

ORISSA ECONOMIC JOURNAL

**Vol. XXX, No. 1 & 2
Jan.-June & July-Dec. 1998**



**ORISSA ECONOMICS
ASSOCIATION
BHUBANESWAR**

ORISSA ECONOMIC JOURNAL

**Vol. XXX, No. 1 & 2
Jan.-June & July-Dec. 1998**

Editor :

Prof. Baidyanath Misra
17, Saheed Nagar
Bhubaneswar



**ORISSA ECONOMICS
ASSOCIATION**
BHUBANESWAR

**ORISSA ECONOMICS ASSOCIATION
EXECUTIVE BODY
1998-99**

President :
Prof. Binayak Rath

Vice-President :
Shri Bhaskar C. Jena

Secretary :
Dr. Rabi N. Patra

Assistant Secretary :
Shri Jagannath Lenka

Editor,
Orissa Economic Journal :
Prof. Baidyanath Misra

Members :

Sri Bhabani Prasad Dash
Sri Kishore Chandra Pattnaik
Sri Ramesh K. Mishra
Dr. Bhagabat Patra
Dr. Surendra Nath Behera
Dr. Uttam Charan Nayak
Dr. Bhagaban Swain
Dr. Jyoti Prakash Patnaik
Miss Basanti Das
Sri Lalit Mohan Sahu
Dr. Raj Kishore Panda
Dr. K. Nana Buchi
Dr. Satyabrata Mishra
Dr. Sudhakar Patra

CONTENTS

Editorial :

The End of an Era

Prof. Baidyanath Misra

Secretary's Report

Dr. Rabi N. Patra 1

Presidential Address :

Poverty, Food-Insecurity and
Standard of Living in Orissa

Dr. Ajit Kumar Mitra 5

Food Security in India

1. The Fragility of Foodgrains Self-Sufficiency and Food Security in India : Some Emerging Trends Towards Colonisation Syndrome R. M. Mallik 17
2. Food Security in India—A high light Ranjan Kumar Sahoo 29
3. Is Public Distribution System alone Sufficient to Ensure Food Security at Individual Level ? Kishor C. Samal 34
4. Hunger and Food Security in India Prof. Surendranath Misra 41
5. Evolution Management & Working of Public Distribution System in India—Problems & Future Prospects Madhuri Padhi 48
6. Food Security and Inequality in India Tushar Kanti Das 55
7. Food Security in India (With Special Reference to Orissa) Saroj Kumar Kanungo 60
8. Food Security System in India Dr. Eswar Rao Patnaik 66
9. Food Availability Trends and Problem of Food Security in India Dr. Sridhar Behera 71
10. Structural Adjustment in India and its Impact on the Food Security Dr. G. B. Nath 78
11. Economic Reforms, Agricultural Production and Food Security : The Indian Experience (Abstract) Dr. B. Swain 82
12. Food Security and Public Distribution System in Kerala : A Case Study (Abstract) Mihir Kumar Mohapatra 85
13. Food Security in the North-Eastern States (Abstract) Sipra S. Nayak 86

[D]

Co-operative Movement in Orissa

| | | |
|---|---|-----|
| 14. OMFED—A Landmark in the Co-operative Movement in Orissa | Sri B. K. Tripathy S. Gopangana | 89 |
| 15. Impact and Evaluation of Dairy Co-operatives—A Study of Keonjhar District Co-operative Milk Producers' Union | Dr. Surendra Nath Behera | 94 |
| 16. Fisheries Co-operatives in Orissa : A Case Study of Financing Beach Landing Crafts in Ganjam District | Mr. P. Sahu Dr. N. B. Pradhan | 101 |
| 17. Performance of LAMPs in the district of Mayurbhanj | Dr. Satyabrata Mishra | 108 |
| 18. Revamping the Co-operative Credit—Linking it with Self Help Groups | Dr. Bhagabata Patro Ms. Nilima Nayak | 113 |
| 19. Effectiveness of Co-operative Movement in Angul District : An Insight | Dr. (Mrs.) Sujata Pati | 119 |
| 20. Problems of Over-Dues in Co-operative Banks : A Case Study | Dr. Sudhakar Patra | 125 |
| 21. Rural Credit Structure—Performance of DCCBs—A Micro Level Study | Umesh Chandra Pati | 130 |
| 22. The Development and Working of Service Co-operative Societies in Athagarh Block of Cuttack District in Orissa | Rajan Kumar Sahoo | 137 |
| 23. Housing Co-operatives in India— a Study With Particular Reference to Orissa | Umesh Ch. Panigrahi Dr. Bhagabat Patro | 143 |
| 24. Problems and Prospects of the Aska Co-operative Sugar Industries LTD. | Mr. Lalit Mohan Sahu | 148 |
| 25. LAMPs and Tribal Development— A Case Study of Koraput District (Abstract) | Dr. K. Nana Buchi | 152 |
| List of Members | | 154 |
| List of Presidents | | 168 |

Editorial

THE END OF AN ERA

'A good heart is better than all the heads in the World.'

Pavan K Varma in his stimulating book, "The Great Indian Middle Class" has made a penetrating analysis of the crisis that confronts the Great Middle Class who now occupy an important position in the social, political and economic arena of independent India. It is said that the middle class has been the vanguard of revolution in each and every country where any such revolution has taken place. In the freedom struggle of India, their role has not been insignificant. Many of them were inspired by the great ideal of Mahatma Gandhi who created a new horizon, the horizon to strive, to seek, to build a new world of freedom, justice and equity. The Gandhian notion of a just state was premised on the idea that collective interest must take precedence over individual interests.

The ideological framework of freedom struggle enshrined certain basic values which were later on embodied particularly in the Directive Principles of the Constitution. They implied, (a) An acceptance of the role of probity in public life, (b) An acceptance of the goal of self reliance to strengthen the economy, (c) Preparation of a strategy to improve the economic well being of the poor, (d) A social sensitivity towards the poor, and (e) A reticence towards ostentatious display of wealth.

There were certain compulsions in the initial stages of development which moulded public opinion to seek for a humane society. First there were leaders of great eminence who made tremendous sacrifice in the struggle for freedom. They were men of great honesty, integrity and high principle. Second, the freedom struggle was not confined to only a few politicians, the uniqueness of the Indian struggle was a mass

movement and hence there was a legitimacy in the belief that freedom should provide benefit to one and all. Third, the rational basis of Indian heritage was of tolerance, of fellow feeling and of sharing togetherness. The middle class, the elite and the men of authority were also actuated by this national ethos.

But as time passed and economic development gathered momentum, there was a change in the attitude and approach to life of all the middle class including elite and men of authority. The cult of individualism increased selfishness with attendant lack of concern and consideration for fellow citizens. The economic development might have been limited, but there was no ceiling of the elite's aspirations to the benefits of good life. 'The life style of the Indian elite is amazing', commented Noam Chomsky during a visit to India in 1996, 'I have never seen such opulence even in America' (India Today, February 15, 1996). The life style envisages expensive cars, the latest consumer gadgets, elegant dresses, five star living, foreign travels, the role model of a new generation of intellectuals oblivious of the poverty and squalor that encompass on all sides of the country.

The urge to move up the consumption ladder even though it creates an unbridgeable gap between the squalor of the poor and the grandeur of the rich is considered to be a new ideology of the new economic environment. This justification of the ideology has been made abundantly clear by one intellectual in the editorial page of one important daily newspaper in which he pleads, 'that a country of the size and importance of India has no choice but to clamber to its new tryst with destiny inside shiny buildings of chrome and glass at the free market. There is no mileage in looking wistfully at quaint mud huts rushing by the car window because they, and their ilk, cannot meet our burgeoning needs, and if truth be told never have' (Gautam Mukherjee in the 'Pioneer', February 26, 1996). The same rationale is also argued with great intensity by a number of modern social scientists who influence and mould the life style of young generation.

The great malady of selfishness is apparent in social approach to community life in the new era of economic development. Before independence, even though India was poor, whenever there was a natural calamity, citizens would form associations and try to collect donations to meet the needs of afflicted people. Even ordinary householders would respond to such requests and contribute cash, food stuff, clothings etc, which would reach the distressed without much leakage. Today, it is a

rare occurrence and if per chance there is some contribution at the time of distress, it is made for the sake of tax relief. But the new cult is, it is the responsibility of the government to assist the distressed, even though in every other matter government intervention is deemed to be 'pernicious' (Arun Ghosh, *India in a Globalised World, Issues of Growth with Equity and Justice*, Mainstream, December 26, 1998).

The greatest irony of the new culture is that all those who are privileged and enjoy good things of life shed crocodile tears for the poor and destitute but remain completely insensitive to any social concerns. What is more, they never hesitate to grumble and growl as to their unsatisfied needs of affluent living. F. P. Adams once wrote, "The rich man has his motor car/His country and his town estate/He smokes a fifty-cent cigar/And jeers at fate". The social milieu is so perverted that even when a destitute climbs his way to affluence, he refuses to see any interest or priority beyond his narrow self interest. As Shakespeare said, a beggar may cry. "There is no sin but to be rich", but when he becomes rich, he will change his tune to say, "There is no vice but beggary".

Gunnar Myrdal who was struck by the callousness in personal relations in Indian society said, 'Many of those who honestly advocate radical egalitarian reforms reveal themselves as harsh, and sometimes, thoughtlessly cruel, when they deal with members of the lower strata as individuals and not as a group to be cajoled' (*Asian Drama*, Vol. II, P. 767). A. M. Rosenthal writing in 1957 also wrote 'The heaviest handicaps under which India laboured through the centuries (was) the individual's place in society and human relations within the society. An individual-to-individual callousness despite India's belief in her spiritualism was always part of India. No miracle has taken place. The callousness is still so strong in the country that it is the greatest danger for a foreigner living in India, for it is a frighteningly easy thing to find it creeping into one's soul (*The Future in Retrospect, "Mother India" "Thirty Years After"* ' *Foreign Affairs*, Vol. 35, No. 4, July 1957, P. 623).

All that it implies when we lose the moorings of a vision and pursue the simplistic level of material welfare without any concern to counter the unspeakable squalor, poverty, disease and illiteracy of the vast majority of the people, not only the country disintegrates, but the elite also disappears. The need for social concern has thus as much to do with successful functioning of the economy as it has to do with the

ultimate fulfilment of the aspirations of good life. We may end this note with a quotation which speaks volumes not only of GDP (Gross Domestic Product), but also of GDH (Gross Domestic Happiness) :

O Undeeful,
think of your country,
calamity stares you in the face.
The signs of your destruction resound in the skies,
O people of Hindustan !
Understand, for if you do not, you will cease to be.
In the annals of history there will be of you
not even a trace. —Iqbal

Prof. Baidyanath Misra

The 30th Annual Conference, 1998

Secretary's Report

Dr. Rabi N. Patra

Secretary,
Orissa Economics Association

Mr. President Professor Mitra, Hon'ble Chief Minister of Orissa, Shri J. B. Patnaik, Chief Patron and Hon'ble Minister of Industries, Textiles & Handlooms and Handicrafts and Cottage Industries Shri Niranjana Patnaik & Hon'ble Minister of School & Mass Education Shri Jayadev Jena, Revered Former Presidents of the Orissa Economics Association, Assistant Advisor, RBI, Dr. Dadhich, Chairperson, Reception Committee & Collector & District Magistrate, Keonjhar Mr. Mishra, Vice-Chairperson, Reception Committee and Principal of the college Mrs. Das, Local Secretary Mr. Jena, Office Bearers of the Organising Committee of the Conference, Distinguished Guests, Invitees, Members of the press and media, Fellow Delegates, Ladies and Gentlemen.

I deem it a unique privilege as the Secretary of Orissa Economics Association to extend a hearty welcome to you all to the 30th Annual Conference of the Association. We are singularly fortunate to have in our midst this evening Hon'ble Chief Minister of Orissa, Sri J. B. Patnaik to inaugurate this conference. The last conference at Rourkela was also inaugurated by our Chief Minister Hon'ble Shri Patnaik. This speaks of his magnanimity, his soft corner and kind gesture to this Association. We are really grateful to you sir for your kind gesture.

We are equally fortunate to have in our midst today the Chief Patron of this Conference, the Local Minister, Hon'ble Minister of Industries Sri Niranjana Patnaik, the sheet anchor of this institution. We are really grateful to you sir for your august presence.

Our honoured guest for this conference is Hon'ble Minister of Mass Education, Orissa Sri Jayadev Jena. We are really fortunate to have you here sir in our midst.

I take this opportunity to present a profile of activity of our association. The Orissa Economics Association was founded on January, 26, 1968 with a view to promoting the study, teaching and research in the Economic Science in general and the contemporary economic issues of the Indian Economy and the State of Orissa in particular. The Association endeavours to carry out these important objectives by arranging Annual Conferences & Seminars and publishing a journal containing the original research articles of its members which are presented and discussed in the conference. Ours is one of the oldest and largest regional academic associations in the country with a membership of 300 of which 3 are Institutional life members, 238 are life members and 59 are Annual Members. The Association has the distinction of holding Annual Conferences and Publishing its mouthpiece—Orissa Economic Journal—regularly right from the year of its inception. I regret to inform you that we could not organise this conference at the scheduled time in February due to some unavoidable reasons.

The Orissa Economics Association is the only forum in the State in which distinguished economists, eminent administrators, planners and statesmen discuss and deliberate upon various economic issues of contemporary interest in different technical sessions of the Conference. The Association has the healthy convention of discussing two sets of issues in the Annual Conferences—one relating to the problems of the Indian Economy and the other in the regional context of the economy of Orissa. The discussion in the conferences have from time to time provided guidelines to the Government on various important economic issues. This year the two topics, selected for discussion in the Conference are —

1. Food Security in India
2. Co-operative Movement in Orissa

While the former is of national importance, the latter has profound relevance in the context of the development of the rural economy of the State of Orissa. Since 1987 an endowment lecture is being organised in a special session of the Conference in memory of Bhubaneswar Mangaraj, an illustrious teacher of Banki. On this occasion an eminent economist of the State is invited each year to deliver the lecture on a current economic issue. This year's Mangaraj lecture session was devoted to a discussion of Indian Economy : Problems & Prospects.

In view of high prices and diversified activities, the Association is facing serious financial hardship. The volume of the Orissa Economic Journal has increased considerably and the printing cost of the journal has

escalated to Rs. 20,000/-. The expenditure in organising a conference has touched the height of Rs. 1.5 lakh. This requires a corpus fund of Rs. 20 lakhs by which we shall be able to organise our annual conferences properly and hold seminar meetings more frequently. As against this, the Association occasionally receives a maximum grant of Rs. 4000/- from the Govt. of Orissa and another two to three thousand rupees from the new members per annum. Fund raising from different sources is gradually becoming extremely difficult and since the responsibility of raising funds for the conference lies with the host unit, invitation for organising the Annual Conference has become terribly difficult. If the state could provide some general grants, the Association can be able to make some useful suggestions for formulation and implementation of economic policy which may serve the interest of the state.

It is my pleasant duty to extend our grateful thanks to the Principal, Local Secretary & Staff of the Govt. Women's College, Keonjhar and to all the office bearers of the local organising committee of the conference in a befitting manner. I am proud enough to record my heartfelt thanks to our Chief Guest, for having kindly accepted our invitation and inaugurating the conference despite his busy schedules. I express my sincere gratitude to our Guest of Honour and Chief Patron Sri Niranjan Patnaik for his active co-operation and ungrudging help in organising this conference in a colourful manner. My special thanks are due to the Chairman, Reception Committee our Collector & Dist. Magistrate, Keonjhar for his sincere efforts, unstinted assistance in all matters and timely action in making the conference a success. I am very much grateful to the Addl. Dist. Magistrate (PDS), Keonjhar for his kind help, friendly advice and timely guidance in arranging this conference. My sincere thanks are due to Dr. C. L. Dadhich of the R. B. I. for coming over here to deliver the Keynote address in the Technical Session on Co-operative Movement in Orissa. No thanks are adequate for my teachers Shri B. P. Dash & Dr. B. K. Mohanty for their precious guidance, brotherly help and timely encouragement in steering the Conference activities. I express my deep sense of gratitude to Prof. Baidyanath Misra for his ungrudging help and guidance in all activities of the Association and for having spared his valuable time in editing the journal.

My special thanks are due to all the former Presidents and Secretaries of the Association, the members of the Executive body and especially to the Conference President Professor Mitra for their Co-operation and help.

My thanks are due to M/s Dash and Associates, Chartered Accountants for having audited the Accounts of the Association for 1996-97 free of cost. I am grateful to the Proprietor and Staff of Nabajivan Press, Cuttack for having completed the printing of the Journal in time. I really owe a great deal of gratitude to the dignitaries, academicians, invitees, guests, delegates, paper writers, funding agencies and volunteers who joined hands with us in making this conference a memorable and successful one and to you all ladies & gentlemen and members of the Press & Media for having given me a patient hearing.

I sincerely hope that with the valuable help, guidance and Co-operation of our members we shall overcome our barriers and shall try to make our beloved Association more dynamic and strong in the years ahead.

With fraternal regards,

**30th Orissa Economics Conference
Presidential Address (1997-98)**

**Poverty, Food-Insecurity and Standard of
Living in Orissa**

Dr. Ajit Kumar Mitra

Professor of Economics &

Co-ordinator, D.S.A.

Deptt. of Analytical &

Applied Economics, Utkal University,

Vani Vihar, Bhubaneswar-751004

Friends and Fellow-delegates,

It is said that no honour is greater than the honour one receives at home, particularly when it is unanimous and not at the cost of somebody-else. So I profusely thank the members of the Orissa Economics Association for the honour they have done to me by unanimously electing me to preside over the 30th Annual session of the Association. I am all the more overwhelmed by this gesture because they have bestowed this honour on me last year at a time, when I was not even present in their midst.

For this 30th conference, we are meeting at a time, when the country is celebrating the Golden Jubilee Year of independence and taking stocks of its achievements, progress and pitfalls in various spheres of life. For our state this year is all the more significant because it not only marks the golden jubilee year of national independence but also golden jubilee year of the formation of "Greater Orissa" with the merger of Indian Orissa with the British Orissa in 1948. Besides, now we are on the threshold of a new century. It provides an appropriate opportunity to take stocks of our past achievement in different economic spheres and also to see how we are preparing ourselves to face the new challenges of a new century. On such a momentous occasion, I want to share with you some of my thoughts on three inter-related economic problems, which interested me throughout my academic career and which I have expressed on various occasions in various forums, books and journals. These problems relate to Poverty, Food-insecurity and Standard of living in Orissa.

Gandhiji made a prophetic observation more than fifty years ago that "Orissa epitomises the poverty of India". The relevance of this observation still holds good. For the major part of the period after independence more than fifty percent of the population remained below the poverty-line. Some of the worst poverty stricken regions of the world like KBK region (consisting of districts of Kalahandi, Bolangir & Koraput) is situated in Orissa. Besides, there is highest concentration of backward population (about 40 percent) consisting of scheduled castes and scheduled tribes in Orissa. Moreover, more than one-third to one-fourth of the rural households belonged to the category of agricultural labourers. Referring to the economic status of this category of workers in India G. Parthasarathy writes : "Assetlessness, unemployment, low wages, under-nutrition, illiteracy and social backwardness constitute the poverty syndrome of agricultural labourers. These reinforce each other so as to constitute a vicious circle of poverty. There is little inter-generational upward mobility among agricultural labour households" ¹ The incidence of poverty in Orissa can be gauged from the Table-1.

TABLE - 1
PERCENTAGE OF POPULATION
BELOW POVERTY-LINE IN ORISSA AND INDIA

| Year | ORISSA | | | INDIA | | |
|-----------|--------|-------|----------|-------|-------|----------|
| | Rural | Urban | Combined | Rural | Urban | Combined |
| 1972-73 | 71.0 | 43.3 | 68.6 | 54.1 | 41.2 | 51.5 |
| 1977-78 | 67.9 | 41.8 | 65.1 | 51.2 | 38.2 | 48.3 |
| 1983-84 | 44.8 | 29.3 | 42.8 | 40.4 | 28.1 | 37.4 |
| 1987-88 | 48.3 | 24.1 | 44.7 | 33.4 | 20.1 | 29.9 |
| * 1993-94 | 49.7 | 41.6 | 48.9 | 37.3 | 32.4 | 36.0 |

Source : Officially released estimate of the Planning Commission as reproduced in Government of Orissa Economic Survey, 1996-97, Chapter-8, Rural Development, P. 75.

* Planning Commission, Government of India, Press Release, March 11, 1997.

Note : During this period in the world as a whole about 20 percent of population remained below poverty-line.

1. Parthasarathy, G. - Recent Trends in wages and Employment of Agricultural Labour, Indian Journal of Agricultural Economics, Vol-51, Nos. 1 and 2, January-June, 1996, P. 145.

Although the problem of poverty in the State was colossal at the time of independence, no mention was made of this problem in the plan documents. The planners and administrators in their hilarious mood on the wake of the independence thought that the poverty was a corollary of the problem of inequality in the distribution of income and wealth. As such, no specific programme was worked out for tackling the problem of poverty. The general approach to the reduction of poverty lay in the reduction of inequality, acceleration of growth rate and making the poor participate in the process of development through National Extension programmes and Community Development projects. The emphasis, on the whole, of these programmes was on the acceleration of the over-all growth-rate. The planners relied primarily on the percolation effect or 'trickle down' theory to remove poverty. But the percolation effect did not operate satisfactorily to remove poverty. So after two decades of planning, poverty remained at high level in the State.

When this experiment failed, following the central guidelines, some special programmes were worked out from the beginning of the Fourth Five Year Plan to alleviate poverty in the state. These special programmes were further strengthened by integrating them with the rural development programmes from the beginning of the Fifth Five Year Plan. From the Fifth Five Year Plan four categories of rural development programmes were in operation to reduce the incidence of poverty in the state.² They were beneficiary-oriented programmes, programmes for generation of additional employment opportunities, programmes for development of chronically drought-prone areas and minimum needs programmes. Although different types of poverty alleviation programmes were in operation for more than twenty years, available data and information show that these programmes only made marginal contribution on the incidence of poverty and primarily helped those households, who were in the neighbourhood of below poverty-line to move above the poverty-line. Some of the factors responsible for poor performance of different types of poverty-alleviation programmes as collected from different evaluation studies³ may be enumerated as follows.

First, the performance of different types of poverty-removal programmes was not satisfactory because they were only assigned a supplementary role in increasing employment and income. But as the

2. Das, S.—Impact of Minimum Needs Programme on the Tribals: A case study of the District of Mayurbhanj. (Unpublished Ph.D. Thesis submitted to the Utkal University, Bhubaneswar, 1996)
3. See Reference No. 2.

level of employment and income from original sources were not adequate enough to reach a critical minimum level, these programmes were not in a position to remove poverty and poverty continued due to the operation of the Nurksian Vicious circle.

Secondly, most of the poverty-alleviation schemes centred around wage-payment schemes or self-employment schemes with distribution of a few assets at a subsidised-rate. So far as the wage-schemes were concerned, they were not supposed to alleviate poverty on a sustained basis. But the asset-distribution schemes were not very effective because they were offered to the 'marginal labour force'. The marginal labour force, by definition, were less motivated and less enterprising with little expertise and managerial skills to operate these assets. Further, in the really backward areas and regions, the Government or bank officials had very little option for their choice of 'target-group' population. If they would not select some from this marginal group of labour force, they would not get adequate number of beneficiaries to reach their target. So sometimes in order to reach their targets they were forced to distribute assets to inefficient beneficiaries. As a result, the performance of the poverty-alleviation programmes was very poor and unsatisfactory. Now a days, this is considered to be a universal factor for making poverty-alleviation programme as non-viable in rural and backward areas.⁴

Thirdly, it was found that the poverty-alleviation programmes became non-viable as the screening of the schemes was done very superficially. The schemes were offered for implementation without properly surveying the resource base, needs and marketing conditions in the local areas. This happened particularly with regard to enterprises like dairy, poultry, piggery etc or development of services like tailoring, haircutting, ricksaw-pulling. These schemes did not click, when the beneficiaries were situated away from even semi-urban areas. Another aspect of screening problem is that while offering schemes of poverty-alleviation to different beneficiaries, social factors like caste-barriers etc. were not taken into consideration. Centrally prepared schemes, made at the all-India level were imposed on the beneficiaries without taking into consideration ground-realities.

Fourthly, the loans sanctioned to the beneficiaries for different schemes were often inadequate. As the beneficiaries belonged to the weaker sections in the community, they could hardly supplement the

4. See Reference No. 7.

inadequate financial support received from institutional agencies. As a result, in most of the cases, loans were mis-utilised and contributed very little to improve employment, income and economic conditions of the beneficiaries.

Fifthly, the subsidy element associated with different poverty alleviation programmes bred different types of corruption. As a result, the schemes contributed very little to improve employment situation, income and economic condition of the beneficiaries.

Finally, political will or commitment to implement the poverty-alleviation programme was not very strong. This could be seen from the fact that a large number of important positions in the really backward regions of the State remained vacant for a long time. This adversely affected proper implementation of the poverty-alleviation programmes. As a result, poverty continues to remain at a very high-level of about fifty percent of the population remaining below the poverty-line.

II

With the incidence of poverty in the State, other two problems, namely, food insecurity and standard of living are closely inter-linked. As you are well aware of, the nature of food insecurity has undergone a change in the Post-green revolution period. Prior to green revolution, the nature of food insecurity was primarily concerned with scarcity condition in food-production. But in the post-green revolution period, it is largely an insecurity in the midst of plenty. It is the vulnerable sections of the community, that is, nearly half of the population, who lived below the poverty-line lacked necessary purchasing power to have adequate amount of food. They were normally underfed and suffer from malnutrition. The incidence of food-insecurity was quite high among them.

In order to overcome this problem of food insecurity among the vulnerable sections of the community, 'food for work', supply of food articles at subsidised rates, mid-day meal programmes for the school-going children, 'expected mothers' etc. were introduced and implemented in different parts of the state by the Government. But the evaluation studies relating to the working of those programmes in different parts of the State from time to time revealed that these programmes could not be properly administered and implemented due to various types of leakages and corruption. As a result, although foodgrains production in the country as well as in the State has increased, malnutrition and food insecurity remained as a stark phenomenon for about fifty percent of the population.

Who remained in the backward areas of the State like K. B. K. region or other regions dominated by the tribal population. It is due to food insecurity, large-scale migration of people from areas like Kalahandi, Nuapada, Sonapur, Bolangir, Malkangiri, Nabarangpur and Rayagada and other backward areas occur regularly in lean seasons to neighbouring states. The Human Rights commission also expressed grave concern at the incidence of food-insecurity in the State and directed the State Government to pay special attention to this problem.

Food insecurity has another aspect. According to the world Health Organisation norm, a country is afflicted with hunger and suffer from food insecurity, if IMR is more than 50 (per 1000 live births). According to this norm the entire country suffered from food insecurity and perhaps it is worst in Orissa, where IMR is highest with 110 per 1000 live births. In the country as a whole I M R declined from 129 in 1971-72 to 74 in 1995-96. In Orissa, it has come down to 95 in 1996 (provisional estimate).

Added to this type of food insecurity for the vulnerable sections of population another type of food insecurity has been hinted at by M. S. Swaminathan recently. This may not be of serious concern to Orissa immediately but policy-makers and administrators should take note of it from now on. According to Swaminathan 'green revolution' is leading to a 'greed revolution' in which there is over exploitation of land resources. As a result, land would suffer from what he calls 'fatigue of green revolution' and once the process starts, there would be a revival of shortages in food grains production. Such a situation would revive the old type of food insecurity. In order to avoid such a situation it is desirable to take precautionary measures from now on.

III

Poverty and food-insecurity also affected the standard of living and quality of life of the people of Orissa.

The term 'standard of living' is an elusive concept and it has both subjective and objective elements. Most of the subjective elements are qualitative in character and difficult to capture through quantitative methods to have a comprehensive idea about the standard of living. In spite of these limitations myself and Dr. M. R. Behera⁵ made an attempt

5. Behera, M. R. and Mitra, A. K.—The Standard of living in India : An attempt towards Inter-Regional study—Indian Journal of Regional Science, Vol. 28. No 2 July-Dec. 1996 P. P. 1-10.

to measure the standard of living of the people in India and fifteen major states of the country by taking into consideration thirty-three objective criteria.

The study revealed that out of the fifteen major States, Orissa occupied the fourteenth rank. The only State, which occupied a rank below Orissa from the point of view of standard of living was Bihar. About 68.1% of what the people earned was spent on meeting the requirements of food-grains. After meeting the requirements for food-grains very little was left with the people to procure other amenities of life to improve their standard of living.

Thus, it is with a bleak scenario on the economic front, we are on the threshold of the 21st century.

IV

In order to transform this scenario on the economic front within the first quarter of the 21st century, it is desirable to take a multi-pronged programme from now on. The basic elements of this programme may be spelt out as follows :

First, as the economy of Orissa is largely rural in character, it is desirable to develop & diversify agriculture. Not only emphasis should be placed on the improvement of crop-production, but effective steps should be taken to diversify agriculture by developing horticulture, dairy, poultry, fishery, goatery and some plantation crops. Recent experience in certain parts of the State showed that Orissa has sufficient potentialities for developing different types of allied agricultural activities. It is due to poverty and consequent demand constraints, allied agricultural activities are not coming up. Once these allied agricultural activities are developed by utilising services of small and marginal farmers (who constitute about 70 percent of agricultural workers) not only the farmers would get a supplementary source of employment and income, but poverty scenario in the State would change to a considerable extent.

Secondly, along with the development and diversification of agriculture, greater attention should be paid to diversify the rural economy by developing various types of cottage and small-scale industries, which will largely use the local raw materials and skills of local labour.

Thirdly, greater emphasis should be placed on the development of human resources. Not only elementary education should be made compulsory but different types of craft and skill-developing centres

should be opened-up in rural areas. This will enable the rural youth to acquire skills of different types of enterprises.

Fourthly, there should be greater decentralisation of the planning process. Not only the State Planning Board should be reorganised & strengthened but district planning organisations should be reorganised to play a more purposive and effective role in the process of formulation of planning and monitoring of different development programmes.

Finally, in order to facilitate the continuity of different types of development programmes, certain amount of political stability is necessary.

Before I conclude, I want to remind everybody that there is no short-cut to remove poverty, food-insecurity and poor standard of living. It is hard and honest work, which will enable the people to tackle these problems effectively and build a prosperous and vibrant Orissa to face the challenges of the 21st century. In order to search a suitable model to rebuild Orissa, we need not go beyond the borders of our country. If Punjab could achieve it against all types of Odds, why not Orissa ?

Friends, it is with this optimistic note. I unburden myself of the responsibility imposed on me by the members to preside over the 30th annual session of the Orissa Economics Association.

Thank you all.

References :

1. Parthasarathy, G.—Recent Trends in Wages and Employment of Agricultural Labour, Indian Journal of Agricultural Economics, Vol. 51, Nos. 1 and 2, Jan-June, 1996.
2. a) Report of An Evaluation of the Working of the Small Farmer's Development Agency in the District of Bolangir, Orissa, 1980.
- b) An Evaluation Study of Integrated Rural Development And Employment Rehabilitation of the Rural Poor in the District of Bolangir, Orissa, 1987.
- c) A Study of the Impact Development Programmes in the Tribal Economy of the District of Mayurbhanj, Orissa 1990.

- d) Prusty, N.—Tribal Development through ITDP : A Case Study of Ghatagaon Block of the Keonjhar District of Orissa (unpublished M. Phil. dissertation submitted to the Utkal University, 1993-94).
 - e) Ray, S. K.—Working of the Regional Rural Banks : A Case Study of the Cuttack Gramya Bank (Unpublished M. Phil. dissertation in Analytical and Applied Economics submitted to the Utkal University, 1994).
 - f) Das, A. N.—Working of the Regional Banks : A Case Study of the Puri Gramya Bank, Pipili (unpublished M. Phil. dissertation submitted to the Utkal University, 1989).
 - g) Parida, B.—A Study of the working of the Regional Rural Banks in Orissa with special Reference to the District of Cuttack. (unpublished Ph.D. dissertation submitted to the Utkal University, 1996).
 - h) Misra, B. and Mitra, A. K. —Problems of the Marginal and Small Farmers : A Case Study of the District of Ganjam, Orissa 1980.
 - i) Das, S. — Impact of Minimum Needs programme on the Tribals : A Case Study of the District of Mayurbhanj (unpublished Ph.D. thesis submitted to the Utkal University, 1996).
3. Mitra, A. K.—Food Problem in India : A Quantitative study in Regional perspective, Meerut, 1986.
 4. Hashim, S. R.—Dimensions of Poverty and Approach to Poverty Alleviation, Yojana Vol. 40, No. 11, 1996.
 5. Hashim, S. R.—Economic Growth and Income Distribution—The Indian Experience of Development (Gautam Mathur Memorial Lecture, 1997), E.P.W. Vol. 33, No. 12, March 21-27, 1998.
 6. Rath, N.—Poverty in India Revisited Indian Journal of Agricultural Economics Vol. 51, Nos. 1 and 2, pp. 101 and 102, Table-6.
 7. Adams, A. V. and Wilson, S.—Do Self-Employment Programmes Work ? —Finance and Development, Vol. 32, No. 3, Sept. 1995, PP 16-19.
 8. World Bank—India—Achievements and Challenges in Reducing poverty, 1997.

9. U.N.D.P.—Human Development Report, 1997.
10. Behera, M. R. and Mitra, A. K. — The Standard of Living in India : An Attempt Towards Inter-Regional Study—Indian Journal of Regional Science, Vol. 28, No. 2, July-Dec, 1996.
11. Mitra, A. K.—Presidential Address delivered at the U.G.C. sponsored National Seminar on Assessment of Poverty Alleviation Programmes in India held on 10th and 11th February, 1997, on the occasion of Silver Jubilee Celebrations of the Department of Economics, S.V.U.P.G. Centre, Kavali (Proceedings of the Seminar).
12. Dahiya, P. S. — Food Security—Key Issues and Strategies. State Bank of India Monthly Review, Vol. XXXVII, No. 2, February, 1998. See also Indian Farming, Special Issue, October, 1997.

**FOOD SECURITY
IN
INDIA**

FOOD SECURITY
IN
INDIA

The Fragility of Foodgrains Self-Sufficiency and Food Security in India : Some Emerging Trends Towards Colonisation Syndrome

R. M. Mallik

Professor of Economics,
Nabakrushna Choudhury Centre for
Development Studies, Orissa

INTRODUCTION

The primary purpose of this paper is to present growth performance of foodgrains versus non-food grains in the India's agricultural sector in retrospect and prospect to focus on an important feature of the food economy; namely the fragility of food self-sufficiency achieved so far. Despite the optimistic view of some with regard to the creation of likely rewarding opportunities under the liberalisation strategy, we argue that the hidden threats to the food security of the country in this new environment are not far away. Such insecurity in food in recent years has further gained support owing to marked decline of area under foodgrains in favour of export crops. Need it be mentioned here that food grains comprise the superior cereals, the coarse grains and pulses.

However, rise in yield per unit of area has been insufficient to maintain the earlier output growth rate by compensating for the area decline of total food grains sown area from 127.8 to 123.5 million hectares during 1990-91 to 1995-96. Of concern is the fact that there is a marked slowing down of total food grains output growth rate to 1.7 per cent over the period 1990-91 to 1996-97 which is less than present population growth rate of 2.1 per cent. Evidently, in no previous period since 1975, had foodgrains growth ever lagged behind population growth in India. This is the case even after including the year 1996-97 when food grains growth is estimated to have spurted by around 13.0 % over the previous year. Precisely, it is our view that since 'Step-function' behaviour in agriculture is common, this output level may or may not be sustained in 1997-98. In reality, the production of foodgrains between 1996-97 (199.3 m tonnes) and 1997-98 has (194.1 m tonnes) represented a decline

of 2.6 %. At this backdrop, the paper argues if such an emerging pattern of growth continues, then a situation of colonisation syndrome in near future possibly may not be avoided. The other question which is of much concern relates to the widening gap between quinquennial average annual cereals produced per capita and average annual availability of cereals after 1976-80. The increase in production of cereals no doubt is attributed to increase in productivity per hectare rather than increase in area, but, with a fairly sharp decline in the per capita intake of pulses between 1951-55 and 1991-95 (even in 1995-96), thus worsening the nutritional balance. In a limited attempt the paper addresses to the above two questions and investigates into the causes in greater details with a pessimistic note that unless some counter measures to reform land, credit and market are simultaneously taken to reverse the evils of economic liberalisation atleast in the agrarian sector, the food situation may be much worse in near future.

The paper is organised in three sections. Section I presents growth performance of foodgrains output versus non-food crops in retrospect and prospect. Section II highlights the likely impact of economic liberalisation on food self-sufficiency economy and the fragility of food. Section III attempts to examine broadly the aspect of food security and highlights regional pattern of concentration. The concluding section draws together some broad conclusions that emerge from analysis.

I

FOODGRAINS OUTPUT VERSUS NON-FOODGRAINS IN RETROSPECT AND PROSPECT

In the past, Indian agriculture was a way of life for vast majority of the rural people. But, its importance was recognised by the Governments only in times of food shortages. Even after independence the agricultural development policy strategy seems to have been directed towards the achievement of self-sufficiency in foodgrains and also to meet the domestic demand for agricultural raw materials. Despite attempts to reform the agrarian structure, Indian agriculture remained mainly peasant agriculture. Need it be mentioned that the continued emphasis during the last couple of five year plans on the objective of increasing food production was no doubt dictated by the national imperative to become self-reliant. The Green Revolution Strategy in the recent past was also mainly motivated by this compelling need to achieve self-sufficiency in foodgrains. But, despite such concerted efforts, the per

capita income of those dependent on agriculture declined from one-third to one-fourth of the per capita income of non-agriculturists during 1980's (Singh : 1990). It is evident from the annual rate of growth of agricultural output during the last forty years that while it has been hovering around 2.6 %, the growth of foodgrains production has been only around 2.0 %.

However, the Green Revolution inevitably produced some islands of prosperity wherever irrigation facilities and enterprising farmers were available. Similarly, Indian agriculture had to face a number of discrimination policies in which industrial sector was protected in the name of import substitution and self-reliance but agriculture was not so lucky to benefit any in terms of any protection. Evidently in the foreign trade front agricultural commodities were allowed to be exported only when they were found surplus after meeting the domestic requirements. It was not only in regard to foodgrains but also in regard to commodities like cotton, tea, sugar, coffee etc. Private investment in agriculture declined since it was disadvantageous to commercial surplus-producing farmers. The policy of public investment on major irrigation projects was considered as an anti-famine measure and did not improve therefore the level of crop yield very significantly. Irrigation was mostly *used to reduce* yield instability rather than *improving level of crop yield*. One of the most unfortunate part of the agricultural development policy strategies was related to Government's over-enthusiasm to maintain stability in consumer prices of agricultural commodities in the domestic market (which indeed misguided it to impose controls on the movements of commodities within the country). Distribution of agricultural inputs like fertilizers and pesticides was also regulated through orders. As a result, the Indian agriculture was saddled by too many controls within the economy. The absence of protection from the international competition also accentuated the situation. Precisely, all these resulted in turning the domestic income terms of trade against agriculture. Both barter and income terms of trade were adverse to agriculture during the 1950's and mid 1960's. Though, they became somewhat favourable during mid 1970's, they again turned against agriculture during the 1980's.

At the backdrop, an analysis of the performance of annual growth in foodgrains production during different periods provides us a distinct picture to what extent the sinews of India's agricultural growth were indeed real and strong to ensure a sustainable source of livelihood to its growing population. And also, to what extent the economy has achieved self-reliance and steady growth atleast in the food front.

TABLE—1

Annual Growth in Foodgrains Production

(In %)

| Compound Growth Rate | Rice | Wheat | Pulses | Foodgrains |
|----------------------|------|-------|--------|------------|
| 1967-68—1997-98 | 2.85 | 4.60 | 0.91 | 2.60 |
| 1980-81—1997-98 | 3.08 | 3.58 | 1.06 | 2.60 |
| 1990-91—1997-98 | 1.60 | 3.72 | 0.34 | 1.73 |

Note : * Growth rates are based on Index numbers, base triennium ending 1981-82 = 100.

Source : Government of India, Economic Survey 1997-98, P. 4.

The break-ups of the above periods no doubt provide average growth performance of three decades but when compared with the exclusive period of economic liberalisation between 1990-91 to 1997-98, the growth performances do not only exhibit a dismal picture but also reminds us repetition of colonisation syndrome (in the changing growth patterns) in the near future unless reversed through sustained upgradation of technology (use of better seeds, fertilizers and more cultivable land under irrigation conditions) for boosting the yield levels of foodgrains. This again needs reforms in land, credit and market structure and enhancement of irrigated land both through public as well as private investments. A marginal increase in the average rate of growth of foodgrains during the period 1980-81 to 1997-98 attributes to occurrence of consecutive good monsoons but sustenance of such growth rate may not be an easy task. However, the decline in the average growth rate in foodgrains from 2.60 % to 1.73 during the period 1990-91 to 1997-98 raises doubts whether the food economy could really sustain to meet the food needs of growing population at 2.1% per annum at the present rate.

It is increasingly realised that the share of investment in agriculture to total investment and GDP (%) over years is on decline and this further corroborates to our earlier argument that unless such trend is reversed, the situation may be much more worse than before.

TABLE-2

Share of Investment in Agriculture to Total Investment and GDP
(In %)

| | 1960-70 | 1970-80 | 1980-90 | 1990-95 |
|----------------------------------|---------|---------|---------|---------|
| Share in Total Investment | | | | |
| a) Public Investment | 5.2 | 5.6 | 4.2 | 2.0 |
| b) Private Investment | 11.0 | 11.7 | 7.4 | 7.0 |
| Total (Both) | 16.2 | 17.3 | 11.6 | 9.0 |
| Share in GDP | | | | |
| a) Public Sector | 1.0 | 1.2 | 1.0 | 0.5 |
| b) Private Sector | 2.0 | 2.4 | 1.8 | 1.8 |
| Total (Both) | 3.0 | 3.6 | 2.8 | 2.3 |

Source : National Accounts Statistics (CSO).

The growing decline in the share of investment in agriculture and irrigation in particular over years impresses upon growing doubts over sustainable agriculture on which around two-thirds of India's population depend upon. Further, the alarming decline in the share of investment to GDP from 3.6% in 1970-80 to 2.8% in 1980-90 and again to 2.3% during the period of economic liberalisation shows the sheer negligence to this primary sector resulting growing decline of its contribution to GDP over years. The present proportion of less than one-third (31.0%) bears testimony to it. In particular, the growing decline in the share of private sector investment in agriculture to total investment and GDP too shows the distinct sign of negligence to the primary source of livelihood of the bulk of India's population.

Need it be mentioned here that the pattern of performance of foodgrains versus non-foodgrains during the 1980s suggests the latter to be higher than that of the former. A distinct pattern of growth between foodgrains and non-foodgrains which emerged during 1980s got reinforced in early 1990s. While the rate of foodgrains declined (when all the years up to 1995-96 were covered rather than during 1981-90) output growth rate of non-food grains moved up owing to acceleration in growth for area and yield per hectare of non-food grains. In particular, cotton, oilseeds, sugarcane and horticultural crops totalling about 2.5 million hectares have registered increase in area sown during 1995-96 over the previous year 1994-95. The fastest growing segment has been soyabean followed by sunflower and safflower—while output of the former has been doubled by 1995-96 over 1990-91, in the latter type of oilseeds the rise is by 40.0% (Economic Surveys 1995-96 and 1996-97). Precisely, with the thrust

towards agri-exports, a shift in the cropping pattern in favour of more paying commercial crops is glaringly visible.

The adverse trend in area growth for foodgrains that emerged during 1980 was due to diversion of area from coarse cereals to oilseeds (Gulati et.al : 1996). Alongwith a trend of marginal deceleration in yield growth for foodgrains emerged, it was nodoubt a matter of great concern. In this context, favourable prospects of growth of non-food grains and the liberalised trade environment for agriculture seem to have increasingly intensified competition for area between foodgrains and non-foodgrains. Occurrence of good monsoon consecutively for the last few years no doubt has been crucial to boost up significant yield growth in both food and non-foodgrains after 1981. But the overall growth rate per hectare of all crops achieved during the post 1989 nodoubt was a moderate one. The higher yield growth rate of 2.58% in case of foodgrains during the period 1981-82 to 1994-95 compared to 2.3% in case of non-food crops bears testimony to the higher growth of foodgrains over years. However, the deceleration in the area under foodgrains and the acceleration by 1.9% in favour of non-food grains no doubt would create a kind of insecurity of food output to feed the teeming millions. Because, the impact of trends in foodgrains output has been crucial on the state of food security in India.

II

THE FRAGILITY OF FOOD SELF-SUFFICIENCY

The concept of 'self-sufficiency' in foodgrains production is always in relation to the satisfaction of demand which can express itself on the market and is not in relation to the objective needs. The fact that India has not needed to import foodgrains from the mid eighties (except to a marginal extent in 1992) is quite consistent with the fact that substantial segments of the population do not get enough food to meet minimum nutritional needs, because they lack desired income. The total demand for food would be much higher if the distribution of incomes was more equal. The rise in per capita output during the last four decades has not compensated for the steep decline in the preceding forty years under colonial rule. Indian food self-sufficiency is a fragile one which needs to be strengthened at two levels—generating more purchasing power in the hands of the people which can be translated into effective demand and stimulate a commensurate expansion of domestic foodgrains production; and developing foodgrains varieties with high yield suitable for arid and semi-arid areas.

Between 1951 and 1991 India has nearly quadrupled its foodgrains production from 46 million tonnes for a population of 360 millions to 170

million for a population size of 832 millions. In 1996-97, the food production reached the peak 199.3 million tonnes, but declined to 194.1 million tonnes during 1997-98. As has been mentioned earlier foodgrains production and its per capita availability over the years has not shown much promise for exports of bio-diverse products through trade liberalisation to western consumers from the Third World owing to varied reasons. On the contrary, the fragility of foodgrains self-sufficiency has been a matter of grave concern. Needless to say that despite our concerted efforts through huge investments in Five Year Plans to ensure self-sufficiency in foodgrains, our success has been somewhat limited owing to growth of population and decline in agricultural productivity. Of course, in spite of our limited success India has not needed food imports since 1980's. But, this does not necessarily mean self sufficiency in foodgrains and enough food security - for substantial proportions of Indian population have failed to secure enough food due to lack of adequate income. Under India's Fund-Bank supported programme, a curtailment of government procurement operations and operation of international market in foodgrains are likely to throw further challenges.

Apart from the question of dismal rate of growth in agricultural production, and foodgrains production in particular the institutional mechanism for procurement and distribution of foodgrains seems to have acquired growing importance from the point of view of sustainability of food security. More than the production of foodgrains, PDS of procuring foodgrains and other necessities and distributing them at subsidised prices no doubt have become crucial. The volume of procurement of foodgrains grew over time as the Green Revolution achieved success in Northern India, though the well-to-do farmers through capitalist investment for market-oriented production benefited the most. In point of fact, procurement of foodgrains in India as such has had an erratic trend over years. Despite this, the percentage of procurement price to issue price at which grains are sold to consumers in fair-price shops has averaged 112 during the 1980's and subsidy has increased with the expansion in the scale of operations. The Fund-Bank targets this subsidy for slashing, even though as a percentage of the budget, India's food subsidy remains considerably below that of many other developing countries.

The Fund-Bank supported programme through its drastic policy changes towards curtailment of government procurement operations and eventual restoration of the free market in foodgrains appears to be suicidal to the interests of large segment of India's population. It is pertinent to point out the PDS has had a predominantly urban-bias with some excep-

tions (in recent years) in the states like Kerala, Tamilnadu and Andhra Pradesh. This course of action is no doubt beneficial to the food-surplus developed countries, but its implications in the domestic market in terms of a steep rise in foodgrains prices are expected to be severe. A noticeable rise in the price of foodgrains by 25.10% during 1991-92 and reduction in the size of buffer stocks during 1985-90 compared to 1980-85 bear sufficient testimony to the adverse implications of cut in subsidy.

The concept of self-sufficiency in such a critical economic scenario does not merely explain the maintenance of a rich buffer stock of foodgrains, since this fails to cater to the needs of rural mass and urban poor. Further, the foodgrains stock may permit the Government to go easy on administered prices and procurement through support price system. Self-sufficiency in foodgrains production is always in relation to the satisfaction of demand which can express itself on the market and is not in relation to objective needs. That, India has not needed imports of foodgrains from mid-eighties (excepting marginally in 1992 due to procurement shortfall) is quite consistent with the fact that substantial segments of the population fail to meet minimum nutritional needs due to lack of purchasing power and not that India has succeeded in securing self-sufficiency in foodgrains. However, to our mind the basic objective of the maintenance of food self-sufficiency precisely is to concentrate our dependence more on our own production of foodgrains (less on imports) and to generate adequate purchasing power for the large segment of rural mass and urban mass who constitute the largest consumers group through productive employment instead of depending on food aid of North to meet chronic deficits (as and when necessary) which is at great risk because of the SAP Policies like devaluation and cuts in subsidies.

III

STATUS OF FOOD ECONOMY AND ASPECT OF FOOD SECURITY

To see matters in a proper perspective, a brief discussion on the present status of India's food economy is necessary. The annual foodgrains production during the period of economic liberalisation has marginally increased from 179.5 m tonnes in 1992-93 to 184.3 million tonnes in 1993-94, 191.5 million tonnes in 1994-95 but declined to 185.0 million tonnes in 1995-96 (revised) and now in 1996-97 it has increased to 199.3 million tonnes. Such substantial increase is primarily due to coarse cereals and rise in wheat production. However, such slow growth in foodgrains production has wider dimensions. Need it be mentioned that the

per annum growth rate of foodgrains (1.7% during 1990-91 to 1996-97) production is less than even the growth of population (2.1%) compared to 2.67% and 2.86% during 1967-68 to 1995-96 and 1980-81 to 1995-96 respectively. Thus, it is evident that during the period of economic reforms, the growth of foodgrains production has not been able to neutralise the population effect, not to speak of taking care of income effect as a result of an average 4.7% increase in GDP. *Evidently, the average annual growth rates from 1990-91 to 1994-95 and to 1995-96 in total foodgrains have been 1.27% and 1.06% respectively.* This is substantially less than the population growth rate—thus, a fall in per capita production of foodgrains (Economic Survey 1995-96, 1996-97).

There is already an increasingly decline in the per capita availability of foodgrains since 1976. The stock of foodgrains has been piled up over years and now at 36.44 million in July 1995. There has been a major shift in the production patterns towards non-food crops and exportables leading to relative decline in foodgrains production. In the export drive—not all, but selective classes of cultivators are the major players owing to their greater marketable surplus and in contrast, numerically large number of small cultivators fail to benefit from exportables. When, the marketable surplus is linked to the export drive, shortages of commodities in the domestic market instead result in unwanted rise in price of essentials and hit the poor most. On the other hand, such continuing shift in the cropping pattern is also likely to cause greater concentration of domestic income distribution.

Further, the investment on irrigation, power, extension, research and infrastructural facilities like roads and communications is on decline. The share of development expenditure has been declining as a proportion of total expenditures from over 66.0% in the sixties and seventies to 61.0% in 1987-88 and to 59.0% in 1991-92. Further, with the curtailment of public investment at the Fund-Bank's directive to keep fiscal deficit in the recommended limit, the growth rates in agriculture seem to be seriously affected—no matter how high agricultural prices rise as a result of the export drive. Even during the expansionary period of growing investment, the growth rates of foodgrains as well as major non-food crops have shown a decline on the basis of average decadal trend upto 1980. While the compound growth per annum during 1950-51–1960-61 was 3.22%, it declined to 2.52% in 1960-61–1970-71 and further to 2.41% in 1970-71–1980-81. Even during 1980's, it further declined to 2.2% per annum. Therefore, the notion of NEP admirers that the economy is in right footing prove indeed with ground realities.

The trends with respect to agricultural production and per capita availability of foodgrains for the half century before independence have been intensively studied by Siva Subramanian (1962) and Blyn (1966). Both of them derived similar conclusion that there was virtual stagnation in foodgrains output which grew at the trend rate of 0.11% per annum during the period 1892-1947. In contrast, the annual rate of increase in case of non-foodgrains production during the same period was 1.34%. However, the per capita availability of foodgrains declined sharply as the decline in per capita foodgrains production was not adequately taken care of through imports. It is indeed very striking that the situation has not changed much even after more than four decades of economic planning despite roughly four times increase in total foodgrains in 1996-97 (199.3 million tonnes) from around 50 million tonnes in 1951. This is no doubt a qualitative break from the pre-independence trend of stagnation and in a sense the achievement is considerable. But, the quinquennial average estimates of per capita availability and production of foodgrains during 1951-1995 and also for 1995-96 and 1996-97 for which data are available suggest that the per capita foodgrains availability has registered disappointingly small improvement.

Evidently, it is distinctly clear that the nutritional balance has worsened with a fairly sharp decline in the intake of pulses from 23.59 kg per capita in 1951-55 to 14.61 kg per capita during 1986-90. Interestingly, while per capita production of cereals has registered a distinct rise during 1976-80 compared to previous periods its per capita availability has been lower at 145.79 kg, 151.95 kg and 158.37 kg compared to per capita production of 147.13 kg, 153.39 kg and 178.27 kg during 1976-80, 1981-85 and 1986-90 respectively. The difference has further widened during 1991-95 & shows therefore the degree of impoverishment of large segment of rural population and urban poor due to lack of their purchasing power. The difference has been no doubt added to the Government stocks, but such stocks have slowly piled up owing to the inability of rural sector to absorb increased production for lack of purchasing power with numerically large number of potential consumers. Because, those who need to eat more are either at or below the minimum and those who do not need to eat more add substantially to the stock, who indeed constitute well-to-do surplus producers in rural areas. This is a paradoxical situation. The procurement, distribution and stocks of wheat and rice during 1990-91 and 1995-96 suggest that despite an increase in procurement from 19.43 million tonnes in 1992-93 to 25.37 million tonnes in 1994-95, the distribution during the same period has declined from 17.74 million to 13.43 million

tonnes through Public Distribution System (PDS) resulting huge stocks in excessive quantities that involve substantial financial costs, spoilage and losses.

Precisely, the trend of per head net output of cereals and net output of foodgrains over the entire period from 1950 to 1997 suggest that within rising trend of per capita availability, there was a period of regression in the second half of 1960's and the recovery thereafter brought the availability level back to the early sixties values only in the late seventies. By the nineties per capita availability was some 20.0% higher than in the early fifties. However, the composition of the foodgrains basket had worsened from the nutritional point of view to decline in per capita availability of pulses; the main source of vegetable protein for the ordinary people. The dependence on food imports was substantial in the first two decades and fell thereafter. Both the early eighties and the early nineties were periods of substantial stock accumulation. But, in the eighties a part of the stocks was used for food-for-work programmes.

IV

CONCLUDING REMARKS

The foregoing discussion pertaining to the fragility of foodgrains self-sufficiency and food security in India : some emerging trends have made distinctly clear that developing countries in general and India in particular would fail to benefit much from the export drive of agricultural products partly due to lack of quality consciousness as well as competitiveness with respect to exportable products, but mostly due to a set of structural constraints in land, credit market, technology organisation etc. The dimension of the issue of sustainability in food output to meet growing consumption needs and to secure so-called 'self-sufficiency' of the one hand and export-led growth strategy in a competitive market frame to resolve trade deficit by way of enhancing exportables of agricultural products via agri-business on the other raise apprehensions about India's food security. As a matter of fact, once food security through P. D. S. is given up and self-sufficiency in foodgrains is lost (which India to a greater extent had nearly achieved), what is the guarantee that India would not reach the worst situation in foodgrains both in terms of production and availability. The implications of New Economic Policy under GATT regime detailed in the paper suggest that the shift in the foodgrains acreage in the production pattern towards commercial crops, fruits, vegetables etc

indicated by the fact that India's annual requirement of food grains are estimated to have increased from 61.9 million tonnes in 1951-56 to 145 million tonnes in 80-85 and 185 million tonnes in 1996-97. As against this, the production of food grains has increased from 50.8 million tonnes in 50-51 to 196.3 million tonnes in 1996-97.

Though the production is a little more than the requirement it bears little relation to genuine adequacy of food because in 1993-94 nearly 40% of people of India were below poverty line, who were not getting two square meals per day and a large percentage of people suffers from malnutrition.

The overall rate of increase in production of food grains has been very slow. The annual rate of increase between 51-52 and 64-65 was only 2.52%, 2.57% between 66-67 and 95-96. The index number of productivity of food grains increased slowly from 72.4 in 50-51 to 93.1 in 60-61 and 102.2 in 74-75. It however jumped to 129.3 in 78-79, further to 154.4 in 85-86 and 191 in 95-96. Considering the high rate of growth of population (2.5% per annum) the rate of increase in food grains production is totally inadequate. Thus per capita availability of food grains production is totally inadequate. Thus the per capita net availability of food grains has failed to increase substantially as it has increased marginally from 494.4 gms per day in 1965 to 509.9 gms per day in 1991.

Further, in a developing economy where large mass of population live at subsistence level, marginal propensity to consume tends to be very high. Food being the most important immediate necessity of population as well as of the additional labour employed in industries the demand for food grains goes on increasing. This is reflected in high income elasticity of demand for food which ranges between 0.6 and 0.9. In India again farm consumption of food grains is increasing with the increase in agricultural output. Thus due to this increase in home consumption the marketable surplus of food grains could not increase substantially.

Production of food grains also fluctuates with the variation in weather condition. Indian agriculture still is a gamble in monsoon. If monsoon fails, agriculture fails. In 1950-51 about 20.9 million hectares of land was irrigated which accounted to only 18% of the total cropped area, but in 1995-96 about 89.4 million hectares of area was irrigated which was nearly 37% of the cropped area of the country. With less irrigation facilities and lack of modernization of agriculture, agricultural productivity can not be increased. Hence, there is food in-security in India.

In spite of green revolution, we are still depending on imports to meet scarcity conditions when weather does not become favourable. A recent study conducted by World Food Programme (WFP) the U. N. in consultation with the Government of India has observed that India still needs external food assistance to help large sections of its population for achieving food security and self reliance despite the country's achievement in Agricultural development and its ability to meet the market demand for food grains.

The public distribution system (PDS) functioning in the country can offer a picture of the food security in India. Since 1943 (after Bengal famine) the system of rationing for equitable distribution of food grains was introduced in India. At the time of independence about 45 million people were brought under statutory rationing and another 90 million people were also brought under other forms of public food distribution. In order to distribute essential food items "fair price shops" were opened in all states. As on 31st March 1996 there were 4,37,000 fair price shops in the country out of which 3.48 lakhs were in the rural areas. Total amount of food grains distributed by the public distribution system has increased from 2 million tonnes in 1956 to about 17.8 million tonnes in 1994-95. In 1996 the average number of people served by a fair price shop was 2000. At present the PDS roughly distributes about 10 to 12% of the annual grain production or it meets only 12 to 15% of the individual food requirements.

The poorest in the cities and migrants are left out as they do not generally possess ration cards. A recent study by S. M. Jherwal has indicated that PDS accounts for merely 17.5% of the rice consumption and 11.8% of the wheat consumption of the poor. Since the price effects on demand are weaker than income effects for poor it appears that PDS can not be effective in providing the food security to the poor even by increasing the differential between issue and market prices.

Besides this the inadequacy coverage of procurement facility has rendered the price policy ineffective. The facility of official procurement reaches only a handful of farmers of the total food grains production—the procurement covers hardly 15%. As a result a view has been canvassed that price policy has only benefited farmers who have surpluses.

The gap between the annual procurement of food grains by Govt. agencies and sale of food grains through the PDS has been growing and the size of the stocks of the Food Corporation of India (FCI) has crossed

the limit of tolerance in terms both of physical storage capacity and of the financial burden. The holding of food grains involves costs in the form of interest cost, godown rents and wastage in storage. These have been estimated to cost around Rs. 120/- per quintal for wheat and Rs. 180/- per quintal for rice. The subsidy paid to the FCI was Rs. 650 crores in 80-81, which increased to Rs. 5884 crores in 96-97 though during the same period food grains actually distributed through the PDS went up only from 15 million tonnes to less than 17 million tonnes. Figures from the Union Budget 95-96 papers show that the carrying and distribution cost of grains are 83.6% of the consumer subsidy in case of rice and 66.8% for wheat. This has been so because the prices of food grains in both the PDS and in the open market have been going up sharply and continuously. The high cost proves a drain on the public exchequer and gets translated into high consumer subsidies.

Finally as brought out in a recent study on the subject that PDS alone will not solve the problem of food security. Apart from higher economic growth a mix of policies such as effective implementation of anti-poverty programmes including PDS, controlling inflation, improving health facilities is needed for increasing food security in the country.

The other aspect of the food situation in India is that the nutrient content in the food of an average Indian is deficient i.e. an average Indian is malnourished. Some studies and surveys have been conducted in the past which reveal that well over 90% of the calorie supply to undernourished households come from cereals, starchy roots, sugar & pulses whereas in other countries these supplies constitute only 57% of the calories & remaining supply is from animal products. Besides an average Indian gets 55 gms. of protein whereas in the developed countries it exceeds even 100 gms. The low nutrient content of food is responsible to a large degree for the low efficiency of an average Indian. Consuming food of low nutrient content though our food surplus is marginal, we can not claim ourselves as having food security.

Another aspect of the problem is that prices of food grains have been rising continuously causing serious difficulties to the rural poor. Under such a situation income disparities have widened and the proportion of population remaining below the poverty line has also increased considerably. Demand for food grains of these people lying below the poverty line gradually declines because they do not have sufficient purchasing power. While people purchase less and consume less due to lack of purchasing power we can not claim food security in India on the basis of marginal surpluses.

CONCLUSION :

The production of food grains is having some marginal surplus having little relation to genuine adequacy of food. Nearly 40% of people in India are below poverty line who were not getting two square meals per day and are suffering from malnutrition. Considering the high rate of growth of population (2.5% per annum) the rate of increase in food grains is inadequate. The high propensity to consume of the Indian people along with increasing farm consumption and rapid urbanization increases the demand for food, the fluctuation in food production due to dependence on monsoon, low irrigation potential and lack of modernization of agriculture has not made substantial increase in productivity. Till to-day the country is still dependent on import of food grains from foreign countries. The public distribution system covers only a very low percentage of total population. Besides this the PDS has become an unnecessary burden on the government. The food contents of Indians are deficient of nutrient contents and the high prices of food grains have deprived the poor of consumption. In such a context marginal surplus in food grains can not be claimed to be a genuine adequacy in food. This shows that there is lack of food security in India.

Is Public Distribution System alone Sufficient to Ensure Food Security at Individual Level ?

Kishor C. Samal
Professor of Economics
NCDS, Bhubaneswar

A large number of people suffer from hunger, though there is sufficient foodgrains in this planet. Self-sufficiency of a country in food-grains is not the same thing as food security for an individual. There is positive role of public action in ensuring food security and thereby beating persistent hunger and endemic deprivation. Various essential elements such as food, primary education, basic health services, etc. have to be promoted for eliminating hunger and endemic deprivation (Dreze and Sen : 1989). Though there is broad agreement in the recent literature on objectives and means of eradicating poverty and hunger, there is significant difference in emphasis.

I

Transient Hunger vs Chronic Hunger :

In Orissa, at present, transient hunger and poverty occur due to natural calamities like flood, cyclone, drought etc. In times of natural disaster, public action should be geared to support public confidence in respect of food availability and stability of prices. Relief plays an important role in this situation. Direct food delivery is the most common policy instrument for the relief.

Cash transfer can also help even if aggregate food availability cannot be increased. The development economists remain divided on merits of monetising food aid (Ravallion : 1992). Dreze and Sen (1989) argue that whether cash transfer or food relief will be more helpful to those in need must be judged according to specific setting including the performance of foodgrain market. It is to be mentioned that, in India, in the late 1970s, the food-for-work programme was withdrawn under the pressure of rich farmers since the programme depressed the foodgrains

prices and increased the wage level in the rural market. As FWP projects were implemented, there was fall in foodgrain prices in rural areas due to rise in its supply and agricultural wage increased consequent upon the fall in supply of labourers for agricultural operation. A common criticism of cash relief is that it will lead to higher food prices. But if the higher food prices, it is argued, are the results of an effectively targeted cash transfer policy, then those in need will still be better off. Moreover, some of the upper caste people in Orissa, even if they starve, do not go to receive food relief such as cooked food, rice, pressed rice (*chuda*), or cloth etc. since these are termed as *chhatar* & a person receiving these commodities was designated in the past as *chhatara* or *chhatarkhia*. On the other hand, they do not hesitate to receive the relief in cash for houses damaged due to flood/cyclone and relief in terms of exemption of tuition fees and examination fees due to natural calamities. So, in view of this, in order to make relief accessible to a wider mass particularly in times of natural calamities, relief in cash is also desirable in Orissa but simultaneously, there should be provision to make both cooked food and non-cooked foodgrains at a price available through PDS. Better proposition is the combination of both relief in cash and food relief.

The alternative targeting mechanism is a combination of employment provision to help those willing to work (i.e. able-bodied rural poor) at low wages (but again a Brahmin will not do physical work like a manual labourer) and unconditional relief to those who are obviously unemployable—the aged, sick, handicapped etc. A timely domestic policy response can avoid the potentially disastrous consequences of a drought or the like to the poor for their more desperate later responses such as sale of assets and distress migration. So, the provision of an effective safety net for the poor complements the long-run alleviation of poverty through economic development.

The prevent transient hunger due to flood or drought is significantly different from eliminating *chronic hunger*. For eradicating chronic hunger and poverty, various steps have been undertaken which are grouped into two broad categories (Dreze and Sen : 1989). One strategy has taken the form of fast growth of per capita national real income and the use of the gains of this growth to enhance the living conditions of the people on a wider basis. This strategy is called "growth-mediated security" which has been followed in countries like South Korea, Hong Kong etc. The other strategy is known as "support-led security" and has been practised in China, Cuba and other nations. It has taken the form of promoting—through direct public support—entitlements to education,

health care and food without waiting for the per capita national income to rise to a high level through general growth. The two strategies have the common feature of marshalling public action particularly in extensive use of public provisioning (especially in health care, basic education and food distribution) to enhance living condition (Dreze and Sen : 1989). But one aspect of success stories of both groups of countries has not drawn the attention of Dreze and Sen (1989). In both groups, the rural feudal structure was drastically destroyed with powerful rural institutions.

There is apparently wide agreement that growth is not sufficient for eliminating chronic poverty and hunger in their various dimensions and that a combination of growth-mediated and support-led security is required. The question is what should be the proper balance (Ravallion : 1992) ? In this respect, there is urgent need for public provision of social services mostly health and education (Dreze and Sen : 1989; UNDP : 1993, 1997; World Bank : 1990).

Thus, there is a positive role for public action in both fighting transient poverty arising out of drought/flood etc. and the long-run alleviation of poverty and hunger. However, in arguing the case for such public action, less emphasis is put on raising incomes (except in so far as that mediates public support) than one observes in other recent literature on this topic.

Food security is one aspect of public intervention for eradication of hunger and poverty. To ensure food security and thereby containing malnutrition, two programmes, viz., (i) Public Distribution System and (ii) Supplementary Nutrition Programme have been implemented in Orissa as well as in India.

The present paper critically examines the PDS as a tool to ensure food security and offers alternative proposals.

II

Public Distribution System :

Due to failure of the price control (price ceiling), some argue that the system of dual pricing offers the best solution. Under the system of dual pricing, the government introduces a deliberate dichotomy in the commodity market. Consumers are divided into two segments. There are two sets of prices for a commodity : (i) a "controlled price" (or issue price) for weaker and vulnerable sections of society which is obviously lower than, (ii) the "open market price" (and slightly higher than the 'procure-

ment' price) (Samal : 1981). Primarily, the system of dual pricing was introduced with an objective of protecting the vulnerable and weaker sections of the society. The distribution outlet to the consumers for this purpose under Public Distribution System (PDS) is through the fair price shops from which consumers get given quantities of foodgrains and other items at a price called "issue price". However, the viability of the system of PDS rests basically upon the difference between the issue price and market price (Ray : 1994). In Orissa, it has been observed that invariably the issue price/controlled price is lower than the open market price. However, the authority has not been able to provide consumer cards to all the poor families.

Public Distribution System in the State covers mostly two other commodities, viz., sugar and kerosene, the former being not essential for the poor. Though kerosene is an essential item for the rural poor, in most of the cases, it is not supplied regularly to the card holders (Samal and Jena : 1998).

Though the main purpose of PDS is to make the essential commodities available on a regular basis to the vulnerable section at a price lower than the open market price, virtually all sections of society rich and poor—are enjoying the advantage of subsidised food products and other items. Recently there has been some modifications to supply cheap rice to BPL families in some tribal blocks under Targeted Public Distribution System (TPDS). Of course, certain commodities distributed under PDS are less preferable for certain affluent sections because of (i) their low quality and (ii) inconvenient location of the fair price shops (Ray : 1994; Schiff : 1996). The poor are unable to avail full quota of controlled items because of (i) their low purchasing power, (ii) longer geographical distance of the fair price shops from their residence and irregular timing of their opening and (iii) supply of non-essential items like sugar (Samal and Jena 1998).

Even those who have the capacity to purchase are denied by the influential dealers to avail of the full quota due to their low social and economic status in a rural feudalistic society where the fair price shops are controlled by traders, landed gentry and the workers of the ruling political parties.

Hence it seems that there is a need for an organisation of the poor to exercise their right to PDS—their power of entitlement—whether it will be political or apolitical is a different issue. Similarly the question of management of PDS by local-self governing institutions in place of government agencies is an issue for further consideration.

When card holders are not getting their full quota from PDS, certain amount of controlled items are diverted to open market. It is recognised that PDS has a greater scope for black market. It is interesting to note that in case of a commodity's price having been legally fixed, the black market price is generally higher than the normal price (ceiling price). But in a black market created by the dual price system owing to PDS, the black market price is generally less than the open market price, though higher than the controlled/issue price (Samal : 1981). This happens owing to illegal diversion from the controlled quota to the open market through ghost cards, impersonation and the like by the dealers in connivance with the officials and politicians. This black market price is beyond the reach of the poor. Thus poverty of the poor makes them poorer through income effect—a case of vicious circle of poverty.

Therefore, serious effort is desirable to make the PDS easily accessible to the most vulnerable groups. The items which are essential for the consumption habit of a particular region should be available in that region, for instance, rice-not wheat—may be supplied through PDS in a tribal area.

A well-administered, decentralised, community-involved PDS can ensure food security to poor households through an assured delivery of adequate quantities of essential foodgrains and other items at favourable prices. The supply of controlled items to a card holder should not be one in a month but on a weekly basis so that the poor will be able to purchase the monthly quota in phases. The PDS is very successful in Kerala and Andhra Pradesh though with a huge cost to public exchequer (Kannan : 1995; Parthasarathy : 1995). But, due to liberalisation, dismantling of the PDS or gradual withdrawal of subsidy to foodgrains distributed through it and consequent rise in issue prices mostly hurt the poor due to lower implicit income effect. But only those vulnerable to poverty and hunger must be highly subsidised which has been recognised by the 'safety net' approach. There is a greater need of excluding the high income group people from the PDS. But at the conference of Chief Ministers in September 1997, the Food Ministers ruled out the exclusion of affluent sections of society from the purview of the PDS. If the food subsidies for PDS is targeted only to the poor, the present quota may be increased and some additional necessary commodities like rice, salt, edible oil may be supplied with the existing resources and subsidies. But the Central Government, particularly the Finance Minister is against the increase in foodgrains allocation for BPL families from 10 kg. at present to 20 kg. per month and hiking subsidy for BPL consumers of the TPDS. However,

there is a need of increasing the number of fair price shops with more essential items in adequate amount targeted only to the poor (without discriminating against rural population) so as to make the PDS commodities more easily accessible to them to have a favourable income effect in India in general and Orissa in particular. It is to be pointed out that the PDS itself cannot solve the problem of poverty and hunger. It is only a supplementary measure to the programmes of poverty alleviation and eradication of hunger.

III

FOOD IN KITCHEN OR MONEY IN POCKET

Food Security :

It must be recognised that Public Distribution System alone is not sufficient to maintain food security. In its essence, the concept of food security must mean that all members of every household particularly those living in rural areas should have adequate access to foodgrains (Venugopal : 1992). But, poor in India do not have enough to eat though enough foodgrains are produced in the country to sustain the entire population. Thus, self-sufficient in foodgrains and food security are totally different. The people must have the power of entitlement to procure food in the market. Access to adequate food for all people at all times is defined as food security (World Bank : 1986). Even if a country is self-sufficient or surplus in food, the poor who do not have adequate purchasing power to buy food and remain undernourished with lack of food security (Bapna : 1990). On the other hand, a country may not be self-sufficient in production of food, it may have large degree of food security if everyone has access to food whether produced in the country or imported.

In India, there is food security at the country level but there is insecurity for individual, particularly the poorest. The main reason for this insecurity is lack of purchasing power. So, PDS should be considered as a short-term substitute. Several alternatives could be worked out in the long-run to increase the income of the poor to have more access to foodgrains since hunger is an issue of broadly based economic growth, especially among the very poorest (Atwood : 1994)

IV

Alternatives To increase Income to Ensure Food Security at Individual Level :

To increase the power of entitlement of the poor, employment (particularly self-employment) should be expanded in rural non-farm sector (RNFS) since the agricultural sector is oversaturated. However, as

postulated by Equity hypothesis (eg. Samal : 1997), the even distribution of land and rural assets including water for irrigation and common property resources and expansion of primary and secondary education may help the growth and expansion of RNFS activities through consumption-expenditure linkages by increasing rural income and bringing more even distribution of such income. Primary and secondary education also help in growth of RNFS by helping in skill development and improving labour productivity. However, better nourished children perform better in schools. So, there is need to ensure that children and their mothers receive adequate amount of nutrients and balanced food and proper health care services.

The skill and productivity of the people which develop due to the increased access to land and rural assets through its even distribution and to education and health services through expansion of school education and health services cannot be fully utilised without access to formal credit system. The main problem of credit delivery system is not the supply of credit at concessional rate or with subsidy (except, of course, at the time of harvest failure so that the informal credit agents like money lenders may be driven out from the rural credit market) but access to credit and timely credit in adequate amount at reasonable rate of interest.

If the Government at the top is not efficient, the alternatives are not Non-Government Organisations (NGOs) which seem to be more corrupt but the decentralisation of power with developmental functions of rural areas rested with local-level institutions like gram panchayats. The structural changes are essential conditions to ensure the rise of rural poor to a position of dominance in the local-level institutions. Organisation of poor for their active and vigilant participation in development project and their well planned movement can reduce the social and political control of rural lords (Samal & Jena : 1998).

Therefore along with local level institutions of genuine local democracy, effective and practicable land reforms, expansion of qualitative primary and secondary education, proper system of credit delivery and steps for growth of RNFS, organisation of rural poor is very much essential to empower them for their upliftment through increase in power of entitlement to have more access to foodgrains to make them free from hunger.

Hunger and Food Security in India

Prof. Surendra Nath Misra

NKC Centre for
Development Studies, Orissa

Poverty and hunger are the two basic problems confronting mankind all over the world. India being a developing country is facing the same problem in a greater magnitude. Poverty and hunger, however, are not synonymous. Hunger is defined as individual's inability to eat sufficient food in terms of calories and nutrients to lead a healthy and active life. According to Prof. A. K. Sen, 'Hunger is not due to the lack of supply of food but more due to the inability of the people to buy food'. Hungry are those who lack physical and economic access to food. On the other hand, the more common definition of poverty is in terms of inadequacy of income indicating thereby that a person's income level falling below the poverty line income, the official prescribed minimum that separates the poor from the non-poor. Hunger is the most deplorable manifestation of poverty. Those who suffer from hunger are necessarily poor but all poor persons are not suffering from hunger and malnutrition. In this article an attempt is made to analyse how food security can act as a catalyst in overcoming poverty and hunger in the country.

The study is undertaken with the following objectives: (i) to ascertain the size and extent of poverty and hunger in the country, (ii) to assess net availability of food grains, percapita and per day of the individuals with a view to determine their physical accessibility, (iii) to examine the nature and type of employment opportunities created for increasing purchasing power of the people with a view to help them to buy food, (iv) hunger is not a problem of lack of access to food alone. It includes other socio-economic inputs like education, health services, drinking water and sanitation etc. that promote quality of life of people.

On the basis of head count index, nearly 35.0 per cent of the total population in India are living below the poverty line in the year 1993-94. It is further noticed that in the rural areas 3.7 per cent of the

total population are living below the poverty line, whereas the same was 30.5 per cent in urban areas. Poverty is thus deepseated in rural areas as compared to urban areas. Further more, out of the total population living below the poverty line in rural and urban areas, nearly 25 per cent of them belong to the category of hungry people.

Food security is defined to mean 'Access by all people at all times to enough food for an active and healthy life. Food insecurity by contrast is lack of access to enough food. Food security requires meeting two conditions: one ensuring that there are adequate food supplies available through domestic production and imports. The other is ensuring households whose members suffer from malnutrition to acquire food, either through producing it by themselves or by having the income to acquire it.

The supply of foodgrains expressed in terms of net availability of foodgrains including cereals and pulses, per capita and per day is explained below: It is seen from the Economic Survey Reports from 1990-91 to 1996-97 that the net availability of foodgrains which includes net production plus net imports minus change in govt. stocks was 133.8 million tonnes in 1986. This increased to 169.4 million tonnes in 1996. Over the period, percentage variation in net availability of foodgrains was 26.6. It is further seen that cereals, which constitute one of the major items in the non-availability of foodgrains, stood at 121.5 million tonnes in 1986, whereas the same was 157.8 million tonnes in 1996, showing a percentage variation of 28.9 over the period. During this period pulses which stood at only 12.3 nutrition tonnes in 1986 declined to 11.6 million tonnes in 1996. Percentage variation over the period was (-) 5.7. The available data clearly show that net availability of foodgrains was more influenced by cereals than by pulses.

The data further indicate that the net availability of foodgrains percapita and per day which stood at 478.1 grammes in 1986, increased to 498.0 grammes in 1996. Here in this case also, the percapita and per day foodgrains basket was more influenced by cereals than pulses although the latter are considered to be poorman's protein for leading a healthier life. The data thus reveal that there has been a maladjustment in the food basket comprising more of cereals than pulses.

The broad based growth strategy adopted in agriculture in the country no doubt helped to increase percapita net availability of foodgrains per day in the country thereby improving the physical access to food by the poor. But how many of the poor people are in a position to

buy the available food from the market is the real problem that seeks immediate solution. Even whatever foodgrains they buy from the market that lacks nutrition and caloric value.

There are basically two reasons for this situation. First, the poor and hungry do not have adequate income to buy available food. This compels them to go without food even though the supply position is satisfactory in the country. It is rightly observed by M. H. Suryanarayan that, "A Household is said to be food secured when it has the necessary purchasing power to buy foodgrains and access to the required amount of foodgrains". Secondly, supply of essential commodities including foodgrains through the mechanism of Public Distribution System has not helped the rural poor and hungry to meet their consumption requirement adequately.

In order to improve the economic access to food by the poor and hungry the Government both Central and States have launched several employment generating schemes classified as self-employment and wage-employment in the state for improving the purchasing power of the people. The self employment schemes consist of: IRDP, TRYSEM and DWACRA etc. The main objective of the schemes is to provide income earning assets to the rural poor so as to enable them to sustain in the activity for a longer period. On the other hand the wage employment schemes cover programmes like JRY, IAY, MWS and EAS. The objective is to provide gainful employment to the rural poor for certain part of the year at the prescribed minimum wage rate approved by the government. Both the schemes are operating in the state for the last several years but they have failed to remove poverty fully from the rural areas. There are many reasons for the failure of the schemes in this front. The causes for the poor performance of the schemes are: wrong and improper identification of beneficiaries, supply of poor quality of assets, inefficiency and pilferage in the delivery system, lack of awareness due to illiteracy and ignorance, absence of follow-up action and supervision of the schemes and lack of coordination among the implementing agencies responsible for implementing the schemes at the grassroot level etc. It is further noticed that the poor and hungry people failed to get employment for a major part of the year. As for instance, under JRY a poor person is expected to get 100 man days of employment but in actual practice he received only 40 man days of employment. In several cases wages received by beneficiaries fell short of the actual minimum wages prescribed by the government. The prescribed minimum wage in the state is Rs. 35 per day but the beneficiaries received wages ranging between Rs. 20 and

Rs. 25. The highhandedness of contractors and middlemen who managed to undertake various employment oriented activities failed to complete the work on time. In certain cases they left the work half constructed and did not pay fully the wages due to the labourers. On account of all these problems, the basic problem of the poor and the hungry continued to persist i. e., they failed to buy the food due to low income and poor purchasing power.

Likewise the PDS also failed to cater to the needs of the poor and hungry, on account of several loopholes in the scheme. These are : (i) PDS has failed to cater to the needs of large number of genuine card holders—the number of ghost cardholders being substantial (ii) failure to supply all the essential items required by the poor people, (iii) irregular opening of fair price shops which are manned by unscrupulous traders and dealers in most cases, (iv) supply of poor quality of rationed articles and even this supply falls short of the actual requirement, (v) number of fair price shops compared to the size of population and coverage of villages appears to be small and (vi) advantages of fair price shops are mostly reaped by non-poor than the poor. It is further noticed that commodities supplied by such shops are not fully lifted by the poor men and women. On the other hand the well to do persons in the rural areas are found to be purchasing the commodities from fair price shops with the help of the poor who fail to buy the rationed commodities for want of income. Due to all these factors PDS as an instrument for channeling subsidised food by the Government to the poor has not made any substantial progress.

Hunger is multi dimensional in nature. Apart from food insecurity, the poor and hungry also lack access to education, health services, drinking water, sanitation and sewerage, transport and communication etc. There are primary schools no doubt but the number of dropout children have increased largely over the years. Even schools have lacked premises, adequate number of teachers and reading materials etc. There are primary health centres but these centres have lacked adequate number of doctors, pharmacists, midwives and medicines etc. Furthermore, there is the acute problem of drinking water in rural areas although there are quite a large number of tanks and ponds. They have remained unrenovated for a number of years. Disinfectants are rarely used in these ponds. Wells are there but they have become dry in course of time. Even some of these wells have been declared as unfit for providing drinking water. This is also noticed in Begunia block where people mostly depend upon ponds and wells for drinking water. The sanitation and drainage system in most of the rural areas are unsatisfactory. On account of poor drainage

and sewerage system, water logging has become a great problem and this has become the breeding ground for mosquitoes and other insects. Along with food security, efforts be made in the direction of providing universal elementary education, primary health services, drinking water, transport and communication, sanitation and sewerage etc. to poor and hungry people in promoting their quality of life.

Measures Suggested :

The following measures are suggested to improve economic condition of the hungry people.

* The foremost requirement is to increase the purchasing power of rural poor through self employment and wage employment activities. It is seen that the rural poor and hungry people have not received substantial benefits from self employment programmes. The self-employment programmes expect too much in terms of entrepreneurial ability on the part of the poorest of the poor, who neither have the capacity nor the aptitude to undertake self employment activities. The assets supplied to beneficiaries are inadequate and of poor quality. They fail to sustain the beneficiaries in economic activities for longer periods. For all these more importance is attached to wage employment programmes.

* Number of wage employment schemes now in vogue in the country side be merged to form a single and viable wage employment programme. The wage employment programme must aim at Providing at least 100 man days of employment in agricultural lean season or 300 mandays of employment in a year. The beneficiaries once selected are provided intensive training under TRYSEM. It is to be seen that those who have received training need be engaged in the trades for which they have acquired the skill. More attention and greater caution be exercised in selecting the contractors to be entrusted with the responsibility of undertaking various construction activities for generating wage employment. The wages paid by them must necessarily correspond to the minimum wage prescribed by the government. All these efforts have the merit of improving the purchasing power of the people.

* The old age pension and widow pension at present touch only a fringe of the population in the rural areas. Besides, the amount given to beneficiaries under the scheme (Rs. 100/-) is also low. These transfer payments are aimed at providing social security to old and aged persons who have no sources of earning. The coverage of the scheme seems to be limited. The scheme fails to cover physically handicapped, leprosy

patients, and helpless persons. It is proposed that with a view to increase the earning capacity of the people, the amount presently given for old age and widow pensions be enhanced from Rs. 100 to Rs. 200 per month by taking into consideration the hike in prices of essential commodities in the market.

* Food supplementation to the hungry can be done either through rationed food subsidy or through nutrition monitoring programme. If the food subsidisation is chosen it should be targeted only for the benefit of the poor through PDS. The present system of PDS which is targeted to cater to both poor and non poor should be abandoned and in its place only poor should be targeted. Further more, the PDS need to cover all the essential items required by the poor and hungry. Moreover, the quota supplied need be made adequate. Persons in the high sense of community service and commitment be selected as the dealers in fair price shops for the distribution of rationed commodities.

* Though food subsidisation takes care of food security, it lacks other causes of malnutrition. The alternative and most precise way to target food and nutrition is through monitoring health posts and schools. Nutrition monitoring in health/family welfare programmes or in schools can identify under nourished children or their mother. This is a better way of identifying the hungry. These hungry families can be provided with food or purchasing power through food stamps or vouchers. This enables the hungry families to obtain free food from ration shops or from other outlets. To begin with, food stamps could be given to participants of JRY and other employment programmes since the poor may be expected to select them into such programmes.

* Credit is one of the essential inputs necessary for engaging people in several income earning activities. Accordingly a Bangladesh Grameen Bank model type of credit delivery scheme is advocated for poor and hungry people. Under this scheme, credit is given to a group who assures of proper utilisation of loan, generation of adequate income, and quick repayment of loans etc. The group selects the income generating activities in consultation with Grameen Bank officials who later undertake the responsibility of financing the selected activities. The Grameen Bank of Bangladesh is an example of highly successful programme that has helped to increase the incomes and consequently the calorie intake of the rural people. It lends primarily to poor women with excellent credit recovery.

* Apart from improving physical and economic access to food, steps in the direction of expanding universal primary education, expansion

of adult education, increasing the number of primary health centres including medicines, doctors, pharmacists and nurses, provision of drinking water through opening of more tube wells and renovation of existing ponds and tanks will go a long way in improving the living conditions of the poor.

* It is more important to promote agricultural development by giving more stress on irrigation and supply of farm inputs. There is need for extending the area under pulses and increasing the quantity of production of pulses in the country which is lacking at present. Besides emphasis may also be put towards promoting allied activities with a view to supplementing the income of the hungry people.

Conclusion :

Hunger is mainly due to the lack of economic access to food. This is again due to lack of purchasing power. The employment programmes pursued in the country have not improved the purchasing power of the poor. Even the PDS too has failed to meet the needs of the hungry people. The beneficiaries continued to be well-to-do amongst the poor and the urban rich. Accordingly, suggestions is made for greater streamlining of employment programmes with particular stress on wage employment programme. Besides PDS is to be confined to rural poor only by including several essential commodities required by them. There is also the suggestion for supplying credit through banks in the form of Bangladesh Grameen bank model type of credit delivery system to help the poor women to adopt viable economic activities for improving their economic lot. Finally there is also the need for targeting food and nutrition through monitoring health posts and schools. Under this the hungry families can be provided with food or purchasing power through food stamps or vouchers. This enables the hungry families to obtain free food from ration shops or from other outlets. In addition to all these measures more stress be given for the spread of education, health services, sanitation and environmental protection in order to improve the living conditions of the poor.

Evolution Management & Working of Public Distribution System in India — Problems & Future Prospects

Madhuri Padhi,

Research Scholar

N. K. C. Centre for Dev. Studies

Bhubaneswar-13.

Public Distribution system in India is a heritage of the Second World War. With the outbreak of the war in 1939, the demand for foodgrains for armed forces increased when supplies from the exporting countries became uncertain. This gave rise to speculative activities and a sudden spurt in prices. Following such trends, several countries including India introduced rationing of foodgrains and other essential commodities. In the postwar period however, most of the countries discontinued the rationing system. In India the system continued though it had undergone changes in its size, nature and coverage.

Evolution of PDS in India :

The evolution of PDS in India could be divided into three phases such as: (a) phase-I (upto 1960), (b) phase-II (upto 1990) and (c) phase-III (After 1990).

Phase-I (Upto 1960) :

The British Govt. in India introduced the rationing system in 1939 in Bombay. In 1942, Department of food was established to deal with problems to food supply. In 1943 the first foodgrain policy committee set up by the Food Department recommended continuation of rationing, maintenance of a reserve stock and expansion of the rationing scheme to rural areas etc.

The important features of PDS in the 40's and 50's were the following :

- (i) PDS was viewed first as a rationing system to distribute scarce commodities and later as a fair price system in competition with private trades who were believed to be exploitative.

- (ii) Wheat and rice continued to be the major foodgrains to be supplied through rationing system.
- (iii) The concept of buffer stock was visualised but was not implemented despite chances of doing so in good production years.
- (iv) It was restricted to major cities. Adequate efforts to cover the poor in rural areas were not made though concern for them was expressed.
- (v) Import had been a major source of supplies for the PDS.

Phase-II (Upto 1990) :

The sixties saw major organisational changes in food distribution. The failure of crops in 1962-63, the war with China and the recommendation of the Foodgrains Enquiry Committee compelled the Govt. to make the PDS a permanent feature of food policy. Promotion of the cooperative sector and govt. agencies for the PDS was planned. The Agricultural Price Commission in 1963 and Food Corporation of India in 1965—were made to deal with distribution of food. A large number of ration shops were opened and coverage was also extended to the rural areas. Particularly in the Fourth Plan (1969-74) a major concern was shown to maintain regular supplies by creating buffer stocks. In the Fifth Plan it was thought that the PDS should be managed in such a way that the exchequer was not highly burdened otherwise a resource crunch for development would be felt.

The crop situation remained good between 1975-76 and 1978-79 and foodgrain stocks were piling up. Before this, due to the introduction of high yielding varieties and good rainfall, the crop situation in 1970-71 and 71-72 was also good. At this stage, it was decided not only to distribute food at lower prices but programmes such as Food for Work and Antodaya (Upliftment of the poorest of the poor) were introduced in 1987. Then the production of foodgrains continued to increase and stocks of grains with the FCI touched 30 million tonnes. So in addition to the PDS, food for work, export, sale in the open market operations, etc. were attempted. In spite of this, the fluctuations in production and instability of prices were noticed.

The salient features of the second phase include (1) Extending the PDS to rural and backward areas. (2) Ensuring adequate stocks and supplies through retail outlets and developing proper monitoring and information system with regard to distribution of food supplies, and (3) Raising

the quality of life of the people by upgrading their nutritional status through the supply of consumer goods at cheap and subsidised prices.

The PDS was given the status of a supplementary programme in poverty alleviation in the Sixth Plan but a more important role was assigned, to the PDS through higher investment for the PDS in the Seventh Plan. But it is observed that benefits of PDS had largely gone to richer households in rural areas. Many empirical studies on PDS purchases had shown that the poor were not benefiting much from the PDS. Besides, the other problems like leakages, inefficiency on the part of the FCI in storage and distribution of foodgrains led to narrow the gap between PDS prices and open market prices

Phase-III (After 1990) :

At different points of time, attempts had been made to restructure the PDS in order to make it poor friendly. When it was found that in the backward rural areas people were not getting supply from PDS, the PDS was revamped in 1992 which was popularly known as Revamped PDS.

The features of the Revamped PDS are (i) The scheme covers 2496 blocks in the country where EAS was introduced. (ii) The issue price for foodgrains is lower by Rs. 50 per quintal than the prices in normal PDS. (iii) The retail price of foodgrains in RPDS should not be higher than the central issue price by more than 25 paise per kilogram. The general problems like bogus ration cards, inadequate storage and failure in targeting beneficiaries were identified by programme evaluation which looked into revamped PDS.

In 1996, Govt. again gave considerable thought to make PDS more effective and promised through common minimum need programme to provide foodgrains to the states in accordance to the poverty ratios based on Expert group (Lakdawala Committee Report) estimates provision was made to provide 10 kgs of foodgrains per family at half of the issue prices.

In 1997, Govt. launched the PDS to fulfil the aspiration and food requirement to the poorest of the poor. The essential features of TPDS are- (i) 32 crore people below the poverty line get rice & wheat at about half the central issue price. (ii) 10 kg of foodgrains per family per month will be issued to all BPL families. (iii) Outgo of foodgrains under TPDS is likely to be 184 lakh metric tonnes in a year against 153 lakh metric tonnes. The additional quantum will go to states where poverty is acute.

(iv) The prices at which foodgrains are to be issued to states will be Rs. 3.50 per kilogram for rice and Rs. 2.50 per kilogram for wheat. (v) The beneficiaries of EAS/JRY will be entitled to additional one kg of rice or wheat for each manday's work.

Management and Working of the PDS :

At the apex of the management of the PDS stood the Planning Commission, Govt. of India. It is the main policy formulation body of the govt. and decided the objectives. Though it looks very simple, it is very much complicated to implement because at the top, there is the plan and at the bottom the beneficiary of that plan. It takes a long time to pass through different stages which are again complicated. So, in order to remove complexity in the management structure of the PDS, it should be simple and direct by taking a few agencies, so that foodgrains can be reached quickly at the door step of the consumer. However the organisational design and structure of the PDS in India can be better reflected through the hierachical chart as given below.

ORGANISATIONAL DESIGN OF THE PDS IN INDIA

| | | |
|--|---|--|
| Policy Formulation | Govt. of India, Planning Commission | |
| Objectives | Decided by the Dept. of Food and Civil Supplies and Planning Commission, Govt. of India | Consumer Advisory Council |
| Implementation | Ministry of Food & Civil Supplies, Dept. of Food | CACP Recommends prices |
| Procurement | From Farmers, Traders/ Millers and Imports by FCI & NAFED | State Cooperative Marketing Federation Private traders as agents. |
| Distribution, Warehousing and Transportation | Warehousing Corporation, FCI Regional Depots | Wholesales flour mills export |

sections by identifying themselves as poor, misappropriating the distribution of cards and also taking advantage when the poor are unable to purchase the commodities from the PDS.

Besides these major problems the problems of high budgetary cost of running the PDS, all round price increases due to the large procurement by the Govt. and leakages from PDS are seen.

Ultimately these problems are threatening its long run sustainability "while the small impact on the poor is reducing its effectiveness".

Measures to improve PDS :

It has been observed that there is food security at the international level, at the country level, for several countries and at the regional level on the average but there is insecurity for individuals in the world particularly in the developing countries. The main reason for this insecurity is lack of purchasing power. If the PDS could be managed properly, it has a direct impact on nutrition. Several changes are necessary for better management of the PDS :

- (i) PDS may be replaced by food stamp scheme or other subsidy measures as it is done in Sri Lanka to avoid fiscal and administration costs.
- (ii) Introduce coarse grains to the PDS because the staple diet of the poor is coarse grains. If the poor or the rich want to buy fine or superfine varieties rice they can buy from the open market.
- (iii) Most people in urban areas keep ration cards to buy sugar. If this privilege is withdrawn by introducing Gur they won't buy any ration by which the poor people can be more benefited.
- (iv) If the govt. wants the poor to buy foodgrains, ration shops will have to be opened where the poor live and make sure that the people living there get ration.
- (v) PDS should be considered as a short term substitute for provision of access to food by providing purchasing power through development and employment schemes.

Conclusion :

From 1960's the PDS has been given a paramount importance for removing food insecurity. However, the system has its own disadvantages by which it is not fully successful. To overcome these disadvantages and to make it a successful one, the measures which are already discussed should be followed sincerely.

Food Security And Inequality In India

Tushar Kanti Das

Research Officer
Department of Analytical &
Applied Economics
Utkal University, Bhubaneswar

INTRODUCTION :

A society is said to be 'food secure' when there is access to adequate food by all for an active and healthy life. Food security can be ensured by (i) a regular supply of food, that is physical access to food and (ii) adequate purchasing power, that is economic access to food. Lack of any of these two factors results in food insecurity. When a given set of households lacks the purchasing power to buy food and hence is exposed to inadequate diet for all, it is called chronic food insecurity. Those households in poverty are exposed to chronic food insecurity. A temporary decline in access to food caused by instability in either food prices, or production, on household income causes temporary food insecurity.

Depending upon the nature and causes, there can be three approaches to tackle food insecurity. These are distinct as policy, but not mutually exclusive: (i) improve domestic availability through increased production or imports, (ii) a system of public distribution wherein, consumers are allotted a fixed quota of food grains at stabilized prices, (iii) improve ability to buy through the poverty alleviation programs involving partial or full wage payments in kind. Thus, the Public Distribution System (PDS) is only one of the instruments for achieving food security. In this respect it runs complementary to employment generation and other poverty alleviation programs. The last option will be effective and can be self targeting particularly with respect to the rural poor who cannot be reached by food price subsidies¹.

1. Suryanarayana, M. H. (1995) 'PDS : beyond implicit subsidy & urban bias—the Indian Experience', *Food Policy* Vol. 20, No. 4, pp 259-278.

The effects of the three approaches on food insecurity will be different depending upon the size and composition of the population group facing food insecurity. Broadly, these groups can be (i) the urban poor, (ii) the rural landless and (iii) the marginal and small farmers. The general belief is that what matters for the urban poor is physical area to food and that for the rural poor, economic access to food. Accordingly, a policy package consisting of food distribution programs for the rural landless and subsidized inputs and infrastructure for subsistence farmers is formulated. Something similar to this is what has been done in India till recently. The original considerations behind PDS in India were quite different from food security. During the first three five year plan periods, basic food items were provided at subsidized prices mainly in urban and food deficit regions in order to keep nominal wages low. The expected gains were growth in employment from the implicit wage subsidy.

As mentioned above food security can be ensured by (i) a regular supply of food, that is physical access to food and (ii) adequate purchasing power. A temporary decline in access to food caused by instability in either food prices or productivity or household income causes temporary food insecurity. The present study aims at assessing the inequality in foodgrains production in the three categories of states (high income states, middle income states, low income states, all states of India and in Orissa for the period 1990-91 to 1995-96.

DATA SOURCE :

Production of food grains data for the states of India for the period 1990-91 to 1995-96 for rice, wheat, coarse cereals, total cereals, total pulses and total foodgrains production are collected from the Economic Survey 1996-97 published by Ministry of Finance, Government of India.

METHODOLOGY :

The following two indices are adopted to measure the inequality in the states of India.

$$\text{Mean Logarithmic Deviation (L)} = \log \left(\frac{1}{n} \sum_{i=1}^n y_i \right) - \frac{1}{n} \sum_{i=1}^n \log y_i \dots\dots(1)$$

$$\text{Square of Coefficient of Variation (SCV)} = \left(\frac{\sigma}{\bar{x}} \times 100 \right)^2 \dots\dots\dots(2)$$

Both the inequality measures are differentiable, symmetric, homogeneous of degree zero and satisfies the decomposability property. Also both the measures satisfy the Pigou-Dalton condition². Here the above two mentioned criteria of inequality measurement are adopted as, Gini coefficient, Rawl's criterion of inequality are neither aggregative nor additive decomposable. On the other hand, Atkinson's measure and Dalton's measure of inequality though aggregative are not additive decomposable.

INEQUALITY IN FOOD PRODUCTION :

The variability in the foodgrains production in the three categories of states, all states of India and in Orissa as are estimated using the Mean Logarithmic Deviation (L) and Square of Co-efficient of variation (SCV) are presented in tables 1 and 2.

TABLE—1

Inequality Measure [Mean Logarithmic Deviation (L)]

| Categories States | Rice | Wheat | Coarse Cereals | Total Cereals | Total Pulses | Total Food grains |
|----------------------|--------|--------|----------------|---------------|--------------|-------------------|
| High Income States | 0.0007 | 0.0006 | 0.0074 | 0.0010 | 0.0088 | 0.0012 |
| Middle Income States | 0.0004 | 0.0047 | 0.0010 | 0.0004 | 0.0003 | 0.0004 |
| Low Income States | 0.0013 | 0.0012 | 0.0032 | 0.0006 | 0.0003 | 0.0004 |
| All States of India | 0.0004 | 0.0009 | 0.0023 | 0.0004 | 0.0007 | 0.0004 |
| Orissa | 0.0019 | 0.2527 | 0.0607 | 0.0016 | 0.0524 | 0.0024 |

Adopting the mean logarithmic deviation as a measure of inequality in the foodgrains production, the variability in the total food grain production is lowest in the middle income categories of states. This is followed by low and high income categories of states. In production of rice the variability is lowest in the middle income states. This is followed by high and low income categories of states. All states of India have also the same variability as the middle income categories of states. In the production of wheat the variability is maximum in the middle income categories of states followed by low and high income states. The variability

2. Bourguignon, F. (1979) "Decomposable Income Inequality Measures" *Econometrica*, Vol. 47, No. 4, July, Pp. 101-920.

lity of coarse cereals, total cereals and total pulses is lowest in the low income categories of states. The variability in the production of food-grains in Orissa is higher than all the three categories of states.

TABLE—2

Inequality Measure [Square of Coefficient of Variation (SCV)]

| Categories of States | Rice | Wheat | Coarse Cereals | Total Cereals | Total Pulses | Total Food grains |
|----------------------|--------|---------|----------------|---------------|--------------|-------------------|
| High Income States | 41.749 | 33.449 | 367.40 | 50.476 | 406.73 | 60.22 |
| Middle Income States | 18.925 | 262.95 | 54.878 | 20.823 | 15.922 | 18.970 |
| Low Income States | 66.385 | 68.480 | 182.07 | 31.511 | 62.124 | 29.769 |
| All States of India | 23.555 | 49.842 | 130.46 | 20.10 | 38.272 | 19.569 |
| Orissa | 99.678 | 12808.9 | 3246.0 | 87.403 | 2531.3 | 130.89 |

When square of coefficient variation (SCV) as a measure of inequality in foodgrains productions is adopted, this also indicates that the variability in the total foodgrains production is lowest in the middle income categories of states. The variability of production of rice, coarse cereals, total cereals and total pulses are lowest in the middle income categories of states. This is followed by low and high income categories of states. The variability in the production of wheat is lowest in the high income categories of states. This is followed by low and middle income categories of states. Here also the variability in the production of foodgrains in Orissa is higher than all the three categories of states.

CONCLUSION :

Food security demands (i) a regular supply of food, i.e., physical access to food and (ii) adequate purchasing power, that is, economic access to food. Lack of any of these two factors results in food insecurity.

In the production of total foodgrains the middle income categories of states are comparatively more secure among the three categories of states. This is followed by low and high income categories of states. Same is the case also in the production of rice, coarse cereals, total cereals and total pulses. In the production of wheat the high income categories of states are most secured. This is followed by low and middle income categories of states.

For all states of India, production of total cereal is most secured. This is followed by production of rice, total pulses, wheat and coarse cereals. Orissa also indicates the same trend in the production of foodgrains.

Given the inter-regional disparities in the foodgrain production, self-sufficiency and economic access to food, one option could be a broad based agricultural growth strategy coupled with combinations of different poverty alleviations and food distributional programmes to combat with the nature and causes of food insecurity in a given region.

Note : High Income States include Punjab, Haryana, Maharashtra and Gujarat. Middle Income States include Andhra Pradesh, Kerala, Tamil Nadu and West Bengal. Low Income States include, Uttar Pradesh, Bihar, Orissa, Madhya Pradesh and Rajasthan. All States of India include twenty five states.

Food security has been defined as "Access by all people at all times to enough food for an active, healthy life". In essential elements as the availability of food and the ability to acquire it. Availability is the function of production or import; while to acquire depends upon their purchasing power. Hence, an attempt is made in this article to study the influence of the above variables on food security in Orissa.

Objectives of the Study :

- The study has the following objectives :
- (i) To examine the relative impact of the different variables in influencing the level of food consumption ;
 - (ii) To evaluate the policy implications of the State in providing food security to the people who need such protection the most ; and
 - (iii) To suggest measures for improving food security.

Hypothesis :

- The following hypothesis needs to be tested :
- (i) Food policy of the state government has improved people's access to food ;

Food Security in India

(With Special Reference to Orissa)

Saroj Kumar Kanungo

Ravenshaw College, Cuttack

Providing food security to all the people living in this country is perhaps the most important unfinished task of Government. During the last forty years, the country as a whole has achieved an unprecedented progress in increasing food production. Yet a large proportion of the population is still hungry and malnourished. Estimates show that in an average 40% of the people in the country and 50% of the people of Orissa do not get the minimum food they need to prevent serious health risks and stunted growth in children.

Food security has been defined as, "Access by all people at all times to enough food for an active, healthy life."¹ Its essential elements are the availability of food and the ability to acquire it. Availability being a function of production or import, ability to acquire depends upon their purchasing power. Hence, an attempt is made in this article to study the influence of the above variables on food security in Orissa.

Objectives of the Study :

The study has the following objectives :

- (i) To examine the relative impact of the different variables in influencing the level of food consumption ;
- (ii) To evaluate the policy implications of the State in providing food security to the people who need such protection the most ; and
- (iii) To suggest measures for improving food security.

Hypothesis :

The following hypothesis needs to be tested :

- (i) Food policy of the state government has improved people's access to food ;

1. Aziz, S. 'Agricultural Policies for 1990s' Development Centre of the Organization for Economic Co-operation and Development, 1990.

Database :

Data about production of food, and per capita income have been collected from published sources like Economic Survey of Orissa, Economic Survey of India of different years. Exponential growth rate of per capita consumption expenditure on food and the number of people below poverty line have been calculated.

Data relating to rationed goods, employment avenues and income earned have been collected from primary sources, undertaking a survey in Kantapada Block of Cuttack district. The survey design followed is, "Stratified Random Sampling". Purposefully, the people below poverty line have been covered.

Analysis :

An attempt has been made to estimate the individual as well as joint impact of supply of foodgrains and income of the people on their level of consumption for the state. Income in the model is captured by incorporating per capita income and the number of people below the poverty line.

For the purpose, a multiple regression model has been estimated by using the Ordinary Least Square Method. While per capita consumption expenditure on food is the dependent variable, per capita income, production and people below poverty line are the independent variables.

TABLE-I

| Year | Y Per Capita Consump- tion Exp. on food | X ₁ Per Capita income in current prices | X ₂ Prod. of food in (000) tons | X ₃ People Below Poverty Line in Lakhs |
|---------|---|--|--|--|
| 1984-85 | 1249.89 | 1822 | 5607.26 | 121.748 |
| 1985-86 | 1492.05 | 2175 | 6967.89 | 123.935 |
| 1986-87 | 1472.97 | 2271 | 6377.92 | 126.114 |
| 1987-88 | 1496.97 | 2308 | 5048.58 | 133.997 |
| 1988-89 | 1817.34 | 2871 | 7001.93 | 136.254 |
| 1989-90 | 2036.99 | 3218 | 7973.4 | 138.538 |
| 1990-91 | 1910.82 | 3077 | 6942.3 | 140.658 |
| 1991-92 | 2426.24 | 3907 | 8273.0 | 143.670 |
| 1992-93 | 2554.79 | 4114 | 6980.6 | 160.636 |
| 1993-94 | 2880.82 | 4639 | 7289.8 | 163.846 |
| 1994-95 | 3202.49 | 5157 | 6898.8 | 167.09 |

TABLE-II

Parameter Estimates and Related Statistics of the Model are given below :

| | Constant | X ₁ | X ₂ | X ₃ | R ² |
|--------------|----------|----------------|----------------|----------------|----------------|
| Co-efficient | 587.8566 | 0.640 | -0.016 | -3.531 | 0.9981 |
| St. error | 32.814 | 0.057 | 0.018 | 3.596 | |
| T Value | | 11.089 | -0.875 | -0.982 | |

It is observed from the above table that per capita income influences per capita consumption expenditures positively and significantly while the other two variables are negatively related with per capita food consumption and their relation is insignificant. In order to test the individual impact, correlation co-efficients between the variables were calculated.

TABLE-III

| | | R ² | 't'-Value |
|---------------------------|----------------|----------------|-----------|
| Per Capita Income | X ₁ | 0.997 | 65.04 |
| Production | X ₂ | 0.285 | 1.89 |
| People Below Poverty Line | X ₃ | 0.931 | 11.09 |

Per capita income (X₁), No. of people below poverty line (X₃) and Consumption expenditure on food are significantly correlated, but X₂ (Production) is insignificantly correlated.

Hence, it is concluded that distribution of income rather than production influences the access of the people to food. In view of the above finding, the policy objectives of the State to protect the vulnerable section of the people from erosion in their consumption standard is quite appropriate.

Public distribution of foodgrains is resorted to facilitate steady growth of consumption and ensure fair distribution of foodgrains, particularly to the poor. It is visualized as an anti-inflationary as well as an antipoverty measure. Through assured supplies of essential commodities, it strives to soften the hardship caused to the consumers by rising prices. The poor benefit from the system as the commodities are supplied at fair and affordable prices. Public distribution of foodgrains increases food consumption of the poor and facilitates equitable distribution of food

among all. In particular, it is aimed at serving those who cannot compete in the open market to meet their food requirement. The system provides physical and economic access to the poor and vulnerable.

In India, as in other countries, the supply through public distribution system is heavily subsidised. Subsidised food (i) reduces malnutrition among low income groups, (ii) achieves food security, (iii) redistributes income in the economy. Given high income and price elasticity for staple food, particularly among the poor households, food subsidies in all probability results in larger food consumption which in its turn has a positive effect on the nutritional status of the hitherto malnourished amongst the poor. This fact has been substantiated by different writers like George (India). Ahamad (Bangladesh), Gavan (Sri Lanka) that 'ration' supply increases the calorie intake in all income groups. In order to examine the increase in demand for rice, the staple food in Orissa in the presence of P. D. S., a multiple regression model has been estimated with an ordinary least square method using the formula

$$Y = L + px_1 + fx_2 + fx_3 + u$$

Where

$$Dr = f(Y, P, r)$$

Dr = Demand for rice

Y = Per Capita Income

P = Price of rice in the open market

r = Quantity of rice distributed through the fair price shops.

The relevant data cover up a period of 15 years ranging from 1980-81 to 1994-95. The results are presented in the following table.

TABLE—IV

| | Constant | B | r | S | R ² | Drs Stat. |
|--------------|----------|-------|-------|--------|----------------|-----------|
| Co-efficient | 20.88 | 0.010 | 0.016 | -0.318 | 0.96 | 2.138 |
| St. error | 2.74 | 0.002 | 0.002 | 0.377 | | |
| 't'-Value | 7.59 | 4.27 | 6.02 | -0.84 | | |

It may be noted that X_1 , X_2 and X_3 taken together explain almost 96% of total variation in Y, i. e., rice consumption in the State. Per Capita Income and open market price of rice taken individually shows a direct influence on the demand for rice while rice distributed through fair price shops influences the demand for rice inversely. Increase in per capita income leads to increase in demand for rice which is corroborate

by the income elasticity of demand for rice which works out 1.08. Hence, it concludes that ration supply and the subsidised item lead to an increase in purchasing power of the people and ultimately increasing the food intake.

To assess the actual gain of the people in presence of P. D. S., a survey was conducted in Uttarana Gram Panchayat in Kantapada Block covering the people who are having the entitlement of rice from fair price shops and are stratified into four groups on the basis of their income. To calculate the actual gain of the consumers, the formula used is :

$$W_c = q_r (P_h - P_r) + q_m (P_h - P_m) + [(q_r + q_m) - (q_h - q_d)] P_m$$

Where

W_c = Consumers gain

q_r = Quantity of ration rice

p_r = Ration price of rice

q_m = Quantity of rice purchased from open market

q_d = Quantity supplied from domestic sources

p_r = Open market price of rice

q_h = Quantity which could have been purchased in the absence of ration supply

p_h = The hypothetical price in the absence of PDS

TABLE--V
GAINS IN QUANTITY CONSUMPTION (In kg)

| Sl. No. | Income Group | Ration Supply | Home Supply | Open Market Purchase | Total | Hypo-thetical | Gain |
|---------|--------------|---------------|-------------|----------------------|-------|---------------|------|
| 1. | Upto 750/- | 6 | 2.84 | 8.22 | 17.06 | 14.47 | 2.89 |
| 2. | 750-1000 | 6 | 3.00 | 9.00 | 18.00 | 15.30 | 2.7 |
| 3. | 1000-1250 | 6 | 5.00 | 4.00 | 15.00 | 12.65 | 2.35 |
| 4. | 1250-1500 | 6 | 7.37 | 1.37 | 14.74 | 12.42 | 2.32 |

Table V reveals that all income groups have a gain in quantity consumption in the event of public distribution system. But it is not a sufficient condition to have food security of the people below poverty line. These people need additional income which will help them in lifting the ration supply. In this regard, the survey reveals that the people have been provided on an average 60 mandays of work with

Rs. 25/- as the daily wage by different poverty alleviation programmes conducted at the Panchayat levels. The income generating programmes with P.D.S. have increased their ability to avail of more food and they are nearer to food security.

Hence, the following suggestions are made :

1. The public distribution system must be more target oriented to supply more foodgrains to the people below poverty line. This can be achieved without having much pressure on the exchequer by eliminating the people with high income from the purview of Public Distribution System (PDS).
2. Employment opportunities must be created at least for 100 days to provide additional income for the able bodied people.

Food Security System in India

Dr. Eswar Rao Patnaik

Reader in Economics

Govt. College, Bhawanipatna

Introduction :

The present paper concentrates on Food Security System in India. The study is based on secondary data. Food Security means not only sufficient supplies of food grains but also supplies at prices affordable by the poorer sections of society. Nutrition security refers to physical and economic access to balanced diet for all people at all times.

The credit for recommending the setting up of a new Food Security System goes to the Committee on Agricultural Policies, and programmes. The salient features of the Food Security System are as follows.

- i) Fixation of a range of prices for Farm Products with intervention and support limits ;
- ii) Government-controlled warehousing facilities in each cluster of 10-15 villages ;
- iii) establishment of producer-consumer links to redistribution links ;
- iv) targeting of food subsidies in cities to the poor ;
- v) storage of all food grain stocks above 15 tonnes only in government-controlled godowns ;
- vi) targeting of food subsidy in villages to pregnant women, mothers of children below the age of fourteen years, disabled and helpless people ;
- vii) Imposition of compulsory levy on farmers with holdnig above two acres.

II

JUSTIFICATION FOR PUBLIC DISTRIBUTION SYSTEM

Public Distribution System was introduced in India in 1939 in the form of rationing and price control to meet famine conditions. Since then, it has been retained in our economy as a permanent measure to ensure a regular supply of essential commodities to the economically weaker sections of society at Fair Prices. The Public Distribution System which had its origin at the recommendations of Dharia Committee covers essential commodities like, wheat, rice, oil, salt, match box, clothes and toilet soaps. Poverty continues to hold its sway over almost half of the population. The per capita net availability of cereals of an average Indian has picked up from 334 grams per day in 1951 to 471 grams in 1991. However, the per capita net availability of pulses has declined from 61 grams to 40 grams per day. The Public Distribution System is designed to provide low cost food to the poor and increase their national status.

III

MECHANISM OF PUBLIC DISTRIBUTION SYSTEM

One notable development in Food Security System was the establishment of F.C.I. in 1964. The F.C.I. specialises in the purchase, storage and movement of food grains in most of the states. The F.C.I. purchases food grains for central pool at procurement prices fixed by the government and issue price is reimbursed to the consumer as a subsidy.

The logic behind the maintenance of buffer stocks is that, in good years, when prices fall, the government steps in and buys; and in bad years when prices tend to rise, it unloads a part of what it has purchased. It is through this contracyclical purchases and sales, that price stability is sought to be achieved in the country.

The buffer stock procurement is an antidote to inflation. The government buys food grains in surplus areas, stores them with F.C.I. and sells food grains in deficit area. The operational stock is maintained to meet the requirement of Public Distribution System with an average of 15 to 16 million tonnes per annum. The other aspect of buffer stock operations is the "buffer", which, refers to the quantity of food grains estimated for meeting future contingencies. It is possible to believe that, the stock of food grains with public authorities acts as a safety valve against bad monsoon in future.

Food subsidy, which is a major part of non plan expenditure of the Central Government, is employed to finance the operations of food management of F. C. I on the one hand and on the other, it covers a part of expenditure, incurred to provide food grains to consumers at subsidised rate.

It is alarming to note that, the subsidy on food has phenomenally shot up from Rs. 28 million in 1992 to Rs. 55.4 million in 1993. The likely explanations for the underlying tendency are the increase in the economic cost of food management by F. C. I, leakage of food grains in form of losses, storage and diversion to market channels. Further, public authorities are committed to feed the masses at low prices. The policy initiative of the government has been to revise procurement prices upwards to provide incentive to producers. However, food subsidy can not be cost-effective because, bulk of the masses do not have purchasing power to buy food grains, even at reduced prices. Hence, the government strives to stimulate demand through reducing Public Distribution issue prices.

IV

FAIR PRICE SHOPS AND THEIR WORKING

Today, the Indian economy is served by 4.33 lakhs fair price shops. Each shop is envisaged to serve a population of 2000. The fair price shops make essential commodities available to the masses at a low rate. Economic analysts contend that, the access of Public Distribution System is confined to nearly 36% of population. It follows, that the benefits of development have not been shared by a vast segment of population.

There is a large body of consensus that, there is low public distribution allocations for states with concentration of high poverty ratios. Public distribution allocation for Orissa was only 6,70,000 tonnes of food grains in 1992 and the average lagged far behind the amounts of food grains allocated for Maharashtra a relatively more advanced state (1,81,70,000 tonnes)

In recent years, plan endeavour is directed to serve 1752 backward and remote blocks falling in drought prone areas, through Revamped Public Distribution System. The targeting of P. D. S to the poor by public authorities is expected to plug loopholes in the working of fair price shops. It is probable that, the unskilled worker requirement may deter the non-poor from participating in it.

IV

PUBLIC ACTION AND EMPLOYMENT OPPORTUNITIES

The masses do not have buying capacity. The argument advanced by planners of the country that, expansion of employment opportunities on a large scale in rural areas may contain poverty in country side. It is endorsed by many, that, a person derives income from use of assets or performance of work.

The success story of Employment Guarantee Scheme, which was introduced in Maharashtra reveals that workers of Maharashtra have improved their bargaining strength with their employers leading to an upward revision of wages. The impact of E. G. S wage rate on agriculture wage rate is positive.

It is possible that, the use of food stamps in EGS has reduced leakages. The traders would stock food only to the extent, that, they can stock food stamps. It is believed that, the EGS has reduced underemployment from 10 to 30% of total days of underemployment.

The focus of J. R. Y was to create employment opportunities in rural areas in productive schemes like, irrigation and Indira Awas Yojana. The hope of eliminating poverty from the country by creating wage employment opportunities has not been realised. The progress achieved in employment generation appears to be very poor. The targeting performance of J. R. Y is far from being satisfactory, because, 50% of households benefited from J. R. Y were above the poverty line. The quality of assets was found to be poor in states like Bihar, Assam, Tamilnadu & Maharashtra.

V

PROCUREMENT PRICES AND THEIR IMPACT

It is instructive to note that, the amount of food grains procured in the country depends on foodgrains production. So, with a view to achieving a spurt in foodgrains production, the procurement prices of cereals have been revised upwards by planners of the country. Economists like, Raj Krishna and Prof. Dantawala believe that, a subsistence crop does not respond favourably to price incentives. The principal objectives of price policy are : 1. To boost agricultural production by assuring the producer that the price of his produce will not fall below a limit ; 2. To prevent excessive rise in prices and thereby protect consumer

interest; 3. To stabilise prices, to curb speculative activities; and to ensure against erosion of farm incomes due to adverse terms of trade between agriculture and non-agricultural sector. The support prices for agricultural commodities are fixed by the government in line with the recommendations of Commission for Agricultural Cost and Prices.

CONCLUSION :

To sum up, there is lacklustre performance of Food Security System in India. The trend may be reversed by commitment to goals of plan and adoption of prudential norms in management of F. C. I and various warehousing corporations. Our Food policy in the ensuing years may have to reveal marked consistency away from drift. Action oriented programmes may be taken up to increase foodgrains allocations to poorer states. A vast segment of population is not covered by Public-Distribution System. The failure can be remedied by establishing vigilance committees in the jurisdiction of each fair shop and by ensuring that supplies are delivered in the presence of vigilance committees.

In schemes like J. R. Y, efforts may be made to encourage selection of target groups by villagers themselves in village level committees. The measure may deter the flow of benefits to ineligible groups.

PROCUREMENT PRICES AND THEIR IMPACT

It is instructive to note that the amount of food grains procured in the country depends on foodgrains production. So, with a view to achieving a specific foodgrains production, the procurement price of food grains has been revised upwards by 10% in the country. Economists like Dr. K. V. Reddy and Dr. D. S. Ranjane believe that a much better approach would be to pay a premium to the farmer for the foodgrains produced in excess of the target. The principal objective of this policy is to ensure that the farmer is not left behind in the process of increasing the production of foodgrains. The present excessive rise in prices and thereby profits of the

Food Availability Trends and Problem of Food Security in India

Dr. Sridhar Behera

Reader, Post-Graduate

Deptt. of Industrial Economics,

Govt. College, Angul.

INTRODUCTION :

Food security of a developing country like that of India is of utmost social and economic importance from the view point of true economic development. During different phases of agricultural development in India, although the purpose was to enhance food availability for a secured food economy the end result did not compensate the policy objectives. In this paper we analyse the food availability trend in India during the post independence period. The post-independence period is divided into two sub-periods viz., 1950-65, the pre-green revolution period and 1967-68 onwards as post-green revolution period in which the period of liberalisation is overlapping.

THE PRE-GREEN REVOLUTION PERIOD (1950-65) :

The agricultural economy during the transitional period of independence and five year plans in India was stagnant. The rate of population growth was relatively low but mortality rate was relatively high till 1951. When the first plan was launched, the country entered into an important phase of agricultural development through an increasing emphasis on agriculture, reorientation and increasing agricultural infrastructure. The performance of agriculture in terms of growth rates for the period for 1952-53 to 1961-62 is considered first because no uniform data are available for the earlier years. Moreover, since the first plan started from 1951-52, this year was regarded as the beginning year and hence it was not considered for the analysis of growth rate of production.

During the first ten year period from 1952-53 to 1961-62, the growth rate of production of all crops was 3.23% per annum. The growth rate of production of food grains was 2.66% which was lower than the growth rate of 4.40% in case of non-foodgrains. Productivity also rose

faster than area in case of foodgrains. Similarly, contribution of rate of growth of productivity to growth of production was higher than that of area. However it is important to note that the growth rate of domestic production of foodgrains (2.66% per annum) was higher than the growth rate of population (2.26% per annum) during the first decade of planning in India. All India linear growth rates for crops during 1952-53 to 1961-62 are presented in table - 1.

TABLE-1

All India Linear Growth Rate during 1952-53 to 1961-62
(Average 1952-53 to 1954-55=100)

| | Agricultural production (%) | Area Under Crops (%) | Agricultural productivity (%) |
|---------------------|--------------------------------|-------------------------|----------------------------------|
| (i) Foodgrains | 2.66 | 1.10 | 1.45 |
| (ii) Non-foodgrains | 4.40 | 2.38 | 1.74 |
| (iii) All-crops | 3.23 | 1.31 | 1.76 |

Source : Govt. of India, Ministry of Food and Agriculture, Growth rates in Agriculture, 1964.

Higher growth in production in comparison to lower growth in population led to better improvement in the food availability and better management in India's food economy. This was due to increase in investment in agriculture, increase in provision of irrigation, good monsoon and shift in emphasis on agriculture with the objective of growth, social justice and self-reliance. Even though, there was wide variations in the growth performance of individual crops, the overall increase in production was due to the growth of area in the case of wheat and gram.

In the second decade i.e. 1961-62 and 1970-71, the food availability trend was also better since the foodgrains output as a whole has shown substantial increase. The improvement was mainly due to the greatest increase in production of wheat as a result of the initial success of green revolution in the country. The rate of growth of output of foodgrains for the trienniums and 1970-73 stood at 2.74% which was marginally higher by 0.08% over the previous decade. The food availability trend would have been better but the trend rate was slightly higher due to two consecutive droughts during this decade.

During the first two decades of planning in India the food availability trend was improved no doubt but there was need to import foodgrains to meet the basic requirements of the growing population. Despite

the improvement in production and productivity and agro-climatic condition, India was a net importer of foodgrains like rice and wheat till the 1960's. The net import of foodgrains as a percentage of net availability of foodgrains was ranging around 8% till 1965. This implies that whatever improvement in the food front in India was made, those became insufficient against the growing population. However, the situation improved and the country stood at a better position after the success of green revolution in the late sixties.

THE POST GREEN REVOLUTION PERIOD :

The annual growth rate in production of foodgrains during the period is analysed in two separate periods overlapping each other viz. 1967-68 to 1992-93; the post-green revolution period and 1980-81 to 1992-93, the post green revolution and liberalisation period. The total production of foodgrains increased from 50.8 million tonnes in 1950-51 to 191.1 million tonnes in 1994-95 and around 200 million tonnes in 1995-96, thus showing a four fold increase. Total production shows a continuously increasing trend except the year 1991-92. On the contrary, population increased from 361 million in 1951 to around 900 million in 1994 showing a two and half times increase. Thus, foodgrains production increased more than the increase in population. This shows better food availability trend than that of the pre-independence period.

The compound growth rate in production of foodgrains stood at 2.89% during 1967-68 to 1992-93 which is higher than the earlier two decades. This was due to the green revolution in India but in the growth rate of individual foodgrains there was wide variations. For example the annual compound growth rate for rice was 2.84% whereas it was 4.89% for wheat and 0.94% for pulses. It is also established that the green revolution became more successful in wheat while there were wide variations in other food crops. The growth rate during 1980-81 to 1992-93 for foodgrains was 2.84% which was a little lower than the period 1967-68 to 1992-93 with some variations in the growth rates of individual foodgrains. The annual year to year change in the growth rate from 1990-91 to 1994-95 also shows positive growth except for the year 1991-92.

We now turn to examine the food availability trend in terms of index numbers of agricultural production, area under principal crops and yield of principal crops with 1981-82 as the base year. On the basis of population index, compound growth rate of population was 2.17% during 1980-94 which was lower than the growth rate of foodgrains. The index

number of foodgrains production shows that the growth rate was 3.1%, 4.8% for non-foodgrains and 3.7% for all commodities. The index of both foodgrains and non-foodgrains rose although but non-foodgrains production rose more than the foodgrains during the period.

The Index of area under principal crops for all commodities increased throughout the period under reference no doubt but the index of area under non-foodgrains increased from 99.4 in 1980-81 to 126.0 in 1993-94 whereas the index number of area under foodgrains decreased from 99.8 in 1985-86 to 96.5 in 1993-94 except with a slight increase in 1985-86 and 1990-91. It may be inferred that liberalisation and export oriented agriculture have increased the area under non-foodgrains and secular decline in the area of foodgrains which ultimately affects the food security for the poor. However, the compound growth rate of yield of foodgrains was 2.88% which was higher than that of non-foodgrains which stood at 2.32% and all commodities at 2.62% as the index numbers of yield of principal crops show an increasing trend during the period.

The net availability of foodgrains increased although during both pre-green revolution and post-green revolution period and also the net production except in the year 1992. The net import as a percentage of net availability increased upto 1965 i.e. the pre-green revolution period and decreased thereafter except for the year 1975. Procurement and public distribution also increased during the post-green revolution period. The net imports decreased substantially during the post-green revolution period showing an improvement in the matter of food security no doubt but it was not due to better self sufficiency in food rather due to better management of food economy through procurement and public distribution system. In contrast to the pre-independence period, there was a sharp improvement in the situation only in respect of the management and administration of food availability through state effort. The net production and availability of foodgrains was affected in some years due to natural calamities.

In terms of per capita net availability of foodgrains, the food economy of India does not show a promising trend. The situation improved no doubt but the increase is not perceptible as the trend is very much fluctuating. In comparison to the increase in the size of population the increase in net availability of foodgrains is not at all promising. For example the population increased from 551.3 million in 1970-71 to 899.9 million in 1993-94 whereas the net availability of foodgrains increased from 468.8 grams in 1970-71 to 474.2 grams per day in 1993-94. When we

divide the total foodgrains into cereals and pulses we find that the per capita net availability of pulses rather decreased while cereals showed a mixed trend during the post green revolution and liberalisation period. It is thus clear that although we have achieved some improvement in food front during the post green revolution period, the food availability does not adequately compensate as per the growing population.

The index of agricultural production based on the triennium ending 1981-82 shows two distinct trends viz. a trend upto 1985-86 and another trend after 1988-89. The index of production for all the commodities has shown altogether an increasing trend after 1988-89 compared to earlier period. The index of production for non-foodgrains has shown an increasing trend compared to foodgrains upto 1985-86 but the opposite happened after 1988-89. This may be regarded as a healthy sign of agricultural development in India. However, considered from the angle of food security for the poor, it may not be promising. Because whenever the question of food security arises it is definitely from the view point of the availability of foodgrains for the poor; indeed the poor farmers are never the beneficiaries of either green revolution or liberalisation of agriculture.

The overall trend in the foodgrains production in the post-independence period is no doubt better than the pre-independence period but the per capita net availability of foodgrains is quite less in comparison to the developed and some developing countries. Putting in terms of the population index, the growth rate of production of foodgrains is undoubtedly greater than the growth of population in the post independence period. But it can not be claimed that the Indian food economy is secured. Actually the question of food security is to be considered from the view point of the poor since their expenditure on food items is substantial and the demand for food is less elastic. Unless there is improvement in the actual availability of foodgrains for the poor, we can not improve our food economy. Thus it seems reasonable to argue that, the situation in the food front was more or less similar over time and what we have achieved is some improvement in the distribution system.

In India the food availability is badly affected by poor post-harvest storage and warehousing facilities. It is observed that due to lack of adequate infrastructural facilities, the farmers are not getting good support prices for their product at the time of harvest. For example, in coastal Orissa, the rice growers are not able to sell their rice at a proper price in the absence of co-operative marketing facilities and this

acts as a disincentive for future production. Similarly, in Karnataka, the fruits and vegetable growers are getting unremunerative prices for their products at the time of harvest. In the absence of storage facilities at the village level, the farmers could not but sell their products at a very low price at the time of harvest. This affects the food availability and the future production and growth.

This view is very well corroborated by the views expressed by R. Gopalkrishnan in the second international conference on food processing held in Chennai in 1997. According to him, India does not have an adequately productive food chain. He further adds that in the absence of proper post-harvest storage-cum process system, wastage of foodgrains is as high as 25 to 30%. Only 2 % of the fruits and vegetables produced in the country are processed, thereby depriving higher income for the growers through value addition. Thus there is an urgent need to set right the existing mis-match between production and post-harvest technologies. Therefore, the study suggests an effective role of the state in the matters of post harvest infrastructure facilities for adequate storage and warehousing for foodgrains which will help in a positive growth in the availability of foodgrains for the poor.

CONCLUSION AND SUGGESTIONS

The pre-British period food economy was quite secured due to the presence of self sufficient village communities. The opening up of agriculture, colonialisation and feudalistic land tenure system during the British period affected the food availability and thus food security for the poor was severely undermined. The growth rate of population was three times of the growth rate of agricultural production which resulted in severe food scarcity.

The food availability trend was relatively better during the post independence period due to increase in investment on infrastructure, plan outlay on agriculture and success of green revolution in the 1970's. Production of foodgrains have shown a fourfold increase and population a two & half fold increase since 1951. Although the gross availability of foodgrains increased, the net availability of foodgrains have not shown any perceptible improvement. Similarly the post-liberalisation impact on food security is also not good. Agricultural exports and large scale diversification of land towards commercial crops have led to decline in the area for foodgrains production and ultimately fall in availability of foodgrains for the poor.

for the poor.

Structural Adjustment in India And its Impact on the Food Security

Dr. G. B. Nath

Reader & Head of the Department,
L. N. College, Jharsuguda

Indian Economy is passing through far reaching changes since 1991. The changes otherwise termed as 'new economic policy', have affected different social groups and classes differently. However the scope of this paper is limited to the extent of analysing the impact of Stabilisation and Structural Adjustment Programme (S and SAP) on the food security in India. More particularly the paper raises the issue whether agricultural policy reforms, such as cut in the subsidies on agricultural inputs, deregulation of grain market, dismantling in the public distribution system (PDS) etc. would ensure higher agricultural productivity and efficient allocation of resources and guarantee food security to the growing population.

A paradoxical situation has been arisen in India where planned economic development in the last fifty years has transformed the traditional agriculture into a modern one; raised agricultural productivity, attained self sufficiency in food grains, diversified the cropping pattern etc. Increase in the food grain production in successive years has already reached to 190 million tonnes and avoided Bengal like famine of 1943, built up a huge buffer stock of 30 million tonnes of food grains. However agricultural growth has not been accompanied with adequate availability of food to the vast majority of the people belonging to poor peasants and agricultural labourers. As a result despite growth in agricultural output hunger and undernourishment are persisting among these social groups. In view of this the present paper argues that the outward oriented market driven export led growth policy followed by government of India has undermined the country's food security and plunged substantial sections of the people to a declining level of food consumption.

II. Structural Adjustment and Agricultural Policy :

Since 1991 though trade, industry and banking have witnessed phenomenal change due to restructuring of the economy there has been

no significant change in agriculture. Only World Bank (WB) has proposed certain changes in the agricultural policies in the country memorandum (1991). Some of the recommendations of the WB are (1) reduction of the subsidies on agricultural inputs such as fertiliser, electricity and water, (2) deregulation of the grain market, (3) liberalisation of policies regarding international trade in agricultural commodities, (4) Scaling down the government procurement operations, (5) reduction of the role of food corporation of India, (6) dismantling the PDS, (7) introduction of patents rights in agriculture etc. Government of India and various state governments are implementing these though the speed of implementation is not so vigorous.

It has been argued that liberalisation and globalisation in agriculture would improve the terms of trade in favour of agriculture and Indian farmer would reap much more benefit by exporting non-traditional items like horticulture, floriculture and dairy based products, poultry, marine products etc. The diversification of agriculture would raise farm employment, productivity and improve the socio economic position of the weaker sections by reducing poverty and inequality. It has also been suggested that involvement of small and marginal farmers in the process of change may also avail the benefits of increasing growth, agricultural diversification and export. Farm lobby in India is also demanding for the integration of the Indian agriculture with the world market and treatment of agriculture as an industry. Demand has also been made for the removal of ceiling on land holdings, restriction on tenancy laws etc.

III. Effect of Agricultural Reforms on Food Security :

Food security implies ensuring the availability of foodgrains to the population at the affordable prices. More particularly the vulnerable sections of the people are to be protected from the high price of foodgrains. It presupposes the availability of adequate amount of purchasing power to buy the food in the market. It also means building up of large buffer stocks of foodgrains in the year of abundant production and use these in the years of low production to stabilise the food prices. Hence there has been state intervention in the foodgrain market in India in the form of restrictions on the movement of foodgrains for export, govt. procurement of foodgrains, involvement of Food Corporation of India in the procurement and buffer stocking, providing subsidies to agricultural inputs, distribution of food-grains at fair price shops, declaring support price for crops etc. These measures are on the one hand to ensure food to the poorest of the poor at the affordable prices and on the other hand to provide remunerative prices to the farmers.

In recent years the international funding agencies like WB and IMF are putting pressure to reverse these policies and accept trade liberalisation as the key to food security. Liberalisation in agricultural policies includes deregulation of the grain market and international trade in agricultural commodities. No doubt this would boost agricultural export and the country would earn precious foreign exchange. In fact it has been reported that export of agricultural commodities has been increased in the country after 1991. There has been diversification of cropping pattern and we are gradually shifting from the cultivation of low profit consumption crops to high profit cash crops. Particularly during 1980-83 to 1992-95 there is a decline in areas under coarse cereals and an increase in area under oil seeds and other high value crops (Bhalla and Sing 1996). Many other keen observers of Indian agriculture have also observed the slowing down of foodgrain growth in post liberalisation India. Utsa Patnaik anticipated the trend of displacement of food grains by export crops on the basis of experience of other developing countries under SAP in the 1980's (Patnaik 1996). This diversification of cropping pattern in favour of cash crops like oil seeds, fruits, vegetables and flowers would raise export but it would not provide food security to the vast majority of poor people whose staple foods consist of coarse grains.

The staple food crops of the poor peasants, when displaced by tradable and exportable crops affect the poor peasants and agricultural labour households reducing the food availability for their consumption. Cash crops, horticultural products and other superior variety of cereals are being demanded by the upper section of the households both in Urban and Rural areas. This is nothing but a shift of resources from the most urgent food needs to not so urgent needs. Hence the argument that market would allocate the scarce resources most equitably is a hollow one.

It is a long practice in India to stabilise the fluctuation in the food grain prices through PDS. Hence there is a network of fair price shops throughout India. Again since 1992 the coverage of people under fair price shops has been enhanced by resorting to Revamped PDS in drought prone, tribal, hill and arid areas having low infrastructure. Now there is a growing body of critical studies on PDS. It has been alleged that the present PDS actually does not serve the people who need them most due to the universal nature of supply of subsidised grains. Thus an indiscriminate subsidy is given to all income groups in Urban areas, but bulk of the poor living in the rural areas are neglected (Dev and Suryanarayana 1991). Again in recent years the issue price and market price of crops supplied through PDS have been narrowed down. This has

disabled vast majority of people buying from the PDS. The poor people who need the subsidised food most do not have the purchasing power to buy them and the better off people do not buy them from PDS due to easy availability of superior quality grains from the open market. Thus as has been shown by Swaminathan (1998) between 1991 and 1994 the issue price of common variety of rice rose 85.8% and the issue price of wheat rose 71.8%. The off take of food grain from PDS has fallen from 17.2 million tonnes in 1992-93 to 15 million tonnes in 1993-94 and further to 13.2 million tonnes in 1994-95 (EPW editorial). Between, wheat and rice the decline in off take was more pronounced for wheat than for rice (George 1996).

In this context, policy makers and scholars in India are suggesting for (1) excluding certain groups of people from the PDS, (2) better targeting, (3) commodity based targeting, (4) Issue of food stamps, (5) restricting distribution in backward areas etc. However in view of the fact that a small number of rich people are supposed to be excluded from the PDS in the new policy set up, there is counter argument against targeting of PDS.

In spite of all the defects, PDS and public buffer stocks, have insulated the food economy from significant fluctuations in prices in the open market. (Khanna 1993) Hence PDS has been working in providing food security to the poor.

Availability of food grains is not sufficient. It must be backed by adequate purchasing power to buy them. Hence overall economic growth, distribution of productive resources, assured employment and income, poverty alleviation etc. are also intimately associated with food security. However as seen above since long we have abandoned structural reform in agriculture by undermining the land reform measures. On the contrary we have emphasised technological reforms by adopting green revolution which benefited rich farmers. Further, green revolution has increased land alienation, small farms passing on to richer ones, which may be called reverse tenancy. This reverse tenancy has reduced employment and decreased income of small and marginal farmers and agricultural labourers. Thus inspite of increased agricultural production, due to lack of purchasing power, there is no food security for the poor who are depending on agriculture. In other words stabilisation and structural reform emphasising diversification of agricultural production, export of agricultural goods, reduction of fiscal deficit, technological development, open competition, reduction of subsidy and so on have neglected human element in economic change.

Economic Reforms, Agricultural Production and Food Security : The Indian Experience

Dr. B. Swain

M. A. (Utkal), M. Phil/Ph. D.

JNU, New Delhi

ABSTRACT

This paper is concerned with the impact of the economic reforms undertaken by the Govt. of India in 1990s on the nature of development of agriculture and on food security in India. In the mid 1960s the Govt. of India shifted the emphasis from institutional reforms to technological reforms to increase the food grains production and ensure food security to a growing population. The state played the crucial role in introducing the new agricultural strategy in the form of a package of complementary biochemical inputs in some agriculturally advanced areas with assured irrigation facilities to augment productivity. This not only widened the inter-regional and intra-regional disparities but also encouraged a capitalist mode of production in agriculture. However, the strategy substantially increased the agricultural output and the nation achieved reasonable self-sufficiency in foodgrain production. But when it was argued that the green revolution should be extended to the agriculturally backward regions, the Govt. of India introduced economic reforms in 1990s under the tutelage of the IMF and World Bank.

The basic features of reform process are the withdrawal of the state from economic functions, a tight fiscal and monetary policy, removal of protection and subsidies, export promotion and encouragement to agricultural exports with thrust on commercial crop production. It is argued that this export oriented reform process will severely affect the food security in India not only in terms of food availability but also in terms access to food.

The objectives of the paper are the following.

- (i) To examine the impact of reforms on the structure of agricultural production.
- (ii) To find out the impact of reforms on the public investment in agriculture.

- (iii) To look in the position of food security at the national level in the post-reform period.
- (iv) To analyse the problems of inter-state variations in food security and the implications of these variations.

This paper is in three parts. First, a brief discussion has been made on the issues related to the reform process and food security. The second section deals with the Indian experience drawing conclusions on the basis of available official data. The final and the last part deals with the policy implications.

Main Findings :

- (i) It is observed that the compound growth rate of total foodgrain output has declined to 0.97% during the period 1990-91 and 1995-96 as compared to 3.13% growth rate during 1980-81 and 1990-91. It is due to a decline in area under foodgrains by 0.68%.
- (ii) The area under the coarse cereals has declined by 0.73% and this led to a smaller increase in the output of these cereals. It may be noted that coarse cereals are consumed by the poor and this tendency may adversely affect their access to food.
- (iii) The area under the non-food grains has increased at the compound rate of about 2% in the post-reform period. It indicates that there is substitution of commercial crops to foodgrain crops.
- (iv) The share of public investment in gross capital formation in agriculture has declined from 25% to 21%.
- (v) The per capita net availability of food grains per day were 410, 476 and 498 in 1980, 1990 and 1996, respectively. Thus there is a marginal increase in per capita food availability in the post-reform period. However, the increase was low compared to that in the previous decade.
- (vi) The state-wise analysis of foodgrain production shows that there were only seven surplus states according to Sukhatme's norm of 503 grams per capita per day in 1990-91. This number has gone down to six in 1995-96.
- (vii) It is found that except Punjab and Haryana most of the surplus states in per capita foodgrain production are not developed states. These include Orissa, Uttar Pradesh, Madhya Pradesh, Himachal Pradesh and to some extent Rajasthan.

Policy Implications :

It is thus found that the reform process has shifted the area under foodgrain crops to commercial crops and public investment in agriculture has declined. The national per capita availability of foodgrains per day does not satisfy Sukhatme's norm. Most of the less developed states are nearer to Sukhatme's norm while the more developed states are showing severe food deficit. It is because these states are substituting commercial crops for foodgrains. The poorer states are giving more land to foodgrain crops due to distress conditions. In fact the states like Kerala, Tamil Nadu, Gujrat and Maharashtra have access to food though they are deficit states. The central Govt. should rationalise the PDS in such a way that more foodgrains should be directed to these so called surplus states as the incidence of poverty in these states is high. Finally the policy makers should reformulate the investment and follow a subsidised policy in agriculture which can reverse the slow-down in the growth rate of foodgrain production and ensure food security to all in a reasonable time frame.

Food Security and Public Distribution System in Kerala : A Case Study

Mihir Kumar Mahapatra

Deptt. of A & A Economics
Utkal University, Vanivihar,
Bhubaneswar-751004.

ABSTRACT

The study aims at examining the Food Security in Kerala by considering the functioning of PDS in the state. In this direction the patterns of consumption of various commodities and dependency of various groups of H. Hs on PDS outlets are taken into account. Around 50% of the requirement of various food items, that are available in PDS outlets only, are met by the PDS. Among all the commodities, around 66% of the Sugar requirement and total consumption of Kerosene are fulfilled by the PDS outlets. The average consumption of various item from PDS outlets are comparatively higher than that from Open Market. Infact, the major baneficiaries of PDS are the H. Hs in the income group of 301-1000 though their dependency on it, is comparatively lower than that of the lowest income group (0-300). On the whole, the PDS is functioning well in the study region.

Food Security in the North-Eastern States

Shipra S. Nayak

Researcher, NERIST

ABSTRACT

In North-Eastern States, agriculture is in a depressed condition. Many cultivators are adopting shifting cultivation. The number of people depending on agriculture is large. But they do not get adequate employment. Agricultural labourers are increasing in different states. Food insecurity is considerable due to low level of purchasing power of most of the people. In order to increase food security, there should be improvement in the productivity of agriculture and additional employment and increasing purchasing power should be created by starting a number of agro-based industries.

**CO-OPERATIVE MOVEMENT
IN
ORISSA**

CO-OPERATIVE MOVEMENT
IN
ORISSA

OMFED—A Landmark in the Co-operative Movement in Orissa

Sri B. K. Tripathy

Director, E. & S.

&

S. Gopangana

Asst. Director

Over the years OMFED has become a household name in Orissa. OMFED milk packets, ghee and curd have become items of common use in daily life. The OMFED booths supplying the above items are common sites at every street corner. But the most significant of the OMFED success story is perhaps the least noticed. The OMFED trade mark carries the caption "The Most Trusted Milkman Around" which in fact it is. But OMFED is not just one milkman, it is the culmination of a movement of milkmen from hundreds of milk producing villages throughout the state through the co-operative movement parallel to a similar movement launched at Anand a couple of decades back. The success of OMFED is the best example of the co-operative movement during the last fifty years of Orissa.

There are three types of co-operatives, such as, credit co-operatives, functional co-operatives like dairy societies and service societies like marketing societies. This paper tries to analyse how OMFED, a functional co-operative has been started and prospered on the basis of co-operative development.

The successful operation of dairy co-operatives came into existence through the Operation Flood Programmes. Operation Flood, the biggest dairy development in the world is the brainchild of Dr. Verghese Kurien. Funds for implementation of this programme were generated by the sale of donated milk powder and butter oil. Thus this became the first programme in India under which food aid had been used for increasing indigenous production and improving the facilities for processing and marketing.

Operation Flood-I was launched in 1970 by Govt. of India with the twin objectives of ensuring a remunerative price to milk producers around the year through producers' co-operatives and providing regular supplies of milk to consumers at a reasonable price. Thus the main area of this programme was to replicate the "Anand Pattern" milk co-operatives in the rural milk sheds and link these with the urban milk markets. The Operations Flood-I covered in Delhi, Bombay, Calcutta and Madras were the major milk demand centres. The National Dairy Development Board (NDDB) and the Indian Dairy Corporation (IDC) played a significant role in the operation and development of dairy co-operatives. The NDDB had undertaken the herculean task of conceiving, planning and developing this largest dairy development project. And the IDC, on the other hand handled the commercial and financial transaction of "India WFP Project-618" which is popularly known as Operation Flood.

The success of Operation Flood-I through remarkable achievements led to the implementation of Operation Flood-II in 1979. This programme covered the whole country over a period of 7 years by making nearly 25 cluster federations covering 155 co-operative unions. In this programme three-tier system of co-operatives was established at state level and all milksheds and consuming centres got linked with NPG. The Operation Flood-II was concluded in 1987 and was followed by Operation Flood-III.

The state dairy federations are the implementing agencies for each state's dairy development programme under Operation Flood-II. Accordingly the Orissa Milk Federation (OMFED) came into existence under the rules and regulations of Operation Flood-II in 1980-81. The OMFED was established with the financial assistance of the IDC and technical knowhow of the NDDB.

The basic unit in the Anand Pattern Milk Co-operatives is the village Milk Producers' Co-operative which is a voluntary association of milk producers of a village for marketing their milk collectively. All the village milk producers co-operatives in a district are members of the District Co-operative Milk Producers Union. Any milk producer can become a member of the co-operative society. At a general meeting of members, representatives are elected to form a managing committee which manages the day-to-day affairs of milk collection and its testing for fat content, sale of cattle feed and the like. Each society also provides artificial insemination services and veterinary first aid to member milk producers. The village societies also market nutritionally balanced compound cattle feed produced by the cattle feed plant owned and operated by the district level union/state level federation.

The Primary Milk Producers' Societies are affiliated to a district union which owns and operates milk chilling plants and distributes semen by dove-tailing with the Govt. of Orissa.

The Union also operates a network of veterinarians to provide routine and emergency services for animal health care. The village societies elect the Board of Directors of the Union which is responsible for the day-to-day management of the Union's centralised facilities like organisation and supervision of societies, milk procurement, chilling and despatch of milk to the state level dairy plant with the supply of technical inputs to the societies. Each Union is professionally managed by a General Manager who reports to the elected chairman and Board of Directors. The Union is able to ensure that the milk producers get 80% to 90% of the lean season price even in the flush season with the help of the milk plant existing at the state level. The Orissa State Co-operative Milk Producers' Federation or OMFED is the apex level body of the district unions.

In the Operation Flood-II four districts of Orissa namely, Cuttack, Puri, Dhenkanal and Keonjhar were selected for operation which covered 24 tehsils as milk potential pockets. Milk unions were set up in Sambalpur and Kalahandi at later stage during Operation Flood-III.

The success and prosperity of the dairy co-operatives in Orissa are explained below which indicates the progress in OMFED in different related aspects, such as—

1. Rise in the number of DCS from 52 to 881 along with rise in the membership from 3328 to 70,609 over the 15 year period signifies the fact that dairying on co-operative basis has been accepted as the most important source in contributing to the income of rural areas.
2. Further rise in milk procurement from 1.157 million kgs to 20.594 million kgs., milk marketing from 1.23 mln. ltrs. to 29.894 mln. ltrs, S. F. M. sale from 2299 to 2,85,070 bottles, and ghee sale from 6.665 mts. to 287.9 mts. confirm the fact that OMFED, a co-operative organisation has grown into a large business enterprise.
3. In brief, the aggregative impact of ideal organisational structure and management practices of dairy co-operatives in Orissa has been successful in developing faith in co-operative group action which is a system for social and economic betterment of people through their access to the organisational activities and finally their equitable share in the benefits of such activities.

It is a fact beyond doubt that of all the types of agribusiness co-operatives, the dairy co-operatives under the name of OMFED have proved that a strong co-operative system which is determined to maintain its independence can flourish. Most of the agribusiness co-operatives are in a sorry state of affairs despite their overwhelming importance in the rural economy. It is because most of them suffer from various organisational, managerial weaknesses. The reforms launched by India's New Economic Policy have not been able to liberate the co-operatives from the archaic co-operative laws, undue vested interest and lack of professional management. OMFED, the dairy co-operatives in Orissa has struggled hard against all these difficulties to establish itself. However the basic principles which are responsible for the satisfactory functioning of dairy co-operatives are as follow.

1. Creation of conditions to make the farmers realise the need to co-operate for their common good instead of imposing it on them. Thus, a need for a co-operative should first exist.

2. Running a co-operative dairy on running business means that business principles should always guide the policies of the dairy co-operatives.

3. Engaging trained & skilled personnel of various types like dairy technologists, chemists, bacteriologists, dairy engineers, accountants, auditors, managerial executives are necessary for its successful operation.

4. Any dairy co-operative will embrace a very large number of farmers in its fold. The temptation to utilise such a large organisation of farmers to serve political ends of one party or the other would very often be overwhelming. If a dairy co-operative is to satisfactorily serve the purpose for which it is set up, politics should not be allowed to enter into the working of the co-operative.

5. The dairy co-operatives take help of the officers of the union or state federation instead of the officers of the Govt., Co-operative Deptt. to avoid unsatisfactory results. It is because however good the officers of Co-operative Deptt. may be, they will have no permanent stake in a particular co-operative.

6. The co-operative must be free of govt., interference and govt. control.

7. Integrity is absolutely essential for a co-operative for its satisfactory function. This can best be achieved by the Chairman and the

Board of Directors setting an example of integrity and penalising corrupt officials however important they might be.

Hence one cannot deny the success of co-operative effort if hard labour, sincerity and honesty are added to it. When there is so much hue and cry regarding the Reservation Bill for women throughout the nation, this dairy co-operative industry has gone one step ahead. It has launched a programme to encourage rural women to go for women dairy co-operative societies. This programme has started from 1996-97 and will continue till 1998-99 with the help of Human Resource Development Deptt., Govt., of India. We may hope that the women co-operative dairy societies will also move towards success with strength and pride even after 1998-99 without the government assistance.

Impact and Evaluation of Dairy Co-operatives — A Study of Keonjhar District Co-operative Milk Producers' Union

Dr. Surendra Nath Behera

Reader in Economics,
D. D. College, Keonjhar.

The growth of co-operatives is regarded as one of the important instruments for economic and social change for human development. As an emerging sector it is not only desired but also desirable. It is no more confined only to credit movement. There has been horizontal and vertical expansion of the co-operatives. It is embracing wider and wider fields of action and is considered as a diversified movement.

Dairy development through co-operatives has not only augmented production and increased the marketable supply of milk but has also generated subsidiary sources of income to the small and marginal farmers, landless workers and other deprived, downtrodden and weaker sections of the society. The 'Operation Flood' Programme or the 'White Revolution' as an integrated dairy development Programme has made considerable progress in achieving its outlined objectives. The programme was started in 1970 with three phases, the third phase was officially closed on April 30, 1996. The third phase had sought to set up 70,000 Primary Dairy Co-operative Societies (PDCS) all across the Country covering 6.7 million families. Compared to this the actual achievement was 71,800 PDCS and 9.2 million families. The OF-3 has been operational since 1988 and is functioning with the World Bank and IDA financial assistance and also National Dairy Development Board (NDDB).

THE STUDY AREA :

The study area covers the dairy co-operative societies functioning under the Keonjhar District Co-operative Milk Producers' Union Ltd. The Co-operative Milk Union of the district was established in 1978. In 1981-82, there were only 13 co-operative societies functioning under it with 313 beneficiaries as Primary Members. The number of societies has gone up to 105 in 1993-94, and has declined upto 28 by the end of July 1997.

The Milk union of the district covers 9 blocks within its scope comprising of more S. C. and S. T. Population.

OBJECTIVES OF THE STUDY :

The following are the main objectives of the study :

- (i) to study the socio-economic status of the milk producers and their attitude to establish Dairy Co-operatives.
- (ii) to evaluate the strategies and positive steps taken by the Milk Union to augment the production, procurement and marketing of milk.
- (iii) to assess the economic benefits reaped by the members of the co-operative milk societies functioning under the milk union.
- (iv) to examine and identify the problems faced by the members and the operational constraints met with by the milk union.
- (v) to suggest suitable policy measures for solving their problems to strengthen the societies for their smooth and effective functioning and making them economically viable.

METHODOLOGY :

The study has been made by using well structured interview schedules. Out of total 6290 milk producers, 120 beneficiaries were chosen at random from 11 scheduled villages. The survey is diagnostic as well as remedial in nature.

THE ANALYTICAL FRAMEWORK :

The socio-economic position of the milk producers show that larger percentage of the cross-breed cows are provided on loan basis to the small and marginal farmers.

In order to strengthen the dairy co-operatives for socio-economic upliftment of the rural poor a package of strategies has been taken. It includes supply of cattle feed, motivation to cultivate green fodder, Urea Straw Treatment (UST), increasing cattle induction, Artificial Insemination (AI), natural service done through bulls and provision of different incentives for procurement and marketing of milk. Integrated efforts are being undertaken with the help of District Rural Development Agency (DRDA) and the District Veterinary Authorities.

CATTLE INDUCTION :

An increase in cattle induction is a healthy sign of the growth of dairy co-operatives. However, it is seen that the number of cows inducted has significantly increased from 519 in 1980-81 to 1599 in 1990-91 and thereafter has taken a declining trend of reaching only 60 in

1996-97. The Co-operative Milk Union has taken the task of supplying high-breed cows to the beneficiaries through the DRDA, Keonjhar under different anti-poverty programmes. Data collected reveal that in all the 11 villages covered under the survey, only 20 to 25% of the Milk producers are provided with loan cows or scheme based cows. Of the total 120 producers or members of societies, only 26 (21.66%) are provided with loan cows. Others have their own Desi cows. Improper identification of beneficiaries and delay in sanction of loans and managerial constraints are the possible causes for this low performance.

MEMBERSHIP :

It has again found that there has been a steady increase in the total number of dairy co-operatives from 13 in 1981-82, i.e. the year of inception to 105 in 1993-94 which has sharply declined to 28 in 1997-98. However, during the same period the number of members has gone up from 813 to 5585 and finally in 1997-98 to 6290. Decline in the formation of Dairy Co-operative Societies (DCSs) may be attributed to poor organisational management. It was found from the survey that female membership varies between 25% to 30% and only in one village named Banajodi, it is completely managed by female members.

FEED & FODDER :

(i) Cattle Feed :

The yielding capacity of the cows and procurement of milk depend upon regular and proper feeding. Though the Union has made provision for supply of cattle feed of two qualities at the rate of Rs. 4.50 and Rs. 5.00 per kg. which is at a subsidised price of 50 paise, the amount available is scanty compared to the nutritional requirements of the cows. The study revealed that 33.3% of the Producers use with 5 kgs, 25%, 3 kgs, 20.8%, 2 kgs, and 12.5%, 1 kg per day. 8.3% producers have not used anything at all. Due to poor financial condition most of the milk producers can not afford to purchase the required quantity of cattle-feed which has reduced milk production. However, the milk union has provided the facility of adjusting the cost of the cattle feed purchased from the Union with that of the milk bill of the producers. It is also noticed that fodder cultivation started in 1993-94 in 85 ha. which has increased to 175 ha. in 1995-96 and has gone down to 35 ha. in 1996-97.

(ii) Urea Straw Treatment (UST) :

The higher cost cattle feed and difficulty in getting green fodder of adequate quantity and better quality are major constraints to maintain

sustained milk stock. Most of the milk producers use paddy straw, which has low nutritious value and reduce the milk yield of cows. Hence, the milk Union has made provisions for Urea Straw Treatment (UST) which is a method of spraying of urea on straw, that makes it soft, easily digestible having greater palatability and nutritional value. The study reveals that in the 11 villages covered under survey only 20% to 25% of the producers are benefited by this processed input, the facility being restricted to those having loan cows. The UST treatment which started in 1991-92 was 139 MT which increased to 408 MT. in 1994-95 and reduced to 180 MT. in 1996-97.

Urea Mollases Block (UMB) is also similar type of nutritious feed available for the cows to increase Milk Production. However, higher cost has restricted its use.

ARTIFICIAL INSEMINATION (AI) :

Artificial Insemination is a modern technical method to raise the birth rate of calf and make the cows milk yielding. The no. of Artificial Insemination Centres, which was only 6 in 1981-82 has gone up to 31 in 1995-96 and then gone down to 19 in 1997-98. No. of AI done has gone up from 205 in 1981-82 to 3720 in 1995-96 and has gone down to 606 in 1997-98. No. of natural service centres by provision of bulls has gone up from 12 in 1990-91 to 21 in 1992-93 & gone down to 9 in 1995-96 which has been recently discarded. No. of natural service done increased from 992 in 1991-92 to 1712 in 1993-94 and reduced to 678 in 1995-96. It does not exist for the last two years. No. of female calves born was 304 in 1990-91, which increased to 712 in 1994-95 and has done down to 107 in 1997-98. The study reveals that, about 40% of the calves born die before attaining the age of one month, which reduces both potential of cows and milk production of the mother cow.

MILK PROCUREMENT AND MARKETING :

Milk procurement depends upon the yielding capacity of the cows. The study reveals that poor transportation facility, interference of the middlemen, low yielding from cows and domestic consumption of milk are some of the factors that have accounted for low procurement. Data collected show that milk procurement has gone up from 161 thousand kgs. in 1981-82 to 2233 thousand kgs. in 1993-94 and deplorably gone down to 162 thousand kgs. in 1997-98. Daily average procurement in kgs. has increased from 441 kgs. in 1981-82 to 6650 kgs. in 1992-93 and had a dismal fall to 1328 kgs. in 1997-98. The purchase price per kg. is Rs. 7.50 from the producers and the selling price by the Milk Union is

Rs. 10/-. Though the average yielding capacity of milk of a high-breed cow is usually 10 kg. per day, the actual production of most of them varies between 1 to 5 kgs. which constitute 82% of the total producers. The processing and storage cost per kg. is about Rs. 2.20, so that the actual cost per kg. by the union is Rs. 9.70. So the Union sells at a profit of only 30 paise per litre, which does not enable it to reap more profit.

In the marketing process the milk bill is partially adjusted with cost of the fodder purchased giving a low net return. A larger part of the milk produced by the Union from the feeding society is used for local marketing and less is sent to other dairy plants or used for preparation of milk products.

ECONOMIC BENEFIT REAPED :

The real objective of the Milk Union is to help in the socio-economic change of the producers. The producers assess the expenditure on cows in terms of fodder cost, maintenance of cowshed, expenditure on maintaining the health of the cows and time required to deliver milk at the Milk Union. Similarly, the benefits are estimated in terms of return from sale of milk, cow-dung and sale of male calves as would be bullocks and female calves as potential cows. Cow-dung is used as fuel, manure and preparation of bio-gas.

Table I below shows a picture of the monthly economic benefits reaped by the producers.

TABLE-I

MAGNITUDE OF ECONOMIC BENEFITS REAPED BY PRODUCERS

| No. of Milk Producers | % of Milk Producers | Total Monthly income (Rs.) | Total Monthly Expenditure (Rs.) | Net Profit per month (Rs.) |
|-----------------------|---------------------|----------------------------|---------------------------------|----------------------------|
| 25 | 20.83 | 429 | 300 | 129 |
| 20 | 16.66 | 643 | 450 | 193 |
| 12 | 10.00 | 858 | 600 | 258 |
| 10 | 8.36 | 1027 | 800 | 227 |
| 08 | 6.66 | 1287 | 640 | 647 |
| 06 | 5.00 | 1501 | 770 | 731 |
| 05 | 4.16 | 1716 | 850 | 866 |
| 04 | 3.33 | 2145 | 1300 | 845 |
| 30 | 25.00 | 2520 | 1425 | 1095 |
| 120 | 100.00 | | | |

Table I shows that only 25% of the milk producers are able to reap a net return of Rs. 1,095/- per month and only 20% of the producers between Rs. 600/- to Rs. 900/- per month. Hence, the impact of dairy co-operatives is not significant on atleast 55% of the Milk Producers. Low return increases their interest burden on loans when they are unable to repay the loans regularly. More of Desi cows, high fodder cost, low purchase price of Rs. 7.50 only by the Milk Union reduce their net return. Hence, it calls for changes in strategies at both the cost and benefit front.

PROBLEM AREAS AND OPERATIONAL CONSTRAINTS I :

An evaluation of the functioning and analysis of the study reveal the following operational difficulties.

Dry land areas of the District are unsuitable for cultivation of green fodder for the cows. Low irrigation potential and incongenial climate condition has reduced the quantity and quality of feed and fodder. Scanty fodder has been a primary source of mal-nutrition of the cows as well as calves which has accounted for a sharp decline in procurement of milk of the co-operative union.

Poverty of the members of different feeding societies does not permit them to purchase cattle-feed at a higher cost, despite a nominal subsidy of only 50 paise provided by the Orissa State Co-operative Milk Producers' Federation Limited (OMFED) to the societies through the District Co-operative Union.

Traditional method of feeding by sending the cattle for grazing has led to various infections and diseases of cows. Non-availability of suitable cow-sheds and undercare for their health have accounted for low longevity of the yielding cows. There is also inadequate health coverage at the village level by the Milk Union and Veterinary authorities. Scanty of funds does not permit for a regular health check up of the costly cows. Available facilities have not helped them in a big way.

Supply of poor quality of cows and lack of artificial insemination facility at the door-step are serious bottlenecks in the progress of the milk societies and union. IRDP beneficiaries are supplied with cows with low milk yielding capacity and ill health, which make them economically less viable. Supply of cows is scheme based for the poor and there is poor maintenance and undercare of the cows. Diseased cows become an economic burden for the poor.

Lack of organised marketing, interference of the middlemen and irregular payment of milk bill to members of the society are operational hurdles in working.

Participation of women members is not substantial due to ignorance, attitudinal constraints and lack of co-operative awareness, which have also accounted for low membership.

Low yield and domestic consumption have reduced the marketable surplus and have caused irregular repayment of loan.

There are no adequate arrangements for co-ordination and monitoring of activities of the members. Most of them have failed to get a package of services.

All these deficiencies need to be corrected in order to improve the working of dairy co-operatives.

Fisheries Cooperatives in Orissa : A Case Study of Financing Beach Landing Crafts in Ganjam District

Mr. P. Sahu

Lecturer in Economics
Gopalpur College

&

Dr. N. B. Pradhan,

Professor of Economics,
Berhampur University

INTRODUCTION :

In the planned strategy of rural development in India, cooperatives have been considered as very important since the turn of this century. The basic idea behind the cooperative movement is to promote thrift, self-help and mutual aid through democratic management. A cooperative is an association of persons with common needs and social purpose. It seeks to bring the best out of a human being for the welfare of the entire community.

The fishermen are economically downtrodden and socially at the lower range of the society. The fishermen are engaged in this age-old profession for centuries together. Fishing is mostly taken by traditional crafts as a subsistence in many parts of the country. The typical Indian fisherman with a small indigenous craft and gear is unable to increase his output. Therefore the need for replacement of the traditional methods of fishing in India by modern methods of fishing using trawler and mechanized boats was felt.

The fishermen in spite of the good catches netted by them in some landing centres and better prices prevailing in some fish markets are undoubtedly not getting a good share of the consumer price. The urgent need which calls for a break through in the institutional framework and the structure of fish market where middlemen operate in fishing trade adversely effecting fisherman's interest by offering very low price for the

fish catches. Fishermen are completely ignorant of fish market and the prevailing prices in the markets ; they generally depend upon these middlemen for fish marketing and financial help. There is a chain of vicious circle of indebtedness fostering exploitation, which in turn makes the fishermen dependent on money lenders and fish traders. The challenging answer to these social and economic problems confronted by fishermen community is to organise various types of cooperatives by themselves and to manage these societies properly and effectively to improve the economic conditions and substantially raising the social standards of the fishermen.

Marine Fisheries in Orissa : A Brief Sketch :

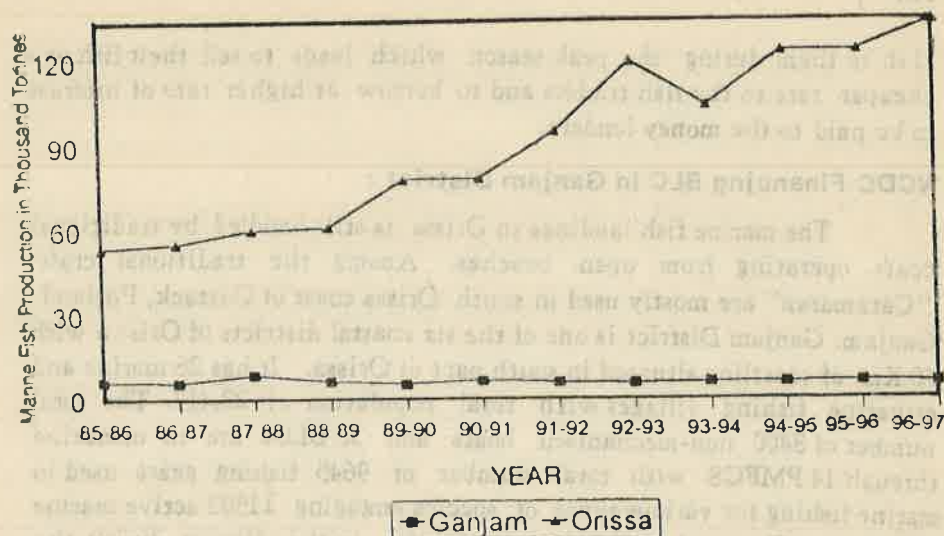
Orissa has 480 Kms. coastline spread over six coastal districts, Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam where marine fishing is done through traditional and mechanised boats. As per the survey report of Department of Fisheries, Orissa, there are 6.5 lakh fishermen in Orissa of which 1.6 lakh are marine fishermen. The marine fishermen inhabit in 329 fishing villages. The marine fishery segment is highly unorganized and complex, the Nolias are still remained unchanged, in spite of the implementation of many developmental schemes.

Orissa occupies seventh position in India in marine fish production. Total fish production in 1996-97 was 1,33,462 tonnes for Orissa and 6,009 tonnes for Ganjam district. Figures submitted by the Director of Fisheries reveal that fish production in Ganjam district has declined consistently with slight fluctuation during 1985-86 to 1996-97, whereas in the state this has increased considerably by 2.5 tonnes. The share of fish production in the district was 12% of the state's production in 1985-86. This share declined to 4.5% during 1996-97. The reason for poor performance of fish landings in the district of Ganjam is lower rate of mechanisation of crafts.

Marine Fish Production in Orissa & Ganjam (1985-86 to 1996-97) :

Out of 1.6 Lakh marine fishermen in the State, only 13,578 were covered under Cooperative showing a coverage of 9% in 67 Primary Marine Fishermen Cooperative Societies (PMFCS) with an apex society at state level and 5 central district cooperative societies. National Cooperative Development Corporation (NCDC) and banks provide loans to the beneficiaries through the PMFCS.

It is also seen that out of the total Fishermen Cooperative Societies, 9% were marine, the Marine Fishermen Societies accounted for 20% of the membership. About 9% of the Government Fishery



Loans went to marine fishery sector. The major refinance is provided by NCDG, which finances term loan and working capital to PMFCS and Apex Society, which in turn finance the primary societies. NABARD also provides refinance assistance to certain fisheries activities for modernisation of the fishery sector.

PMFCS in Orissa constituted 50 societies in 1984-85 with the member of 9,541 which increased to 67 Societies with the total member strength of 13,578 in 1996-97. Balasore district is having the highest number of 17 societies with 4,199 members followed by the Ganjam district having 14 societies with the highest number of 5,199 members and Jagatsinghpur district is having the lowest number of only 4 societies with 260 members. Primary Marine Fishermen Cooperative Societies were started before independence in the state. In Ganjam out of 14 PMFCS three societies at Gopalpur, Sonapur and Patisonapur were registered under Societies Act 1860 in 1946. It is found that almost all the Societies were formed to get Government assistance but it was not functioning effectively with its objectives to cater to the needs of the members and to develop the fishing activities in the cooperatives. Many of the societies are defunct due to non repayment of loans to the Government and concerned lending banks.

None of the societies in Ganjam is marketing the fish catch by the members of the societies. The members of cooperative societies are compelled to borrow from the money lenders and fish traders during the lean season for their consumption purpose with an agreement to sell

fish to them during the peak season which leads to sell their fish at a cheaper rate to the fish traders and to borrow at higher rate of interest to be paid to the money lenders.

NCDC Financing BLC in Ganjam District :

The marine fish landings in Orissa is still handled by traditional boats operating from open beaches. Among the traditional crafts "Catamaran" are mostly used in south Orissa coast of Cuttack, Puri and Ganjam. Ganjam District is one of the six coastal districts of Orissa with 60 Km. of coastline situated in south part of Orissa. It has 26 marine and estuarine fishing villages with total population of 22,417. The total number of 3400 non-mechanised boats and 32 BLCs are in operation through 14 PMFCS with total number of 9645 fishing gears used in marine fishing for various types of species engaging 11593 active marine fishermen. The total marine fish production in the district during the year 1996-97 was 6009 tonnes which landed in 16 fish landing centres. Due to non-availability of infrastructural facilities and sound marketing system, the fishermen are forced to sell their catch to the middlemen at a price dictated by the traders. The transportation of fish is done by head loads and cycle loads to the main roads at a distance of 3-4 Kms. from the landing centres.

Objectives of Introduction of Beach Landing Crafts (BLC) :

The wooden Catamarans have many disadvantages as these need to be dried well after each sailing and can be effectively used for only one outing day. Moreover with sinking forests and lacking quality logs being not available, the traditional fishermen are facing much difficulties to own a new craft at a reasonable cost.

The development of a new type of user friendly and more efficient fishing craft for operation off open beaches was identified as an improved component of technology development to help the traditional marine fishing communities in the Bay of Bengal region to achieve their ultimate objective to improve the standards of living and quality of life of small scale fisher folk through increase in fish production. The Beach Landing Craft (BLC) was introduced in the east coast of India in 1979 (BOBP Report, 54) with the objective of developing to fishing craft capable of efficient operation from surf beaches. This will enable the traditional fishery folk to exploit the rich marine fishing resources of south Orissa coast in Ganjam District.

The scheme was introduced in 1987-88 in Orissa sponsored by the Central Government for purchase of BLCs through the Primary Marine

Fishermen Co-operative Societies on 50% subsidy provided by the Government of India. 5% of the unit cost is provided by the beneficiary society as margin money. NCDC provides 45% of the loan amount at the interest rate of 12.5%. It is providing assistance to the primary marine fishermen co-operatives under this scheme. 32 BLCs (IND-25) have been financed to 7 PMFCs in Ganjam district since 1987 through the Department of Fisheries, Orissa. Total cost of the BLC was Rs. 1.05 lakhs with 50% subsidy of Rs. 0.52 lakh. According to the present mode of NCDC assistance 25% as margin money has to be met by the beneficiary societies, 20% as subsidy by the NCDC and 55% as the loan component.

Repayment of Loan :

Seven PMFCs of Ganjam have availed Rs. 14.75 lakhs of NCDC loan as on 31st March 1997. The co-operative societies are found to have paid 33.9% of total loan which was availed by Gopalpur PMFCs, the highest recipient of NCDC loan, and it has repaid the 67.5% of the total loan. Though Sana Arjipalli has been financed recently in 1993 it has paid the highest 75% of the total loans of Rs. 2.36 lakhs. This is no doubt a remarkable achievement of the society.

The two societies have not paid any loan though New Buxipalli PMFCs which have been financed in 1989 have paid the lowest 13.4% of the total loan availed. The total outstanding loan comes to Rs. 9.75 lakhs constituting 66%.

The satisfactory performance of Sana Arjipalli may be attributed to successful operation and efficient management of BLCs through the society.

Reasons for Poor Repayment :

The poor performance of PMFCs is due to the fact that the three BLCs financed to New Buxipalli PMFCs belong to the important office bearers of the societies who are not interested for repayment of loan. This does not mean that the BLCs are not in operation.

Some beneficiaries are found to be reluctant to repay the loan amount as the crew members of BLCs are no more interested to go for fishing because they prefer more beneficial fishing through FRP boats. In case of some others engines of BLCs are not in good condition and are not being repaired because of non-availability of technicians which are to be provided by the Department of Fisheries, Orissa.

Distribution of Catch :

There are different types of fishing crafts and gears used for catching different types of fish. Fishing is mainly a team work which involves 3 to 10 members in a group. The sharing of the fish catch goes as follows. If there are four members in a boat of which boat owner is one, there will be six shares, four for crew members with one share each and the rest two shares for boat and net. If the boat owner has provided the net he will get three shares, one for boat, one for net and one for his own labour. This system is followed in case of the traditional crafts.

In case of the Beach Landing Crafts (BLCs) 50% of the catch is allocated for fuel and maintenance which goes to the owner or society. Balance 50% is shared among the crew members.

Marketing of Fish :

The fish landings by the BLC boats are not marketed through the societies. The members of the societies sell their share of catch at the landing centres on auction sale basis. In case of prawn they sell to the traders who are pre-determined. Some crew members might have entered into binding agreement to sell the catch to the traders who have advanced loan to them.

Due to lack of marketing facility by the societies the shares of BLC boats are deposited in terms of money value of sale proceeds of catch to the society by the group members for its maintenance and repayment of the loan by the society. It is evident from this study that except in case of Sana Arjipalli the share of the BLC boats are not deposited regularly by the beneficiaries who happen to be the office bearers and leaders of the community in the village.

Need for Credit-Marketing Linkage :

Credit is an important component of the production and distribution system of the marine fishery sector. In the production process the fishermen (Nolia) community plays the crucial role in the primary production. They belong to low income groups with high mobility and lack of awareness which restricts the availability of institutional finance. The institutional finance is mainly extended for mechanization of traditional crafts, purchase of boats and net. But the politically biased selection process, complex documentation, long waiting time have not made the system successful. The fishermen mostly need consumption loans in the lean period when their income is low and when there are social functions such as marriage and death. This demand is well tapped by the money lenders and fish traders. The fishermen play only an

insignificant part in the disposal of the catches. The marketing is almost entirely in the hands of middlemen. Then fishermen are turned into bondage labour working for the merchant traders which continues some-time for generations. To make the fishermen free from this bondage a well developed institutional credit marketing linkage is necessary where cooperative societies must come forward to take up marketing of catch by the members.

Conclusion :

The study finds that the NCDC financing BLCs has helped the fishermen to increase fish production. The problems are associated with inefficient operation of BLCs through Cooperative Societies and lack of repairing facilities of BLCs. In some cases the leaders of the community or societies are found to be responsible for mismanagement of BLCs leading to poor repayment of loans. In case of successful operation of BLCs, repayment position is found to be satisfactory, resulting in economic improvement of the fishermen.

The problem of marketing with the pre-determined traders aggravates the exploitation of the fishermen. For this some kind of institutional arrangement of consumption loan during the lean period is necessary to make the fishermen free from clutches of the fish traders and money lenders. A well directed credit marketing linkage with institution support involving the fisherman communities is needed for the sustainable development of the fishermen.

LAMPs, 24 LAMPs have introduced MINI Banks under the aegis of MCCB by 1996-97. In order to coordinate public distribution system of consumer goods 149 rural retail outlets are working in the cooperative fold throughout the district.

Management :

Cooperatives are democratic organisations being formed by the members. These institutions pursue democratic principles of management of their own affairs which make the members aware of their rights and duties. To retain democratic spirit, the Govt. of Orissa adopted a pioneering step by bringing about Orissa Cooperative Societies Amendment Act 1991, by which election of all Primary Cooperative Societies in the State were completed by 1993. All the 53 LAMPs working in the district are having elected Board of Management, each consisting of 15 members, out of which two thirds of elected members belong to the tribals. The Managing Directors manage day to day affairs with the help of other officers appointed by LAMPs or deputed by the Govt.

Performance of LAMPs :

The performance of LAMPs in the district of Mayurbhanj is analysed below.

(a) Membership :

Total membership of 53 LAMPs has increased from 1.78 lakhs in 1980-81 to 2.31 lakhs in 1996-97 exhibiting a spurt of 29.78% over a span of 17 years. Tribal members have increased by 31.2% over the years which is more than proportionate to that of non-tribal members. Tribal members constitute 71% in 1996-97 as against 70.2% in 1980-81 which demonstrates that tribal members have still predominance in the total membership.

(b) Borrowing Membership :

The number of borrowing membership has drastically declined from 0.45 lakh in 1980-81 to 0.12 lakh in 1996-97 exhibiting a diminution of 73.3% over the time span. The borrowing membership has been consistently declining over the years, which reveals that the borrowers deviate from LAMPs to other institutional sources. The tribal borrowing members has consistently declined from 0.31 lakhs in 1980-81 to 0.04 lakh in 1996-97 indicating a diminution of 87.1% over the time span.

(c) Loans Operations :

The quantum of loans advanced has increased from Rs. 299.76 lakhs in 1980-81 to Rs. 530.61 lakhs in 96-97 exhibiting a spurt of 77.01%

over time span. The quantum of loans advanced to tribals has significantly declined from Rs. 197.13 lakhs to Rs. 122.96 lakhs over the time span indicating a diminution of 37.62% over the years. Loans advanced to tribals out of total loans constituted 23.2% in 96-97 as against 65.8% in 80-81. On the other hand, the quantum of loans advanced to non-tribals has increased from Rs. 123.63 lakhs to Rs. 407.65 lakhs over the span of 17 years.

(d) Non-Credit Operations :

Consumer business transacted by LAMPs has increased from Rs. 133 lakhs to Rs. 369.25 lakhs exhibiting a spurt of 177.6% over the span of 17 years. Controlled commodities (PDS) constitute a major share in consumer business transaction as these increased perceptibly from Rs. 41.31 lakhs to Rs. 327.36 lakhs accounting for a spurt of 692% over the span of 17 years and 40.7% per annum. Input supply constitutes mostly fertiliser worth Rs. 105.13 lakhs as against Rs. 52.78 lakhs over the years which account for a spurt of 99.2% over the span of 17 years.

(e) The viability of LAMPs is adjudged from the stand point of number of LAMPs earning profit. In 1980-81 42 LAMPs had earned profit to the extent of Rs. 7.81 lakhs which has drastically declined to only 16 LAMPs earning profit amounting to Rs. 6.39 lakhs in 1996-97.

(f) Financial Performance :

The amount of total share capital has increased from Rs. 128.68 lakhs to Rs. 213.09 lakhs over the span of 17 years which accounts for 65.6% rise over the years. Govt. share capital has increased from Rs. 50.61 lakhs to Rs. 75.09 lakhs during the corresponding period which accounted for 48.4% rise over the years. Members share capital increased from Rs. 78.07 lakhs to Rs. 138.0 lakhs during the corresponding period which accounted for 76.8% rise over the years. Out of total share capital members' share capital constitutes 60.7% in 80-81 which increased by 64.8% in 96-97. Members' share capital has major contribution to total share capital vis-a-vis Govt. share capital.

Observations :

(a) Growth of membership of LAMPs has been perceptible over the years. But the percentage of tribal members to total members has remained almost constant over the years.

(b) The number of borrowing members has drastically declined over the years. The tribal borrowing members have declined at a faster magnitude than that of non-tribal members.

(c) Loans advanced by LAMPs to tribals have declined by 37.6% over the years and loans advanced to tribals out of total loans have exhibited sharp decline from 65.8% to 23.2% over the span of 17 years.

(d) The quantum of short term loan outstanding exhibits fluctuating trend over the years. Medium term loan outstanding has also exhibited fluctuating trend but declined sharply in Eighth Plan Period. The quantum of total loans outstanding also exhibits fluctuating trend over the years.

(e) Consumer business controlled (PDS) has increased considerably over the years. Non-controlled business has sharply declined over the years.

(f) Inputs supply especially fertilisers exhibit considerable increase over the years.

(g) Business turnover per LAMP has increased from Rs. 4.74 lakhs to Rs. 7.17 lakhs over the years. Credit business turnover has been more than proportionate to that of non-credit business turnover.

(h) Over the years the viability of LAMPs has exhibited deteriorating trend as the number of profit earning LAMPs has drastically declined from 42 in 80-81 to 16 in 96-97 and loss incurring LAMPs has surged from 11 to 36 during the corresponding period.

(i) Members' share capital have major contribution to total share capital. Growth of members' share capital has been more than commensurate to that of Govt. share capital.

(j) Total amount of deposit has accounted for perceptible growth over the years. The compound growth of deposits per annum has been 20.3%.

(h) Total amount of borrowing has increased considerably. Annual compound growth of borrowing has been marginal at 2.6%.

(k) Growth of working capital exhibits fluctuating trend. It has increased at an annual compound growth of 2.8%.

(l) Mini Bank deposits have recorded 38.2% compound growth per annum which provides a glimpse on the improved performance of Mini Bank in mobilising small savings of depositors.

Revamping the Co-operative Credit— Linking it with Self Help Groups

Dr. Bhagabata Patro

Reader & Head

Deptt. of Economics

Berhampur University, Orissa

&

Ms. Nilima Nayak

Univ. Research Fellow

Department of Economics

Berhampur University

Financial sector plays a major role in mobilisation and allocation of savings in a developing economy. Institutional financial agencies, instruments and markets which constitute the financial sector, act as a pipeline of the transfer of financial resources from net savers to net borrowers. Thus the real growth of the economy depends on the efficiency of monetary sectors and the way they perform the financial intermediary function. Easy availability of credit enthuses the competitive environment resulting in productivity and efficiency of the economic system.

In a predominantly agrarian economy like India availability of credit is mostly identified with the availability of agricultural credit. With about 70% of people depending on agriculture as their main source of livelihood, credit availability has important implications for employment. The Govt. of India have initiated a set of systematic changes applicable to commercial banks and regional rural banks since 1991 as a part of general economic reform of the country's economy. The reform process is based on the Report of the Committee on Financial Sector Reform with Mr. M. Narasimham as the Chairman. While examining the financial sector, the committee has not adequately discussed the problems of the co-operative sector. This is perhaps due to the fact that the co-operative sectors are under the control of state government, even though they are responsible to supply a sizeable part of agricultural credit. It is believed that even now about 20% credit requirement (Bhagawati and Srinivasan, 1993) of the economy is met from non-institutional sources. The co-operative sector is meeting around

50% of the total institutional credit. So the process of financial sector reform is only targeting 30% of the total credit requirement of the economy administered by the commercial banks and RRBs.

Table-1 presents the flow of institutional credit to agriculture through co-operative and commercial banks for short-term, medium-term and long-term purposes from 1950-51 to 1996-97. The table reveals that there was a continuous decline in the share of agricultural credit supply through the co-operative sector. On the eve of independence, the co-operative sector enjoyed the benefit of monopoly control over agricultural credit and this continued for about two decades. The bank nationalisation of 1969 facilitated the entry of commercial banks in the agricultural sector. The establishment of RRBs further strengthened the role of commercial banks and put the co-operative sector in a disadvantageous position. There is a neck to neck competition between the co-operative sector and the commercial banking sector in the eighties. At the time of initiating the financial sector reform, both the sectors were placed equally claiming around 50% of the credit needs of the agricultural sector. In the post-reform period the Co-operative sector had improved its performance up to 1994-95 and thereafter shows a fluctuating trend. The ups and downs in the share of Co-operative sector in the total agricultural credit clearly reveals the intensity of competition faced by this sector.

TABLE -1

FLOW OF CREDIT TO AGRICULTURE THROUGH
CO-OPERATIVES AND COMMERCIAL BANKS FROM
1950-51 TO 1996-97 (Rs. In '000 Crores)

| Year | Short term | Long term** | Total | % to total | Short term | Long term** | Total | % to total | Total Short term | Total Long*term |
|---------|------------|-------------|-------|------------|------------|-------------|-------|------------|------------------|-----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1950-51 | 0.02 | 0.001 | 0.021 | 100 | — | — | — | — | 0.02 | 0.01 |
| 1980-81 | 1.52 | 0.60 | 2.12 | 63 | 0.52 | 0.75 | 1.70 | 37 | 2.04 | 1.35 |
| 1991-92 | 4.40 | 1.40 | 5.80 | 55 | 2.34 | 2.47 | 4.80 | 45 | 6.74 | 3.86 |
| 1996-97 | 13.44 | 3.36 | 16.80 | 62 | 5.16 | 5.20 | 10.34 | 38 | 18.59 | 8.55 |

Source : 1. Centre for Monitoring Indian Economy, Mumbai.
2. Economic Survey, Government of India, 1991-92,

PROBLEMS OF CO-OPERATIVE SECTOR :

The administrative set-up of the co-operative sector is very peculiar. It has to satisfy three masters for its survival. Firstly, as it is a democratic institution it has to satisfy the Board of Directors. The Board normally consists of political persons with diverse interests. Secondly as a co-operative institution, it has to yield to the direction of the bureaucracy of the Co-operative Department in the State Government. Thirdly, as a financial institution, it is mandatory for the society to act as per the RBI guideline. This creates a lot of handicaps for the co-operative societies to take timely decisions. In the later part of the seventies, the co-operative institutions made an attempt to become multi-purpose oriented. In addition to meet the credit needs of agriculture, they agreed to supply other critical agricultural inputs and also worked as retail outlet for public distribution system. Combining all such functions by a single institution created a lot of administrative complication and co-operatives turned into a society which is "Jack of all trades but master of none".

The success of co-operative sector depends on the way it responds to the needs of the individual agriculturists vis-a-vis the traditional money-lenders. The original idea is that the farmers and the co-operatives will have close interaction at every point of time. However, in practice this has not materialised and the traditional money-lenders still enjoy considerable amount of advantage in meeting the loan requirements of the cultivators.

The efficacy of co-operative sector is also linked with the success of availability of other inputs to agriculture like irrigation, mechanisation and land reform policies. It is noticed that where irrigation is assured, crop is assured and so also recovery of agricultural loans. The failure on any one front seriously affects the functioning of co-operative sector.

REFORMS INITIATED :

The areas in which the Co-operative sector is linked with the R.B.I. have witnessed reforms along with such reforms for Commercial banks and R.R.B.s. These areas are :

(1) De-regulation of Interest :

One of the areas in which the RBI has given operational flexibility to the financial sector including co-operative sector is the freedom to fix interest rate with a minimum lending rate. The size of profit is dependent on the rate interest, which on the other hand is to be fixed

on the basis of cost of funds, transaction costs and risk involved in a lending programme.

(2) Establishment of Co-operative Development Fund :

Under the supervision of NABARD, a Co-operative Development Fund was established to improve managerial skill, management information system and strengthen the recovery percentage of co-operative institutions.

(3) Model Co-operative Act :

The Government of India prepared a Model Co-operative Act in 1991 and circulated the same to all the state governments for making Co-operative a vibrant democratic institution. But till now, except Andhra Pradesh, no other state govts. have shown serious concern for this.

REFORM NEEDED :

In spite of the above, there are still some areas in which the Co-operative sector has to initiate reform measures on its own. They are :

(1) De-bureaucratisation of management :

The practice of sending officials to the Co-operatives on deputation is creating a sense of complacency and non-committment. This requires that the practice be dispensed with a cadre of professionals committed to the ideals of co-operative movement be created.

(2) Human Resources Development :

The quality of man power with the Co-operatives needs to be upgraded as they are not selected on the basis of their professional competence. The Multi-dimensional tasks discharged by the co-operative sector require dynamic, intelligent and hardworking personalities to be recruited systematically.

(3) Better recycling climate :

Recycling of funds is an essential feature of financial institution. Due to poor recovery, it becomes difficult for the Co-operative sector to be self-sustained. Mobilising deposits and deploying these in productive channels will enhance the profitability of these institutions which is the need of the hour.

SELF-HELP GROUPS :

The Co-operative sector will succeed in its mission only when the members accept it as their own institution and work for it with commitment and devotion. The Co-operative structure as existing at

present is not in a position to generate such a temper. A slight modification in the structural set up is necessary to make it more acceptable to public. In this context it is necessary to examine a recent innovation in rural credit i.e. the Self-Help Groups. Even though the principle of co-operative recognises the principle of Self Help, yet it is not possible to get the benefit due to various deficiencies in the manner in which it is being used till now. It is now recognised that the concept of self-help has to be utilised in a different manner to create an environment of community action, the basic philosophy of SHG is similar to the experiment of Prof. Mohammad Yunus in the concept of 'Grameen' in Bangla Dosh. The Grameen concept was first launched in 1976 and worked successfully. As on October 1994, it had a membership of two millions spreading over 34,765 villages. Under the Scheme a group is formed by only 5 members belonging to same caste, religion, sex or socio-economic stratum in a village. The village may have many such groups. The group is recognised after training and compulsory minimum group savings. Eight such groups shall form a Grameen Centre. The centre meets weekly on a particular day in which attendance is compulsory. The link branch shall send its representative to help the centre in finalising lending programmes and take deposits from the members. The link branch will assist the members with loans for self-chosen income generating activities. The functioning of the entire Grameen is transparent and all members are fully involved in its management. The success of the scheme is apparent when it is noticed that by 1994 it is possible to make cumulative disbursements and recoveries to the extent of Tk 3727 Crores and Tk 2998 Crores respectively.

In Sri Lanka, Phillipines and Indonesia many models were developed in different names for facilitating 'Banking for poor'. In India the concept of forming Self-Help Group was mooted by the RBI in July 1991 through a circular to all the nationalised banks in the country. The NABARD launched it as a pilot project and by 1992-93, 255 SHGs were established. By 31st Dec. 1995, there were around 2700 SHGs operating in the country. The SBI viewed that their experience with the SHGs so far has been quite satisfactory. It is reported that the scheme is very much successful in the states of Tamilnadu, Kerala, Karnataka, Andhra Pradesh and Orissa. In Northern India, some parts of Central India and in the North East it is still not finding adequate support.

While analysing SHGs it is obvious that a question comes to our mind as to whether the scheme would be more successful if it is linked to a credit co-operative society or with a bank branch. It appears that

the co-operative system is more nearer to the structure of a SHG which intends to develop a saving habit among the members and assists them with loanable funds which have low transaction cost. Additionally, the functionaries of the PACS are more acquainted with the problems of the rural poor than a bank official who is frequently transferred from one place to another. The RBI/NABARD should recognise this and take immediate steps to link SHGs with the Co-operative sector rather than the Banking sector. This will help in revamping the co-operative system which is in deep trouble after financial sector reform. The Co-operative sector is also required to take up this matter with the RBI immediately and convince it about its merits vis-a-vis the banking system. Once the Banking sector reaches near the grass-root farmers via SHGs, it would be difficult for the co-operative sector to maintain its share in rural credit.

Effectiveness of Co-operative Movement in Angul District : An Insight

Dr. (Mrs.) Sujata Pati

Senior Lecturer,
Post-Graduate Deptt. of
Industrial Economics,
Govt. College, Angul

INTRODUCTION :

The co-operative is an institutional thrust providing for the wide base for the involvement of people. Evolved from the people's participation, more local than regional, the co-operative as an association of people restricts the evils of an overcentralised democratic system encapsulating the idea of effectiveness of community efforts over individual effort. For the success of any movement the beneficiaries must recognise the needs, realise that the movement offers a way to meet the needs and take necessary steps to promote it. For the speedy success the movement must be spontaneous and the initiative should preferably come from the people themselves. In India there are recognised needs but the great majority of people do not understand what co-operation can do to meet these. Only a negligible number of co-operators realise the importance of co-operative movement, and depend on the government for its success.

Co-operative movement in India started in an organised manner since the enactment of the first Co-operative Societies Act in 1904. The shortcomings of the 1904 Act were remedied with the enactment of Co-operative Societies Act, 1912, Co-operative Societies Reforms Act, 1919 in the pre independence India (Puntula, 1966). Most important event in the history of Co-operative movement in Independent India is the appointment of Rural Credit Survey Committee by the Reserve Bank of India in 1951, which submitted its report in 1954. During the First Plan (1951-56) 'cooperation' was recognised as 'an instrument of planned economic action in democracy'.

The co-operative movement progressed unabated through successive plan periods with large and diversified base touching all sections of

the economy. What is being attempted under the co-operative development plans is strong state support especially in finance to enable the movement to restrict the supremacy of the money lenders and traders. Credit is also being developed in conjunction with marketing and processing since these are all linked together.

THE STUDY :

On the background of the vital role assigned to the co-operative movement the present study is an attempt to have a close look of the functioning, activities and achievements of the co-operative societies of the Angul district. The available data from primary and secondary sources have been analysed to assess the correlation between the population, number of co-operative societies established, membership, working capital, amount of advances and activity sectors at the community development block level by adopting Karl Pearson's Product Moment Correlation technique. To examine the regional disparity the coefficient of variation has been computed. The context of developmental disparity has been assessed through the Principal Component Analysis. Attempts are also made to point out some crucial weaknesses and suggest conditions necessary for the success of the movement.

THE STATE OF CO-OPERATIVE MOVEMENT :

Orissa passed its first Co-operative Societies Act in 1935. Credit societies still dominate the scene, agricultural credit societies far exceed both in number and membership. In Angul district in the year 1996 there were 107 Primary Agricultural Co-operatives (PACs) covering all the 8 blocks having membership of 112406 (13.2% of the population of the district) with working capital of Rs. 886.11 lakhs. The total amount of loans advanced by the PACs was Rs. 194.56 lakhs with amount of overdue of Rs. 215.36 lakhs.

There are 25 non-agricultural co-operative societies encompassing only three blocks, Angul, Banarpal and Talcher; benefitting 7395 members. Talcher has the maximum share (17) benefitting 5840 members with working capital of Rs. 402.16 lakhs and the amount of loan advanced Rs. 243.17 lakhs.

There are only 2 wholesale consumer stores, one in Talcher and the other in Pallahara having 10 branches benefitting 797 members. While the Talcher units are showing a marginal profit, the Pallahara units exhibit loss.

There is a remarkable decline in the number of Primary Consumer Co-operative stores (PCS) & Multipurpose Co-operatives (MPC) in Angul

district. While in 1992 there were 22 PCS and MPC, those have been reduced to 11 in 1996.

Though the Government has taken steps to create infrastructural facilities in agricultural product markets, assistance for setting up of rural godowns, market research and training of personnel in agricultural marketing in its co-operative marketing policy, these have very insignificant impact in this district. The result is there are only two regional and specialised commodity marketing co-operative societies, one in Angul and another in Athamallik.

In the district twelve Central Co-operative Banks are operating having total membership of 23,739, with working capital of Rs. 1972.17 lakhs, extending loans of Rs. 6.45 lakhs with overdue amounting to Rs. 3.3 lakhs.

Taking all types of Co-operatives into account it is found that there are 159 Co-operatives benefiting 1,57,865 members, with working capital of Rs. 3,489 lakhs, extending Rs. 501.17 lakhs of loans with over due of Rs. 194.56 lakhs.

ANALYSIS AND INTERPRETATION :

Looking into the existence of different types of co-operative societies in different blocks of the district, it is only the PACs which are more or less evenly spread over all the blocks. The value of coefficient of variance calculated in case of no. of societies, membership, working capital and amount of loan advanced is much more in comparison to the distribution of population in different blocks which implies non uniform development of co-operative movement in different blocks of the district. The amount of correlation existing between population and no. of societies, population and working capital, population and loan advanced is very much insignificant. Though the amount of coefficient of correlation is high in case of population and membership of different blocks of the district.

To study the development disparity amongst the blocks of the district as a whole only three variables, like population, membership and working capital are taken into account for Principal Component analysis and Composite Indices have been calculated. Four Blocks have shown positive indices and those are grouped under two categories, such as, Highly developed blocks (Angul and Talcher Blocks with Indices between 3 to 6) and Medium developed blocks (Chhendipada and Banarpal Blocks

with indices between 0 to 3) and other four blocks show negative composite Index, Kaniha (-2.4557), Athamallik (-2.99), Pallahara (-5.48) and Kishorenagar (-6.95).

As the PACs are dominating the picture and they are present in all the blocks, the statistical analysis of the PACs working in different blocks also reveal similar condition. The amount of coefficient of variance is high in case of no. of societies, amount of loan advanced and working capital in different blocks than the coefficient of variance in case of population and membership. High amount of correlation exists only in case of population and membership in PACs of different blocks. But the correlation coefficient is very low between population and working capital. The Principal Component analysis with the same type of variable for PACs also resulted in the presence of high developmental disparity between the blocks, only exception being Talcher having negative composite index.

The review of the functioning of the Co-operative Credit Institutions reveals that the PACs suffer from organisational inefficiency. There are bad debts and the membership is only intended to obtain loans, which are usually spent for the purpose other than for which it was intended, such as, agricultural loans are spent for the daughter's marriage. There is a wide gap between the loans sanctioned and the actual amount disbursed. It is due to the adverse report on the utilisation of the first instalment of loan being spent by the borrower for the purpose other than for which it was sanctioned. Due to unproductive consumption of the loans the rate of recovery is recorded to be much below the target amassing huge overdues. It led to fund crunch for further credit to the debt free members. In some cases the loans are sanctioned in favour of influential members although they do not possess credibility. Announcement of populist measure of 'Loan waiver schemes' by the ruling parties exerts a lot of pressure on the Co-operative Institutions creating chain reaction in resheduling the schemes in operation and reduction in targeted recovery rate.

The condition of non-agricultural co-operatives is very much desperate. The study reveals that all the six Oil Growers Co-operatives (OGCs) were liquidated. One Vegetable Growers' Co-operative, one Multi Purpose Co-operative and one Regional Marketing Society (RMC) in Athamallik block were liquidated. Only one RMC in Angul block benefiting 255 members is found to be solvent. Thus the Co-operative Movement in this district exhibits sad state of affairs in spite of several governmental incentives.

PROBLEMS ENCOUNTERED BY CO-OPERATIVE INSTITUTIONS :

Co-operative Institutions in Angul district encounter several problems due to non-viability, managerial inefficiency, inadequate capital formation, over dues as bad debts, governmental interference etc. The Board of Directors of most of the Co-operatives are nominally responsible for any violation of the bylaw. Lack of coordination among the employers and employees creates a vacuum in the process of monitoring the schemes.

One of the most difficult problems of management of advances is the leniency in the recovery of loans leading to irresponsibility and callousness among the borrower members. It also affects adversely the financial position of the co-operatives.

In view of the inadequacy of staff the accounts remain unaudited, which lead to improper financial planning. Due to this the targets of the institution could not be achieved and the dividend/profit could not be declared in time. It creates disincentive among the members and loss of faith in the organisation. As a result the deposit mobilisation could not be possible to the desired proportion causing insufficiency in working capital.

One of the reasons why the co-operative movement in the district remained static, is the lack of appreciation among the inhabitants due to improper extension services to promote it. The inhabitants never regarded this movement as a philosophy of life but as a matter of convenience. They regarded it as an agency for the supply of provisions at a cheaper price and easy terms, which they may repay at their convenience. The loan waiver schemes promulgated by the government lead to such callousness.

Finally, the most important hindrance in the functioning of the co-operatives is the unnecessary political interference in the sanction of loans and recovery of over dues. There is a cold war between the bureaucrats and politicians.

SUGGESTIONS FOR FUTURE PROSPECT :

Proper coordination of different lines of effort within the co-operative movement is inevitable at the moment. Agreement has to be reached and lines have to be drawn clearly between the functions of education, propaganda, supervision, audit, execution of awards etc. The accountability must be there on specific agencies about their responsi-

bilities, targets and achievements. Thrust areas are to be identified to be taken up on priority basis. Membership drive and deposit mobilisation must be taken up expeditiously to create a sound financial base for the co-operative institution. The defaulters should be black listed and stringent action must be initiated against them for the recovery of the over dues. Adequate feedback services must be started to remove the communication gap and to establish proper coordination among various wings. Besides these, frankness in propaganda and thoroughness in co-operative education are important factors to be considered. In the education of all workers in the movement the paid workers in the co-operative societies also need more than mere technical efficiency, they need to be imbued with the co-operative ideals. The co-operative movement needs sound banking and business practice, but even to material success the building up of member loyalty and morale is important. To be benefited from the co-operative movement the underprivileged sections of the society also need to strengthen their own sense of duty.

Service of the co-operative cause in any capacity is properly a mission, not merely a job or even a career. But men of capability as well as of good will are needed. Even in the lowest ranks the pay must be sufficient to maintain a family in modest comfort and a graded system of promotion should take into account attitude, effort and achievement and not merely seniority.

"Co-operation is not merely a matter of registers and entrance fees. It begins in the heart, and until it begins there it can never hope to be a success" (Balishter). To remove the weakness, patient but energetic and hard work are necessary on the part of the cooperators. The choice before the cooperation today is either to remove weakness and function with full state support as a dynamic and efficient agency with national importance or else to slide back into an isolated movement which has developed in limited favourable areas unable to make any strong impact on the economy of the country.

Problems of Over-Dues in Co-Operative Banks : A Case Study

Dr. Sudhakar Patra

Senior Lecturer in Economics,
N. C. College, Jajpur

As a voluntary movement Co-Operatives have become an integral part of India's democracy. There is a general feeling in the country that cooperatives have not done well. Our records are not so impressive as compared to other countries of the world. Yet, no body can deny that the cooperative movement of India is the largest cooperative movement in the world. There are more than 3.5 lakhs of Cooperative Societies with 16 crores membership and Rs. 62,500 crores working capital. During last 90 years of existence since emergence in 1904 in an enactment of Credit Cooperative Societies Act, it has diversified and emerged as a very powerful sector of the Indian economy alongwith the private and public sector.

The Cooperative movement strives to provide opportunity to these weaker segments by pooling their resources leading to collective and cooperative social action and thereby mitigates their problems and promotes development. As a voluntary movement, cooperation has now become an integral part of India's development strategy and paved the way for the socio-economic upliftment of the weaker segments.

The definition of cooperative itself highlights social justice and the need to organise cooperatives to bring the weaker segments under its fold for elimination of their socio-economic problems. Cooperation is a form of organisation in which persons voluntarily assist one another on the basis of equality for the promotion of their economic interest. Those who come together have a common economic aim which they cannot achieve by individual isolated action. The element of individual weakness is overcome by self-help pooling of their resources and by strengthening the bond of moral solidarity between them.

1. 1. OBJECTIVES OF THE STUDY :

The specific objectives of this study are as follows :

- (i) To study the performance and development of agricultural credit through Boudh Central Co-Operative bank.
- (ii) To analyse the reasons for non-repayment of loans and problems of overdues.
- (iii) To find out the extent of borrowing and its relation with operational holdings of the borrowers.
- (iv) To highlight weakness and problems of co-operative bank and to provide suggestions for efficient management of the co-operative banks.

1. 2. DATA BASE AND FRAMEWORK :

Boudh Central Co-operative bank is situated at the heart of district headquarter of Phulbani. The data are collected in printed questionnaire from the borrowers of agricultural loan belonging to the villages of Teraguda, Gudari, Rojangi and Kaladi. The borrowers are selected randomly from the list provided by the Boudh Central Co-operative Bank. Purposefully the borrowers are selected from nearby villages within the 6 (six) kilometers of the bank and data are collected on personal enquiry basis. The collected data are classified and tabulated to facilitate analysis.

1. 3. TERMS OF LOANS :

Central Co-operative bank advances loans to (a) Primary agricultural Co-operative societies (PACS), (b) Farm loan to farmers, (c) Non farm loan for consumer durables. Farm loans are sanctioned to farmers within the area of operation on land mortgage basis and the amount of loan depends on operational land (Irrigated and un-irrigated) owned by the borrower. For example a farmer with one acre of land can avail maximum amount of Crop loan of Rs. 3,300/- for Khariff Crop in case of irrigated and Rs. 1,900/- in case of un-irrigated land. For sugar-cane cultivation maximum limit of loan is Rs. 8,000/-. The maximum limit for Crop loan is Rs. 10,000/- and for purchase of pumpset it is Rs. 20,000/-.

The interest rate on loans depends on purpose and amount of loan. The interest rate varies from 13% to 18%. Central Co-operative bank advances loans to PACS at 14% interest and PACS advance loans to members at 16.5%. The interest rate changes as per the Reserve Bank

of India guide lines. Crop loans are advanced on short term basis for a period of one year..Consumer durable loans are advanced for a period.of 3 years and maximum period of repayment is usually 7 years.

1. 4. ANALYSIS AND RESULTS :

The borrowers of farm loan for agriculture and allied activities are classified by the purpose of loan. Out of 50 borrowers, crop loan is advanced to 23 which constitute 46% of total borrowers. Due to dry land and rain fed area of Phulbani, 12 borrowers (24%) are given loans for digging wells and Tubewells. Only 3 persons are advanced loan for purchase of pump sets and 7 persons for plantation. The crop loan to 23 borrowers is sanctioned for a period of one year whereas other loans are medium loans for 3 years.

The borrowers are classified according to the amount of loans taken and it is found that 18 respondents (36%) belong to Rs. 4,000/- Rs. 5,999/- class. In this class 13 borrowers are defaulters in repayment of loans. Only 4 persons have taken loan above Rs. 10,000/- and 6 persons below Rs. 2,000/-.

The amount of loan sanctioned depends on purpose and operational land holding of the person. 64% borrowers are defaulters who do not repay the loan in proper instalments fixed by the Co-operative bank. 30% of borrowers have loan above Rs. 6,000/- whereas 70% have taken less than Rs. 5,999/- which indicates that more loans are given to farmers with less operational land holdings. Central Co-operative Bank sanctions loan as per government directives under IRDP, ERRP Schemes.

The causes for non repayment of loans in time are given below. Out of total 32 defaulters, 11 borrowers did not repay due to draught conditions during 1997-98. 13 borrowers stated that agriculture income was not adequate to repay the loans. Due to higher consumption and low market price, there was no agricultural surplus income. 3 respondents could not repay the loan due to unforeseen medical expenditures and family burden.

38% of the borrowers are small farmers having 1.0 acre to 2.5 a cre land holdings. 9 marginal farmers and 11 farmers having more than 5 acres of land are among the 50 borrowers. It is clear that small farmers can easily mortgage their land holding to avail agricultural loans from Co-operative Banks.

1.5 OBSERVATIONS :

Co-operative banks are the most important source of institutional rural credit. The small and marginal farmers mostly depend on these co-operative banks for short term Kharif and Rabi crop loans. The Boudha Central Co-operative Bank under study has not been successful in making profit due to non-repayment of loans in time. The bank is not effectively managed due to lack of proper identification of beneficiaries and political pressures to sanction loans.

On the other hand agriculture is not a lucrative occupation in Phulbani district as the land is rain fed dry land. The agriculture in Phulbani is a gamble of monsoons and a good crop year is always followed by a draught year in this area. So the borrowers and farmers are not able to repay the loans in time. Further, an increase in output due to good crop results in sharp fall in price of the commodities in the local markets.

The Co-operative Bank is forced to sanction loans to the people under IRDP, ERRP and other schemes without the credit worthiness of the borrowers which results in Non-repayment of loans. The present study of Boudh Central Co-operative Bank provides similar results as of other Central Co-operative Banks of the state.

1.6. CONCLUSION AND SUGGESTIONS :

The working of the Co-operative movement is not quite satisfactory even though there is a tremendous increase in the number of Co-operative banks and societies. Their total membership and amount of loans given may sound spectacular when we compare the figures over a period. The amount of overdues is also increasing with the growth of the movement. The funds of Co-operative Banks and societies are often misused and mismanaged.

The following conclusions can be made out of the present study.

- (i) Maximum number of borrowers of Central Co-operative Bank avail short term crop loan.
- (ii) Borrowers within loan range Rs. 4,000/- to Rs 6,000/- are largely defaulters.
- (iii) Draught conditions and less agricultural surplus income are the main causes of non-repayment of loans.
- (iv) Small farmers are the maximum beneficiaries of Co-operative loans.

It is futile hope to eradicate the poverty of rural masses with co-operation alone when movement is not functioning properly. There is an urgent need to rethink and revitalise co-operative banks and societies. Some of the curative suggestions are as follows :

- (i) Weaker segments of the society should be given priority in sanction of loans according to the credit worthiness of borrowers
- (ii) Sanction of loans should be made strictly as per the principles and provisions without political pressure.
- (iii) Properly trained and bank management degree holders should be given appointment in higher posts of the Co-operative Banks.
- (iv) Periodical review and Training be conducted for all co-operative Banks.
- (v) Women should be given equal opportunity with men in co-operative sector.
- (vi) Loan recovery procedures should be strictly followed and defaulting should be checked.

Rural Credit Structure—Performance of DCCBs—A Micro Level Study

Umesh Chandra Patl

Lecturer in Economics

Paramananda College, Bolgarh

INTRODUCTION :

The farmer produces food and fibre, the most vital needs of human beings after air and water, for use on the spot or after spatial movements. India lives in villages which account for 75% of its population. Nearly 70% of the population depend on agriculture. Agriculture also continues to occupy an important place in the state as the share of this sector in the state Income for the year 1994-95 was 33.24% at constant (1980-81) prices. Nearly 48% of the total population is still in grip of vicious circle of poverty. Majority of the families belong to category of small and marginal farmers, agricultural labourers and rural artisans. Rural poverty is mainly related to unemployment and under-employment. Hence adequate and timely supply of credit on reasonable terms is necessary though not sufficient for agricultural development in a region.

IMPORTANCE OF CO-OPERATIVE CREDIT :

Among the various institutions providing financial assistance for agriculture and allied activities, the share of Co-operative institutions is higher than that of others. They are the age-old institutions in the rural atmosphere. It shows their extensive involvement in the rural economy. It has not only sidelined the money lenders, but diversified activities considerably to every nook and corner of the country. Looking to the number of societies, the volume of business handled, the number of members enrolled and the geographical coverage, the progress of co-operative movement in the state is nothing short of spectacular.

CREDIT SET-UP :

There are two separate wings of the co-operative credit structure in the state like the country. One provides short-term and medium-term

loans, whereas the second provides long-term credit. The short-term being of a threetier structure with the State Co-operative Bank at the apex, Central Co-operative Bank (CCB) at the district level and Primary Agricultural Credit Societies (PACSS) at village level. Long term credit is provided by the State Co-operative Land Development Banks and Primary Land Development Banks.

The Central Co-operative Bank is in the middle of the three-tier set-up with head office located at the district headquarters with a number of branches spreading over the district. Its operation is confined to the boundary of respective districts.

Objectives and Methodology :

The broad objectives of the present study are :

- (1) To go into the progress of Cuttack Central Co-operative Bank with regard to its membership, mobilisation of deposits, Share-Capital, Loans advanced etc.
- (2) To Study the over-due position of the bank; and
- (3) To identify the basic factors responsible for overdues and to put-forth suggestions to strengthen the Co-operative movement in the state.

The period of study ranges from 1990-91 to 1996-97. Use of secondary data is the basic limitation of this micro-study. But the observations made in course of discussion with officials of the bank are incorporated in the study.

Profile of Cuttack CCB :

The Central Co-operative Bank at Cuttack was registered in the year 1918. After the scheme of amalgamation made during 1956-57, the weak and uneconomic units established in Kujang, Jajpur, Kendrapara and Cuttack were amalgamated as Cuttack United Central Co-operative Bank. It was in 07.10.56. The Cuttack Central Co-operative Bank in its present form was registered in the year 1962 under the Orissa Co-operative Societies Act of 1962 and Kujanga, Kendrapara, Jajpur were included as its branches. Its area of operation extends to the whole of Cuttack district excluding the areas under Banki subdivision. At present it has 38 branches including one women Branch inside Cuttack City. It has also received permission from the Registrar to open two new branches.

FUNCTIONS :

The broad objectives and functions of DCCB, Cuttack are as follows :

advanced has been increasing from year to year. It was Rs. 771 lakhs in 1990-91 and reached the figure of Rs 5,819 lakhs, an increase of 654%.

PROBLEM OF OVERDUE :

One of the most problematic features in the working of CCBs is an increase in the amount of overdues. The overdues exceed the owned funds and cripple the Co-operative credit structure to such an extent that it is not in a position to absorb credit from higher financing agencies.

There are two factors responsible for such a situation, one external factor, which is beyond the control of lending institutions, for example, climatic condition, irrigation facilities and cropping pattern. The other is internal, such as defective lending policy, absence of effective supervision, apathy of the management in taking quick action against the defaulters and above all the absence of favourable climate for which the state government is responsible to some extent.

The attitudes and certain policies pursued by the state government create a very unfavourable climate for repayment of overdues. The earlier decisions of the government to write off the agricultural loans create an impression that loans need not be repaid. Besides, certain statements made by the representatives of the government sometimes also give impression to the borrowers, explicit or implicit, that the co-operative dues need not be repaid. The overall effect of all these vitiates the climate for prompt repayment.

The overdues reported by the bank do not represent the real recovery position since book adjustments of different types and of varying degrees exist at branch level. This is done to reflect a better financial and operational picture. The secretary of the concerned Central Co-operative Bank and the Registrar of Co-operative Societies should take stern action against the erring staff responsible for book adjustment.

Conversion of loans again makes the overdue position of the bank more difficult. When loan becomes overdue with a beneficiary, another fresh loan is issued in his favour, thus hiding the actual overdue position. So the question of overdue which is the most important criterion of judging the credit-worthiness of a society is never given due consideration. The amount of overdue of Cuttack Central Co-operative Bank has increased from Rs. 1,138 lakhs in 1990-91 to Rs. 2,908 lakhs in 1996-97. This is an increase of 155% over a period of seven years.

To overcome this situation, the Bank has intensified the supervision work in the matter of recovery. The tour programmes of the

supervisors are under strict scrutiny. The Bank is also motivating the defaulters to make timely repayment to avail the opportunity of interest reduction. Separate department is there to collect the overdues from the individuals and large number of certificate cases have been filed against the defaulters. But unusual delay in the finalisation of the proceedings and political interference stand as obstacles in the path of getting concrete result.

CONCLUSION AND SUGGESTIONS :

Thus the DCCB is not only a vital link between state-level apex bank and the primary societies but has a place of its own in the entire Co-operative set-up. But the failure in achieving the objectives cannot be looked into as an isolated issue. Its weaknesses are as follows :—

- (i) The highly distressing problem of heavy overdues and non-viability of a number of PACSs are due to lack of political will to completely revitalise the co-operative structure.
- (ii) Lack of co-operation and active involvement on the part of the rural masses is also another basic weakness.
- (iii) Lastly, lack of proper assessment of manpower needs, absence of co-ordination among various agencies involved in the movement, government's inability to meet man-power and financial needs of co-operative banks, low level of representation of weaker sections are some of the loopholes of the co-operative system.

It is a fact that the upper strata of the society, though exploiting the resources from the co-operative structure are not helpful in strengthening the movement. The Royal Commission on Agriculture has warned not to enrol persons as nominal members. But the richer sections of people being enrolled as nominal members avail large amount of loans thus affecting the interests of poor farmers. It has also warned that co-operative business should not be commercialised. But the bank is providing more amount of non-farm loans than loan for on-farm activities. This is purely against the spirit of co-operation for which it was started.

At the grassroot level, the PACS themselves are not in a position to mobilise deposits from the members, though they are increasing the volume of lending amount year after year by borrowing funds from

DCCBs. Thus the economically poor PACSs are responsible for the weakness of the Central Co-operative Bank.

The repaying capacity of the farmers is badly affected by the rising prices of agricultural inputs, wage goods and other commercial commodities.

Basically, the rural farmers are poor, illiterate and are facing socio-economic dualism. Unless the government takes initiative to restructure the co-operative system from the grassroot level by involving major agricultural households and inculcating social responsibility and credit worthiness among the rural farmers, the fruits of co-operative activities will continue to elude the rural poor.

The Development and Working of Service Co-operative Societies in Athagarh Block of Cuttack District in Orissa

Rajan Kumar Sahoo

Lecturer in Economics,
S. S. D. Mahavidyalaya,
Gurudijhatia, Cuttack

The Co-operative movement in India was started in 1904 as a means to combat indebtedness and supply rural credit. In 1919 the Government of India Act was passed and co-operation became a provincial subject spreading the spirit of "All for each and each for all". Though the economic prosperity between 1920 and 1929 facilitated the expansion of the co-operative movement, the depression of thirties gave a tremendous set back to the movement. The appointment of Rural Credit Survey Committee by the Reserve Bank of India in 1951 revealed that co-operatives failed to make any significant inroads in the field of rural credit. It had provided only about 3% credit requirement of farmers, which had reached only the wealthier members of the villages whereas the needs of the poor farmers were not satisfied. Besides large parts of the country were not covered by co-operatives. Analysing these causes the Committee recommended for an integrated scheme of Rural Credit which was the basis of Co-operative development. Since then the number of co-operative societies, their membership, supply of short term, medium term and long term credit, working and share capital have increased manifold. Their activities have been diversified from agriculture to industry, credit to non-credit spheres like marketing, processing, consumer co-operatives, food preservation, fishery etc. Whether significant development of the co-operatives has been achieved both in its quantitative and qualitative aspects is yet to be assessed. This study is intended to review the development and working of the Service Co-operative Societies at the grass root level in Athagarh.

The study has been undertaken with the following objectives.

- To study the nature and magnitude of development and working of the Service Co-operative Societies of the Athagarh Block of Cuttack district in the State of Orissa.
- To examine the level and causes of the indebtedness of the borrowers of the service co-operative societies of the Athagarh block.
- To study the effectiveness of co-operative credit for the benefit of the borrowers.

The study has been planned with the following hypotheses.

- Increase in 'overdues' affects the smooth functioning of the co-operatives.
- Unnecessary Government interference increases the indebtedness of the borrowers and affects the development of the co-operatives.
- Non advance of loan for consumption purposes affects the working of the co-operative societies.
- Grant of loan without surveying the loan repayment capacity of the borrower reduces the development of the co-operatives.
- Non investment of loan for the right purpose reduces the effectiveness of the co-operative movement.

Here the study has been undertaken collecting data on random sampling method from 16 Secretaries and 80 borrowers of service Co-operative Societies of Athagarh block. Besides this relevant informations have been collected both from published and non-published sources of certain government organisations.

It has come to the notice that during 1992-93, in Athagarh block there were 26 Service Co-operative Societies, whereas in all the 14 blocks of Cuttack district this number was 209. So the average number of societies per block in the district is 15 which is less than the Athagarh block. Similarly in Orissa during the above period there were 2820 Service Co-operative Societies in 314 blocks. So the average number of societies per block in the State is 9 which is less than the number at the district level.

In Athagarh block during 92-93, the membership of the Service Co-operative Societies is 17,518. In Cuttack district this membership is 1,76,850. So the average membership per block is 12,632 which is less than the Athagarh block. Similarly in the State of Orissa this membership is

33,41,000. The average membership per block is 10,640 at the State level which is less than the average membership per block of the Cuttack district.

Analysis may be made societywise at the block, district and State level. In Athagarh block there were 17,518 members of the 26 SCS, whereas this membership is 1,76,850 for 209 SCS' in the Cuttack district and 33,41,000 for 2820 SCS' in the State of Orissa. The average membership per society is 674 in Athagarh block, 846 in Cuttack district and 1185 in the State. So the membership per society in Athagarh block is very less.

The working capital of 26 SCS' in Athagarh block was Rs. 151.63 lakhs during 1992-93. whereas this was Rs. 1887.03 lakhs in all the 14 blocks of Cuttack district and Rs. 30,094 lakhs in 314 blocks of Orissa. The average working capital per block in Cuttack district is Rs. 135 lakhs and Rs. 96 lakhs in the Orissa State. So the working capital of SCS' of Athagarh block is more than the block average of Cuttack district and the State. But the societywise average working capital of Athagarh block is Rs. 5.85 lakhs which is less than that of the Cuttack district and the State where these averages are Rs. 9 lakhs and Rs. 10.7 lakhs respectively.

The total number of agricultural families covered under service co-operative scheme in Athagarh block from 1992-93 to 1996-97 have been studied here. It is revealed that the percent of agricultural families covered under co-operative scheme during the above period ranges from 57 to 60%. Another 40% agricultural families remain outside the co-operative fold till to-day.

The total share capital of Service co-operative societies of Athagarh block increases from rupees 15.73 lakhs in 90-91 to rupees 17.87 lakhs in 95-96. While the contribution made by Government remains constant except in 1990-91, the contribution made by members increases due to the coverage of more and more members by the co-operative societies.

Sixteen secretaries of the Service Co-operative Societies were asked regarding the purpose of loan given to the borrowers. All of them pointed out that they advance loan for the success of agricultural crop in form of cash and fertilizer. No loan is advanced for purchasing agricultural implements or making permanent improvement on the land.

The borrowers were asked about the purpose of loan. 90 % of them pointed out that they receive loan for making agricultural Crop

successful by purchasing fertilizer and paying labour charges. While 10% utilised the loan for purchasing seeds.

The Service Co-operative Societies grant agricultural credit both in cash and kind for Khariff and Rabi Crops. The number and amount of investment of loans for Khariff from 90-91 to 96-97 in Athagarh block show that more loans are given in cash than in kind.

There is neither increasing nor decreasing trend for the grant of loan. The investment of loan has been severely decreased during 1991-92 both in cash and kind. But the amount of loan increased from 92-93 to 94-95. Further from 95-96 to 96-97 the investment of loan was decreasing which was disappointing, while the demand for loan is increasing due to increase in membership, the decrease in investment of the loan is detrimental to the development of agriculture as well as co-operative movement.

The grant of agricultural loan for Rabi in Athagarh block from 90-91 to 96-97 reveals that the amount of loan invested has increased from 90-91 to 94-95 both in cash and kind though the number of cases financed decreased in 91-92 and 92-93. But the amount of loan financed from 95-96 to 96-97 has been decreasing gradually which is not a healthy sign for the development of Service Co-operative Societies.

The total amounts of credit advanced by 26 service co-operative societies in Athagarh block both for Khariff and Rabi from 90-91 to 96-97 show that the service co-operative societies have invested more and more of loans from 90-91 to 94-95 both in Khariff and Rabi in form of cash and kind though there is slight decrease in 91-92. But the amount of investment has been decreasing gradually from 95-96 to 96-97.

The borrowers were asked about the way they got the loan. 63% of them told that they were selected on the basis of merit while 38% got the loan due to good relation with the Secretary.

The borrowers were asked whether they have invested the loan for the right purpose. While the opinion of 88% was positive, 12% was negative and 38% opinion was both. But when those borrowers were asked about the causes of non-investment of loan for the purpose, 75% of them told that they had done so to meet the day-to-day expenditure while 25% of them spent for medical treatment.

The Secretaries were asked about the influence of Chairmen in granting loan. They pointed out that Chairmen were men of politics and most of them put some pressure to advance money to their followers.

The Secretaries were asked whether consumption loan was given by the co-operatives. Here cent percent opinion was negative. Similarly the borrowers were also put the same questions and there was no difference in answer.

A query was made from the Secretaries whether prior survey had been made by them about the loan repaying capacity of the borrowers. The cent percent answer was negative.

A question was asked to the borrowers whether loan was given at right time. It was seen that while 75% opinion was positive, 25% of them gave opinion that sometimes it was delayed.

The amount and percent of over dues of the service co-operative societies in Athagarh block from 91-92 to 96-97 show that the overdues of the societies are conspicuous starting from 57% in 95-96 to 92% in 92-93, whereas the percent of recovery during the above period is very much less. Hence there is indebtedness of the borrowers. When the causes of indebtedness are asked to the Secretaries, cent per cent opinion was due to poverty of the borrowers debt relief and non-stringent policy of the government. Indebtedness due to political influence was almost nil.

When the same question is asked to 80 borrowers it is seen that 88% opinion is for poverty, 38% is due to debt relief policy of the government and crop failure while 25% is due to lack of stringent policy of the Co-operative to recover loan.

The Secretaries were asked for their suggestions for the improvement of the societies. They suggested for the elimination of political pressure and government's initiative for recovery of loan, enhancement of loan and sanction of the loan for business purpose. The borrowers suggested for the grant of loan for purchasing agricultural implements, making permanent improvement of land, enhancement of loan amount, sanction of loan at right time, and grant of loan for business purpose.

CONCLUSION :

The societywise working capital and membership of the Athagarh block are very much less. Forty percent of agricultural families remain outside the co-operative fold. Government's contribution towards share capital is constant. The loans are sanctioned only for making agricultural crops successful. There is decrease in the amount of loan for investment while the demand for it is increasing. No consum-

ption loan is given and prior survey is not made about the loan repaying capacity of the borrower. Overdue is rampant and indebtedness of the borrowers is due to their poverty, debt relief policy of the government and non-adoption of stringent policy of the government.

Steps may be taken to increase society-wise membership and working capital of SCS' of Athagarh block. More and more of agricultural families should be brought to the co-operative fold. Government's contribution towards share capital should be increased. Loans may be granted for making permanent improvement of land. Amount of loans may be enhanced and consumption loan ought to be granted. Steps may be taken by the government to reduce overdues and indebtedness adopting stringent recovery policy and making prior survey regarding loan repaying capacity of the borrower. The staff and personnel of the societies should be properly trained to develop the spirit of self help and mutual help among the borrowers for the smooth working of the Service Co-operative Societies at the grass root level.

Housing Cooperatives in India—a Study With Particular Reference to Orissa

Sri Umesh Chandra Panigrahi

Lecturer in Economics

Gopalpur College,

Gopalpur-on-sea

&

Dr. Bhagabat Patro

Reader in Economics

Berhampur University,

Berhampur-760007

Shelter is recognised as a basic human necessity next to food and clothing. As such, it is one of the primary objects of a welfare-state to provide its citizens with shelter having favourable surrounding and healthy atmosphere. Unfortunately, in our country, despite all the efforts made by the Government, provision of suitable housing accommodation is not-available for a large segment of the population.

The house building activities have not kept pace with huge demand for housing units in our country. According to the estimate of National Building Organisation (NBO), the total backlog of housing was estimated at 31 million housing units in 1991 in India. Of this the backlog in rural areas was about 20.6 million and in urban areas it was about 10.4 million housing units. Some of the disturbing factors in the country's housing conditions are overcrowding and congestion, kutcha and dilapidated houses and unhygienic environment unfit for healthy human inhabitation.

Housing Co-operatives at the National Level :

Since independence, the economic policies of the Central Government highlighted the significant need of co-operative effort to fulfil the objective of just and equitable distribution of housing facilities. The First Five Year Plan document states "we lay special emphasis on co-operative housing societies not only because they can mobilise private capital, which otherwise would remain dormant, but because they open

the way for aided self-help in the construction of houses which should be encouraged for reducing the cost as much as possible.

A housing co-operative is a registered body under the Co-operative Society Act. It is democratically controlled by the members with the primary objective of owning a house each for themselves and improving their living conditions. The first co-operative housing society was set up in 1909 in the erstwhile Mysore state (now Karnataka) and was known as Bangalore Building Co-operative Society. Since then, the number of housing co-operatives have gone up. This sector has evolved a vast organisational and infrastructural network. At present, there are 85,000 Primary Housing Co-operative Societies operating at grassroot levels having membership of over 50 lakhs, 25 state apex housing federations at state level, and the National Co-operative Housing Federation at the national level.

The Orissa Co-operative Housing Corporation Limited was formed in 1952 as a state level apex organisation. The objectives listed below, would give some general idea about the apex societies.

1. To promote house building activities in the co-operative housing sector of the state.
2. To supervise and co-ordinate as well as guide the housing programmes undertaken by the members of Primary Housing Co-operative societies (PHCs) in the state.
3. To finance activities of members of PHCs to increase the dwelling house units, and supply them to individual members.
4. To promote house building activities in the co-operative sector of the state in both rural and urban areas.
5. To implement the Central housing programmes for middle and low income groups in the state's co-operative sector.
6. To mobilise the necessary capital through its borrowing activity and in turn channelise it for promoting the activities of the primary HBCs in the state.

In Orissa, before commencement of the First Five Year Plan, there were only 10 primary House Building Societies (HBCS). By the end of Fifth Plan, due to the mushroom growth of primary HBCS, they reached a staggering figure of 427. Most of them became either dysfunctional or moribund after availing of the first loan assistance from the

corporation. To overcome this difficulty, the Government of Orissa adopted a pilot project to re-organise the entire co-operative housing sector. It was decided to combine all primary HBCS into 63 societies—6 urban HBCS in the six important towns of the state, namely, Cuttack, Bhubaneswar, Berhampur, Sambalpur, Balasore and Pur & and 57 rural, one each at revenue subdivisional head-quarters.

Thus, at present the organisational network of the Orissa co-operative housing sector consists of 63 affiliated primary co-operative societies, 17 corporate housing co-operatives specially organised for the welfare of employees of different institutions like staff of S. B. I., R.B.I., G. I. C., L. I. C., and other commercial banks which do not depend on the Co-operative Bank or the State Government for finance; and the Orissa State Apex Housing Corporation Limited operating at the state level. The total membership of the primary HBCS as on 1995 stands at 58,000 persons.

Since re-organisation, the activity of housing co-operatives has been geared up. Housing co-operatives have availed more loans from the Life Insurance Corporation. The State Government provided share capital and managerial subsidy to them. With this, the working capital of both the corporation and the primary H. B. C. S. had increased from Rs. 1.71 crores and Rs. 1.61 crores respectively in the Fifth Plan to about Rs. 5.56 crores and Rs. 4.97 crores by the end of Sixth Five Year Plan. In 1994-95, the working capital of primary H. B. C. S. was about Rs. 33.05 crores and of the Corporation was about Rs 34.30 crores.

The success of the co-operative housing movement can be judged from the number of houses constructed by these societies. It is observed that the position of house construction activity has not kept pace with the increase in the demand for houses in the state rather it shows an uneven declining trend. The average number of houses constructed per society fell from 16 in 1990-91 to 5 in 1994-95. The poor performance of housing co-operative movement can be assessed from the fact that it accounts for only 3% of the total house construction and 2% of the total expenditure in the housing sector.

The present condition of housing co-operatives is far from satisfactory. It is found that the trend of profitable housing co-operatives has decreased over the years. The number of societies incurring loss were only 23 in 1990-91 which increased to 38 in 1994-95. Thus, at

present 51% of housing societies are working under loss and another 20% are running on no-loss-no-profit basis in the state. The remaining 29% of housing societies are making marginal profits, and a majority of them do not earn profit continuously.

The sources of finance of housing co-operatives in Orissa are : (1) Share capital from the State Government ; (2). Loan from Life Insurance Corporation of India ; (3) Loan from Housing and Urban Development Corporation (H. U. D. C. O.) ; and (4). Loan from National Housing Bank (N. H. B.) etc. The L. I. C. is the most important financial institution for providing finance to the housing co-operatives of the state for their housing activities. The total credit flow of the L. I. C. to housing co-operatives through the State Apex Housing Corporation is Rs. 53.80 crores till 1995-96.

Housing Co-operatives provide house building loans to its members for construction, renovation and extension of houses. Recently, a new scheme known as self-finance scheme has been adopted providing loans for purchase of flats and apartments sponsored by Developmental Authorities, Housing Boards and private estate builders. Loans are provided on easy terms with less interests both in urban and rural areas. The amount of Maximum loan is Rs. 2,00,000 in rural areas. The rate of interest is 15.3% (simple) which is repayable between 18 to 20 years.

With the impact of liberalisation and economic reform, housing co-operatives have diversified their business. Both the Apex Corporation and Primary H.B.C.S. have taken up developing plots, construction of houses and office-cum-commercial complexes, etc., in a massive way.

Problems of Housing Co-operatives :

The housing co-operatives in Orissa suffer from many problems which are listed below :

1. A large number of housing co-operatives are ordinary type building societies which assign priority for financing the house construction activities of individual members rather than undertaking construction of houses by themselves.
2. A number of H. B. C. S.s have confronted seriously with the problem of overdue which is responsible for losses.
3. A large number of them are not sufficiently dynamic and efficiently managed to prepare and submit feasible project proposals for obtaining institutional loan from agencies like L. I. C., public sector banks, N. C. D. C., H. U. D. C. O. etc.

4. These house building co-operative societies are more or less urban based with concentration in municipalities, N. A. Cs. and district headquarters.
5. Housing co-operatives do not fulfil the needs of poor sections of society as they prefer to provide loans to employees of Government only.
6. There is no effective co-ordination between housing co-operatives and other housing development agencies. The Urban Housing Development Department both at the centre and state, seldom involve the housing co-operatives in formulation of housing plans and programmes. The Development Authorities have not come forward to appreciate the services of housing co-operatives.

New policy measures are necessary for reviving and broadening the base of housing co-operatives. The Government of India in the Ministry of Urban Development Affairs and Employment constituted a Drafting Committee to frame a model Law on Housing Co-operatives. The Committee report is still under the consideration of the government. The following measures have to be taken immediately to make housing co-operatives a viable institution and to play an effective role in the economy.

1. The State Governments should contribute liberally towards the share capital of Apex Co-operative Housing Corporation.
 2. The N. H. B. should provide more funds to the Corporations under its Refinance Scheme for lending the same to the housing co-operatives and liberalise the terms and conditions of the scheme related to interest rate, recovery percentage and classification of Audit.
 3. The loans given by Urban Co-operative Banks and Commercial Banks to housing co-operatives should be treated as priority sector lending.
 4. The State Government should take suitable measures to remove the difficulties of loan sanctioning process by housing co-operatives.
 5. The housing co-operatives should be persuaded to use local building materials and adopt low-cost housing technology, to reduce cost and making the houses environmentally viable.
 6. Operational efficiency of housing co-operatives should be improved. Corrupt practices prevalent in the societies should be removed.
-

Problems & Prospects of the Aska Co-operative Sugar Industries Ltd.

Mr. Lalit Mohan Sahu

Dept. of Economics,
Salipur College, Salipur

The Aska Co-operative Sugar Industries started functioning from 31. 8. 1956. With Crushing capacity of 1219 metric tonnes per day, it has gone into production of sugar from 12. 12. 1963. The Industry is also having its distillery and carbon-di-oxide plants. The Industry has a membership of 26,025 out of which 25,005 are cane growers, 105 cooperative societies and 915 are non-grower members.

The Management of the Society as per its bye-laws is to be vested with a committee of Management. The last Committee of Management continued upto 5. 12. 1986 and thereafter the Management has been vested with the Registrar of Co-operative Societies, Orissa.

The operational area of the Industry comprises whole of the Ganjam District but its effective area of operation is confined to 15 Blocks only. In the area of the Industry there is kharif irrigation facility for an area of 1,38,083 acres and rabi irrigation of 37,817 acres from different sources.

Crushing of cane during the last three seasons indicating area under sugarcane, quantity crushed and recovery obtained are mentioned below :

| Season | Area under sugarcane (in acres) | Quantity received for crushing (in MT) | Recovery% |
|-------------|------------------------------------|---|-----------|
| 1986-87 | 6,580 | 1,74,876 | 8.90 |
| 1987-88 | 9,016 | 2,68,560 | 7.43 |
| 1988-89 | 6,308 | 1,03,711 | 9.59 |
| 1989-90 | 5,323 | 1,35,780 | 9 |
| (projected) | | | |

Due to prevailing long dry spell as well as scarcity of irrigation water during months from March to 15th June the sugarcane crop has

been affected at growing stage. Also in some cases the crop has been completely damaged. The existing agreed cane area comes to Ac. 3453 plant and 1870 acres ratoon and the expected tonnage of about 1,35,780 MT will be available for 1989-90 crushing season.

To achieve better recovery it is necessary to maintain area cultivation in the ratio of 40:30:30 in early, mid and late varieties respectively. In general the early maturity cane varieties of high sucrose content yield comparatively less quantity than the late variety. So to motivate the cultivators for growing early variety of cane for the crushing programme, special incentive is given @ Rs. 25/- per tonne over and above the normal cane price. With this attempt the ratio of early, mid and late varieties has come to 44:40:16. The Industry is giving various subsidies to the cane-growers to encourage cultivation.

The Industry has started an extension wing to educate the cane-growers on improved cane cultivation. It is imparting training and issuing instructions through monthly bulletin, film-show and meetings in different villages at regular intervals.

Production of sugar during the last three years and projection for the year 1989-90 are mentioned below :

| | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 |
|-------------------------------------|----------|----------|----------|----------|-----------|
| 1. Date of starting | 18.12.85 | 27.11.86 | 1.11.87 | 21.12.88 | 31.12.89 |
| 2. Date of closing | 20.3.86 | 01.05.87 | 18.7.88 | 28.3.89 | 30.4.1990 |
| 3. No. of days crushed | 93 | 156 | 261 | 98 | 135 |
| 4. Total cane crushed in M. T. | 1,07,824 | 1,74,876 | 2,67,600 | 1,03,711 | 1,35,000 |
| 5. Total sugar bagged in Qtls | 97,820 | 1,55,820 | 1,99,010 | 99,126 | 1,21,500 |
| 6. Total molasses produced in M. T. | 4,402 | 8,362 | 14,148 | 6,750 | 6,075 |
| 7. Recovery% of sugar | 9.73 | 8.90 | 7.43 | 9.59 | 9.00 |

Sugar is the main product and the by-products are molasses, rectified spirit, denatured spirit, bagasse, filtercake and carbon-dioxide gas.

Disposal of sugar is controlled by the Government of India. Production and sale of sugar during last three years is mentioned hereunder :

| Years | Production in M. T. | Marketing | |
|---------|------------------------|-----------|--|
| | | in M. T. | Value excluding excise duty (Rs. in lakhs) |
| 1985-86 | 9782 | 9782 | 446.99 |
| 1986-87 | 15582.0 | 15349.0 | 714.96 |
| 1987-88 | 19901.0 | 19899.00 | 969.51 |
| 1988-89 | 9912.6 | 7921.8 | 456.12 |

The Industry is having a distillery unit with a production capacity of 10,000 Bulk litres of Rectified Spirit per day. The distillery is to work for 300 days per year for its optimum utilisation. By this the production will be 30 lakhs bulk litres. The internal consumption of the state as accommodated by the Government is around 15 lakhs per year, resulting in 50% utilisation.

FINANCIAL MANAGEMENT :

Assets and Liabilities as on 31.3.1989 is mentioned below :
(Rupees in lakhs)

| Liabilities Account | | Assets Account | |
|---|--------|------------------|--------|
| Share capital : | 139.06 | Fixed Assets : | 112.53 |
| Reserve Funds : | 152.62 | Advances : | 46.09 |
| Deposits | 31.07 | Investments : | 18.41 |
| Borrowings | 155.67 | Other assets : | 158.44 |
| Other liabilities : | 234.21 | Closing stocks : | 382.18 |
| Profits : | 33.73 | Cash & bank | 28.71 |
| (including current year's Rs. 3.89 lacs) | | balance | |
| Total : | 746.36 | | 746.36 |

Details of outstanding loans as on 31.3. 1989 are mentioned below :

(Rs. in lakhs)

(A) Term loan :

Purpose

| | | |
|----------------------|--------|-----------------------|
| (i) State Government | nil | |
| (ii) N. C. D. C. | 11. 79 | distillery and godown |
| (iii) IDBI loan | 1.35 | machinery |

(B) Short term loan :

State Bank of India. 142.53

Total 155.67

The short term loan has already been repaid by now. The State Government has issued guarantee for availing long-term loan amounting to Rs. 28.36 lakhs from the National Co-operative Development Corporation, New Delhi for installation of Distillery unit. The Industry has made net profit of Rs. 3.89 lakhs after paying the cane price @ Rs. 305/- per M. T.

LAMPS and Tribal Development—A Case Study. of Koraput District

Dr. K. Nana Buchi

Reader in Economics,
Vikram Deb College, Jeypore

ABSTRACT

Basing on the recommendation of the Bawa Committee, the Primary Agricultural Co-operative Societies of the Tribal Sub-Plan areas of the State of Orissa were reorganised into 223 LAMPS, to provide a package of services to the tribes from one Agency in all the Blocks of the Tribal Sub-plan of the State. Of the 223 LAMPS, there are 20 LAMPS in the newly created district of Koraput. These LAMPS cover all the 14 Blocks of the district of Koraput. All the LAMPS have covered 0.88 lakh of agricultural families out of a total of 1.26 lakh of the entire district.

The total membership of all the 20 LAMPS comes to 0.88 lakh, of which the borrowed members come to only 5.8 thousand in the year 1996-97. The total share capital is Rs. 128.7 lakhs. The share capital of the State Government comes to 40.9 lakhs. All the LAMPS have been affiliated to the Koraput Central Co-operative Bank with its headquarters at Jeypore. As the financing agency, the Koraput C. C. B. has financed Rs. 602.5 lakhs during 1996-97. The working capital of the LAMPS for the year comes to Rs. 1036.3 lakhs. During 1996-97, all the 20 LAMPS have issued Rs. 335.8 lakhs as loan to their borrowing members.

In the Study an attempt has been made to assess the profit and loss of the LAMPS of the Koraput District. During study, it is revealed that in the year 1996-97, the total income and total expenditure of all the LAMPS come to Rs. 15.74 and Rs. 13.59 lakhs respectively. Though the loss during the year 1996-97 is only Rs. 2.05 lakhs, the accumulated loss of the LAMPS till 1996-97 is Rs. 634.62 lakhs.

The LAMPS of Koraput provide short-term, medium term, long term and crop loans to the tribes of the district. In addition to the

above, the LAMPS are also implementing the IRDP programmes/schemes for the benefit of the tribes of the district.

During the study, it is also revealed that the loans provided for non-agriculture (mostly the petty business loans) is quite popular among the tribes. The IRDP programmes like Animal Husbandry schemes, Land Development schemes etc. did not alleviate the poverty of the tribes who are below the poverty line.

The study further revealed that many of the LAMPS are not viable due to increased management cost. Of the 20 LAMPS, only one LAMP is viable, 12 are potential viable and the rest 7 LAMPS are non-viable. As the provision, the cost of management should not exceed 2.5% of the working capital. But it is noticed that most of the LAMPS' cost of management in shape of salaries of employees who are posted in the LAMPS on deputation from other agencies exceed from 5 to 20 times of the stipulated provision. Adding to it, the problem of over-dues and low level of business activity also hampers the question of viability and smooth functioning of the LAMPS.

In conclusion, it is suggested that appropriate steps and measures should be taken to make the LAMPS effective so that they can play an important role to develop the tribes of the district.

LIST OF MEMBERS

INSTITUTIONAL MEMBERS

1. Council of Analytical Tribal Studies,
Pujariput Road, Koraput-764 020
2. Directorate of Economics & Statistics,
Govt. of Orissa,
Heads of Deptt. Buildings,
Bhubaneswar-751 001
3. Gopabandhu Academy of Administration,
Chandrasekharpur, Bhubaneswar-751 013

LIST OF LIFE MEMBERS

A

- | | |
|---|---|
| 1. Smt. Anjali Das, Deptt. of Economics B. J. B. Morning College, Bhubaneswar | 8. Smt. Amita Choudhury, Deptt. of Economics, Berhampur University, Bhanja Vihar, Berhampur-7, Dist. Ganjam |
| 2. Sri Atal Bihari Sahoo, Deptt. of Economics, Anandpur College, Anandpur. Keonjhar | 9. Sri Akshaya Kumar Panda, 457, Laxmi Bai Nagar, New Delhi-110023 |
| 3. Dr. Ajeya Kumar Mohapatra Deptt. of Economics, J. K. B. K. College, Cuttack | 10. Smt. Anuradha Mohapatra, Deptt. of Economics, P. N. College, Khurda |
| 4. Dr. Ajit Kumar Mitra, Prof. in the Deptt. of A & A Eco., Utkal University, Vani Vihar, Bhubaneswar-4 | 11. Sri Amitav Das, Deptt. of Economics, Shahaspur College, Balichandrapur Dist. Kendrapara |
| 5. Miss. Annapoorna Satapathy, Deptt. of Economics, Govt. College, Angul | 12. Dr. Akrura Chand, Deptt. of Economics, Sambalpur University, Jyoti Vihar, Burla. Dist. Sambalpur |
| 6. Major A. K. Roy, Dy. D., H. E. (Retd.) Orissa | 13. Sri Abhay Kumar Nayak, District Employment Officer District Employment Exchange Rourkela-12 |
| 7. Dr. Adwait Kumar Mohanty, Prof. in the Deptt. of A & A Eco. Utkal University, Vani Vihar, Bhubaneswar-4 | |

14. Sri Arabinda Mishra,
Deptt. of Economics,
Govt. Women's College,
Sambalpur
15. Smt. Asha Dugal,
Deptt. of Economics,
Emarti Devi Women's College,
Nayasarak, Cuttack
16. Sri Amulyanidhi Pradhan,
Deptt. of Economics,
Govt. Evening College,
Rourkela

B

1. Dr. B. Eswar Rao Patnaik,
Deptt. of Economics,
Govt. College, Bhawanipatna
2. Sri Bhabani Prasad Dash,
Deptt. of Economics,
Ravenshaw College, Cuttack
3. Smt. Banabasini Mohapatra,
Deptt. of Economics,
S. K. D. A. V. College, Rourkela
4. Dr. Binayak Rath,
Prof. in the HSS Deptt.
IIT Kanpur-208016 (UP)
5. Dr. Bidyadhar Nayak,
Deptt. of Economics,
Ravenshaw College, Cuttack
6. Sri Basanta Kumar Das,
Deptt. of Economics,
Rajdhani College, CRP Square,
Bhubaneswar
7. Sri Benudhar Mishra,
Principal, Nalco Nagar College
Nalco Nagar, Angul-759145
8. Prof. B. C. Parida,
Friends Colony, Bajrakabati
Cuttack.
9. Sri Bimal Kumar Dasb,
Deptt. of Economics,
Govt. Women's College,
Dhnkanal
10. Sri Bibhudendu Mishra, I. R. S.
Director General, Investigatio
Income Tax, Calcutta
11. Sri Bijay Kumar Bose,
SIDBI, IPICOL House,
Bhubaneswar
12. Dr. Bimal K. Mohanty,
Deptt. of Economics,
Ravenshaw College, Cuttack
13. Dr. Basudev Sahoo,
Retd. Prof. of Economics,
A/M-39, Kapila Prasad,
Bhubaneswar-2
14. Dr. Bibekananda Das,
Retd. Prof. in Economics,
Canal Street, Gandhi Nagar-2
P.O. Berhampur, Dist-Ganjam
15. Dr. Bhagaban Swain,
Deptt. of Economics,
Govt. College, Angul
16. Dr. Bhagabat Patro,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Berhampur-7
Dist. Ganjam
17. Sri B. K. Sahoo, Principal,
Kalinga Mahavidyalaya,
G. Udayagiri, Phulbani
18. Sri B. K. Panda,
Deptt. of Economics,
Berhampur University,
Bhanja Bihar, Berhampur-7
Dist. Ganjam
19. Sri Binayak Das,
Deptt. of Economics,
KSUB College, Bhanja Nagar
Dist. Ganjam
20. Sri. B. Samantaray,
Deptt. of Economics,
R. C. M. College, Khallikote,
Dist. Ganjam

21. Miss Bijaylaxmi Rout,
Deptt. of Economics,
Ravenshaw College,
Cuttack
 22. Major Bramhananda Sahoo,
Principal, Kendrapara College,
Kendrapara
 23. Dr. Benudhar Nayak,
HSS Deptt. NERIST, Nirjuli,
Arunachal Pradesh
 24. Prof. Baidyanath Misra,
17, Sahid Nagar, Bhubaneswar
 25. Dr. Bedabati Mohanty,
Prof. in the Deptt. of A&A Eco.,
Utkal University, Vani Vihar,
Bhubaneswar-4
 26. Dr. Balaram Mishra,
Deptt. of Economics,
Bhadrak College, Bhadrak
 27. Sri Bhikari Behera,
Deptt. of Economics,
Godavarish Mohavidyalaya,
Banpur, Dist. Khurda
 28. Sri Basanta Kumar Mohanty,
Deptt. of Economics,
U. G. College, Khamar,
Angul-759 118
 29. Sri Biswambhar Jena,
Deptt. of Economics,
D. K. College, Jaleswar,
At/PO. Dhansimulia,
Balasore-756 084
 30. Miss Bandana Pathak,
Deptt. of Economics,
J. K. B. K. College,
O. M. P. Square, Cuttack-3
 31. Sri Bharata Bhusan Mohanty,
Deptt. of Economics,
S. A. College, Balipatna,
Khurda
 32. Sri Binod Bihari Nayak,
Deptt. of Economics,
Bamra T. F. College, Bamra,
Sambalpur
 33. Sri Bidyadhar Praharaj,
Deptt. of Economics,
S. G. College, Kanikapada,
Dist. Jajpur
 34. Dr. Bhabesh Sen,
Deptt. of A & A. Economics,
Utkal University, Vani Vihar,
Bhubaneswar
 35. Sri Bhaskar C. Jena,
Deptt. of Economics,
Govt. Women's College,
Keonjhar
 36. Sri Bidyadhar Mahanta,
Deptt. of Economics,
C. S. College, Champua,
Dist. Keonjhar
 37. Miss Bharati Das,
Deptt. of Economics,
P. N. College, Khurda
 38. Sri Bibekananda Mishra,
Deptt. of Economics,
Bhagabati Mahavidyalaya,
Konark, Puri
- C**
1. Sri Chandramani Das,
Deptt. of Economics,
S. B. Women's College,
Cuttack-1
 2. Sri Chittaranjan Das,
Deptt. of Economics,
Padmapur College, Padmapur
Bargarh
 3. Sri Chitrasen Pasayat,
N. K. Choudhury Centre for
Development Studies,
Chandrasekharapur.
Bhubaneswar-13

4. Sri Chintamani Satapathy,
Deptt. of Economics,
Karanja College, Karanja,
Mayurbhanj

D

1. Sri Dayanidhi Pal,
Deptt. of Economics,
Kendrapara College, Kendrapara
2. Sri Dayanidhi Samantaray,
Narayan Mishra Lane,
Behind Grand Cinema, Cuttack
3. Dr. D. Chaudhury,
Deptt. of Economics,
Dalmia College, Rajgangpur
4. Smt. Dipti Panda,
Deptt. of Economics,
Ravenshaw College, Cuttack
5. Sri Durgasankar Sarangi,
Deptt. of Economics,
F. M. College, Balasore
6. Dr. Dilip Ray,
Assistant Director (Statistics)
Directorate of Economics and
Statistics, Heads of the Deptt.
Building, Bhubaneswar-1
7. Sri D. Mishra,
Deptt. of Economics,
Godavarish Mahavidyalaya,
Banpur, Khurda
8. Sri Digambar Chand,
Deptt. of Economics,
Bamra T. F. College,
Bamra, Sambalpur
9. Sri Dhananjay Patnaik,
Deptt. of Economics,
Seva Mahavidyalaya,
Bidanasi, Cuttack-8

G

1. Smt. Gopa Das,
Deptt. of Economics,
Municipal College, Rourkela-2

2. Sri Gobind Chandra Das,
Deptt. of Economics,
Dhenkanal College, Dhenkanal
3. Dr. Golak Bihari Nath,
Deptt. of Economics,
L. N. College, Jharsuguda
4. Sri Gangadhar Behera,
Deptt. of Economics,
Betnoti College, Betnoti
Mayurbhanj
5. Sri Gopinath Kar,
Deptt. of Economics,
Gop College, Gop, Puri
6. Prof. Ghanashyam Das,
Retd. Director, H. E., Orissa,
699, Sahid Nagar, Bhubaneswar
7. Dr. Gyan Chandra Kar,
Director, N. K. Choudhury
Centre for Development Studies,
Chandrasekharpur,
Bhubaneswar-13
8. Dr. Gajendra Nath Das,
Prof., Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla, Sambalpur
9. Sri Gobind Chandra Padhi,
Deptt. of Economics,
Hinjilicut College, Hinjilicut,
Ganjam
10. Sri Golak Bihari Prusty,
Deptt. of Economics,
Banki College, Banki, Cuttack
11. Smt. Gitanjali Panda,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar-4

H

1. Dr. Hemanta Kumar Pradhan,
Institute of Financial
Management & Research,
30, Kothari Road,
Nungambakkam, Madras-600034

2. Sri Harekrushna Nayak,
Deptt. of Economics,
Bhadrak College, Bhadrak

I

1. Sri I. Gopal Rao,
Deptt. of Economics,
Gunupur College, Gunupur,
Dist. Koraput
2. Smt. Indira Udgata,
Deptt. of Economics,
Ravenshaw College, Cuttack-3
3. Smt. Indulekha Das Bhattamishra
Deptt. of Economics,
Govt. College, Rourkela
4. Miss Ifat Nawaz,
Deptt. of Economics,
S. A. College, Balipatna,
Dist. Khurda

J

1. Smt. Jharana Roy,
Deptt. of Economics,
R. D. Women's College
(Morning)
Bhubaneswar
2. Dr. Jayanta Kumar Parida,
Deptt. of Economics,
Banki College, Banki,
Dist. Cuttack
3. Smt. Jyotsna Udgata,
Deptt. of Economics,
Jatni College, Jatni,
Dist. Khurda
4. Sri J. S. Mahaprasastha,
Deptt. of Economics,
Christ College, Cuttack
5. Sri Jagannath Lenka,
Deptt. of Economics,
Ravenshaw College, Cuttack

6. Smt. Jyotirmayee Kar,
Research Officer, RBI Chair,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar

7. Dr. Jyoti Prakash Patnaik,
Professor of Economics,
Sambalpur University,
Jyoti Vihar, Burla

K

1. Sri Kartik Ch. Rath,
Deptt. of Economics,
Salipur College, Salipur,
Dist. Cuttack
2. Smt. Kanak Manjari Mishra,
Deptt. of Economics,
B. J. B. Morning College,
Bhubaneswar
3. Dr. Kumarbar Das,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar-4
4. Sri K. N. Mohapatra,
Deptt. of Economics,
Ravenshaw College, Cuttack
5. Sri K. Srinivasan, I. A. S.
Retd. Commissioner of
Agriculture, Govt. of Orissa,
Bhubaneswar
6. Dr. K. Nana Buchi,
Deptt. of Economics,
V. Deb College, Jeypore,
Dist. Koraput
7. Dr. Kishore Chandra Samal,
N. K. C. Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar-13
8. Sri K. C. Maharana,
Deptt. of Economics,
V. Deb College, Jeypore,
Dist. Koraput

9. Sri Kartika Prasad Jena,
Ravenshaw College,
Cuttack
10. Smt. Kanaka Manjari Mohanty,
Deptt. of Economics,
S. B. Women's College,
Cuttack-1
11. Sri K. C. Nayak,
Deptt. of Economics,
A. B. College, Basudebpur,
Dist. Balasore
12. Sri Kali Charan Nayak,
Deptt. of Economics,
S. C. S. College, Puri
13. Dr. Khetra Mohan Mohapatra,
Asst. Prof., Deptt. of H. S. S.,
H. B. T. I., Nawab Ganj,
Kampur-208 002
14. Sri Kishore Chandra Pattnaik,
Deptt. of Economics,
Berhampur City College,
P. O. Berhampur,
Dist. Ganjam
15. Sri Kishorehari Badatya,
Deptt. of Economics,
Govt. College, Phulbani
16. Dr. Kasturi Sahoo,
Deptt. of Economics,
P. N. College, Khurda

L

1. Sri L. N. Panigrahi,
Deptt. of Economics,
Aska Science College, Aska
Dist. Ganjam
2. Ms. Lipika Das,
Deptt. of Economics,
Balikuda College, Balikuda,
Dist. Jagatsinghpur
3. Sri Lalit Mohan Sahoo,
Deptt. of Economics,
Salipur College, Salipur,
Dist. Cuttack

4. Ms. Lila Subudhi,
Deptt. of Economics,
Niranjan Govt. Women's
College, Aska, Ganjam
5. Ms. Lipika Das,
Deptt. of Economics,
K. B. D. A. V. College,
Nirakarpur, Dist. Khurda
6. Sri Lalit Kumar Dash,
Deptt. of Economics,
Remuli College, Remuli,
Dist. Keonjhar
7. Sri Lalit Kumar Mahanta,
Deptt. of Economics,
P. S. College, Jhumpura,
Dist. Keonjhar

M

1. Dr. Manoranjan Das,
Deptt. of Economics,
G. M. College, Sambalpur
2. Sri Manoj Kumar Hui,
Deptt. of Economics,
D. S. College, Bahalda,
Dist. Mayurbhanj
3. Sri Manmohan Das,
At-Gopalbag,
(Near Satyasai Vihar), Baripada
4. Smt. Manorama Mohapatra,
The Samaj, Gopabandhu Bhavan
Buxi Bazar, Cuttack-1
5. Dr. Mohit Kumar Sarangi,
Deptt. of Economics,
M. P. C. College, Baripada
6. Sri Manmohan Biswal,
Deptt. of Economics,
Banki College, Banki,
Cuttack
7. Dr. Manmath Kumar Mohanty,
Deptt. of Economics,
Ravenshaw College, Cuttack

8. Smt. Mitali Chinara,
Deptt. of Economics,
R. D. Women's College,
Bhubaneswar
9. Smt. Manaswini Sahoo,
Deptt. of Economics,
Ravenshaw College, Cuttack
10. Sri Mrutyunjay Adhikari,
Deptt. of Economics,
Jamsuli College, Jamsuli,
Dist-Balasore
11. Sri Mahiranjan Dash,
Deptt. of Economics,
Ramchandi College,
Garhmanatri, Dist-Khurda
12. Smt. M. K. Devi,
Deptt. of Economics,
P. N. College, Khurda
13. Dr. M. Behera,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar-4
6. Sri Narsingh Charan Acharya,
Deptt of Economics,
R. S. Mahavidyalay, Odagaon,
Dist-Nayagarh
7. Prof. Nilakanth Rath,
Retd. Prof. of Economics,
Gokhale Institute of Politics
and Economics, Pune
8. Sri N. C. Ray,
Deptt. of Economics,
Ekamra College, Bhubaneswar
9. Sri Narottam Nanda.
Principal, M. P. C. College,
Baripada
10. Dr. N. B. Pradhan,
Deptt. of Economics,
Berhampur Univesity,
Bhanja Vihar, Berhampur-7

P

1. Dr. Nagen Chandra Mohanty,
C/o. Ideal Nursing Home,
Buxi Bazar, Cuttack-1
2. Sri Natabar Raut,
Deptt. of Economics,
S. V. M. College, Jagatsinghpur
3. Smt. N. Pravati Kusum,
Deptt. of Economics,
R. C. M. College, Khallikote,
Dist-Ganjam
4. Dr. N. C. Sahoo,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Berhampur-7
5. Sri Nalinikanta Mohapatra,
Deptt. of Economics,
Balikuda College, Balikuda,
Dist. Jagatsinghpur
1. Dr. P. K. Mohapatra,
CARE, Rajasthan,
C-11, Surya Niketan,
Sawai Jaisingh High Way,
Bani Park, Jaipur-302 016
2. Dr. P. C. Mohapatra,
Deptt. of Economics,
D. A. V. College, Koraput
3. Sri Pratap Keshari Nayak,
Deptt. of Economics,
Dhenkanal College, Dhenkanal
4. Dr. Prahallad Panda,
Prof. in Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Berhampur-7
5. Smt. Pratima Sarangi,
Deptt. of Economics,
Ravenshaw Morning College,
Cuttack

6. Smt. P. K. Singh,
Deptt. of Economics,
V. Deb College, Jeypore,
Dist-Koraput
7. Prof. Pravat Kumar Patnaik,
Jawaharlal Nehru University,
New Delhi-110067
8. Prof. P. R. Bramhananda,
Retd. Prof. of Economics,
University of Bombay
9. Sri P. K. Mohapatra,
Deptt. of Economics,
Khemundi College, Digapahandi,
Dist-Ganjam
10. Sri Prabhat Kumar Mohapatra,
Deptt. of Economics,
B. J. B. College, Bhubaneswar
11. Sri Purna Chandra Minj,
Deptt. of Economics,
Rajdhani College, CRP Square,
Bhubaneswar
12. Dr. P. C. Dhal,
Deptt. of Economics,
Nimapara College, Nimapara,
Dist-Puri
13. Sri Prafulla Kumar Mansingh,
Deptt. of Economics,
S. C. S. College, Puri
14. Dr. Pragati Mohanty,
Deptt. of Economics,
S. D. Women's College,
Rajgangpur, Dist. Sambalpur
15. Miss Pragyan Pal,
Deptt. of Economics,
S. B. Women's College, Cuttack
16. Sri Pratap Chandra Mahanty,
Deptt. of Economics,
Bramhanajharilo Mahavidyalay,
Bramhanajharilo, P.O. Raipur,
Dist-Cuttack
17. Sri P. Sahoo,
Deptt. of Economics,
Gopalpur College,
Gopalpur on Sea,
Dist-Ganjam
18. Sri P. K. Das,
Department of Economics,
Karanjia College, Karanjia,
Dist-Mayurbhanj
19. Smt. Priyambada Bhainsha,
Deptt. of Economics,
V. S. S. College, Jujumara,
Sambalpur
20. Smt. Pratima Mohapatra,
Deptt. of Economics,
Satyasai Women's College,
Bhubaneswar
21. Sri P. K. Bisoi,
Deptt. of Economics,
T. T. Mahavidyalay, Ghatagaon
Dist-Keonjhar
22. Smt. Prajna Samantaray,
Deptt. of Economics,
Christ College, Cuttack-8
23. Sri Patitapaban Sahoo,
Deptt. of Economics,
Rajdhani College, Bhubaneswar
24. Ms. Puspa Das,
Deptt. of Economics,
Kamala Nehru Mahavidyalay,
Bhubaneswar
25. Sri Prabodh Kumar Samal,
Deptt. of Economics,
G. C. College, Ramchandrapur,
Dist. Jaipur
26. Sri Prasanta Kumar Chhotray,
Deptt. of Economics,
Ekamra College, Bhubaneswar
27. Sri Prasana Kumar Mohapatra,
Anchalika Mahavidyalay,
Swampatna, Keonjhar

R

1. Sri Rabindra Kumar Mishra,
Deptt. of Economics,
B. J. B. College, Bhubaneswar
2. Sri Rajkishore Mishra,
Deptt. of Economics,
N. C. College, Jajpur
3. Sri Ravi Narayan Kar,
Asst. Director (EI&S),
Room No. E-605, Block-E,
MS Apartments and Hostel,
Kasturba Gandhi Marg,
New Delhi-110001
4. Dr. R. P. Chaudhury,
Principal,
Khallikote College, Berhampur
5. Sri Rasbihari Samal,
Deptt. of Economics,
Talcher College, Talcher,
Dist. Angul
6. Dr. R. N. Mohapatra,
Head, Deptt. of Economics,
S. D. Women's College,
Rajgangpur-770017
7. Sri Rabi Narayan Patnaik,
Deptt. of Economics,
Dhenkanal College, Dhenkanal
8. Sri Ramesh Chandra Sarangi,
Deptt. of Economics,
N. C. College, Jajpur
9. Sri Ramakanta Sahoo,
Deptt. of Economics,
A. P. College, Sujanpur,
Dist. Jajpur
10. Sri Rabindra Kumar Nayak,
Deptt. of Economics,
Ravenshaw College, Cuttack
11. Dr. R.K. Panda,
Deptt. of Economics,
Utkal University, Vani Vihar,
Bhubaneswar
12. Sri R. P. Behera,
Deptt. of Economics,
Rajendra College,
Dist. Bolangir
13. Dr. Ramchandra Mishra,
Deptt. of Economics,
S. C. S. College, Puri
14. Sri Ramesh Chandra Mishra,
Deptt. of Economics,
Govt. College, Angul,
Dist. Angul
15. Sri Ranjan Kumar Sahoo,
Deptt. of Economics,
S. S. D. College, Gurudijhatia,
Dist. Cuttack
16. Sri Rabindra Nath Ray,
Deptt. of Economics,
V. N. College Jajpur Road,
Dist. Jajpur
17. Prof. R. Padhy Sharma,
Director, Institute of Economic
Studies, Manasi Mension,
Jayprakash Nagar,
Berhampur-10
18. Dr. R. K. Sahoo,
Principal,
Nimapara College, Nimapara,
Dist. Puri
19. Dr. Rabi Narayan Patra,
Deptt. of Economics,
Ravenshaw College,
Cuttack
20. Sri Ramesh Chandra Panda,
Deptt. of Economics,
Swarnachud College, Mitrapur
Dist. Balasore
21. Sri Rabindra Kumar Mishra,
Deptt. of Economics
Nilamadhab College, Kantilo,
Dist. Puri

22. Sri Ramakanta Prusty,
I. I. M. Vastrapur,
Ahmedabad-380015
23. Sri Ranjit Kumar Das,
A. G. M., NABARD,
Lucknow, Uttar Pradesh,
PIN-226001

S

1. Smt. Sashikala Patnaik,
N2/121, Nayapalli,
Bhubaneswar
2. Sri Saroj Kumar Panda,
Deptt. of Economics,
Khallikote College, Berhampur,
Dist. Ganjam
3. Sri S. N. Panigrahi,
Deptt. of Economics,
Khallikote College, Berhampur,
Dist. Ganjam
4. Smt. Sutapa Gopangana,
Assistant Director,
Economics & Statistics,
Heads of Deptts. Building,
Bhubaneswar
5. Dr. Surendra Nath Behera,
Deptt. of Economics,
G. M. College,
Sambalpur
6. Dr. Salik Ram,
Scientist, C. R. R. I.,
Bidyadharpur, Cuttack
7. Sri S. Mishra,
Deptt. of Economics,
K. B. D. A. V. College,
Nirakarpur, Dist. Khurda
8. Sri Surendra Swain,
Deptt. of Economics,
V. Deb College, Jeypore,
Dist. Koraput
9. Dr. Santi Das,
Principal,
S. B. Women's College,
Cuttack-1
10. Sri Sarat Kumar Nayak,
Deptt. of Economics,
Ravenshaw College, Cuttack
11. Smt. Sita Sahoo,
Badambadi, Cuttack
12. Dr. Saila Devi,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar
13. Sri S. C. Mohapatra,
Deptt. of Economics,
S. K. C. G. College,
Paralakhemundi
14. Sri Srinath Sahoo,
Vill. Kendal,
P. O. Madhusudanpur Sasan,
Dist. Jagatsinghpur, 754103
15. Sri Siben Kumar Bose,
Deptt. of Economics,
Christ College, Cuttack-1
16. Smt. Surangini Mishra,
Deptt. of Economics,
B. J. B. Morning College,
Bhubaneswar
17. Smt. Sipra Sarkar,
C/o. Dr. Benudhar Nayak,
HSS Deptt, NERIST,
Nirjuli, Arunachal Pradesh
18. Dr. S. N. Tripathy,
Deptt. of Economics,
Aska Science College, Aska,
Dist. Ganjam
19. Sri Suresh Chandra Raut,
Deptt. of Economics,
Anandpur College, Anandpur,
Dist. Keonjhar

20. Smt. Sailaja Nandini Jena,
Deptt. of Economics,
Bhadrak College, Bhadrak
21. Dr. Sudhakar Patra,
Deptt. of Economics,
N. C. College, Jajpur
22. Sri Simanchal Mishra,
Deptt. of Economics,
Kesinga Mahavidyalay, Kesinga,
Dist. Kalahandi
23. Dr. Sushant Kumar Das,
Deptt. of Economics,
Ravenshaw College, Cuttack
24. Dr. Satyabrata Mishra,
Deptt. of Economics,
M. P. C. College, Baripada
25. Sri S. K. Das,
Deptt. of Economics,
M. P. C. College, Baripada
26. Sri Sachindra Nath Mohanty,
Niliabag, P.O./Dist. Balasore
27. Sri Siba Charan Behera,
Deptt. of Economics
Anchalika Mahavidyalaya,
Swampatna, Dist. Keonjhar
28. Sri Satrughna Nath Das,
Deptt. of Economics,
Ravenshaw Morning College,
Cuttack
29. Sri Saroj Kumar Kanungo,
Deptt. of Economics,
Ravenshaw College, Cuttack
30. Dr. Satyakam Mishra,
Deptt. of Economics,
Ravenshaw College, Cuttack
31. Dr. S. C. Koomar,
Deptt. of Economics,
Ekamra College, Bhubaneswar
32. Smt. Sujata Mohanty,
Deptt. of Economics,
Ravenshaw College, Cuttack
33. Dr. Sridhar Behera,
Deptt. of Economics,
Govt. College, Angul
34. Sri Sangram Kumar Mohapatra,
Deptt. of Economics,
Gopalpur College, Gopalpur,
Dist. Balasore
35. Smt. Sanjukta Patnaik,
Deptt. of Economics,
S. M. College, Rengali,
Dist. Sambalpur
36. Sri Sushanta Kumar Mallick,
Deptt. of Economics,
University of Warwick,
Conventry CV4 7AL, U.K.
37. Smt. Saudamini Rout,
Deptt. of Economics,
Bhadrak College, Bhadrak
38. Dr. S. M. Ali,
Deptt. of Economics,
S.S.B. College, Mahakalpara,
Dist-Cuttack
39. Sri Surendra Nath Das,
Deptt. of Economics,
M. P. Mahavidyalaya
Erkana, P.O.-Podamarai,
Dist-Cuttack
40. Ms. Sunanda Patnaik,
Deptt. of Economics,
Niranjan Govt. Women's College,
Aska, Ganjam
41. Dr. Subhranshubala Mohanty,
Deptt. of Economics,
K.B.D.A.V. College,
Nirakarpur, Dist-Khurda
42. Sri Sukanta Chandra Swain,
Deptt. of Economics,
Godavarish Mahavidyalay,
Banapur, Dist- Khurda

43. Ms. Sailabala Patnaik,
Deptt. of Economics,
Govt. Women's College,
Berhampur, Dist-Ganjam
44. Dr. Srikanta Chandra Patra,
Deptt. of Economics,
U. N. College, Nalgaja,
Dist-Mayurbhanj
45. Sri Soumendra Dash,
I.I.M. Vastrapur,
Ahmedabad-380015
46. Dr. Siblal Meher,
N. K. Choudhury Centre for
Development Studies,
Chandrasekharapur,
Bhubaneswar-13
47. Sri Srimanta Upadhyaya,
Deptt. of Economics,
Nirakarpur College, Nirakarpur,
Dist-Khurda
48. Sri Sanyasi Sahoo,
Deptt. of Economics,
Ravenshaw College, Cuttack
49. Sri Srinibash Jena,
Deptt. of Economics,
Gopaljew Mahavidyalaya,
Benamunda, P.O.-Kaliahata,
Dist-Keonjhar
50. Dr. (Smt.) Sandhyarani Das,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
51. Dr. (Smt.) Sujata Pati,
Deptt. of Economics,
B. J. B. College, Bhubaneswar

T

1. Dr. Trilochan Mohanty,
Deptt. of Economics,
J.K.B.K. College,
O.M.P. Square, Cuttack-3
2. Sri Tarun Kumar Ojha,
Deptt. of Economics,
K. A. Mahavidyalaya,
Kochianandi, P.O.-Kushaleswar
Dist-Keonjhar

U

1. Dr. Uttam Charan Nayak,
Deptt. of Economics,
S.V.M. College, Jagatsinghpur
2. Sri U. C. Panigrahi,
Deptt. of Economics,
Gopalpur College,
Gopalpur on Sea,
Dist-Ganjam
3. Sri Umesh Kumar Pati,
Deptt. of Economics,
P. N. College, Bolgarh,
Dist-Khurda
4. Smt. Usharani Pujari,
Deptt. of Economics,
Chandbali College, Chandbali,
Dist-Bhadrak
5. Dr. Upendra Pathy,
Deptt. of Economics,
Kalinga Mahavidyalaya,
G. Udaygiri, Phulbani

LIST OF ANNUAL MEMBERS

A

1. Shri Ajay Kumar Pradhan,
Deptt. of Economics,
Remuli College, Remuli,
Dist-Keonjhar
2. Shri Aniruddha Ojha
Baniapat, P.O./Dist-Keonjhar
3. Shri Anam Charan Behera,
Deptt. of Economics,
D. B. College, Turumunga,
Dist-Keonjhar
4. Shri Adwait Kumar Sahoo,
Deptt. of Economics,
B. P. College, Antei,
Dist-Kendrapara

B

1. Shri Balmiki Das,
Deptt. of Economics,
Govt. College, Sundargarh
2. Dr. Bharat Chandra Behera,
Deptt. of Economics,
Nilgiri College, Nilgiri,
Dist-Balasore
3. Shri B. K. Mallick,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
4. Shri Birendra Pradhan,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
5. Shri B. K. Patnaik,
Deptt. of Economics,
Tara Tarini College,
Purusottampur, Dist-Ganjam
6. Shri Bharat Chandra Mohanty,
Deptt. of Economics,
Salipur College, Salipur,
Dist. Cuttack
7. Miss Basanti Das,
Deptt. of Economics,
Women's College,
At/P.O. Dist.-Rayagada

8. Shri Biswa Ranjan Mohanty,
Kamargada,
P.O./Dist-Keonjhar

D

1. Shri Dharendra Kumar Patra,
Deptt. of Economics,
N. B. Samant College,
Kamardia, P.O.-Balitutha,
Dist-Jagatsinghpur
2. Shri Damodar Jena,
N.K.C. Centre for Development
Studies, Chandrasekharapur,
Bhubaneswar-13
3. Shri D. K. Nanda,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam

G

1. Shri Ghanashyam Mohanta,
Deptt. of Economics,
L. N. College, Pipilia,
Dist-Keonjhar

J

1. Shri Jayanta Kumar Das,
Deptt. of Economics,
D. K. College, Jaleswar,
Dist-Balasore
2. Shri Jitaram Dey,
Deptt. of Economics,
Karanjia College, Karanjia,
Dist. Mayurbhanj

K

1. Dr. K. K. Sen,
Principal,
Govt. College, Dhenkanal
2. Shri Kushadhar Panda,
Deptt. of Economics
Madhupur College, Kalan,
Dist. Jajpur
3. Smt. Kanaklata Gantayat,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam

M

1. Miss Madhuri Padhy,
NKC Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar-13
2. Shri Mihir Kumar Mohapatra,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar
3. Smt. Minati Mallick,
Deptt. of Economics,
D. D. College, Keonjhar
4. Miss Manjushree Acharya,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
3. Shri Ramesh Kumar Mishra,
Deptt. of Economics,
Govt. College, Sundargarh
4. Shri Ranjan Kumar Panda,
Deptt. of Economics,
Charigarh Mohavidyalaya,
Telkoi, Dist-Keonjhar
5. Shri Rabi Arukh,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
6. Miss Ranjukta Panigrahi,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam

S**P**

1. Shri Pradeep Kumar Jena,
Deptt. of Economics,
N. A. C. College, Burla,
Sambalpur
2. Shri Prasanta Kumar Mohapatra,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist. Ganjam
3. Shri P. K. Patra,
Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Dist-Ganjam
1. Dr. Surendranath Mishra,
Professor of Economics,
NKC Centre for Development,
Studies, Chandrasekharpur,
Bhubaneswar-13
2. Sk. Kalimullah,
Deptt. of Economics,
Sudarsan Mahavidyalay,
42 Mauza, Dist. Cuttack
3. Shri Sunil Kumar Rath,
Deptt. of Economics,
Paramananda College,
Bolgarh, Khurda
4. Dr. Sanatan Mohanty,
Madhab Nagar,
P.O. / Dist. -Bhadrak

R

1. Dr. R. K. Meher,
NKC Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar-13
2. Dr. Radha Mohan Mallick,
Professor of Economics,
NKC Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar
5. Shri Saroj Kumar Hati,
Deptt. of Economics,
Barbil College, Barbil,
Dist. Keonjhar

T

1. Shri Tushar Kanti Das,
Deptt. of A. & A. Economics,
Utkal University, Vani Vihar
Bhubaneswar

LIST OF PRESIDENTS

| <u>Year</u> | <u>Host</u> | <u>Venue</u> | <u>Presidents</u> |
|-------------|-----------------------|--------------|-----------------------------|
| 1968 | Ravenshaw College | Cuttack | Prof. Sadasiv Misra |
| 1969 | Dhenkanal College | Dhenkanal | Prof. Devendra Ch. Misra |
| 1970 | Khallikote College | Berhampur | Prof. Bidyadhar Mishra |
| 1971 | Utkal University | Vani Vihar | Prof. Baidyanath Misra |
| 1972 | Bhadrak College | Bhadrak | Dr. Chakradhar Mishra |
| 1973 | Panchayat College | Bargarh | Prof. R. C. Patnaik |
| 1974 | O.U.A.T. | Bhubaneswar | Prof. S. P. Gupta |
| 1975 | Kendrapara College | Kendrapara | Prof. H. K. Mishra |
| 1976 | S. C. S. College | Puri | Prof. Devendra Ch. Misra |
| 1977 | Nimapara College | Konark | Dr. S. Tripathy |
| 1978 | Berhampur University | Bhanja Vihar | Prof. Nilakanth Rath |
| 1979 | Utkal University | Vani Vihar, | Prof. K. Kanungo |
| 1980 | G. M. College | Sambalpur | Prof. Pravat Kumar Patnaik |
| 1981 | O.U.A.T. | Bhubaneswar | Prof. Dayanidhi Mohapatra |
| 1982 | Municipal College | Rourkela | Prof. Bibekananda Das |
| 1983 | Ravenshaw College | Cuttack | Prof. Ghanashyam Das |
| 1984 | Berhampur University | Bhanja Vihar | Prof. Basudeb Sahoo |
| 1985 | Vikram Deb College | Jeypore | Prof. Sanatan Mohanty |
| 1986 | Banki College | Banki | Prof. B. C. Parida |
| 1987 | Kendrapara College | Kendrapara | Prof. Benudhar Bhuyan |
| 1988 | S. C. S. College | Puri | Prof. Gyana Chandra Kar |
| 1989 | M. P. C. College | Baripada | Prof. N. P. Patro |
| 1990 | Not Held | — | — |
| 1991 | Utkal University | Vani Vihar | Prof. Khetra Mohan Patnaik |
| 1992 | Sambalpur University | Jyoti Vihar | Prof. Trilochan Satpathy |
| 1993 | Ravenshaw College | Cuttack | Prof. Surendra Nath Mishra |
| 1994 | B. B. College | Chandikhol | Prof. Adwait Ku Mohanty |
| 1995 | P. N. College | Khurda | Prof. Benudhar Mishra |
| 1996 | Paradip College | Paradip | Prof. Gajendra Nath Das |
| 1997 | Municipal College | Rourkela | Prof. Jyoti Prakash Patnaik |
| 1998 | Govt. Women's College | Keonjhar | Prof. Ajit Kumar Mitra |
| 1999 | Talcher College | Talcher | Prof. Binayak Rath |