form 12 per cent of the cereals produced and in good crop years it would be more for building up the buffer stock besides meeting the public distribution commitments."

TABLE 1
Procurement of Paddy in Orissa

Year	Target (Lakh MT)	Procurement (Lakh MT)	Production (Lakh MT)	Procurement as % of production
1974-75	1.75	0.57	31.66	1.80
1989-90	2.73	2.37	62.84 (P)	3.77
1990-91	2.73	2.15	..	..
Average from 1974-75 to 1989-90.	..	1.12	42.62	2.62

Source : Economic Survey of Orissa

The procurement in different years also fall below the target of procurement in different years. The low procurement in Orissa during these years may be due to the fact that the market price of rice in Orissa has always been higher than the procurement price and the producers feel that they do not get fair return by way of the procurement price which is on the lower side.

(b) Co-operative Marketing :

The Marketing Co-operatives in the state can be classified under two broad categories i. e. general purpose Marketing Co-operatives and Specialised commodity Marketing Co-operatives.

(i) General Purpose Marketing :

General purpose Marketing Co-operative is a two tier system with state co-operative marketing Federation at the apex level and Regional Co-operative Marketing Societies at base level (Mandi Level). The general purpose Marketing societies purpoy :

- (i) to procure and purchase agricultural produce from the grower process the same in processing units like rice mills, oil mills for fetching better price;
- (ii) to supply fertiliser, pesticides, insecticides and other agricultural inputs to the farmers;
- (iii) to provide better services such as distribution of consumers articles as essential commodities.

To provide better storage facilities to the growers members storage godowns scheme at Mandi Level, Apex, Regional and Primary Levels under the assistance of I. D. A. is being implemented in the state since 1978-79.

Regional Co-operative Marketing societies are doing multifarious activities through PACS, LAMPS and FSS, functioning at the village level. The Regional Co-operative Marketing Societies are also acting as sub-agents of Orissa State Co-operative Marketing Federation in procurement of paddy and other agricultural produce.

Besides the general purpose marketing co-operatives, there are specialised commodity marketing co-operative societies functioning in the state, namely, Forest Marketing Co-operative Societies, Jute Marketing Co-operative Societies, Cashewnut Processing and Marketing Co-operative Societies, Fruit and Vegetable Marketing Co-operative Societies, Betel Marketing Co-operative Societies and Onion Marketing Co-operative Societies and Sabaigrass Marketing Co-operatives.

(ii) TDCC :

The Orissa State Tribal Development Co-operative Corporation Ltd. is an apex institution for all LAMS and forest marketing Societies in the state. The main aim and activities of the TDCC is to ensure better price to the tribals for their produce and for the minor forest produce collected by them and to supply consumers and other essential goods to the tribals at fair prices.

(iii) Oil Orissa :

With a view to transplant the sprit of single commodity growers Co-operatives in the districts of Cuttack, Puri and Ganjam, the Government of Orissa in collaboration with NDDB formulated a project for development of oilseeds and vegetable oil as a part of the national project for restructuring edible oil and oilseeds production and marketing from May 1982. The major objective of the project is to organise the Ananda pattern oilseed co-operatives in the rural areas and to link these with the urban edible oil markets. This is to ensure increase in oil seeds production by progressive elimination of middlemen, and to increase return to oilseed growers. By the end of the 2nd financial year i. e. October, 1983 about 2,148 farmers families have been placed in command of their own development through two tier co-operative set up.

The Federation has introduced oilseed procurement system through the societies-oilseed growers own organisation. The Federation announces the procurement base price for every season taking into consideration production costs, uncertainty of weather conditions and market fluctuations. The co-operative societies buy

oilseeds from the members and non-members, on the basis of shelling percentage, moisture percentage and refraction analysis. There are some other types of marketing co-operative societies such as Patato Growers marketing co-operative Society, Cold Storage and Sugar factories functioning in the state.

Table 2 shows the number of co-operative societies organised in the state from 1976-78 to 1989-90 and shows their business turn-over, profit and loss position of marketing co-operatives and sugar factories in the state.

The Table shows that in 1976-77 there were 58 Regional Co-operative Marketing Societies in the state. It increased to 64 in 1989-90. There were 58 specialised Co-operative marketing societies in 1976-77. These societies increased to 75 up to the end of 1989-90.

The co-operatives have been able to increase their business during Plan periods. The Orissa State Co-operative Marketing Federation was doing business of Rs. 2 lakhs in 1950-51 whereas it has been able to increase its business to Rs. 3,243 lakhs in 1989-90.

The Regional Co-operative Marketing Societies also increased the business turnover from 10 lakhs in 1950-51 to Rs. 537 lakhs in 1989-90. The Orissa State Oilseed Growers Federation which is a new concern also increased its business from Rs. 160 lakhs in 1983-84 to Rs. 1,233 lakhs in 1986-87 but Rs. 678 lakhs in 1989-90. The specialised marketing societies also increased their business from Rs. 2 lakhs in 1950-51 to Rs. 286 lakhs in 1989-90.

But these institutions are incurring heavy losses over the period. R. C. Ms., Co-operative Cold Storage for potato growers, Co-operative Sugar factories are incurring losses in almost every year over the period. Whereas specialised marketing Co-operative societies getting some profit in 8 years over the period. The cumulative figure upto 31-3-1990 shows that all types of co-operative societies are incurring heavy losses except oilseed growers co-operative federations. The cumulative loss of Regional Co-operative Marketing is highest (Rs. 998.32 lakhs) followed by State Marketing Federation (Rs. 912.17), T.D.C.C. (Rs. 815.41), Co-operative Sugar Factories (Rs. 142.00) Co-operative for Potato Growers and Cold

TABLE 2

GROWTH OF MARKETING CO-OPERATIVES IN ORISSA

	No. of Societies		Business Turnover (Rs. Lakhs)		Profit/Loss (Lakhs)		Cumulative Profit/Loss up to 31-3-1990 (Lakhs)
	1976-77	1989-90	1978-79	1989-90	1978-79	1989-90	
1. State Co-operative Marketing Federation.	1	1	1.082	3,243	+28	-400	-912.71 (June 1989).
2. Regional Co-operative Marketing Societies.	58	64	1,833	537	-32	-85	-998.32
3. Specialised Commodity Marketing Co-operatives.	28	75	120	286	-36	+4	-31.38
4. Tribal Development Co-operative Corporation.	1	1	346	936	-122.61	-153.2	-815.41
5. Oilseed growers Federation	1	1	160 (1983-84)	678	..	..	+789.38 (June 1988).
6. Co-operative Cold Storage of Patato growers.	21	21	..	..	0	-3	-117.39
7. Co-operative Sugar Factories	2	4	..	..	-42	-17	-142.80

Source—Co-operative Movement in Orissa a Profile

Registrar of Co-operative Societies, Orissa, Bhubaneswar.

Storage (Rs. 142.80) and Specialised Co-operative Marketing Societies (Rs. 31.38).

It appears, in spite of the development of Co-operatives in the state, the co-operative marketing of agricultural produce has not been properly structured in the State. The prices of most agricultural produce and minor forest produce, particularly for which no support price is fixed by the Government fluctuate with varying magnitude. Co-operatives which are marketing these produce run the risk of incurring losses. As a safeguard against much risk, these societies have been directed to create price fluctuation fund. As most of them have not been able to create such a fund the Government have sanctioning subsidy at the rate of 2% of the purchase value of agricultural produce from 1982-83.¹³ Moreover most of the co-operative societies lacked in working capital for procurement and business operation and are deficient in managerial skill and necessary drive to compete efficiently with private traders in purchase operations. The percentage of business of co-operative in the state is very low. The Jute Marketing Societies at Danpur and Coconut Growers Marketing Co-operative Societies at Sakhigopal are purchasing only 15% and 5% of total arrival in the market respectively.

Thus the progress of co-operative marketing in the state is far from satisfactory. It does not seem to be able to play an important role in eliminating the middlemen in marketing channel and to ensure better deal to the procurer members.

(c) Regulated Markets :

Out of the 76 wholesale markets including two terminal markets identified in the state, 42 regulated markets were established upto 1990-91. Out of the 42 markets 24 markets have received central assistance to develop the market yard. There are 1250/1,300 rural markets in the state. Out of these 205 rural markets are controlled by regulated markets, and 134 rural markets have received central assistance to develop market yard facilities.

Table 3 shows the arrival of notified commodities (i.e. Rice, Mung, Biri, Kulthi, Guoundnut, Jute, Turmeric, Coconut, live stock) in the market yard from 1972-73 to 1987-88. The table shows that the arrival of rice in the market yard (paddy converted to rice) in 1972-73 was 207 thousand tonnes. But this was reduced to 127 thousand tonnes in 1987-88. The percentage of production arrived in R.M.C. was 5.17 in 1972-73 and this came down to 3.65 in 1987-88.

In case of Mung, Biri, Kulthi, the total arrival in the market yard was 28 thousand tonnes in 1972-73. But it is only 9 thousand tonnes in 1987-88. The percentage of production arrived in R.M.C. was 7.25 in 1972-73 but it became 1.13 in 1987-88.

In case of groundnut the total arrival which was 42 thousand tonnes in 1972-73 came down to 24 thousand tonnes in 1987-88. The percentage of production arrived in R.M.C. was 35 percent in 1972-73 and 4.89 percent in 1987-88.

TABLE 3
Arrival of notified commodities in the market yard
Arrival in 000' tonnes)

Commodities	1972-73			1987-88		
	Production	Market arrival	% of production arrived in Market yard	Production	Market arrival	% of production arrived in Market yard
1. Paddy	3,983	206	5.17	3,471	127	3.65
2. Mung, Biri, Kulthi	386	28	7.25	793	9	1.13
3. Groundnut	120	42	35.0	490	24	4.89
4. Jute	68	26	38.23	53	16	30.18
5. Turmeric	13	1.5	11.53	24	0.15	0.62
6. Coconut	43,772	15,602	35.64	1,34,873	14,331	10.62
7. Livestock (000' Nos.) (75-76)	26,020	285	10.95	27,083	203	44.43
7. Livestock (000' No.)						(1985-86)
						(1982-83)

Source : Regulated Marketing Section / Registrar Co-operative Societies, Orissa, Bhubaneswar.

In case of Jute and turmeric the percentages of production arrived in R.M.C. in 1972-73 were 38.23 and 11.53 respectively. These were reduced to 38.18 and 0.62 in 1987-88.

The arrival in case of coconut is not very satisfactory as it is the case with rice, pulses, groundnut, jute and turmeric. The percentage of production arrived in R.M.C. was 35.64 in 1975-76 while it was as low as 10.62 in 1985-86.

There was an improvement in the case of live stock products. The percentage of live stock product arrived in R.M.C. in 1972-73 was 10.95 percent. This increased to 44.43 in 1982-83.

Market Information :

There are three stations of the All India Radio in Orissa located at Cuttack, Sambalpur and Jeypore. These local Akashvani Stations broadcast market rates of different agricultural commodities prevailing at different important markets of the state in their farmers programme.

There are many daily newspapers in Orissa. The dailies often publish the market rates of different agricultural commodities of the state alongwith the prices of other commodities.

The press notes of the Government relating to price policy procurement programmes, future plans in relation to marketing programmes are also published in the local dailies.

The wholesalers, other middlemen are in constant touch through the telegrams, telephones, in regard to prices, production, market activities and general business conditions. The post offices are also helpful in informing the business partners or agents regarding marketing activities. In 1989-90 there are 7,705 post offices, 1,845 post and telegraph offices, 20 telegraph offices, 432 telephone exchanges, 1,253 public call offices and 56,860 telephone connections in use in Orissa.

There is a Market Intelligence organisation under the supply department of Government of Orissa. The Market Intelligence section of supply department collects information from 85 important marketing centres of the state. It publishes weekly bulletin on prices, monthly

bulletin of movement of prices and stock and arrival position of agricultural commodities in the state. The limitation of this organisation is this wing produces information for the use of government. The farmers, producers and consumers seldom use these informations to their benefit.

Regulated Markets in Orissa also supply information about the prices that are prevailing in R.M.C. yard and prices of R.M.C. of other states which are dealing with same commodities. But these R.M.C. do not supply their information bulletins to the rural areas for the use of the farmers for whom the price information is much needed.

Grading of Agricultural Produce

Very little grading is done at producers level in Orissa. The produce is simply cleaned by indigenous method to separate grain either from the husk or straw and offer it for sale. Even in case of commodities like jute and coconut, where price differentials between grades are substantial and different grades have different uses altogether if is brought to the market in mixed lot, commonly known as 'Garsat' or 'panchaangutia'. This gives the trader substantial scope to under quote on the basis of estimated qualities of different grades in the lot. In view of the presence of sizable percentage of dirt, dust and impurities, the producer-sellers are at the mercy of the purchasers.

In Orissa 30 grading units have been established in regulated markets but the value graded is nil. Grading and standardisation are auxiliary function of marketing. This however does not in any way detract their importance as aids to efficient performance of all other market services.

Storage

Importance of storage arises out of the fact that most of the agricultural products are seasonal in nature and cannot be disposed of immediately after harvest. But consumption of food resources is a continuous day-to-day process. These peculiarities of agricultural production necessitate conservation of what is produced in one crop till the time of next one. Storage protects the quality of perishable and semi-perishable products from deterioration. Storing of produce also leads to stability of

market prices. During glut period commodities may be stored not to allow the market price to fall below the minimum level and during scarcity the stored stock may be released to check the rise in prices in the market. Adequate storage facilities in the market area supported by availability of credit on the basis of stored production also increased the waiting power of the producer. Storage is also necessary for some period for the performance of other marketing functions. For example the produce has to be stored till arrangement for its transportation are made or during the process of buying and selling or weighing of the produce after sale, and during its processing by the producer.

The system of storage in Orissa is primitive both at village as well as mandi level. The agricultural produce are stored in home such as Berhi, Dhausar, Kothi, Golas and Godowns of arhatyas in the secondary markets, are not free from evils and insects. These indigenous methods of storage adopted in villages and secondary markets do not adequately protect the producers from the dampness, weevils and other vermins. Consequently there is a greater post harvest losses for food grains in Orissa.

There has been an improvement in the storage facilities because of warehouses constructed by Central Warehousing Corporation, State Warehousing Corporation and Warehousing by Co-operative Societies. The capacity of storage in Orissa has increased from 22,040 MT in 1973-74 to 64,879 MT in 1979-80, 79,831 in 1980-81 and 9,58,179 MT in 1986-87. But this increase in capacity of storage in all these organisations has not substantially helped the producers. The utilisation of capacity by producers of the total capacity in 1988-89 of State Warehousing Corporation is only 1.20% whereas State Government, Food Corporation of India, Fertiliser Companies, Co-operatives and other have utilised 23.68%, 27.39%, 46.75%, 0.04%, 0.94% respectively.

The main reasons for very poor utilisation of warehouse by farmers are :

- (i) lack of knowledge about the facility of warehousing available for the farmers.

- (ii) locational disadvantages of warehouses for most of the cultivators located in villages.
- (iii) complicated and time consuming procedure of depositing and withdrawing the produce from warehouses.
- (iv) non-existence of nationalised banks in villages and the problems of arranging finance at the time of taking delivery of receipt from the bank and
- (v) small quantity of surplus produce available with most farmers, and the pressing need for finance.

The National Grid of Rural godown scheme is implemented through market committee and state warehousing corporation in Orissa. The capacity of storage in 1983-84 by S.W.C. is 31,200 MT and capacity of Market Committee is 19,200 MT. The scheme is new and godowns are yet to be constructed by Market Committees in Orissa.

Cold Storage :

In Orissa cold storage is closely associated with the potato growers. These cold storages are built up by co-operatives. The capacity of cold storage as on 1988-89 was 24,700 MT. The capacity of cold storage is the highest in Cuttack (i.e. 13,600 MT) and the capacity in Dhenkanal is 2,650 MT, Ganjam 2,550 MT, Koraput 650 MT, Phulbani 1,200 MT, Puri 2,650 MT, Sambalpur 650 MT and Sundargarh 650 MT. The districts like Balasore, Balangir, Kalahandi, Keonjhar and Mayurbhanj do not have cold storage facilities in Co-operative sector.

Summing up :

The preceding discussion brings out the following facts :

- (1) The chief characteristic feature of the marketing organisation in the state is the prevalence of village sale. The principal market functionaries in village are village traders who provide most important link in the marketing process. The village trader is also the principal source of market information for majority of producers who are living in the villages. The village traders are natives who possess enough skill to deal

with the business of agricultural produce. They somehow keep contact with wholesalers of secondary markets and usually do not have access to the latest market information of terminal markets. The wholesalers on the other hand because of their advantageous position in being settled at market towns are some how better informed than the village traders. Therefore in the absence of proper network of market information and the ignorant producers fall at prey to the village trader as well as the wholesalers who are far away from him.

(ii) Another important feature of the marketing system in Orissa is the increase in post-harvest sale by the cultivators. This shows the meagre waiting power of the cultivator to sell their produce during favourable marketing season.

(iii) Scientific grading and standardisation facilities are totally absent in all transactions entering into markets at producers level.

(iv) Reliable information at the primary level regarding price and stock arrival in the market overtime is not readily available to the producers. The market information which is provided by supply department of Government of Orissa does not cater to the need of the producers. It is meant for official use only. The R.M.C. are not sufficiently engaged in the state for providing market information to the producer-sellers.

(v) Producers of Orissa are not accustomed to modern methods of storing in warehouses. They are still storing their products in conventional methods. Except potato growers other producers are not accustomed to the now system of experimental trials grade specifications and special arrangement of the storage of goods.

(vi) Co-operative Marketing is not adequately structured in the state and Co-operative are incurring loss almost every year. Co-operatives have not been able to improve the bargaining power of the cultivators in postponing and retaining the sale of marketable surplus to a much favourable firms. Moreover due to inefficiency, weak financial background and lack of managerial skill the co-operatives have not

been able to withstand competition from the traders.

(vii) Yet 53 percent of wholesale markets have been brought under the orbit of market regulation in Orissa after 30 years of implementation of the scheme. Regulation of primary markets which serve as the focal point for the producers in the disposal of agricultural produce still remains neglected in the state.

It is observed from the study that there lies a great gap between commodities notified and commodities actually arrived in the market yard. The regulated markets have not been able to attract a large percentage of agricultural commodities in the market yard over the years except live stocks. A few markets adhere to the auction system of sale of agricultural produce because of non-arrival of agricultural produce in the market yard. Market functionaries are not licenced in the market area. Spot payment of sale produce is absent as a result of which the share of producers in assembling of agricultural produce has been reduced although it was quite high in the beginning of the market regulation scheme. In spite of providing advantage for selling of agricultural produce in the market yard the market committees have been able to generate large amount of income in course of time by posting checkgates. It appears that the market Committees have turned in to fee collecting mechanaries instead of giving proper attention to the regulatory functions which they should do for providing benefits to the producer sellers."

In short due to illiteracy, ignorance, financial weakness, lack of organisation, the cultivators possess a weak bargaining power vis-a-vis: the trader who is well informed, organised, financially sound and tactful. The farmers bargaining position is virtually dependent on his ability to postpone sale of marketable surplus and his accessibility to markets. The former depends on his economic viability including physical availability of storage facilities and the later on the condition of village market towns, road network and the distance of the village from the market town.

In the absence of all these facilities the farmers are at the mercy of the traders for selling their products.

Under these circumstances the farmers in Orissa need protection from government. Since the marketing co-operatives in the state are not well structured and procurement operation is very weak, establishment of regulated markets are essential for protecting the farmers. Hence the regulated markets should function as viable institutions to protect the interests of the producers sellers instead of working as fee collecting machinery without any regulatory functions.

References :

1. Marketable surplus and post-harvest losses of paddy in India. (abridged-report) 1972-73, Government of India, Appendix XXII P.-95.
2. Ibid. P.-49
3. Ibid. P.-56
4. Economic Survey of Orissa, 1983-84, P.-40.
5. Ibid. (1980-81), P.-22
6. Marketing of Jute in Orissa, Cuttack 1942, P.-27-28.

7. Marketing study Report 2, Turmeric, TDCC, 1976 P.-9.
8. Ibid. P.-9
9. Routray, S.K. Survey Report on Marketing of Coconut in Puri district 1986-87, D.M.I. Nagpur. P.-50
10. Mishra Bhagabat, Economics of Public Distribution System in Orissa, P.-191.
11. National Commission on Agriculture, Government of India, 1975 P.-55.
12. Mishra Bhagabat, Economics of Public Distribution of food grains, 1985, P.-180
13. Economic Survey of Orissa, 1983-84, P.-10.
14. Mishra R. C., "A Study of Regulated Markets in Orissa with reference to important Commercial Crops" Co-operative". Ph. D. Thesis (Mimeo) 1991.

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SOCIAL FORESTRY AND WASTELANDS DEVELOPMENT IN ORISSA

Dr. R. A. Sharma

Although traditional social forestry systems such as home gardens have been practiced for a long time in India (Singh, 1987; Tejwani, 1987), the recent surge of international interest came about as a response to concern about the degradation of land-based resources and consequent rural poverty. The scarcity and resulting need for provision of fuelwood and fodder to people was realised as early as 1893, when Voelcker (1893) recommended the creation of fuelwood and fodder reserves. The creation of village forests and minor forest divisions, for supply of fuelwood and fodder, was suggested by the Royal Commission on Agriculture (1928) also.

The National Forestry Policy (GOI, 1952) envisaged farm forestry for afforestation of the communal and government wastelands; this scheme was to be implemented by the Rural Development Department, but it did not get off the ground due mainly to lack of interest among the staff (Wilson, 1986). In 1958 concrete steps were formulated for implementing farm forestry in an All India seminar (GOI, 1958) but little progress was achieved until 1961 when a farm forestry scheme was initiated during the third Five Year Plan.

The real impetus to social forestry came from the report on social forestry prepared by the National Commission on Agriculture (NCA, 1976) which recommended a wider scope for farm forestry. Social forestry was included as

an important part of socio-economic development programmes. Social forestry schemes are currently being implemented in almost all the States but each case of implementation is different as a result of the emphasis placed on the socio-economic aspects relevant to the particular environment of a State or region.

The socio-economic uptake of social forestry by the villagers in different States and regions has been different due mainly to the villagers' decision-making which is influenced by the existing land-use pattern, agro-ecological, technological and policy package but also by the relevant socio-economic aspects of the environment in which the social policy is implemented. This paper evaluates social forestry by assessing its potential for the development of wastelands in India in general and Orissa in particular. In doing so it identifies the constraints in wastelands development through a social forestry package.

An evaluation of social forestry :

In developing economies such as India, the person: land ratio together with the utilisation of land, and labour availability are of critical importance for the prospects of development (Myrdal, 1968). In India, as in many other agrarian economies, land is not only a main factor of production but also a basis of social stratification because the groups in control of land derive enough resources to influence social structure and value system. The land tenure systems introduced during

the pre-independence period and the consequent agrarian structure not only influenced the management of forests adversely (Sharma *et al*, 1990) but also generated a tradition of unsettled tenure in those States where the Zamindari (landlord) system was implemented. For instance, the permanent settlement of Bengal (1793) conferred the rights of land ownership to Zamindars (who acted as intermediaries between the tenants and government) by sacrificing the cultivators' interests. As a result a landlord class—the Zamindars and Jagirdars (who also acted as money lenders to the poor at usurious interest rates) were at the apex of agrarian social structure. They had superior rights over the land, allowing them to lease out land and to extract a surplus in the form of rent. At the same time the cultivator was reduced from the status of proprietor of land to a mere tenant, losing the fixity of tenure which had been enjoyed earlier (Byres, 1985).

In the States such as Gujarat, Haryana and Punjab where the Ryotwari (tenant) and Mahalwari systems were introduced (with tenurial security and owner cultivation) the villagers were generally enthusiastic about adopting new land-based technologies such as the Green Revolution because these systems encouraged villagers to exhibit entrepreneurship and innovation. A natural corollary of this is the development of an infrastructure in these regions, such as marketing facilities leading to the villagers growing cash crops which in turn lead to a shift from subsistence economy to a more monetised one.

In contrast, most of the States in eastern and north-eastern India are characterised by subsistence agriculture and lack of infrastructure. Illustrations of this argument can be found in the States of Bihar, eastern Uttar Pradesh and Orissa in eastern India, and Haryana, western Uttar Pradesh and Punjab in north-western India. The parasitic landlordism of the first type of agrarian economies with a subject peasantry stood in sharp contrast to the second type of agrarian economies with a more dynamic peasantry

having respect for manual labour, thrift and economic rationality (Joshi, 1981). The peasants in the States of western and north-western India (the regions endowed with a relatively well developed infrastructure and irrigation facilities) responded enthusiastically to Green Revolution technology (biochemical and mechanical innovations) and in fact have greatly benefited by it. Given the high input nature of the technology, already rich farmers were the early adopters (less than 15 per cent of the area under foodgrain, which lies mainly in the Green Revolution belt, contributed as much as 56 per cent of the increase in foodgrain production) because they had the ability to secure the scarce resources including information about the performance and utilisation of new technology. As a result the CPRs including forests were encroached upon in order to extend the commercial agriculture.

After independence, although Zamindari system was abolished and land reforms were carried out, the legislation extended protection inequitably to the large and medium sized farms. The commercial tendencies were more marked in the Ryotwari and Mahalwari regions than in Zamindari regions, and therefore the villagers in the States of western and north-western India have adopted mainly commercially-oriented social forestry systems such as farm forestry on their own land holdings. Another important factor which has contributed to the success of farm forestry in north-western India, especially in the industrially developed regions, is the large demand for constructional timber such as poles. In western and north-western India, the situation is acute because of the small number of Government forests resulting in a smaller supply of timber for construction. This perhaps explains the large scale plantings of Eucalyptus species after 1974 when it accounted for two-thirds of the total seedlings distributed: Eucalyptus species are not only fast growing and non-browsable having narrow crowns so that more trees can be grown per unit area, but they also provide excellent timber for poles because of their straight boles.

The discussion so far suggests that in the western and north-western India social forestry plantations were raised mainly as cash crops and not for the development of wastelands. In fact in some places the plantations fetched such a good money value that even good agricultural lands were diverted for farm forestry thereby generating land-use controversy. In those regions of the Green Revolution belt where labour supply was short the villagers, especially rich farmers adopted farm forestry because it required less labour overall; apart from plantation establishment and cultural operations carried out during subsequent two years, the labour requirement in a forestry crop is small, unlike agriculture which requires seasonal labour each time a crop is grown. In addition, the irrigation and managerial inputs (in the form of maintenance and supervision) associated with a forestry crop are less than those for agricultural crops which are generally raised biannually or annually. Because of these factors many absentee landowners have preferred forestry which has also reduced the risk of encroachment by villagers because the land is occupied for a comparatively longer period. Although the same phenomenon can be observed in some pockets of eastern India also, the reason for this change in land-use is quite different. Most of the land in eastern India is less fertile, making it more suitable for forestry rather than agricultural crops, and whenever the demand for forest produce exists the absentee landowners have gone for forestry in order to obtain financial returns from the hitherto unproductive lands.

In the southern Indian State of Kerala, where the population density is the highest, the villagers have exploited the land potential (good soil fertility and high rainfall) by adopting multi-storeyed home gardens in order to maximise the overall output from the scarce land resources. This age-old tradition of establishing home gardens alongwith the higher consciousness (as reflected by Kerala having the highest literacy rate in India) seems to be a major contributory factor in the higher involvement of villagers in social forestry. In the adjoining State of Tamilnadu, where irrigated agriculture using tank stored water has a long history, community

plantations raised on the shores of such tanks is an important component of social forestry.

In the semi-arid and arid regions of Rajasthan and Haryana, the villagers grow trees on their farms mainly to increase soil productivity and sustain land capability. In eastern, north-eastern and parts of central India, the differing socio-economic environment has shaped the uptake of social forestry. In these areas the government forests are still a source of forest produce for meeting households needs. This seems to be a consequence of low population pressure and less industrial development in these areas which has also resulted in less market development. The villagers are therefore not motivated to adopt social forestry with their own resources; instead they consider it a government activity. Social forestry has become more of a community-oriented rural development programme in these areas to be implemented largely with the support of Forest Department on community or government wastelands.

The subsistence nature of agriculture and poverty in the region do not usually permit the peasants to take risks by adopting a new technology such as social forestry, without adequate assistance from government. The community and government wastelands are more accessible in this region due mainly to low levels of fertility and economic activity. In contrast, most of the land in other parts of the country which is under high population pressure has been brought under plough, leaving little land on which social forestry can be practised.

As agriculture is mainly a private sector activity, the lack of capital markets in eastern and north-eastern India has decelerated the rate of reinvestment and consequently reduced the growth of production surpluses. The resulting poverty and economic dependency has meant that productive investment has been low which, coupled with high population pressure, has resulted in inadequate improvements in productive assets such as land and labour. The preponderance of an increasingly differentiated peasantry, consisting of a large number of small and

marginal peasants, has further increased subsistence agriculture. The situation has further deteriorated due to the lack of investment in the industrial sector which would have otherwise provided some economic opportunities, thereby lessening the population pressure on cultivated lands. The backward economy of the region, characterised by the above listed socio-economic factors, has given rise to peculiar labour conditions. The non-availability of assured and timely employment has induced landless labourers, and marginal and small farmers to cling to their fragmented and tiny holdings which they cultivate intensively with the help of surplus family labour such an approach avoids the risk of not securing off farm employment. The consequence is high intensity of cultivation, intensive use of family labour, low labour productivity and high land productivity but less sustainability.

Such an agro-ecological and socio-economic environment has led to the inclusion of a special component to social forestry in West Bengal and Orissa aimed at bettering and rehabilitating the rural poor by generating enough income. The Group Farm Forestry in West Bengal aims to motivate groups of poor households to establish plantations on contiguous plots of twenty ha. or more of government wastelands. Tree seedlings and technical know-how are provided by the Forest Department and the motivating force for participation of villagers is income generation and the production of forest produce for their own consumption.

The scheme is similar to the Forest Farming for Rural Poor (FFRP) component of Orissa Social Forestry which has similar objectives to the Economic Rehabilitation of Rural Poor Programme—an important part of the rural development schemes aiming to raise the income and consequently consumption level of the landless rural poor. The main objective of FFRP is to enable landless rural households to practise intensive forest farming or agroforestry, whichever is feasible, on government wastelands (0.5 ha. per family) in and around the villages. From the nursery stage until the harvest of first agricultural crop, the beneficiary is closely associated with

all the activities and nearly 250 to 300 worker days are generated over a 0.5 ha. area (Pattanaik, 1988) this wage earning alongwith annual income from agricultural crops for the initial three years contributes a substantial income for an otherwise comparatively longer gestation forestry enterprise.

Other major components of the social forestry in Orissa are Village Woodlots (VWL), Reforestation of Degraded Forests (RDF) and Institutional plantations. The main concept of VWL is that the Forest Department will support villagers to carry out a community-oriented tree plantation on community and government wastelands for the benefit of villagers. the RDF component aims at reforesting those degraded and depleted areas which are in the vicinity of villages and over which villagers have Nistar rights. The Institutional Plantations are similar to VWL except that institutions such as community centres and schools are encouraged to participate in the programme : a related component is strip plantations, in which plantations are raised in strips along sea coasts, roads, etc. instead of blocks.

Wastelands development through social forestry :

Natural resources such as forests have a potential role in the socio-economic development of a developing economy (Westoby, 1962, 1968 Gane, 1969 Muthoo, 1971), particularly in the countries such as India which lack capital resources. In India the person-land ratio is high and this means that a proper utilisation of the scarce land and surplus labour resources is of critical importance for the prospects of socio-economic development.

Although the present area under cultivation is comparatively large, there is no possibility of converting agricultural land to social forestry because of increasing population : the per capita availability of cultivable land has continuously declined from 0.48 ha. in 1951 to 0.26 ha. in 1981, despite an increase in total area under agriculture during the same period. This shows that potential land area for social forestry will mainly come from

non-agricultural lands. However, there are currently nearly 175 million ha. of wastelands in India (Table, 1), which remain either unutilised or underutilised, and therefore can be made available for social forestry.

TABLE 1

Wastelands available in various States

(in M. ha)

State	Saline & Alkaline	Wind eroded	Water eroded	Non-forest degraded	Forest degraded
A.P.	0.24	..	7.44	7.68	3.73
Assam	..	..	0.94	0.94	0.80
Bihar	0.004	..	3.89	3.90	1.56
Gujarat	1.21	0.70	5.24	7.15	0.68
Haryana	0.53	1.60	0.28	2.408	0.08
H.P.	..	..	1.42	1.42	0.53
J. & K.	..	..	0.53	0.53	1.03
Karnataka	0.40	..	6.72	7.12	2.04
Kerala	0.02	..	1.04	1.05	0.23
M.P.	0.24	..	12.71	12.9	57.20
Maharashtra	0.53	..	11.03	11.56	2.84
Manipur	..	..	0.01	0.01	1.42
Meghalaya	..	..	0.82	0.82	1.10
Nagaland	..	..	0.51	0.51	0.88
Orissa	0.40	..	2.75	3.16	3.23
Punjab	0.69	..	0.46	1.15	0.08
Rajasthan	0.73	10.62	6.66	18.00	1.93
Sikkim	..	..	0.13	0.13	0.15
T.N.	0.004	..	3.39	3.39	1.01
Tripura	..	..	0.11	0.11	0.87
U.P.	1.30	..	5.34	6.64	1.43
W.B.	0.85	..	1.33	2.18	0.36
Union Territory	0.02	..	0.87	0.89	2.72

Source :GOI (1987)

The poor depended on a large part of these lands for their sustenance most was classified as common property resources (CPR) such as village forests and pastures. But in the absence of any rational government land-use policy and investment these have become "no man's lands", to be exploited by whosoever gets it first, promoting resource deterioration (Romm, 1981a, 1981b). However, the Government of India has recognised the nexus between rural poverty and land degradation: the land-use policy paper (GOI, 1988) states, "in planning efficient resource allocations, we should not forget the problems of rural communities, the tribals and others

below the poverty level in whose hands these resources have to be efficiently utilised and whose minimum needs the efficient use of such resources is meant to provide. Resource use in the hands of such persons cannot be optimal unless the policy framework facilitates such optimal use by making the prescribed use relevant and profitable to the user by providing the necessary supporting package of technology, input, supply, credit, social infrastructure and marketing support".

Socio-economic functions of social forestry in an agrarian economy such as Orissa are significant and diverse, notwithstanding the protective and ameliorating effect on the land resources. To achieve these functions a wider perspective should be adopted rather than a single need with a technological solution. An appropriate technology has to address these issues for individuals and communities. Social forestry has strong backward and forward linkages with the local rural economy: Chetty (1985) has identified nearly 90 small scale cottage and village industries which are dependent on forests for raw materials. If promoted, these forest-based industries will reduce dependence of the villagers on cultivated lands, promoted self-employment especially for village artisans, generated healthy completion in rural markets and encourage technological transfer to rural areas.

An important factor contributing to land degradation in India is related to the increasing privatisation of village common land such as village forests and pastures, which have played a significant role in the socio-economic life of the rural poor. A study by Jodha (1983) of 80 villages in the dry zones of seven States reveals that the annual per household income derived from CPRs ranged between Rs. 530 to 830 which is higher than the income generated by a number of anti-poverty programmes implemented in these States. However, a large privatisation of these CPRs (between 49 per cent to 86 per cent of CPRs ended up in the hands of non-poor) in the last decade coupled with the commercialisation of the activities based on these CPRs (such as marketing of fuelwood and fodder) have almost completely marginalised the weaker sections. They increasingly find that they have to buy things which they formerly used to receive in the

forms of traditional claims. This on the one hand suggests that what the government gives to the poor through its anti-poverty programmes is taken away by the socio-economic processes dominated by the rich, while on the other that these wasted community lands need to be rejuvenated through social forestry if such adverse trends are to be halted in future.

In those areas where there is surplus labour and alternative economic opportunities are low the villagers are motivated to participate in social forestry because of a need to earn their livelihood and to obtain fuelwood, fodder and small timber. The labour intensive subsistence agriculture in these regions requires a net transfer of fertility from the forests through fodder and leaf litter. This means that agriculture draws heavy inputs from the already deteriorating forests. With declining forest availability and productivity, the agricultural productivity is also adversely affected. Gadgil (1987) reports that in the Eastern Ghat region the paddy fields and arecanut orchards are well managed with above ground actual production of 9 and 20 tonnes per ha. respectively but this production is at the cost of forests which annually provide plant organic matter inputs to the tune of 16.6 tonnes per ha.

The disparities among districts of Orissa have increased over the period starting from the 1950's. Nearly two-thirds of the cultivated area operates under a negative or very low growth rate. This is because of uncertainty of monsoons, and the lack of infrastructure and irrigation for rice cultivation (the area under irrigation constitutes below 20% of the total cropped area). It is estimated that during the period 1951 to 1966, 40% of the variation in agriculture production was accounted for by erratic monsoon rains; increasing to 60% during the period 1958 to 1978 (Mishra, 1983). The implementation of social forestry has been given less attention in the Central and Eastern Ghat regions of Orissa because they still have good forests which are easily accessible to the less densely settled population of the region. In contrast, the densely populated coastal plains (which have little land under forests) are more developed in

terms of agriculture and industry due to good soil and infrastructure such as markets and transport. Villagers are accustomed to growing cash crops and trees on their farm land to meet their demand for forest produce with any surplus being sold. However, as the size of land holdings is comparatively small, large scale plantations are not possible.

In the economically backward and less densely populated regions of the Central Table Land, community oriented social forestry has proved more acceptable and successful. In this region the community and government wastelands (which in most cases are village forests and pastures which have become devoid of vegetation due to overuse and mismanagement) are adequately available for raising social forests. The community-centered social structure of the predominantly tribal population has created a suitable environment for the success of social forestry. Strong traditional leadership in which the village communities have confidence has proved an asset in motivating the villagers.

Although Orissa is backward both economically and agriculturally, it offers a great opportunity for the development of wastelands through social forestry, due in large measure to its surplus labour and land resources. Extensive areas of arable land, which are currently lying unused, require reclamation but the Government policy in past had not envisaged large scale reclamation of these wasted lands. Therefore, structural improvements alongwith biophysical and economic ones are urgently required. Social Forestry can fulfil this gigantic task by involving the increasing labour force, both individuals and communities. Sharma (1990) has analysed the intertemporal trends in economic and agricultural activities in Orissa, based on the data compiled from GOI (1986) and the annual issues of Government of Orissa reports on Season and Crops. Generally the number of cultivators and agricultural labourers have increased faster than the total population while there is a dramatic decrease in the percentage of workers engaged in household industries including forestry and fishing. This suggests that an increasing number of workers find the household industries economically less attractive and

either become landless labourers or adopt agriculture—further decreasing the size of land holding.

Although there are large patches of wastelands in Northern Plateau which can be brought into agriculture, they have neither been reclaimed by the villagers (who lack the appropriate resources required for such laterite soils) nor by the Government. Such lands, if reclaimed through social forestry, would greatly benefit the impoverished rural populace. The villagers' used to get three-quarters of their food from the nearby forests and are now finding difficult due to the degradation of these forests. They are consequently forced to sell their land holdings in order to meet their subsistence needs (Hota, 1986). In the sparsely populated Central and Eastern Ghat region, a sharp increase in the percentage of cultivators is possibly due to easy access to unused land and lack of economic opportunities. This has resulted in a large number of workers becoming agricultural labourers. Such developments mean that social forestry can be adopted by these poor villagers, mainly as a means of earning income through employment and not for forest production.

Conclusions :

In ancient and medieval India, local inhabitants used forests to meet their consumption needs and in the non-monetised economy an equilibrium was maintained between the needs of people and state of health of forests. This symbiotic relationship changed when forest management, under the influence of commercial interests, adopted revenue-oriented practices and population increased significantly. The needs of communities were realised when the village forests and pastures were earmarked for their use, and rights and concessions in government forests were recognised. However, increasing restrictions on villagers' use of the forests were imposed by reserving more forest lands. As a result the forests under the management of Forest Department were better stocked, but the village forests and pastures deteriorated to wastelands due to over use and lack of any management policy. The problem was compounded by the non-implementation of earlier

recommendations for the creation of fuelwood and fodder reserves.

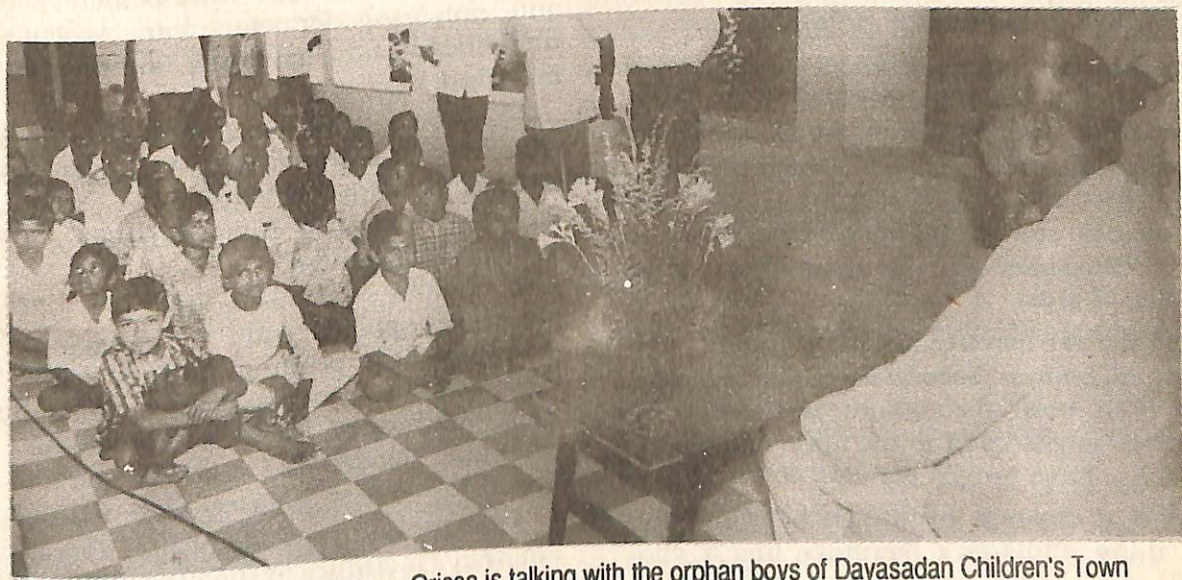
Since the secondary and tertiary sectors had limited employment capacity, especially to non-wage earners, the bulk of gainful employment opportunities could only be created by increasing the productivity of the land-based primary sector. However, given the agro-ecological constraints, any acceleration of the agricultural growth (in terms of both productivity and employment capacity) cannot be envisaged in the near future and especially until the irrigation network is improved substantially. The potential of social forestry in improving energy, employment, income and welfare of the rural populace should, therefore be harnessed by utilising the wastelands and surplus labour. A direct attack on the poverty and land degradation nexus through labour-intensive land-use technology such as social forestry is essential. This will not only reclaim the over-used village forests and pastures but also improve wastelands-output ratio and hence reduce unemployment and poverty.

References :

- Byres, T. J. (1981)—Technology, class Formation and class Action in the Indian Countryside *Journal of Peasant Studies*, 8(4): 405-54.
- Chetty, R. N. V. (1985)—Social Forestry/ and forest based industries. *Indian Forester*, 111 (9): 670-91.
- Gadgil, M. (1987)—Depleting renewable resources: a case study from Karnataka Western Ghats. *Indian Journal of Agricultural Economics*, July-September.
- Gane, M. (1969)—Priorities in planning: cost-benefit methodology and simulation with special reference to forestry and economics development in Trinidad. Commonwealth Forestry Institute, Paper No. 43, Oxford.
- Government of India (1952)—*The National Forestry Policy*, Delhi.
- Government of India (1958)—*Proceedings of Farm Forestry Symposium*, ICAR, New Delhi.
- Government of India (1986)—*First Meeting of the National Land Use and Westland Development Council*. Ministry of Environment & Forests, New Delhi.
- Government of India (1987)—*General Economic Tables—Series I*. National population Census, Government of India, New Delhi.

- Government of India (1987)—*Status Report on Forests*. Forest Survey of India, Dehra Dun.
- Hota, S. (1986)—Forest Development and Employment. In Bandhu, D. and Garg, R. K. (eds) *Social Forestry and Tribal Development*. Indian Environmental Society, Delhi.
- Jodha, N. S. (1983)—Market forces and erosion of common Property Resources. Proceedings of the international workshop on "Agricultural markets in the semi-aria tropics". ICRISAT, Hyderabad.
- Joshi, P. C. (1981)—Fieldwork Experience: Relieved and Reconsidered. The Agrarian Society of UP. *Journal of Peasant Studies*, 8 (4) : 455-84.
- Mishra, B. N. (1983)—Deceleration of rates of agricultural growth in Orissa: Trends and explanatory factors. *Indian Journal of Agricultural Economics*, 38 (4) : 591-604.
- Myrdal, G. (1968)—*Asian Drama: An Enquiry into the Poverty of Nations*. Pelican, London.
- Muthoo, M. K. (1971)—*Renewable Natural Resource Planning for Regional Development with special reference to Kashmir*. Unpublished Ph. D. thesis, Oxford University, Oxford.
- National Commission on Agriculture (NCA) (1976) *Report of the National Commission on Agriculture—Part IX, Forestry*. Government of India, New Delhi.
- Pattanaik, B. K. (1988)—What social forestry can do for rural poor? *Kurukshetra*, March, 11-14.
- Romm, J. (1981a)—The uncultivated Half of India (1). *Indian Forester*, 107 (1) : 1-23.
- Romm, J. (1981b)—The uncultivated Half of India (11) *Indian Forester*, 107 (2) : 69-85.
- Royal Commission on Agriculture (RCA) (1928) *Report of Royal Commission on Agriculture*. Government of India, Delhi.
- Sharma, R. A. (1990)—*Socio-economic Planning in Social Forestry*. Unpublished Ph. D. thesis. Department of Forestry & Natural Resources, University of Edinburgh, U. K.
- Sharma, R. A. (Blyth, J. F. and Mc Gregor, M. J. (1990)—The Socio-economic Environment of Forestry Development in India (Since the British Period) : A Historical Perspective. *Indian Forester*, 116 (7) : 523-35.
- Singh, G. B. (1987)—Agroforestry in the Indian Sub-continent: past, present and future. In Stepler, H. A. and Nair, P. K. R. (eds) *Agroforestry: a decade of development* ICRAF, Nairobi.
- Tejwani, K. G. (1987)—Agroforestry practices and research in India. In Gholz, H. L. (ed) *Agroforestry: Realities, Possibilities and Potentials*. Martinus Nijhoff, Dostrecht.
- Voelcker, J. A. (1893)—*Improvement in Indian Agriculture*. Government of India, Delhi.
- Westoby, J. L. (1962)—The role of forest industries in the attack on economic underdevelopment. *Unasylva*, 16 : 168-201.
- Westoby, J. L. (1968)—Changing objects of forest management. *Address to the IXth Commonwealth Forestry Conference*, New Delhi.
- Wilson, J. (1986)—Management of Community forests in Tamil Nadu. *Indian Forester*, 112 (4) : 305-13.

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Shri Biju Patnaik, Chief Minister, Orissa is talking with the orphan boys of Dayasadan Children's Town Madras at the Chief Minister's residence, Bhubaneswar on 27-5-1992.

CHILDREN'S LITERATURE : SOME REFLECTIONS

Maheswar Mulia

Children's literature primarily is literature written for children. Its history is pretty old. It is created when the child learns to speak in mother's lap. The creator of children's literature is Mother. Mother worried over child's anger, obstinacy and disobeying nature tries to pacify and amuse with lullaby and stories that would divert the child's mind. And this unwritten song and story from the base of children's literature. The child learns language first from mother – which is man's mother tongue. Literature in general is enriched and grows with children's literature as the foundation. Every language and literature spring from children's literature.

Before a language or a syllable took concrete form man knew children's literature through lullaby, songs, riddles, nursery rhymes, folk tales and folk songs.

The nature and substance of children's literature changes with the growth of child. Apart from merely amusing a child in Mother's lap, children's literature switches over to teaching morality through mythological stories and fairy tales. Thus was born 'Hitopadesha', 'Panchatantra' and 'Arabian Nights'.

Children are carefree and their mind is free having no bounds. Several imaginative stories have been born throughout the world for centuries only to cater to the mind of children and those have proved popular among them.

Pleasing children by literature is not the only thing. Children's literature has a vital

role in moulding child's tender mind to achieve higher things of life. Child draws inspiration, high hopes and grows inquisitive only through wholesome children's literature.

Children's literature is constantly changing with the change of times. Knowledge has spread tremendously with spread of education. The present day child is no longer interested in imaginative and unrealistic stories of yore. Child's thought, knowledge, imagination and choice have developed in present day world where science pervades every walk of life. Today's child looks to a much wider world, comes in touch with various bewildering discoveries of science. It is futile today to feed child with imaginative and fairy tales when man has already landed on moon, is set to make inter-planetary travel and preparing for star wars which may ultimately end in total annihilation of mankind.

The books that were earlier written for education of children were knowledge-based and for infusing morality in them. Children's literature has the sole purpose of child's mental development.

Floodgates of progress of children's literature opened with the invention and development of printing industry in the 19th century through Christian missionaries. Books of history, science, mathematics and grammar flooded the markets and children began to see new frontiers of knowledge.

After the third decade of the 20th century children's literature in the world was enriched

with new ideas. Inventions and discoveries in science came in print with a language and style understandable to child. Emphasis was laid on child's nature and psychology. Attempts were made to initiate child into the world of reality based on logic.

Child's life is moulded at three levels—family, school and society. Mother in family, teacher in school and outer environment are child's guides in life. They make a man what he or she is. Herein lies the importance of children's literature which portrays a nation's progress, politically, socially, spiritually and in science and art. Literature which is created in perfect unison with our country's culture, heritage and tradition becomes immortal and popular.

The impact of textbooks in development of child's mind is immense. Initially textbooks were foundation of children's literature. Today most of the writers of textbooks and teachers are helping a lot in the spread of children's literature.

Is children's literature only for children? Surely no. It is for all. It is meant to entertain and amuse at the same time helping to gather knowledge. In fact, children's literature can be termed as literature of the mass. Writers, editors and publishers, artists and readers, all have a responsibility for enrichment of children's literature.

Children's literature expresses child's thoughts, curiosity, joy, emotion and inner feelings. It must now prepare the child for the next century. It must satisfy today's child who is exposed to an explosion of knowledge. It must not be such, so as to bring in disappointment, frustration, fear, anxiety and negative feelings in the child's tender mind. It must infuse high ambitions and ideals in the child. Not merely scientific, children's literature must help in child's development—mentally, physically and spiritually. Child should grow to have an allround personality with power of mind, heart and spirit.

In the topsy turvy world of today, in which life has become disorderly and environment polluted, children's literature should help child become a worthy citizen. An ugly, prejudiced

and blind belief must be removed from child's mind. Child must learn how to sacrifice, be adventurous, be aware of country's own culture and heritage. Love for the motherland must be inculcated in child's mind. Children's literature must speak of 'Satyam, Sivam and Sundaram'.

A number of young writers have emerged leading children's literature to a new frontier of knowledge, expression, information and learning. New modes of expression, pictorial representation of stories and verses have become the feature of present day children's literature. The emphasis on teaching morality and virtues has been shifted to the psychological aspect of stories and verses. Emphasis is laid on the entertaining qualities of children's literature. Technology, international affairs have been gradually been introduced in regional children's literature.

Children's literature in India has occupied an honourable position in the world, thanks to the spread of education, printing technology, multiplication of the number of magazines and journals, radio and television. Sahitya Akademy, national Book Trust have also played a big role in patronising regional languages thereby helping children's literature. India is yet to come of age in this field. Writers of children's literature are still deprived of honour due to them. They are yet to be financially well off. They are not a well organised lot. Barring a few, some of the regional languages have not yet seen modern printing technology. Government patronage is not enough. Writers and publishers also do not show much of sincerity in children's literature. Therefore children's literature often limps. It fails to move in jet-speed as in many developed countries.

To conclude, exchange of ideas among writers of children's literature at national and international levels and translation of rich children's literature of all tongues in the world will go long way in enriching children's literature

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WRITING FOR CHILDREN'S RADIO PROGRAMMES

Dr. Jagannath Mohanty

Importance of Radio :

Radio is an effective medium. It is also comparatively inexpensive. It has occupied a significant place in communication. It is also playing an important role in education and literature. It not only informs, but also inspires. It not only inculcates values and virtues, but also creates attitudes, interests and appreciation. It can cover a very wide area at the same time. There is already a well developed infrastructure, a background of long experience to its advantage.

Children's broadcasting has, therefore, immense possibilities. Particularly in a developing country like India where constraints of finance, efficient teachers, suitable equipment and appliances adversely affect literary and educational activities, radio is to play a significant part in promotion as well qualitative improvement of education and literature.

India is still having some inaccessible areas where expansion of education has faced difficulties and literature has not been developed properly. To a large number of socially disadvantaged children, education is not meaningful and literature is not interesting. There has been growing awareness about the inadequacy of the traditional form of literature or formal system of education not only for expansion, but also for improving the standard of education and

literature. The need for alternatives in the shape of non-formal education in the shape of non-traditional literature is gradually felt imperative.

Achievement of Radio :

Throughout the world, radio programme has become popular and in certain area/countries it has worked wonders. These countries also represent both developed and developing world and the radio programmes have been found effective both in formal and non-formal systems of education and literature.

Wilbur Schramm and others in their research work, "The New Media: Memo to Educational Planners" have elaborately discussed the achievements of various media in the field of education and training. Especially the use of radio is quite remarkable in Algeria for meeting the Post-Independence emergency in the shortage of teachers by providing pre-service and inservice training, in Australia for extending the school facilities to far-flung sparsely populated areas situated hundreds of kilometres away from the nearest schools, in Newzealand for providing educational opportunities to remote families, in Niger, Toge Honduras for providing literacy and adult education and in Thailand for teaching teachers. In Kerala Radio was used for training teachers in teaching English language and literature efficiently.

Besides Schramm and others, Goodman, UNESCO expert in sound broadcasting in his

paper "Educational Radio: Some notes on its Potential and its Utilization" has narrated the successful stories of educational radio in three countries. In the Australian State of Tasmania, a new form of handwriting was introduced with massive preparation and co-operative efforts. In Papua Newguinea with 700 linguistic groups, English was taken to be the common medium of communication by utilising various well-designed print materials and other techniques. In Indonesia, radio was able to provide inservice teacher-education through an extensive piolt project. Thus we have ample evidences of the achievements of radio in different contries of the world. Broadcasting has also been used for enrichment purposes, for non-formal education, for open school and open university system and teaching languages and literature.

Limitations of the radio :

Radio has a number of inherent Limitation. It is medium dependent on sound only. It demands a habit of constant listening which is not ordinarily available with many. Radio may broadcast well developed lesson and a good place of literature but cannot develop a lesson or interact with the audience. No intervention or control over the broadcast is possible to suit the special need and interest of any group. S. Rahman has rightly pointed out, "Radio broadcast is evanscent, impermanent and rarely sufficient in itself for the core of instruction intended in educational broadcasting. It cannot be turned to, studied or re-read at leisure." It cannot broadcast a great novel or full drama.

In radio programmes, there is no scope for interpersonal contacts and interaction between the artists (here radio or writer, teacher) and the audience. So the elements of motivation and inspiration are usually lacking in the sound broadcasting. Audience cannot see the performers or authors directly, nor artists or performers are able to see the audience. It therefore makes a lot of difference in the approach and techniques.

Sole dependence on sound and complete absence of any visuals make this medium quite different from television or film and establish on its own merit. G. C. Awasthy has

aply said, "In radio, the artist and his audience are nowhere near each other. In the physical sense they are nonexistent to each other. The basic fact about radio art and this is the over-riding fact is that it is entirely an aural art with a complete absence of visual components. This is at once the weakness and the strength of radio as an artform.

To most of us listening is very exacting and to some it is taxing also. Since radio calls for listening only from its audience, it has to perform a difficult task. Donald Mc Whinnie discussing the true nature of radio has observed that we are used to seeing and listening simulaneously and listening only proves inadequate or the effect demanded too exacting. Asking for imagining a piece of conversation in a dark room, Mc Whinnis has added, "The words acquire a compulsion of meaning they did not have before, they develop a richness of texture through being isolated and you focus your sensibility and imagination on then as you rarely do in daylight". That is why, radio as a medium makes the heaviest demand on the listener's imagination and sensibility". The listener has to make the experience gained from the radio his own, by relating it to his own terms or reference or his own background.

What we can do to overcome the Limitation :

With a view to overcoming the limitations in the radio programmes/broadcasting the following steps should be taken.

1. Since sound is the only means of communicating the message in the radio broadcast, it has to be supported with printed materials, illustrations, posters, slides, filmstrips etc. as well as discussion.
2. As the programme is on the air we listen to anything only once for all and every thing change from moment to moment. In order to make an impact, it must draw attention right from start and continue to sustain the interesus of audience. This will be possible only by adopting certain attention-drawing and interest-eustaining techniques.

3. Sound being the only medium in radio broadcasts, it has to be enriched by variety and reality in music and sound effects. By this, the absence of visuals is mitigated and the deficiency made up giving ample scope for audience's imagination.
4. Suitable script should be developed as a frame work of the radio programmes giving adequate scope for generating interests, sustaining suspense of curiosity throughout and shedding new light and sound.
5. Scripts are also to be properly handled by the producers in producing programmes. Awasthy has nicely observed, "A radio script, no matter how well it is written, is but the bare bones of a programme. What counts is how well it is put across. Between the script and its broadcast lies the whole technique of producing and the success of otherwise of the producer".

Lastly, it may be pointed out that radio has to utilise selected subject areas for clearly defined purposes. It should have emotional appeal, power to stimulate the imagination to bring the external or distant world to the internal environment or class-room and to recreate an event of episode from the past life or history. Thus the choice of material and formal optimum use of sound and musical effects, utilization of suitable techniques and treatment would ensure success of education and literary broadcasting.

Script writing :

Script being the basic frame-work of radio programme, utmost care should be taken to make it suitable for reflecting the above concepts and principles . In this context, the guidelines developed by the British Council Media department, London are found to be quit concise as well as comprehensive, very meaningful as well as relevant. They are given below.

Radio Writing "Writing to be Heard" :

1. The Script is most important part of a radio programme. Unless it is

excellent every other aspect of production is useless.

2. To be successful it must be written in the right languages, for the listener.
3. The right language is the language the listener can understand. So it must take into account the listener's background, education and interests. The writer must therefore think carefully about the structure he is going to use and the vocabulary.
4. The words the scriptwriter uses are not read by the listener they are listened to. So the words must appeal to the EAR not to the EYE.
5. Writing for the EYE relies on the conventions of writing, punctuation, paragraph-type-size-columns-head-lines. The reader can go at his own speed. He can go at his own speed. He can go back to check any point of difficulty. He can stop reading, put the writing on one side and return to it later.
6. Writing for the EAR is quite different. The listener cannot be given too many facts. He cannot be given too many figures. It is essential to keep holding his interest therefore the script must be presented in an interesting way. It must develop logically. The radio writer may have to repeat, expand and reinforce. He must use the form of language which is simple and informal. It is SPOKEN LANGUAGE. The listener must be held otherwise he switches off mentally or physically.
7. How is the listener held ? The radio writer must think of the listener as his personal friend. He must talk with the listener not at him. He must hear in his mind all the tones of voice that will communicate the script. He must visualize the listener. He must read the script aloud to himself and ask- "What do I sound like?" "What do I mean ?"

Present Practice :

Although Akashvani is responsible for production of children's radio programmes, it depends on the outside resource persons for preparing scripts. However necessary editing of the script is made by the producer or his Unit. A case study of School Broadcasts at Delhi revealed that "It is mostly of the nature of substituting some difficult words with simpler ones, and/or curtailing/adding the spoken matter. The accuracy of facts presented in the material is generally accepted, as no other subject matter specialists is consulted in the matter. This practice allows a material passed off for broadcast without providing a safeguard for checking its accuracy at the editing stage. This practice at New Delhi holds good to all the Akashvani Stations and the instances of such errors in educational programmes are also not rare.

What Can Be Done :

Hence writing of scripts free from all errors thematic as well as linguistic is very important for success of the educational or literary broadcasting. It may be regarded as a

specialised job. The script writers are usually appointed from among subject experts which do not always happen well. Therefore care should be taken for preparing fool-proof scripts for the purpose. It is better to get them approved by the subject experts and then use for production of programmes in presentable form by the producer which is a media man.

It was thought desirable as well as more practicable to train the specialist to write scripts for radio. In order to write suitable scripts, besides, content-knowledge, the writer should have knowledge about various formats, audience profile different techniques for attracting attention and sustaining interests, ability in languages and presentation styles and techniques. During a training course or workshop, the prospective scriptwriters should be exposed to these theoretical as well as practical aspects of the programme. It should be realised that good script writers are not born, but made, through sincere efforts, long practice, sustaining interest and love for the job.

References :

1. Wilbur Schramm et al : The New Media : Memo to Educational Planners, UNESCO 1967
2. Lester Goodman : "Educational Radio : Some Notes In Its Potential and Its Utilization", Centre for Educational Technology, NCERT, 1977.
3. Saulat Rahman : "Sound Broadcasting for Education Orissa Education Magazine December 1977.
4. G. C. Awasthy : Broadcasting in India, Allied Publishers Ltd., Bombay 1965.
5. Donald Mc Whinnie : The Art of Radio Faber Faber London 1961.
6. The British Council Media Department London : "Radio Writing" (A Working Paper)
7. Centre for Educational Technology, NCERT : "A Case Study of School Broadcasts in Delhi" 1980.
8. Jagannath Mohanty : Educational Broadcasting : Radio & T. V. in Education Sterling Publishers New Delhi 1984.

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PAGES FROM A REPORTER'S DIARY

"THE DAY I WORKED LIKE A SCOTLAND YARD POLICE"

Ramahari Mishra

On a September Day, in the beginning of the month, nineteen hundred seventy six I reached London from Kabul in a non-stop overnight flight, only touching Istanbul, the Venice of the East, for refueling on the way.

Alighting from an Ariana-Afgan Boeing 707 at Heathrow at dusk, I was sweating like any one who travelled in a jampacked tram car in the streets of Calcutta during Summer days. It was a very unusual extended Summer for England in that year, when mercury rose far above the normal, making life horrible for the British people.

The day I planned my trip to Europe I had a self-appointed mission to locate my prodigal uncle, who left home as far back as 1951 for England and gave up connection with his parents and relations, a decade after he settled down as an electrical engineer under the Greater London Corporation. On early days of his stay in the British capital, when life appeared to be promising enough, he kept up his correspondence with his parents, who lived in a sleepy Orissa village near Balipatna. But soon after, he left his old job for a new one with fluctuating fortune, he changed places leaving no forwarding address for the land ladies to redirect his mails.

Mr. B. N. Ota, 86, B. Elspeth Road, London, Sw, Telephone GUL 2738" was all the information I collected from my relations about him when I packed up for my trip abroad. This was the flat, he wrote to have

purchased, when he was quite prosperous or nearly so.

As soon as I reached my host, the famed artist turned writer (who has authored "MY VILLAGE MY LIFE"), Mr. Prafulla Mohanty's place in Wapping, on Thames I suffered from a nagging thought how to find out Mr. Ota, my distant uncle, whose scholarly disposition and his collection of books on varied subjects fascinated me in my college days. He built up a personal library of selected titles, even when he was a student of Bengal Engineering College at Sibpur, near Calcutta. I did not find a single book on Mathematics or Engineering in his collections but his choice of books ranged from Shakespeare to Sex (Havelock Ellis).

I greatly enjoyed reading his books in his absence, which he never allowed to be touched by human hands except his own when he was in India.

I told Mr. Mohanty about my mission. He counselled me to try his telephone number. This was an old number and London dispensed with this alphabetical prefix long before and had fallen in the line with the international standard having country, area and exchange codes. However, I tried the Conversion Directory, but there were no substitutes for the old numbers.

I again glanced through the voluminous London telephone Directory and suddenly came across one Ota, catalogued under "O".

Then I dialled the number, restlessly, soon came the response, "Ota speaking". I went on talking to him all kinds of things only to discover later that he was a Japanese. And he could as well inherit such a surname without becoming an Indian Brahmin, which my uncle was.

My host tried the "Telephone Assistance", a very co-operative and helpful kind of people and seemed to know every thing under the sun. We enquired whether there was a new number at the 86A Elspeth road, and if so, the name of the occupant of the flat. The telephone revenue people certainly knew that. But the telephone girl very politely said that this information she could not part with unless the name of the subscriber was supplied to her. On our wooing and cojoling her she asked "Are you people from the In land Revenue or the Scotland yard?" We frankly told her that we are none of it and explained to her our predicament. She reluctantly obliged us by giving a telephone number in the Elspeth Road apartment and the occupants name as Mr. Oxbria. Following was the telephonic talk :

"Could I talk to Mr. Oxbria" ?

"Yes, Oxbria speaking" :

"We are interested to know if you are aware of an Indian Engineer, Mr. B. N. Ota, who once owned this flat?"

"No sorry. But I received letters in his name for quite some times. But I did not know what to do with the letters as he left no forwarding address. Infact, I never knew him. I marked the letters for RLO (the Returned Letter Office)".

"Excuse me sir, would you mind telling us from whom you purchased this house, so that we can address our enquiries to him".

Mr. Oxbria said that he purchased the house from one Robert Roach who lived in 15, Coventry Road, St. Leonards on Sea, Sussex with a telephone number 0424-431-563. We thanked profusely Mr. Oxbria for the information.

Quickly, I established contact with Mr. Roach in Sussex, thanks to the efficient STD

system, who to our dismay told us that the house sold to Mr. Oxbria belonged to his brother who stayed in North Hamton which he purchased through the solicitor "Shoe Smith and Harison" in 1972.

The solicitors when contacted said that the property was acquired from a Real Estate Agent, "Ridgewell and Harris of Lavender Hills". Mr. Ota sold the house to Mr. Ridgewell, a partner of the firm Ridgewell and Harris, who later sold it to Mr. Roach.

It was Mr. Ridgewell who hesitatingly said that he had the information that Mr. Ota had left London and perhaps he was staying now in Briton, a sea front in England. "That is what Mr. Ota told me quite few years before. I have not met him since then."

It was getting late for dinner. Mr. Mohanty's friend, Mr. Derek Moore, a British Civil Servant, had already arrived to join us. I was still leafing through the pages of Briton's telephone directory.

My eye lids were falling and aching with pain when I was browsing through the microscopic letters of the telephone directory. I dialled the number written against OTA B. N. after dialling the Briton Code 273.

A sweet lady's voice said "Cat and Cucomber".

That sounded quite funny to me. Still I gathered courage to ask "Could I speak to Mr. Ota". "Yes", said the Lady at the other end of the line. "But he is at the moment sleeping". I insisted that I would only have a word with him. She had to wake him up.

After disclosing my identity, I told my uncle to ring me back next morning if he recognised me and if he at all felt happy to communicate with me.

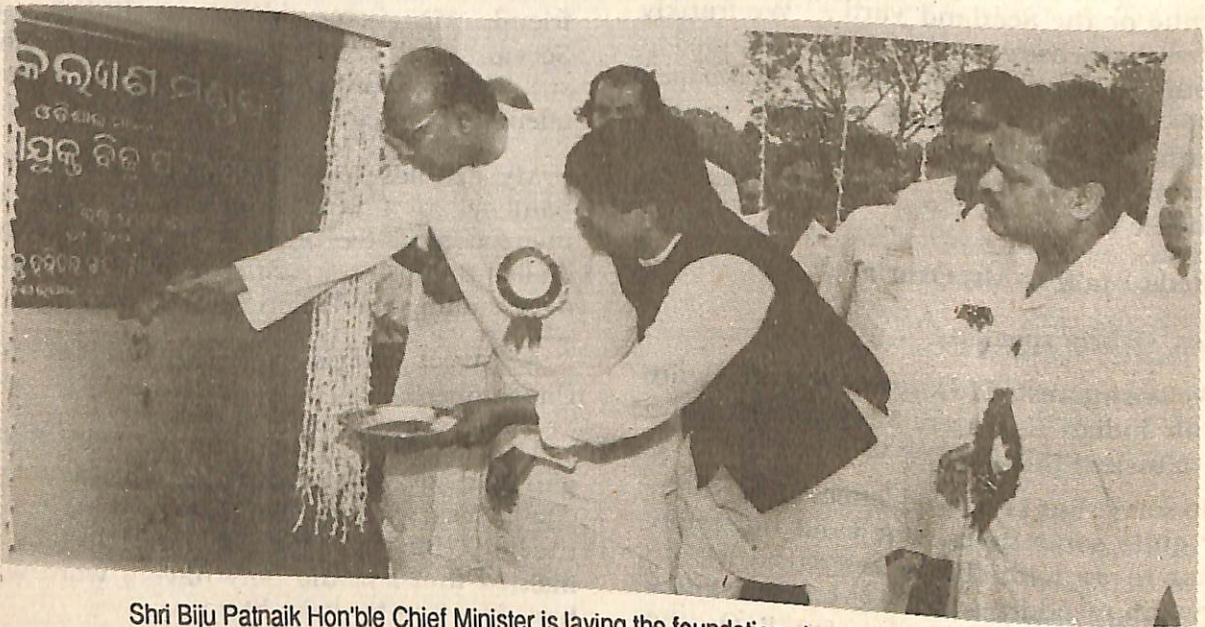
His was the first call I received next day morning from Briton with a prompt invitation to go to his place and offered to meet me in London any day that suited us. He came to London and met a nearest relation (me) after a quarter of a century.

The first thing I asked him was what stood for "Cat and Cucomber". It turned out to be

the name of a restaurant which he and his French born wife run for their living. It paid them more than the job he held. I wept and enjoyed my stay with him for a full day. We talked about Cabbages and Kings in Orissa. My delight was that I could discover him when many others failed. Why he left his connections in India or the compulsion of his

leaving a sheltered job for an uncertain living was all together a different question, and a very personal one indeed. I had no desire to unravel that at the cost of his hospitality.

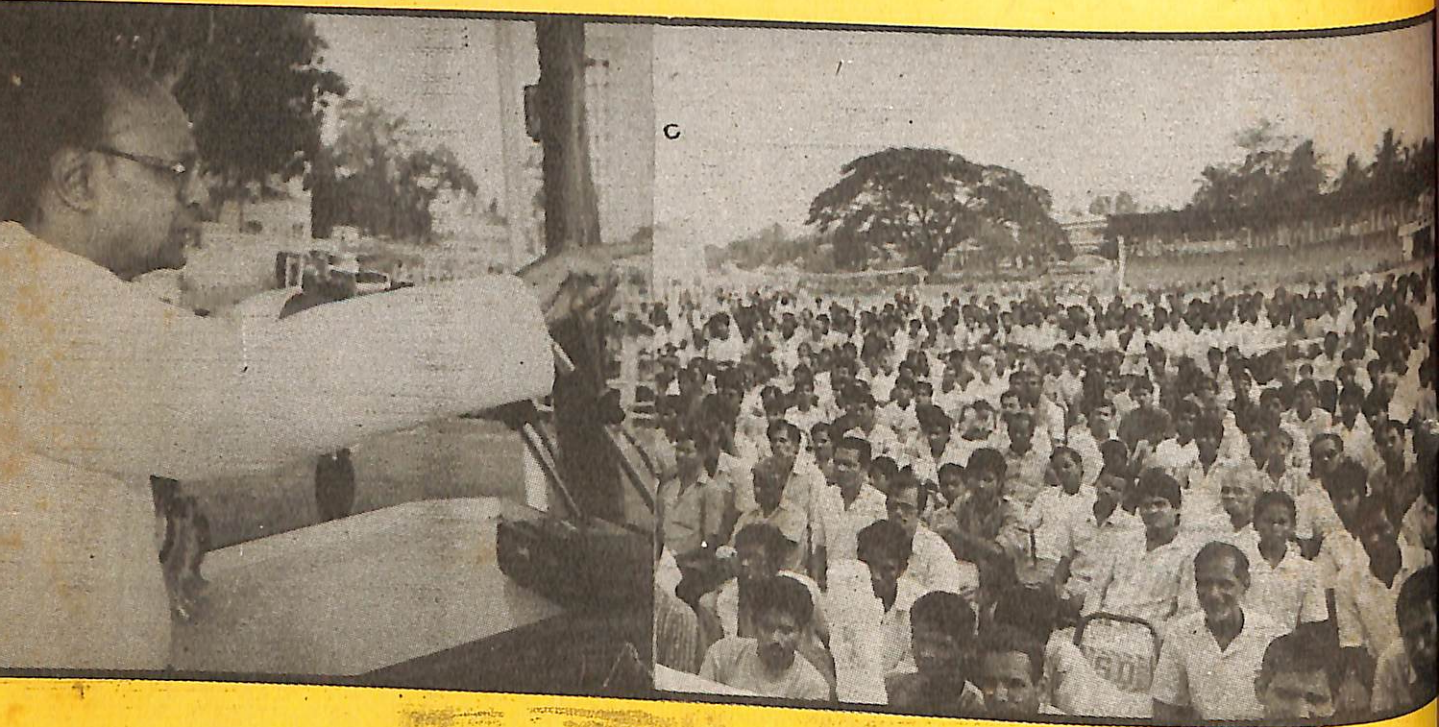
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Shri Biju Patnaik Hon'ble Chief Minister is laying the foundation stone of Kalyana Mandap at Keonjhar on 22-6-1992, Shri Nalinikanta Mohanty, Minister, Works and Urban Development was also present in the function.



Shri Bijoy Mohapatra, Minister, Irrigation & Parliamentary Affairs, Shri Ashok Das, President, State Janata Dal, Shri Prafulla Chandra Ghadei, Minister of State, Planning & Co-ordination, Sayed Mustafiz Ahmed, Minister, Textile & Handlooms are discussing on the ensuing Bhoomipuja function arrangements on the site of the proposed Second Steel Plant at Jakhapura near Duburi of Cuttack district on 23-4-1992.



Shri Biju Patnaik, Chief Minister, Orissa is addressing at the closing function of Birth Centenary Celebration of Maharaja Krushna Chandra Gajapati at Khallikote College Stadium, Berhampur on 26-4-1992.