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**ORISSA ECONOMICS
ASSOCIATION**
BHUBANESWAR

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Editor :

Prof. Baidyanath Misra

17, Saheed Nagar
Bhubaneswar



**ORISSA ECONOMICS
ASSOCIATION**

BHUBANESWAR

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ECONOMIC CHALLENGES OF THE 21ST CENTURY

It is said that the eighteenth century was a period of reason, nineteenth century a period of complacency & twentieth century a period of tension. Probably the period of tension is coming to an end within span of two years. What about the twenty first century for which we have been anxiously waiting for a pretty long time ? Does it after any hope or frustration ? If one reads the famous book of Paul Kennedy, 'Preparing for the Twenty First Century', one will say that we are entering the 21st Century in a troubled, unsettled and complex environment. We may cite a few dangers which loom large in the horizon.

One is the Malthusian ghost which haunts the developing countries. The British people somehow escaped their Malthusian trap via three doors: migration, agricultural production and industrialisation. Some other countries like Germany, U.S.A., Belgium initiated the British practices and followed the upward spiral of increased productivity, wealth and standard of living. But in many others, particularly in most of the developing countries the total number of surviving human beings are exploding at such a rapid rate that the only living planet which exists now may explode with their pressure. Even the raw figures in the years 2025 and 2050 considered in historical perspective is daunting.

It is estimated that in 1825, as Malthus was making the final amendments to his original Essay on Population, about one billion human beings occupied the planet, the race having taken thousands of years to reach that total. By then, however, industrialisation and modern medicine were permitting population to rise at an alarming rate. In the following hundred years the world's population doubled to two billion, and in the following half century (from 1925 to 1976), it doubled again to four billion. By 1990, the figure had advanced to 5.3 billion. In spite of some decrease in overall fertility rates in many countries, some of the estimates show that by 2025, the earth will contain a population of 8.5 billion people. And the World Bank estimates show that the total population of the earth may stabilize at between 10 and 11 billion people in the second half of the twenty-first century, but some others have put the total as high as 14.5 billion. And India, even by 2025, may have the largest population compared to any other country and may eventually reach a

Is there any scope to provide a decent standard of living for all the people who may inhabit in our planet ? It has been argued by Julian Simon that a population is not a problem, but a resource. Yes it is a resource if you have especially skilled, spirited, hopeful, young people, who will exert their wills and imaginations for their own benefit, and so, inevitably, benefit the rest of other people as well. But what we see with regard to age composition is that the developing countries have the burden of supporting millions younger than 15. In case of India for example, about 40% of the people belong to the age group below 15 years. In case of developed countries, we have a contrasting spectacle of fast increasing numbers of people older than 65. In most of the developed countries about 17% of people are above the age of 65. It is estimated that in many countries, the number may increase to 22 per cent by about 2040.

This does not seem to be a healthy development. Generally the population aged between 15 to 64 create wealth, place fewer demands on health and social services. But old people like very young tend to consume more resources and place higher demands upon health and social services. The burden of this demographic explosion is numerous particularly in developing countries where poverty and malnutrition are prevalent. If we take the example of food, according to the World Watch estimate, increase of 28 million tons of grain are needed each year merely to keep pace with population growth, yet recently the annual net gain has been closer to 15 million tons. This will increase undernourishment to an extent of 500 million. Consider further the burden that will afflict the poor people in respect of housing, sanitation, transportation, food distribution and communication systems (which are now inadequate or deficient), if their population double or treble in size.

Another reason for apprehension is the effect of technological change on employment. Industrial revolution ushered in a factory system which not only created unhealthy conditions of work, but also destroyed individual freedom. The strict regimen of work did not provide any scope for work nor provided any initiative for personal improvement. Displacement of craftsmen, handloom weavers, potters etc. from their traditional occupation created a great problem for them how to live, how to work and how to maintain one's keep. Technological change even in agriculture reduced the scope of employment to a considerable extent which aggravated poverty and malnutrition.

Again recent replacement of human beings in the factory by machines and other automated equipment to increase productivity has

highly educated work force with commitment to work, availability of plenty of capital, large number of highly qualified engineers, high level investment in R & D and yet because of cut-throat competition, many of the industrial establishments are introducing robots into factory culture. It is given them tremendous economic advantage. As the process of change increases, the cost of robots has gradually decreased and the time needed for a return on investment has shrunk accordingly. It is estimated that if a robot replaces one worker for one shift per day, the payout is roughly four years. If a robot is used for two shifts, it will pay for itself in two years, and if used round the clock, in just over one year".

Take the case of Nissan's upgraded automobile plants. Formerly it took eleven months and cost Nissan 4 billion yen to retool its body assembly for a new car model, now it takes a quarter the time and costs about a third as much—which is the chief reason that Japanese auto productivity continues to rise. The other advantages with Robots that they do not require heating or air conditioning, can work in the dark, they save electricity, they do not become tired, they do not waste materials and so on. Because of these advantages, many developed countries are increasing the number of robots to increase productivity with less cost. In 1988, there were 2,80,000 robots, Japan of course leading with 76,000. If this change continues in developed countries, the industrialists in the developing countries will have to change their production technique to meet the competition of the industrialised countries. The adoption of robots will also help them to control the indiscipline of the politicized labour force.

Though the employment of robots in manufacturing industries may not be immediate particularly in developing countries, they will ultimately dominate the production system and displace labour to a considerable extent. Even the steam engines took some time to enter into the manufacturing process. But ultimately no country could escape from this change. Therefore, it may be stated, as has been pointed out by Paul Kennedy, that longer term implications are disturbing and threaten to exacerbate the global dilemma. As the biotech revolution reduces the importance of certain forms of farming, robotic revolution may eliminate many types of industrial jobs. And what is worse, in both cases, multinational companies derive benefit from reduced value of land and labour.

The overall projected growth in the world's population cannot be sustained with our current patterns and levels of consumption. We have now two fold attacks from human beings—the excessive demands of

natural resources by the people of developed countries and the aspirations of additional billions of people in developing countries who try to imitate the affluent to increase their consumption. This puts a heavy burden on nature. When about 5 billion people create a lot of damage to the nature, how can 8 to 9 billion people by about 2025 would be able to sustain environment ?

As it is, we are now in grave danger. Excessive demand for consumption and indiscriminate industrialisation in pursuit of wealth are gradually destroying the life support system. The reckless exploitation of earth gives rise to emission of toxic gasses, depletion of ozone layer, threat of acid rain, pollution of air, water and land surface, etc., in fact nothing is spared resulting in total pollution. The increase in chemical industries causing the depletion of ozone layer which acts as a blanket of earth to filter out the harmful rays of sun is a great danger to the humanity. If the ultra-violet rays of the sun reach the earth, there will be incidence of skin cancer, increase in temperature of earth which could melt polar-ice cap. As a result of this melting, all the cities, towns along with sea coast will submerge in water with great devastation to human civilisation.

All this implies that we have to limit our demands to the carrying capacity of our planet. Economy is not just about the production of wealth, and ecology is not just about the protection of nature : they are both, as mentioned in 'Our Common Future' equally relevant for improving economic and social well being of mankind. We have already crossed the thresholds of nature and there is a limit beyond which we can go.

Hence we have to make a collective endeavour in order to establish a sustainable society which conserves natural resources, promotes equity, establishes environmental harmony, stabilises the world's total population, curbs the profligate use of energy, food stuffs and other raw materials, and involve the people in active participation of social and economic changes. Otherwise before very long we will have so over populated and ransacked the earth that we will pay a heavy price for our collective neglect. Economists have to play probably a major role in meeting this challenge.

B. Misra

The 29th Annual Conference

Secretary's Report

Bimal K. Mohanty

Secretary, Orissa Economics Association

Mr. President Professor Patnaik, Hon'ble Chief Minister of Orissa Sri Janaki Ballav Patnaik, Hon'ble Minister of Forest and Public Enterprises Sri K. C. Patel, Hon'ble Minister of Tourism Sri Bhupinder Singh, Hon'ble MPs Miss Topno and Mr. Kujur, MLA, Rourkela Sri Pravat Mohapatra, Revered Former Presidents of the Orissa Economics Association, Chief Patron Mr. Tripathy, Collector, Sundargarh, Chairman Reception Committee Mr. Dash, ADM, Rourkela, Principal of the College Dr. Praharaj, Local Secretary Dr. Mohapatra, Fellow Delegates, Distinguished guests, invitees, Ladies and Gentlemen.

As the Secretary of the Orissa Economics Association, I feel privileged for extending you all a cordial welcome to the 29th Annual Conference of the Orissa Economics Association.

The Orissa Economics Association was founded in the year 1967-68 with a number of academic objectives. From that year itself, we have been organising Annual Conferences regularly. At present, the Orissa Economics Association has 285 members out of which 3 are Institutional Life Members, 222 are Life Members and 60 are Annual Members. It publishes a journal each year which contains the research papers of the members presented and discussed in the Conference. The Orissa Economics Association is the only forum in the state in which various economic problems of national and regional dimension are discussed. Eminent economists, administrators, planners and statesmen participate in the deliberations of the Conference. Two topics are selected for discussion in this year's Conference.

1. Level and Pattern of Consumer Expenditure in India and
2. The Role of NGOs in Economic Development of Orissa.

While the former is of national significance the latter has a positive relevance in the context of economic development of the state of Orissa. Since 1987, an endowment lecture in memory of Bhubaneswar Mangaraj, an illustrious teacher from Banki is being organised. Eminent economists of the state deliver lectures on this occasion. Professor K. M. Patnaik, Ex-Vice-Chancellor, Utkal University has given his kind consent to deliver this year's lecture on Monetary Management in India. I am delighted to announce that the Orissa Economics Association finds its

mention with a brief history of its activities in the list of Regional Economics Associations of the country compiled in the Profile of the Indian Economic Association published on the eve of the 78th Annual Conference held at Chandigarh, 1996. In this respect, we are thankful Dr. Raj Kumar Sen, Honorary Secretary and Treasurer of the Indian Economic Association. Efforts have already been initiated to enlist our association with the Indian Economic Association Trust for Research and Development.

I feel my report will be incomplete without a reference to the problems that we encounter while conducting various activities for attaining the cherished goal of encouraging academic and research interests among the teachers in Economics. Finance has now become a serious constraint in the activities of the Association. The volume of the Orissa Economic Journal has considerably increased along with the printing cost. We receive a maximum grant of around Rs. 4,000/- from the Government of Orissa and another two to three thousand rupees from the new members. On account of the financial hardships, we are not able to meet all our commitments.

I am extremely grateful to the Principal of the Rourkela Municipal College, Chairman of the Reception Committee, Local Secretary, Organising Secretary, Heads, Members and Students of all the Teaching Departments of the College for their tireless efforts in organising the Conference. My special thanks are due to Dr. D. M. Praharaj, Principal of the College and Dr. R. N. Mohapatra, Head of the Department of Economics of the College for having agreed to undertake the onerous task of organising the conference. I express my deep sense of gratitude to all the former Presidents and Secretaries of the Association for their valuable and timely advice. I really owe a lot to all the members of the Executive Body and more particularly to the President of the Association, Professor Patnaik for their kind co-operation at the time of the Conference. I am deeply indebted to Professor Baidyanath Misra for having donated his valuable time to edit the Journal and to Professor Khetra Singh Patnaik for having accepted our invitation to deliver this year's Praharaj Lecture. My thanks are due to M/s. Dash and Associates, Chartered Accountants for having accepted our request to audit the accounts of the Association for 1995-96 without charging any fees.

I am grateful to the delegates, paper writers, invitees, guests and you all ladies and gentlemen for your co-operation to make the Conference a success.

29th Orissa Economics Conference Presidential Speech (1996-97)

Orissa's Economy—Agenda for 21st Century

Dr. Jyoti Prakash Patnaik

Professor of Economics
Sambalpur University

On behalf of the members of Orissa Economics Association, I welcome you all ladies and gentlemen to its 29th Annual Conference which is being hosted by the Rourkela Municipal College, Rourkela, from the 8th to 9th February 1997. I express my gratitude to the local secretary, Dr. R. N. Mohapatra and to the teachers, officer staff and students for their kind invitation to the members of OEA to come over here and I offer special thanks to the principal Dr. D. Praharaj, the chairman and the members of the Reception Committee, Patrons and our well-wishers for organising this Conference.

I formally thank the honorable members for unanimously electing me as the President for the session 1996-97. But I must confess of becoming emotional at the moment for their kind gesture and while wearing my heart, as Shakespeare said, on my sleeve, I feel reticent on two counts. First, there are my elders in the Association who deserve this honour far more than myself. Second, I am also caught in philosophical predilection -te aham- they (the members) are me.

As a student of B.A. Economics (Hons) of the great Ravenshaw College in 1967, I had the unique opportunity of participating as a volunteer in the First Orissa Economics Conference held under the presidentship of (Late) Dr. Sadashiv Mishra, our respected teachers' teacher. It was organised in the historic Assembly Hall. Gods should have come down from Heaven to see monetary theorist Dr. Khetra Mohan Patnaik, a teacher, who comes once in a century, locking horns with fiscal policy advocate Dr. Baidyanath Misra, so well known for his excellent contributions to teaching and research, literature and journalism, and to Orissa Economics Association. It was still more delightful to see the Ravenshaw's star Professor, Dr. Debendra Chandra Mishra (of Harvard fame) bringing about an intellectual reconciliation

The Presidential address by late Dr. S. Mishra was really a treat. At the Orissa Economics Conference, he always enlivened us by his brilliant analysis, wit and humour. Alas! he is no more with us. We mourn the loss of late Dr. Sriram Chandra Dash, the legendary Professor of Political Science of Utkal University, who was initially an economist of no mean importance. Late Dr. Shiba Prasad Gupta, who was the main architect of modernised courses of study in Economics, the former Professor of Sambalpur University and a past President of this association, has also left us for his heavenly abode. I have sustained personal loss due to the recent passing away of my school teacher, late Sri Prafulla Kumar Pattnayak who made all the difference in my life.

I request the honorable members, honoured Guest, the ladies and gentlemen and students to pay homage to and pray for the departed souls by solemnly observing a minute's silence.

PREFACE

It is a Preface to my speech and is prepared in the interest of the Role for Economists in Democracy on 21 century.

The year 1996 has been hailed in India as the Judiciary Year. Judiciary has been lauded as a Saviour of Democracy thanks to the conceptualisation by Hon'ble Chief Justice (now retired) Sri Jukta Katakachalliah. But it has been flayed also by the Press and Public 'discriminatory application of law', inordinate delay in case disposal, and the nature of proceeding and exploitation.

The year happens to be my Presidential year, although needless to say, your president has got nothing to do with it. But I wish to make something of it with your kind permission and sympathetic consideration of the Judiciary, Govt. of India and Govt. of Orissa by suggesting two suggestions:

(1) A few years back the GAC (Comptroller and Auditor General) of India reported that the Bar and the Bench need to upgrade their levels of knowledge for reaching just and expeditious decisions. As a teacher I, therefore, propose sophisticated schooling not only for the Judiciary, but also for our Legislature and Executive wings.

(2) Since Legislature, Government, Judiciary are the three pillars of the state, which is constituted by the individuals of the state.

come under the ambit of economists' study and research (Cost benefit analysis etc.) in the 21st century.

ORISSA'S ECONOMY—AGENDA FOR TWENTY FIRST CENTURY

Orissa, our dear state, had a circular-flow economy operating at a very low level during the pre-Independence period. It was a stagnant economy, which repeated its macro variables like income, employment and output etc. year after year except for the fluctuations in values, caused by flood and drought, around the stagnant trend lines. In short, Orissa economy was a highly under-developed and natural calamity prone economy in the British period.

Planned Government investments undertaken by the Govt. of Orissa with the financial support of the Govt. of India since the inauguration of Planning in 1951 have broken the circular flow and raised the economy to a higher level of income.

In undertaking investments, the Planners and the Govt. of Orissa also aimed at removing poverty through growth of the state pie and providing development insulation to the economic impacts of natural calamities.

For example, they built, what our first Prime Minister (late) Jawaharlal Nehru called, "A modern temple"—The Hirakud Dam—(1951-56) which controls flood in the Mahanadi delta area of coastal Orissa; removes drought and irrigates 5,40,000 acres of agricultural land in our western districts of Sambalpur and Balangir generating green Revolution. We cannot of course, forget the physical, emotional and economic costs borne by the displaced families.

But as I look at the Orissa's economy at the close of the 20th century and after 50 years of our Independence and planned developments, I have a mixed feeling.

I am elated because so much has been done to generate growth in all the 5 sectors of the Orissa economy.

But I feel deeply disturbed due to the following C.T. Scan reports about the health of our economy :

(1) Orissa generates second lowest income or net state domestic product (NSDP) in India, computed at Rs. 5121 crores in 1993-94 at 1980-81 price. This is equal to Assam's income (CSO data). Our gross income i.e. gross state domestic product (GSDP) is Rs. 19,659 crores at

(2) Orissa's per capita income in 1993-94, which is computed at Rs. 1542/- only at 1980 prices; is also the second lowest in the country, next only to Bihar which, however, generates income which is twice that of Orissa.

(3) Our state climbs to the 1st position in the country in terms of percentage of population below poverty line, which is estimated by the Planning Commission as 44.7% in 1987-88.

(4) The Annual Economic Survey of Govt. of Orissa (1995-96), which makes excellent reading, estimated the backlog of unemployment at the end of 1993-94 to be 5.76 lakh with an estimated annual addition to the labour force of 2.70 lakh. But the employment potential of industries coming up in Orissa due to sincere initiatives by our two successive Chief Ministers, Sri Biju Patnaik and Sri Janaki Ballav Patnaik (which include 3 steel plants at Duburi and TISCO at Gopalpur and others) is estimated by the Survey at 28,737 persons only.

(5) Orissa's economy, particularly its agricultural sector, which is still operating at a low level, is ravaged by natural calamities like drought, flood and cyclone in almost regular intervals. Flash flood devastations have been definitely controlled due to dams on the Mahanadi and Brahmani rivers. But it is empirically more or less true that on every 1st year drought and on every 4th year flood visit the state and on every 3rd year (3+4+3), the drought becomes disastrous.

Emotional Twilight Zone—A Digression :

So I am in an emotional twilight zone—happiness over economic achievement yielding place to sorrow for dismal performance over half a century.

Charles Dickens wrote about this transitional phase—the success and failure of French Revolution—in his “A Tale of Two Cities” immaculately : “It was season of light ; it was season of darkness. It was spring of hope and winter of despair.”

Outside this Conference hall, the nature is also changing side by side in striking contrast to my feeling. Shelley sang “Ode to West Wind” : “Winter comes, can Spring be far behind ?” Leaves reflect now more green and flowers exude fragrance and bees hum around under a lukewarm sun in this Continent of Circe of Nirad Chowdhury.

So I shake off my mood of despondency and search out three areas

(A) Under-development

(B) Poverty

(C) Natural Calamity.

SECTION A

FIGHTING UNDER-DEVELOPMENT IN AN OPEN ECONOMY

Section A does the following analyses :

A1(i) measures the trend of economic growth and A1(ii) determines the permanent economic influences on growth over the plan periods under Controlled Trade Regime (CTR). A2 measures upward displacement in growth trends perhaps for the first time and identifies the political regimes associated with it to determine the causative factors analytically and empirically. A3 discusses the effects of Globalisation and Liberalisation Regime (GLR) on these determinants in particular and on growth in general. A4 deals with sectorial growth needs of Orissa in 21st century.

A1 Measurement of Growth Trend and Identification of Permanent Economic Influences on Growth Under Controlled Trade Regime (CTR)

Orissa's real state income (NSDRP) has grown from Rs. 599.68 crores in 1950 (unplanned year) to Rs. 1,708.69 crores in 1988-89 (end of Controlled Trade Regime) at constant price (1970-71 prices) through peaks and troughs showing good and bad years of rainfall¹ respectively. This is depicted in Diagram A.

A1 (i) Measurement of State Income Trend and Growth Rate.

The Trend equation for economic Growth :

$$\text{NSDRP} = 48057 + 2636.9T \quad [T \rightarrow \text{Time}]$$

Both intercept and slope coefficients are significant at 1% level.

In order to calculate the growth rate (g), we adopt the Semi-log model :

$$g = 2.70.$$

So the Orissa's economy has grown at the rate of 2.7% over the CTR period due to growth of all its five sectors—physical infrastructure, agriculture, industry, trade and transport, and service sectors. Supportive evidence offered by sectoral growth data are available in Estimates of State Domestic Product (1950-51 to 1988-89) by Directorate of Economics and Statistics, Orissa (DESO), Bhubaneswar.

1. Directorate of Economics and Statistics, Bhubaneswar,

The Climatologically Data, Orissa, 1992.

1 (ii) Is Orissa A Supply Constrained Or Demand Constrained Economy ?

A less developed economy (LDE) is constrained from the supply side as well as from the demand side. Govt. tries to loosen and remove these constraints through public expenditure.

The Govt. Revenue Expenditure (GRE) expands demand and this moves narrowness of the market which in turn generates incentive for investment. This exerts upward pull on the economy from the demand side and the state income increases :

$$Y = C + I + G \quad (\text{Eq 1})$$

The Govt. Capital Expenditure (GCE) generates capacity in the economy, through provision of social overheads, and material and human capital formation etc. It expands productivity and production in the economy and thus it gives supply push to the state income :

$$Y = \sum_{i=1}^n \alpha_i \quad (\text{Eq 2})$$

Combining Eq 1 & 2, we write

$$\sum_{i=1}^n \alpha_i = C + I + G. (\text{Eq for Balanced Growth})$$

We regress NSDP on GRE and GCE separately and then regress NSDP on both in a multivariate model to obtain the determining influences of these two factors on economic growth. We use current price data of all the variables because time series price data are not available from the DESO, Bhubaneswar to deflate GRE and GCE current price data and regress real state income (NSDRP) on them.

Computer Results

$$(1) \text{ NSDP} = 2449.7 + 6.1515 \text{ GRE} \\ (0.15) \quad (31.36)$$

$$(2) \text{ NSDP} = 43507 + 2.2608 \text{ GCE} \\ (4.15) \quad (47.96)$$

$$(3) \text{ NSDP} = 22491 + 2.3229 \text{ GRE} + 1.4526 \text{ GCE} \\ (3.26)* \quad (8.41)* \quad (14.48)*$$

Findings : The Permanent Influence Factors on Growth

Both GRE and GCE have significant effects on NSDP. But GRE has more influence on NSDP than GCE.

marks indicate statistical significance at less than 5% level.

DIAGRAM - A

Growth of Net State Domestic Product
(at 1970-71 Prices)

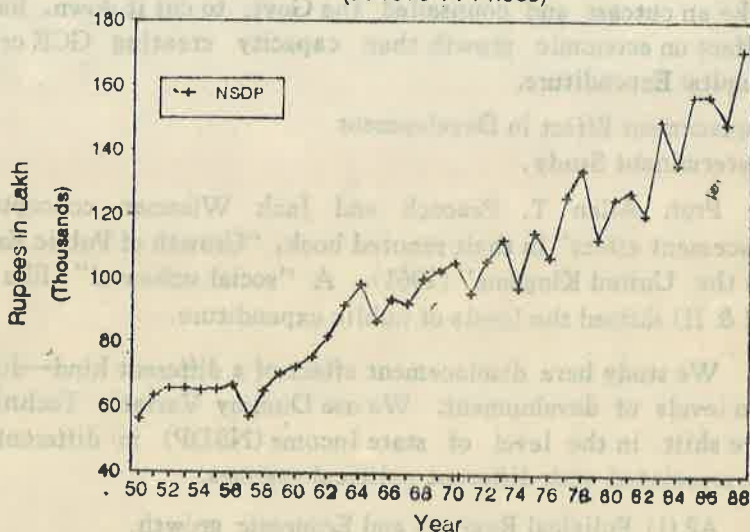
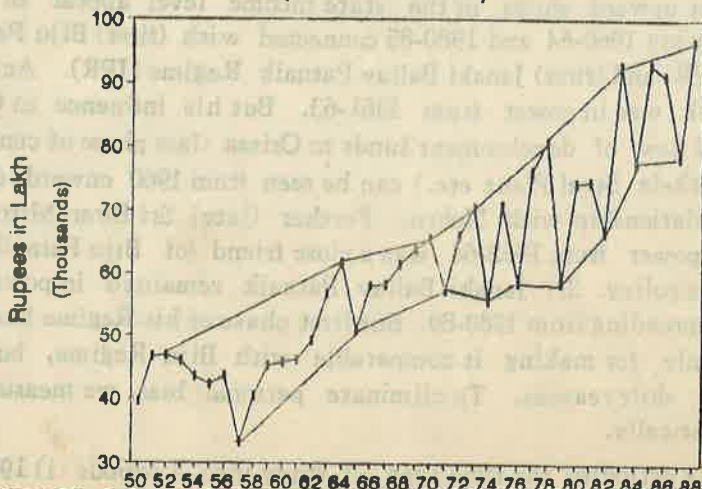


DIAGRAM - B

Growth of Agricultural Income
(at 1970-71 Prices)



These findings throw up interesting conclusions :

- (1) The Orissan economy is constrained from both demand and supply sides. But it is more constrained on the demand side.
- (2) GRE or Govt. Revenue Expenditure which the economists treated like an outcast and counselled the Govt. to cut it down, has more effect on economic growth than capacity creating GCE or Govt. Capital Expenditure.

A2 Displacement Effect in Development —A Determinant Study.

Prof. Allan T. Peacock and Jack Wiseman conceptualised "displacement effect" in their reputed book, "Growth of Public Expenditure in the United Kingdom" (1961). A "social upheaval" like World War (I & II) shifted the levels of public expenditure.

We study here displacement effect of a different kind—displacement in levels of development. We use Dummy Variable Technique to measure shift in the level of state income (NSDP) in different time periods associated with different political regimes.

A2 (i) Political Regimes and Economic growth.

We find from the Diagram A showing Growth of Net State Domestic Product at constant prices that economic growth has occurred during all political regimes. The positive trend line fitted to the time series in Sub-section A1(i) verifies statistical relevance of the hypothesis.

But upward shifts in the state income level appear to have occurred during 1960-64 and 1980-85 connected with (first) Biju Patnaik Regime (BPR) and (first) Janaki Ballav Patnaik Regime (JPR). Actually Biju Patnaik was in power from 1961-63. But his influence in Orissa politics and flow of development funds to Orissa (last phase of construction of Rourkela Steel Plant etc.) can be seen from 1960 onwards due to his close relationship with Nehru. Further (late) Sri Biren Mitra who climbed to power from 1963-64 was a close friend of Biju Patnaik who followed his policy. Sri Janaki Ballav Patnaik remained in power for two terms spreading from 1980-89. But first phase of his Regime has been taken not only for making it comparable with Biju Regime, but also because of shift reasons. To eliminate personal bias, we measure the shifts statistically.

We periodise the time span of study into 4 periods (i) 1950-60.

used to find growth (g) rates of state real income (NSDRP) during 4 periods.

(1) Shift I

Trend of State Real Income (NSDRP) in Period I

$$\text{NSDRP}_1 = 59776 + 796.77 T$$

$$(22.15)^* (2.0)^*$$

$$g_1 = 0.9\%$$

Trend of NSDRP in Period II

$$\text{NSDRP}_2 = 62904 + 6943.2 T$$

$$(29.54)^* (10.81)^*$$

$$g_2 = 8.6\%$$

(2) Shift II

Trend of NSDRP in Period III

$$\text{NSDRP}_3 = 87119 + 2128.8 T$$

$$(22.56)^* (5.65)^*$$

$$g_3 = 2.21\%$$

Trend of NSDRP in Period IV

$$\text{NSDRP}_4 = 116070 + 5471.6 T$$

$$(17.55)^* (4.66)^*$$

$$g_4 = 3.9\%$$

(3) Shift I > Shift II

$$\text{Shift I} = 3.10\%$$

$$\text{Shift II} = 0.29\%$$

$$\text{Interim Period} = -8.57\%$$

(Between Shift I & II)

Findings : (1) Levels of NSDRP shifted upwards in both BPR and JPR, whereas the interim period (1964-79) associated with other political regimes shows a downward shift in the initial years.

(2) Growth Rate of BPR is the highest. Next to it lies JPR, also known for massive public expenditure. Growth rate of first decade of planning (1950-60) is the lowest which shows the laying down of economic base :

$$g_2 > g_4 > g_3 > g_1$$

Determinants of Displacement

Future researchers may obtain more accurate result by eliminating permanent influence factors like population growth and inflation by taking per capita real income and regressing it on economic and socio-

political determinants of development. I have only tried to set the ball rolling.

Due to data constraints which haunt the researchers, Govt. of Orissa and our Directorate of Economics and Statistics, we use current price data to regress NSDP on GRE & GCE independently and together for BP regime and JP regime separately :

Biju Patnaik Regime (BPR).

$$NSDP_2 = 10938 + 6.2853 \text{ GRE} \\ (0.06) \quad (0.06)$$

$$NSDP_2 = 20100.4 + 1.80049 \text{ GCE} \\ (0) \quad (0.05)$$

$$NSDP_2 = 15066 + 2.4858 \text{ GRE} + 1.17729 \text{ GCE} \\ (0.07) \quad (0.03) \quad (0.06)$$

Both GRE and GCE have positive effects on state income during BPR, but GRE has greater influence than GCE.

Janaki Ballav Patnaik Regime (JPR).

$$NSDP_4 = 8146 + 6.836 \text{ GRE} \\ (0.06) \quad (0.05)$$

$$NSDP_4 = 144425 + 2.01217 \text{ GRE} + 1.51099 \text{ GCE} \\ (1.93)^* \quad (0.05) \quad (0.09)$$

$$NSDP_4 = 46912 + 2.01217 \text{ GRE} + 1.51099 \text{ GCE} \\ (0.46) \quad (0.05) \quad (0.09)$$

Both GRE and GCE have positive effects on State income during JPR, but GRE has stronger influence on growth than GCE. Secondly GRE has a greater influence on NSDP in BPR in comparison to JPR. GCE has greater effect on NSDP in JPR than in BPR.

Explanation for Displacement

(1) We have found that upward displacement in state income occurred during BPR and JPR. (2) The Dummy variable results obtained for a determinant study on displacement reveal the high effect of GRE and GCE on displacement.

Shift I

The first shift is noticeable from 1960, thanks to the massive investment under both (late) Harekrushna Mahatab (1946-50 and 1951-56) and Nabakrushna Chowdhury (1951-56) which laid the foundation for economic growth in Orissa. Hirakud Dam Project was founded by Pt. Jawahar Lal Nehru in 1948 in Sambalpur during Chief Ministership of Mahatab.

But work began during Chowdhury regime in 1952 and was also completed during his tenure in 1956 when he resigned due to movement against SRC (State Reorganisation Committee). The Rourkela Steel Plant was completed during Mahtab's period in 1958; but its work had begun during Chowdhury regime. Mahtab had played the great role of establishing new capital at Bhubaneswar and in construction of roads and bridges during his second term which coincides with Second Plan (1956-61) of India, known for its infrastructural and industrial development.

But shift I is justifiably associated with Biju regime because he built well on the economic base laid down by his predecessors. During BPR, Orissa experienced what may be called the First Golden Age due to construction of Paradip Port, Balimela Hydroelectric Project, Talcher Thermal Power Project, establishment of IDC industries and Panchayat Industries which generated industrial awareness in Orissa and shifted state income level upwards. After demise of the legendary Madhusudan Das, the founder of Orissa, Orissa had never experienced such surging economic (industrial) nationalism. He is also credited with establishment of Regional Engineering College at Rourkela and Regional Research Laboratory at Bhubaneswar which have aided industrial growth in Orissa.¹

Shift II

Second shift in state income occurred during first term of Janaki Ballav Patnaik regime (JPR). This may be called the Second Golden Age of Orissa in post-Independence period. Orissa saw massive inflow of central plan grant due to personal initiative of Sri J. B. Patnaik which was effectively utilised by a construction genius namely the then Public Works Minister, Sri Basanta Kumar Biswal, to build Rengali Dam, Upper Kolab Project, NALCO Aluminium Industry, infrastructure for private industries (which had started coming up in Dhenkanal during Smt. Nandini Devi's tenure), roads, bridges and in implementation of Central Govt. Programme of IRDP with spectacular bank assistance and launching of special "Poverty Removal programme" like ERRP.²

A3 Globalisation Effects on Development.

Friedrich List, the father of Protectionism in Economic history, was inspired by American revolt (spearheaded by Hamilton) against Free Trade entry of British goods into its territory which harmed the manufac-

1 & 2. Jyoti Prakash Patnaik, "Swatantra Odishare Ardha Satabdira Arthaniti" Odisha Sanskrutika Samaj, Sambalpur (1986) p 83-84.

ring industry, when this great intellectual statesman was staying in USA in 1825. The same country USA is now the torch bearer of Free Trade after it has become what Prof. Kenneth Galbraith calls "The Industrial State". India could as well have joined the globalisation bandwagon after attaining industrial maturity rather than now when it has just built its industrial base—of course in selected pockets.

Free Trade is beneficial to a developing economy if there occurs transfers of (a) technology, (b) capital goods, (c) skill, (d) critical raw materials, and (e) financial resources from the industrially advanced countries. List recognised the merits.

Under patriotic guidance of our first Prime Minister late Jawaharlal Nehru, India adopted a Regulated Trade policy—low import duty on import of capital goods and high import duty on import of luxurious consumption goods—to establish and protect its infant industries.

But after almost 40 years of planning, it was found that Indian manufacturing had become overprotected. They had become sure of the home markets which were growing and did not adopt modern technology which could increase production and productivity, lower per capita cost and per unit price and improve quality of goods to be internationally competitive. India was facing trade deficit all the time.

With those sensible arguments and promising modernisation of Indian economy through foreign investment and transfer of advanced technology, the then Finance Minister, Dr. Manmohan Singh who had led the Indian economy from the balance of payments crisis during the 1947 War, brought about a consensus in India on Globalisation.

In signing Uruguay Round for Global integration, India, therefore, has opted for Export-Led Growth Strategy and jettisoned its Import Substitution Strategy. Let us briefly study effects of Trade Relaxation Policy Regime (TPPR) of India which is a step towards Globalisation.

Trade liberalisation has helped Indian economy in generating around 8% of industrial growth. Firstly, foreign direct investment particularly collaborative investment and flow of capital goods have increased in the automobile, energy, computer and communication sectors.

But the industrial growth has not come about due to improve-

Hero-Honda or Suzuki automobiles) or due to reduction in price vis-a-vis American/European/Japanese products. It has occurred mostly because captains of industry have been able to search out new markets in Asia, Africa and Latin America.

Secondly, foreign investment has not flown into capacity creating sectors except Enron's thermal power investment using depleting resource like coal. It has rather gone into highly profit earning conspicuous consumption sector—Kentucky fried chicken and pizza that go well with Pepsi and Coca-Cola.

Thirdly, transfer of advanced technology has not taken place in computer and other areas.

Fourthly, the industrialised countries are likely to compete out Indian goods in Indian and overseas markets in not too distant future which will ruin our manufacture sector.

Fifthly, the reduction in investible resources of the Central Govt. due to cuts in Import Duty (Globalisation) and cuts in Excise Duty (Liberalisation) would adversely affect provision of irrigation, electricity and roads. This will hit hard agriculture and other productive sectors as well as trade.

A4 Sectoral Growth Needs.

Despite resource crunch under TRPR, Govt. of Orissa has to garner resources by considering to levy a Value-Added Agricultural tax or Agricultural Income Tax from large farmers and effectively utilise central plan grant to modernise its infrastructure and all productive sectors. The Economic Times, Calcutta, has reported on 29th Oct. 1996 that Orissa failed to utilise more than 50% of central grant : "A recent CAG report revealed that Orissa had to surrender about Rs. 56 crores to the Centre in 1994-95 out of Rs. 95.4 crores released by the latter as grant. So funds are there and we must create an apparatus to use it.

Agriculture

(1) According to the Economic Survey of Govt. of Orissa (1995-96), "The scope for extending the margins of cultivation is limited. The per capita availability of cultivated land which was 0.39 hectare in 1950-51 has declined to 0.9 hectare in 1993-94 "due to" "Population growth". India is reportedly going to be the most populous country in the world in 2046.

(2) Given limited land, agricultural output growth has to come

Revolution in Punjab. In case of Hirakud Dam, (Dr.) Prasanna Tripathy¹ estimates that irrigation caused a major shift in gross cropped area and agricultural production between 1959-60 to 1964-65. In the period 1965-66 onwards, HYV seeds and fertiliser were used (Green Revolution period) which increased productivity.

(3) Irrigation being key factor of agricultural growth, (a) Minor irrigation projects can be undertaken, (b) Hirakud canals have to be cemented to prevent 40% water loss through seepage, evaporation and flooding; (c) Boring and energising deep tubewells have to be undertaken as Orissa has harnessed only 0.5% of the ground water potential of 23,000 million cft. (Central Ground Water Board); (d) Lift pumps have to be installed on a large scale; and (e) Traditional sources such as dugwells, ponds and katas have to be revamped which mitigate drought situation.

(4) Dry farm technology of Israel has to be adopted in the drought prone areas.

(5) Like Andhra Pradesh, Orissa should encourage integrated allied activities like dairy, fishery, poultry and horticulture.

Industry

(1) The Rourkela Steel plant, which is the pole star in the industrial firmament, has to cause a turn around through sound management counselling to the management Chief, hard and innovative work, safeguards against breakdowns and accidents, better inter-union relationship, zero political intervention in employment, marketing and financial matters, and plugging loopholes at every level. This is necessary for almost all of our public enterprises. The industries have to earn a surplus of at least 5% annually on their investment.

(2) Generation of more electricity, early completion of Talcher-Sambalpur railway line, modernisation of roads (like Sambalpur-Rourkela road) through loan from Asian Bank, construction of Gopalpur Port and above all modernising the existing aerodromes are essential for industrial growth in 21st century.

(3) A Techno-Economic Committee must be constituted to visit Europe, Japan, U.K., Canada, USA and Gulf countries with the Chief Minister to invite foreign capital and technology.

(Dr.) Prasanna K. Tripathy, "An Analysis of Orissa's Agriculture"

Vision (The Journal of Jay Prakash Institute of Social and Economic

(4) Private companies importing raw materials from Orissa have to be encouraged and to invest here. The bright example is offered by Tata Steel at Gopalpur which has come to Orissa in big way, due to personal initiative of our present Chief Minister Sri Janaki Ballav Patnaik. The displacement and ecological problems should be sympathetically sorted out.

Trade

(i) Instead of exporting ores, spices, cashew, pineapple and mango etc. Orissa should strive to process them and export to obtain manufacturing and trade advantages.

(ii) Orissa imports around Rs. 80 crores of fish and Rs. 20 crores of eggs from Andhra. With such marine, riverine and traditional water sources and expanding agricultural production, import substitution is the need of the hour.

Service Sector

Education

(1) The National Literacy Mission be disbanded for obvious reasons and funds utilised for building infrastructure of schools, colleges and Universities.

(2) Curriculum load at primary and secondary levels should be immediately reduced and new schemes be implemented in the place of well meaning and wrongly designed Mid-day Meal Programme to cut primary drop-out rates.

(3) More Engineering, Medical and General colleges be established.

(4) UGC's 'cafataria approach' to higher education in the 9th Plan for introducing "Continuous Internal Assessment" be rejected at the Education Ministers' Meeting because such a system has been given up by the Sambalpur University recently on the grounds of lower teaching days, academic degradation, controversial evaluation and campus violence. The Delhi University has accepted the Sen committee report to adopt internal examination for 25% marks only and thus it has rejected UGC "Continuous Internal Assessment" guideline, which appears to be a negative spill over of Globalisation policy.

(5) Examination should be made transparent by giving a copy of marked script to the examinee after examination.

Health

Orissa has allopathy and modern surgery based Medical colleges, Homeopathy colleges and Ayurvedic colleges, but an integrated approach to patient treatment is missing.

Secondly, more Govt. funds should be available for health sector because medicines and other requirements have become costly due to withdrawal of subsidy under Globalisation policy which is impinging on poor.

Thirdly, health in its prevention, cure, education and research aspects need to be modernised and should touch the grassroot level.

Fourthly, the Govt. has an important role in extending and modernising its 3 Medical Colleges and the attached Hospitals. The Health Minister has to sympathetically look into the special problems of V.S.S. Medical College, Burla.

Physical Infrastructure

Extension and modernisation of roads, railways, navigation and air service ; generation of more irrigation and electricity from traditional and modern sources ; modernisation of communication facilities like telephone, telegraph and increasing access of people to television, radio and newspapers are sine qua non for economic growth during 21st century.

FIGHTING POVERTY

Nationalisation of 14 major commercial banks by the then premier late Smt. Indira Gandhi for "Removal of Poverty" was a pleasantly shocking event of 1969 and the sensation has not died down. But Orissa is still a poor state ; in fact it is the poorest state in India in terms of highest percentage (44.7%) of the population living below the poverty line.

Measurement of Orissa's Poverty :

Manoj Panda measures "Poverty in Orissa—Over Time and Across Classes". He uses a nutritional standard of 2200 calories and Sen's Poverty Index. Panda finds over a span of 1957 to 1987 the following : The percentage of poor decreases from 66% to 48% during 1st period (1957-62) of his study ; increases during most of the sixties to reach a peak of 70% in 1968-69 (end of 2nd period) and falls to lower levels in 3rd period (1970-87) and remains around 55% in the eighties.

Manoj Panda, "Poverty in Orissa—Over Time and Across Classes", Study Paper, Indira Gandhi Institute of Development Research,

The Central Statistical Organisation estimates that 44.7% of Orissa's population live below poverty line in 1987-88. Manoj Panda finds it in the same year to be 10% higher than the CSO estimate.

M. H. Suryanarayan¹ finds average calorie intake of urban Orissa to be higher than rural Orissa i.e. above 2100 calorie.

The problem with these poverty estimates is that they incorporate only want of nutrition flow aspect leaving behind deprivation of stock aspect of poverty, health and education expenditure etc. due to data constraints. Such inclusions would inflate poverty percentage much more.

Deleterious Effects of Globalisation.

Globalisation inflicts deleterious effects on poor section.

(1) Manoj Panda has estimated that area induced agricultural growth has a stronger effect on rural poverty in Orissa than a yield induced one. But limited availability of arable land would mean recourse being made in 21st century to increase agricultural production through productivity gains by adopting capital intensive (Green Revolution) technology. That may push small farmers into poverty bracket.

(2) Tax cuts to make Indian goods more competitive abroad would reduce investible funds with Govt. to spend for irrigation and development of backward regions. Additionally, agricultural growth would be retarded as Kirit Parikh—Suryanarayana² simulation study finds, due to cut in fertiliser use.

(3) Withdrawal of subsidy to fertiliser, pesticide and irrigation (implicit) would increase costs of cultivation and market price of these crops which would adversely affect intensity of poverty.

(4) There is no guarantee that withdrawn subsidy funds would be spent for the poor or for irrigation.

(5) Increase in the number of poor persons would cause a slump in Indian manufacturing sector due to lack of effective demand in the Coming Age.

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1. M. H. Suryanarayan, Food security and calorie Adequacy Across state; implications for Reform, Indira Gandhi institute of Development Research, Bombay (1996).
 2. Kirit Parikh—M.H. Suryanarayana, "Food and Agricultural Subsidies : Incidence and Welfare Under Alternative Scheme", Journal of

Composite Growth Strategy :

Prof. Allan T. Peacock (London) and Prof. Richard Bird (Toronto) have said kind words while reviewing my edition, *Fiscal Weapons and Front Co-ordination* (Peacock, 1981) where a "Composite Growth Strategy" is formulated to take care of growth and its trade-offs with distribution and stability objectives.

Massive Govt. investments directed at uplifting the poor class and the regions inhabited by the poor—the poverty weighted growth approach—have to be considered by the Govt. Transfer of income/consumption along with redistribution of land and other productive assets as well as over-all growth of the economy may change the poverty scenario for better in the 21st century.

C FIGHTING NATURAL CALAMITIES

Orissa is a natural calamity prone economy. Flood, drought, famine and cyclone have taken toll of human and animal life; caused poverty, destitution and starvation and hindered economic growth by unbalancing the economy.

The current year's drought in an all Orissa phenomenon. Permanent drought syndrome of distress sale of produce, labour and child and malnutrition deaths in the Rain shadow Areas of western & southern Orissa (located under the shadow of Eastern Ghats) appears to have been alleviated by a late shower for rabi crops and timely Govt. intervention. It is amazing to see cattle grazing in the standing crop fields in coastal Orissa in full view of public this year.

Ecologists' View

According to the ecologists, flood and drought occurred in the pre-British period too. But these were sporadic occurrences. The monsoon disturbances—high/low precipitations—were caused by meteorological factors such as change in sunspots, intensity and direction of monsoon cloud from Indian Ocean and Somali Low level Jet Stream, and change in temperature zones and the direction of global winds.

But with onset of the British rule, forests were cleared to make roads and lay railway tracks for ensuring law and order, collecting land, raw materials, ores and bamboo for British industries and distributing British goods. That brought in climatic changes which resulted in more frequent and severe natural dislocation.

Planned economic development has led to destruction of forest

establishment of industries, construction of roads and railway lines, ports, aerodromes and above all river dam reservoirs and urbanisation. We know that forest loss is correlated with urbanisation and not population growth.

All these coupled with industrial pollution, global warming, Green house effect and ozone depletion have severely impaired the economic balance precipitating drought and flood situations.

In Orissa flash floods have been controlled in the coastal Orissa due to construction of the Hirakud Dam and the Rengali Dam, but floods occur in the delta region due to silting of the river mouths on account of loss of forest cover.

It is worth quoting "State of Orissa's Environment" report¹ :

"A glance at the district wise annual rainfall since the beginning of the century till the present times indicate that before the end of 1950s the rainfall was less erratic with most years receiving normal and above normal rainfall."

Monsoonic Fluctuation and Divergent Economic Instability :

Monsoon affects agriculture sector directly. Its fluctuations are reflected in movements of agricultural income as depicted in the Diagram B.

We measure the Peak Trend (PT) and Trough Trend (TT) of agricultural income to find out whether the economic instability is divergent in nature :

$$PT = 39531.9 + 1451.516 T$$

$$(14.56)^*$$

$$TT = 24115.51 + 1368.322 T$$

$$(8.314)^*$$

Since estimated β value of Peak Trend is greater than the estimated β value of Trough Trend, this indicates divergence of economic fluctuations. So economic instability is increasing due to worsening monsoon fluctuations in spite of irrigation facilities provided by Govt. and cultivators and Afforestation programme.

Forest Area Controversy

Land under forest decreased from 1950 onwards (Forest Dept. data). Economic Survey, Govt of Orissa (1993-94) shows marginal rise of

rest cover in 1991-93 over 1987-88. But the Imagery Report of the Forest Dept. shows a decline of forest cover to 47205 sq km even in 1991.

Measuring Drought & Flood

Meteorological drought occurs when rainfall in a year is less than 1000 mm (normal precipitation) according to National Irrigation Commission. Hydrological drought is measured in term of run-off in the river whereas agricultural drought is indicated by crop failure. Measuring drought is a difficult exercise as it is a dispersed phenomenon. The Central Water Commission, therefore, uses an Arid Index to measure soil-moisture stress for measuring drought in a region. But measuring flood presents little problem as it is indexed by rainfall rate, run-off, number of breaches in the river and loss to life and property.

Calamity Proofing Measures

Drought and flood are two sides of the same coin. Presence of a large volume of uncondensed water vapour (drought) in one part of a year reaches dew point in another part of the same year or next year and precipitates much (flood). So some of the important calamity proofing measures like Forest Conservation and Soil Conservation, which help restore ecological balance, reduce danger of drought and flood simultaneously.

SPECIAL DROUGHT PROOFING MEASURES

For Drought proofing, DPAP (Drought Prone Area Programme) should adopt mini watershed management approach and follow "Ridge to Trough" method.

Traditional water sources like pond, katas and wells be revamped and lift-pumps installed on river beds and jungle streams to save crops and life.

The Drought in Orissa is an ecological drought over and above being a meteorological drought because HYV which consume more water being pushed into areas which were reaping short duration varieties like 'Dangara Dhana' etc. for centuries. According Dr. Richaria (formerly Director of CRRI, Cuttack), some of the traditional varieties are disappearing at a fast rate.

Sub-Sahara has a problem which may afflict us in future due to globalisation. It exports agricultural goods suiting to the high demand of prosperous countries when a large section of its population has no food to eat.

We must not forget our roots. In Tapaswini, the saint Balmiki

Nibaar bija jaata binaakarsane
Jatne aahari pujaa fula sumane" (Gangadhar Meher)

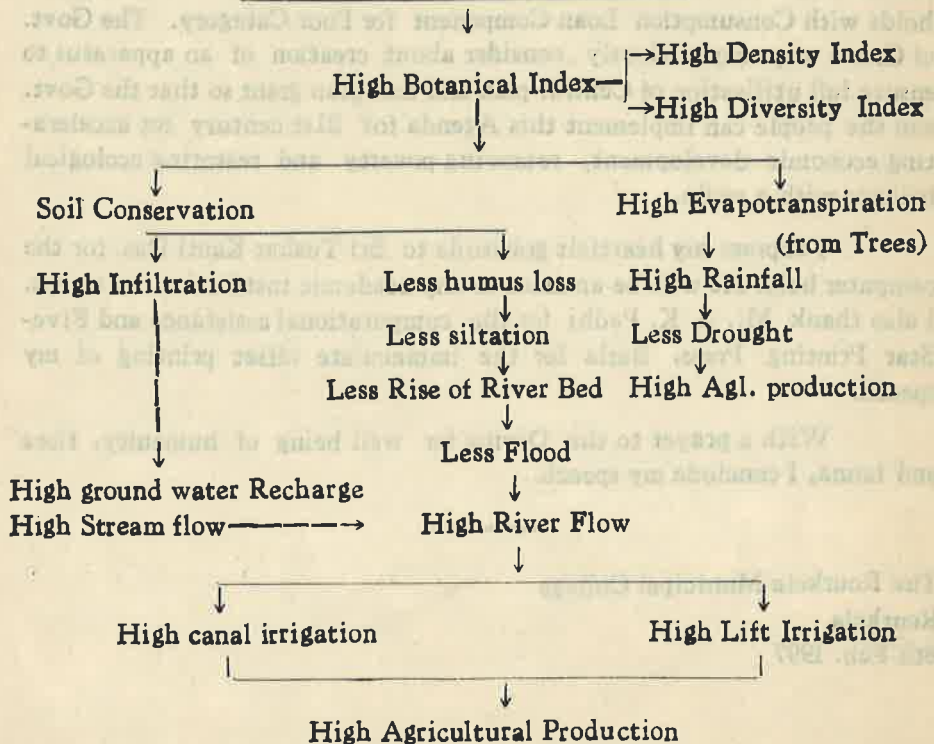
Translation :

"Wild paddy grows in the forest without ploughing
Pick them carefully along with worship flowers."

Gahiramatha is zoologists' haunt for nesting of Pacific turtle, Olive Riddle. It is also botanically known for its wild paddy reaped by Bangladesh sailors. In Bangladesh boatmen harvest rice crop from the river. So let us have growth with ecology—more forest, less pollution and less use of depleting resources. That would be sustainable growth indeed.

FOREST ECOLOGY UTILITY MODEL

Forest Conservation & Afforestation



* To produce 1 kg of dry wood, a tree transpires 2000 times of water by weight and therefore 2.5 acres of dense forest can produce sufficient water for paddy cultivation in 5 acres of land (Kerala Shashtra Sahitya

Conclusion :

The 21st century waits upon us. Let us all—the Government and people of Orissa and India—prepare a core Agenda of Forest Conservation and Afforestation, Extensive Irrigation from Ground Water Source, Mini Watershed projects, more Electricity generation from Non-conventional sources, Green Revolution, White Revolution and Integrated Allied Activities, and adoption of Israel/ICRISAT Dry Farm Technology, Modern Infrastructure, Pollution-free Industries and recycling of Wastes, Establishment of Techno-Economic Advisory Committee for inviting more Private (NRI/NRO) Investment, A (Not highly) Regulated Trade Regime, of Less Burdensome and Transparent Education with Modern Teaching Aids, Integrated System of Medicine and Modernised Medical Colleges and Hospitals, and of Encouraging and Monitoring of Developmental Bank Credit to Rural and Urban Households with Consumption Loan Component for Poor Category. The Govt. Orissa may expeditiously consider about creation of an apparatus to ensure full utilisation of Central plan and non-plan grant so that the Govt. and the people can implement this Agenda for 21st century for accelerating economic development, removing poverty and restoring ecological balance with a smile.

I express my heartfelt gratitude to Sri Tushar Kanti Das for the computer help. He will be an asset to any academic institution, he serves. Also thank Mr. S. K. Padhi for the computational assistance and Five-star Printing Press, Burla for the immaculate offset printing of my speech.

With a prayer to the Divine for well being of humanity, flora and fauna, I conclude my speech.

Rourkela Municipal College
Rourkela
Feb. 1997

Monetary Management in India

Prof. K. M. Patnaik

Ex-Vice-Chancellor,
Utkal University

I

I thank the members of the Orissa Economics Association for choosing me to deliver the Tenth Mangaraj Lecture, 1997. The topic of my lecture is Monetary Management in India.

Monetary Policy refers to the measures taken by the Central Bank in regard to the supply and cost of money. Monetary Policy is an instrument to realise the objectives of economic policy. To have a clear idea about the exact scope of monetary policy, it is necessary to make a distinction between monetary policy on the one hand and fiscal and economic policy on the other. It is not easy to draw clear-cut lines of distinction between them. Nevertheless, one can find out whether a measure is aimed at producing mainly monetary or non-monetary results. To understand this, let us take up the distinction between fiscal policy and monetary policy. Fiscal policy refers to policy of the government relating to revenue, expenditure, borrowing, debt repayment and the like. Any measure which affects on the budgetary position of the government will have some effect on the monetary sphere. For example, the automatic monetisation of the persistent fiscal deficits in our country by the Reserve Bank has adverse effects on monetary management. Therefore, fiscal policy and monetary policy cannot be divided into watertight compartments. However, measures of taxation, items of government expenditure, and the like cannot be included as parts of monetary policy.

Monetary policy is a part of the economic policy of a country. Economic policy which affects the volume of production in a country is likely to produce monetary effects, even though it is not primarily aimed at affecting the monetary sphere. Similarly, a policy of redistribution of incomes will affect the monetary situation even though it is part of a broader economic policy. In all these matters, the role of monetary policy

A comparison of fiscal policy and monetary policy as regards their relative flexibility shows that the latter has this advantage. Edward Shapiro advances two reasons to prove that monetary policy has a greater degree of flexibility. *First*, certain tools of monetary management like open market operations have inherent flexibility. *Secondly*, monetary policy is controlled by a decision-making authority which is independent of government control and whose power is concentrated in the hands of a few persons. In contrast, the decision making process in the area of fiscal policy brings in the whole of executive and legislative branches of the government. Thus fiscal policy is largely a matter of political decision. Therefore, it will remain anything but flexible, for it will continue to depend on legislative action which is a time-consuming process, being based on long discussions in the legislature and ultimately on majority vote. Therefore, Edward Shapiro writes, "it is fair to conclude that fiscal policy will remain far less effective as a means of achieving short-term stabilisation." We will have to find out whether in the Indian context, the supposed greater flexibility of monetary policy can be taken granted or not or Shapiro's statement holds good for our country.

II

The important changes seen in our monetary system during the last forty years, which are the offshoots of the working of a planned economy, may now be analysed. These developments vitally affect the functioning of the monetary system in our country—Let us take up some of these developments to understand how they have affected the operation of our monetary system. The expenditures of the Central and State Governments have gone up steeply since 1970-71 and now constitute little more than one-third of the GNP. We have achieved a gross saving rate which was as high as 22.6 percent in 1983-84, though it was higher at 24.7 per cent in 1978-79. But during the Seventh Plan period; it came down and remained more or less stagnant between 21 to 22 per cent. Savings have risen significantly and the monetary system accounts for a substantial portion of these savings. The household sector has a little more than 93 per cent of the total savings, the public sector 3.8 per cent and the private corporate sector 2.8 per cent of the total. The share of bank deposits in the financial assets of the savers is nearly 46.7 per cent in 1986-87. In spite of these favourable developments, Government has been incurring huge deficits which not only shows that its saving is not keeping pace with the growing demands on

limited. This implies that plan expenditures rest on inflationary financing and not the savings of the public to a large degree. The increased recourse to deficit financing is a very unhappy development and it has become imperative to ensure that deficit financing, measured in terms of recourse to credit from the RBI, is brought down to a safe level.

We may now analyse the pattern of public debt operations in India, which have considerably added to our misery. Our external debt including NRI (non-resident Indians) deposits amounted to \$ 62 billion or Rs. 1,50,000 crore in July, 1991 and internal debt was more or less of the same order. The market borrowing of the Central Government in 1960-61 was Rs. 100 crore; it went on increasing year after year and in 1991-92 it amounted to Rs. 30,008 crore. It should be noted that the maximum interest rate of 10.5 per cent per annum offered during 1984-85 on government securities with a maturity of as large as 30 years remains lower than the maximum rate offered by banks on term deposits of more than five years maturity. The major investors in the gilt-edged market are the Commercial Banks, Insurance Companies, provident funds and other trust funds. The market is, however, narrow. Investment by households in government securities is negligible, even though more than 93 per cent of the total savings arise in this sector. The financial institutions mobilise savings from the public and investments made by them in government securities represent a transfer of institutionalised savings to the government sector. Investments by these institutions are governed by the respective statutes applicable to their operations. Commercial banks are under obligation to invest 38.5 per cent of their deposits in government securities. This is the prescribed statutory liquidity ratio at present. The L. I. C. has to invest not less than 50 per cent of its accruals in the form of premium income in government and other approved securities subject to a minimum of 25 per cent in Central Government Securities. Similarly, General Insurance Corporation and its subsidiaries have to invest 35 per cent of their fresh accruals of investible funds in government and other approved securities with a minimum of 25 per cent in Central Government Securities. Provident funds are required to invest 30 per cent of their accruals in government securities with a break up of 15 per cent in Central Government Securities and the balance in State Government and other approved securities. Thus, these financial institutions constitute a captive market for government securities.

A crucial aspect of the financial relations between RBI and the government is RBI's lending to governments, both Central and State.

Sec. 17 (5) of the Reserve Bank of India Act provides that it may make advances to Central and State governments, which are repayable within three months. There are no statutory provisions as regards either the maximum amount of advance or the rate of interest to be charged. These details are decided on the basis of agreements made by RBI with the Central and State Governments. Observed trends in this regard reveal that advances to the State governments are subject to limits prescribed in ways and means agreements with the States, but there are no such limits applicable to the Central Government. This is because RBI accommodation to the Central government takes the form of sales of *ad hoc* Treasury bills to RBI rather than ways and means advances. Such practice has created an undesirable trend as the RBI has no control over the extent of its accommodation to Union Government. There is no limit on the amount of *ad hoc* Treasury bills which the RBI has to purchase; nor does the RBI have any statutory power to refuse to accept *ad hoc* Treasury bills beyond a limit. As a result, RBI's holdings of *ad hoc* Treasury bills over the years have gone on increasing to a great extent. This has led to an enormous expansion of money, creation not matched by RBI resources. RBI's lending to the central government against *ad hoc* Treasury bills has been the main factor behind the inflationary situation created by the country. The RBI is helpless in this matter in the absence of statutory powers limiting its power of short-term lending to the central government and thereby putting a check on monetary expansion.

The budgetary deficit of the Union Government is mainly financed by borrowing through the issue of treasury bills. These bills are sold on tap at a discount by the Reserve Bank and the latter also rediscounts the same when required. The major purchasers of treasury bills are banks and the State Governments. However, an analysis of the ownership of total treasury bills outstanding shows a different picture. The RBI itself holds over 90 per cent of the outstanding treasury bills. This is because purchasers of such bills do not hold them till maturity in view of their very low yield but rediscount them with the Reserve Bank before maturity. The ready rediscount facility afforded by the Reserve Bank results in a substantial holding of treasury bills by it in the virtual absence of a market outside the latter.

It has been stated earlier that investments of the household sector in government securities are insignificant even though more than twenty-three per cent of our savings arise in this area. It appears, there-

public through an appropriate interest rate structure and by offering a wider choice of savings instruments with attractive features. This had been also recommended in the report of Sukhmoy Chakravarti Committee, submitted in April, 1985. Such a measure will have the desirable consequence of lowering the rate of expansion of reserve money and the money supply associated with a given level of borrowing by the government. The most prominent aspect of the market borrowing programme of the Central Government is that over the years the Reserve Bank has been called upon to take up a large proportion of the new issues. This has to be stopped to avoid the inflationary tendency gathering momentum. The subscription of the Reserve Bank to the net loans floated formed about 64 per cent of the total in 1981-82. This is increasing every year. To prevent this undesirable tendency and thereby the emergence of excessive inflationary pressure, Sukhmoy Chakravarti Committee recommended that in the capital market government borrowing should contend with market forces but only at the margin after the captive market for government securities has been fully tapped. In the case of short term gaps between receipts and payments, the Central government could take recourse to ways and means advances from RBI within a mutually agreed limit. As regards incentives for growth of savings, it is desirable to pay higher interest rates on savings instruments without fiscal concessions than lower interest rates with large tax incentives. These three measures, according to the Reserve Bank, are likely to vastly improve the overall economic policy framework. It is only when such steps are taken by the Central government that the RBI would be able to adjust through open market operations the level of reserve money and the overall liquidity, taking into account the real factors in the economy. Only then can the supposed greater flexibility of monetary policy and open market operations be felt in our context.

III

A budgetary deficit is estimated in different ways. One way of looking at the deficit is the excess of the estimated expenditure of the government over the expected receipts of only tax and non-tax revenues. This is how a budget deficit is estimated in advanced countries. In the case of India, the budgetary deficit is not estimated in this manner. The practice followed in our country is to equate the deficit with the extent of borrowing made from the RBI to balance the gap between estimated expenditure and anticipated revenues of all kinds, including borrowing from the market and financial institutions. In other words, the entire net

credit extended by the RBI to the Central government, during a year is taken as the budgetary deficit in our country.

The credit provided by the Commercial banks and co-operative banks through investment in government bonds and securities is not a part of deficit financing in India. It is true that the impact of the credit advanced by these institutions to government is more or less the same as that extended by the RBI. But there is an important difference. When the RBI finances a budgetary deficit, there is not only an immediate and direct expansion of money supply with the public but also a considerable secondary expansion of bank credit on account of increased cash reserves of banks following an enlargement of *reserve money*. In the case of commercial bank financing of government deficit, there is no such secondary expansion but an increase of money supply equal to the credit provided. Budgetary deficit financed by borrowing from the non-banking institutions may be generally considered as non-inflationary, as this does not take an addition to money supply. In this case, the purchasers of government securities in the non-banking sector find a reduction of their deposits in their Commercial banks and an increase in the government deposits to the same extent in the banking system. All borrowing, irrespective of the form or source, really measures the extent of the aggregate income of the country that is transferred to the government for its use, apart from taxes.

The impact on the money supply of the borrowing from the Central bank is the largest. Any creation of monetary reserves by the RBI through its lending operations to government, will lead at the present time to an expansion of money supply thrice the amount of reserves created. A Rs. 1000 crore increase in reserve money (currency with the public, cash with banks and their balances with the RBI) will lead to a Rs. 3000 crore expansion in money supply. This ratio is called "the money multiplier." This ratio has been rising steadily in India from 1.5 in 1950-51 to 2.27 in 1970-71 and to almost 3.0 at the present time. It now stands at roughly in 3.4.

IV

CONCLUSION :

In a situation where fiscal deficits go on increasing year after year, monetary policy becomes helpless in controlling the situation of instability in the economy. In a near hopeless fiscal situation, the supposed advantage of a greater flexibility of monetary policy does not manifest itself, as experienced by us. When actual fiscal deficits become

much larger than the budgeted deficits year after year and the same is automatically monetised, monetary policy gets blunted. Such a situation indicates that monetary and fiscal policies are working at cross purposes. This inevitably leads to a strained policy relationship between the Central bank and the government. The cash reserve ratio in India has been pushed up to 15 per cent, which is the upper statutory limit. This cannot be now moved upwards to contain the excessive overall liquidity in the economy. Nor can open market operations in the shape of sale of securities be used by the Reserve Bank to check excessive liquidity in a situation where government is currently borrowing roughly Rs. 1600 crore per month on an average from the banks and Rs. 1150 crore from the Central bank. The Central bank of a country cannot possibly undertake a restrictive monetary policy at a time when the government is borrowing heavily. Such a step is likely to harm the government as it cannot sell its securities at the prices and yields expected. The Central bank has also a special responsibility in connection with the debt management operations of the government.

This naturally restrains the RBI to pursue a tight money policy, even though it is needed in the interest of economic stability. In the light of these facts, it is imperative that monetary policy and fiscal policy should become complementary and not competitive. The initiative in this regard has to come from the side of fiscal policy in our country. The government has the sole power to deal with questions relating to fiscal policy.

While monetary policy influences the economy through cost and availability of credit, fiscal policy is a more important determinant of aggregate demand which puts pressure on financial resources and purchasing power. Therefore, there is urgent need for a high degree of coordination between the Central bank of our country and the Union Government. There is greater need for more respect for the views of the Reserve Bank than is found at present. There is no mechanism in the existing situation by which the advice given by the Reserve Bank to the Central government could be made effective. If this cannot be ensured, the other alternative is to legally stipulate that the central government can meet its short-term need for funds through ways and means advances from the Reserve Bank within a mutually agreed limit. Along with this, steps may be taken to enlarge the market for Treasury bills by making the return on it flexible and attractive. These bills should be placed on

bills by varying upwards the rate of discount for these bills. There should be also limits on rediscounting facilities offered by the Reserve Bank in this regard. Offering a rate of return on treasury bills that is attractive would enable the central government to raise its required resources without the excessive creation of reserve money that is inherent in the present system. Such a device will also substantially lower the amount of holding of these bills by the Reserve Bank, thereby leading to a corresponding reduction in Reserve Bank credit to government and hence in reserve money. These measures relating to treasury bills as a tool of monetary policy had been suggested by the Sukhmoy Chakravarti Committee in 1985. The implementation of these recommendations is likely to provide an improved framework for better monetary management to ensure greater economic stability in our country.

In the absence of any control over our fiscal deficits, wasteful expenditure has gone to such an extent as to result in deficits in the budget year after year on the revenue account. In other words, currency is being printed in order to pay salaries. This is clearly an untenable situation which has already gone on too long and the only way to enforce discipline is to legislate limits to excessive government spending. A few of these legislative limits in the monetary sphere have been suggested here for implementation in order to have some control over fiscal deficits and thereby enabling the RBI to be more effective in regard to monetary management.

**LEVEL AND PATTERN
OF
CONSUMER EXPENDITURE
IN INDIA**

Standard of Living Versus Level and Pattern of Consumption : Some Issues

Dr. Basudeb Sahoo

Promotion of individual and social well-being is the primary goal of economic planning and administration of a State. But measuring and conceptualising individual and social well-being and securing compatibility between the two have always been a knotty issue, defying consensus amongst the theoreticians and practical administrators. Further the desirability and feasibility of certain standard of living and/or consumption level are linked up with the controversial themes of value-judgement and acceptability of time-span. Nonetheless with the growing concern for individual as an individual and the totality of individuals, standard of living inter alia level of consumption has drawn the serious attention of social scientists, planners and the rulers. Major concern of the rulers of the developing countries being enhancement of human welfare, it is pertinent to have a clear idea of standard of living and its relation with consumption level.

The paper makes an attempt (a) to clarify the issues involved in conceptualising and measuring standard of living and level of consumption; (b) to throw light on the consumption pattern and its link with standard of living and (c) to highlight the consumption level of India and the Indian States.

Conceptualisation of standard of living poses a number of questions. Should it be in terms of empirical-material approach or in terms of philosophical approach ? Should the standard of living be expressed in terms of a bundle of goods consumed or in terms of happiness originating from the environment which determines the mindset of the person ? Should standard of living be judged in terms of essentialism, or realativism, that is according to some absolute norm or in relation to

A particular standard of living may be ethically desirable, but materially not attractive. This leads us to value judgement. Value-judgement may vary with persons. One may follow Gandhian principle and idealise simple, honest and puritan life, another may go in for a Marshallian concept of decent and civilised life. One may consider a standard of living just and desirable if it may be universalised, that is, it can be accessible to all (A Kantian categorical imperative).

Level of living is a multi-dimensional concept covering various things like consumption, literacy, life expectancy, access to safe drinking water, shelter etc. Hence, obtaining a single index based on all these which will be all comprehensive is difficult to compute. However the one variable most commonly used in studies on poverty is private consumption: public consumption is supposed to take care of other aspects like education and health. That is why the Ministry of Planning, 1985, observed that it is not "possible to categorise household as poor or otherwise on the basis of the information on any characteristic other than per capita expenditure".

Social welfare or standard of living may be measured in terms of individual utility function or bundle of commodities or it may be measured in terms of character or attribute of commodities or functioning. Here instead of drawing preference map on commodity space, we may draw it on attribute map. Individual instead of choosing between commodities, takes into consideration its character or attributes. In place of preference for different food articles we are to base our preference on their attributes, calories, calcium or protein. As is known, many food articles, roots, vegetables, wild fruits, not very popular among the urban sophisticated people, have high protein and nutrition and often consumed by rural and tribal people. When compared in terms of nutrition, tribals may not lag far behind the urban elite.

Similarly if we intend to measure the level of welfare in terms of functioning as Amartya Sen has done, we are to consider whether a particular function is performed by a group of people irrespective of the method or instrument of performance. Say if meeting the friends, attending a good educational institution could be possible without much convenience on foot or by a cycle when friends and institutions are in neighbourhood, why should there be greater preference for car? Thus, for society what is important is the achievement of the objective function or doing the desirable function, not the instrument of doing it.

others point out that some functions are important in relation to a society and functions are relatively more or less important compared to one another.¹

Thus, conceptualisation of social welfare or standard of living is complex and full satisfaction from any concept is a mirage. Nonetheless as a working proposition certain indicators of development have been evolved in recent times which in many countries have been accepted as an index of social welfare.

Estimate of standard of living depends on a set of choices such as choice of distribution of income, consumption, wealth or calories. To place people or families in the different levels of living, that is above or below certain minimum desirable level, a cut-off line called poverty line has been conceptualised, the line varying from country to country. This notion of poverty line entails absolute poverty i.e., poverty without reference to any other society and relative poverty line with reference to others. As Atkinson (1987) pointed out, the notion of one absolute poverty standard applicable to all societies is irrelevant. When relative poverty or standard of living is spoken of, it may be conceived in terms of the minimum in personal sense or in terms of the minimum in social sense. To get at the socially minimum level of living social value and society's opinion through gallop poll as in USA may be undertaken. To measure the change, rise in real income in light of the rise in price index has to be assessed. The question arises as to the type of price index to be made use of. Prof. Minhas and Vaidyanathan preferred price index around the various classes of people to the general price index to measure the change in real income. Further when real income is taken to reflect the consumption level to mark the cut-off line of poverty or socially minimum standard of living, the changing nature of consumption basket and the change of taste should be taken into consideration.

In our country, the poverty line has been estimated as that level of consumer expenditure which provides for a normatively determined calories amount. This is generally based on the National Sample Survey (NSS) data on consumer expenditure distribution (Dandekar and Rath 1971, Perspective Planning Division).² The mechanism involved in this approach is consumption of household collected is converted to per capita consumption. The consumptions are that (i) the composition of households is same (ii) there is a proportional relation between household consumption and household size and (iii) distribution of consumption

there is no discrimination between male and female members in matters of distribution.

Notwithstanding the above limitations, poverty in India has been measured by head-count ratio defined as the proportion of the population having a consumption level less than the poverty line. While the limitations of such an index are well-known, and there are other better measures like the Sen index (Sen 1976) and the PL measure (Foster, Green and Thorbecke, 1984), few attempts have been made to estimate the latter. One major reason is that the available NSS data on consumption distribution being in grouped form, these measures are not easily measurable. The headcount measure is insensitive to distributional concerns among the poor. Whereas Sen and PL measures take weighted sum of income shortfalls of the poor and thereby reflect distribution aspect among the poor.³

In recent years, standard of living and the purpose of development have been expressed in terms of human development indicator (HDI). The UNDP in its Reports 1990 and onward, has been ranking various countries in terms of HDI by combining indicators of real purchasing power, education and health. In 1993 India ranked 146th in terms of GNP and 134th in terms of HDI among 173 countries.⁴ This indicator is more comprehensive than simple GNP or consumption level. But it gives intercountry picture, not intra-country picture.

In our country as well as in many other countries consumption level has been used as a yardstick to measure poverty and inequality in standard of living—Pattern of consumption is intimately connected with the level of consumption which to a great extent reflects the income level. Of course beyond certain level increased income manifests in increased saving. How poor are the poor can be gauged from the pattern of their consumption and the level of consumption. Across section study showing various levels of income show varying level of consumption and varying pattern of distribution of expenditure over consumption articles. U.S.S. data reveal rural-urban differences in average consumption expenditure on different items.

That with change in income, consumption level and pattern of consumption changes are evident from various socio-economic surveys made by a number of scholars. Studies made by this author and his scholar in Sundergarh district testify to this fact. For example before 1960, in Urban area of Rourkela income of tribals was Rs. 1201 and that

the corresponding figures were Rs. 15106 and Rs. 16562. In rural area before 1960 the annual income of the rural household of the tribal was Rs. 1551 and of the non-tribal it was Rs. 1588 while the corresponding figures for the period late eighties were Rs. 8679 and Rs. 8949 at current prices.

With industrialisation incomes of the people change and with urbanisation the fashions and styles of living change. These effect a change in consumption pattern. Such changes have been observed in Sundergarh district in case of both tribals and non-tribals. On an average the non-tribal households were spending 72.3% of their earning on food before industrialisation whereas they were spending only about 57% in the late 1980s. The proportions of income spent on items like cloth, education, rent, fuel, books and magazines, medicines and other were larger in 1980s than in 1960. Similar changes in consumption pattern are observed in case of the tribals too. Tribals in late 1980 have entered in to the monetised sector and were spending more on non-traditional items like education, transportation, books, magazine, medical treatment etc.. With the rising level of income and urbanisation, the proportion of income spent on food has declined.

Pattern of consumptions is also affected by difference in culture and habit. A survey of the fishermen families in the year 1988-89 reflects it. In coastal Orissa, income per household per month for Telgu fishermen was Rs. 940/- and that of Oriya fisherman was Rs. 1125/-. The average monthly expenditure and the proportion of it spent on broad items were as follows :

Consumption Expenditure of Fishermen Families

Sl. No.	ITEM	TELGU HOUSEHOLDS		ORIYA HOUSEHOLDS	
		Average expenditure	%	Average expenditure	%
1.	Food	Rs. 626.00	50	Rs. 793.95	67
2.	Drugs & beverages	Rs. 438.20	35	Rs. 142.20	12
3.	Others	Rs. 187.80	15	Rs. 248.85	21
TOTAL		Rs. 1252.00	100	Rs. 1185.00	100

It is significant to note that Oriya fishermen households spend higher percentage of expenditure on food than the Telgu households. But Telgu households spend much higher proportion on drugs and beverages (35%) than the Oriyas (12%). The Oriya fishermen households

on education, 1% on entertainment while the Telgu fishermen household spends 15% on others consisting of 3% on entertainment, 7% on cloth, and 0.5% on education.⁵

At the national level in India there are contrasts and contradictions in consumption pattern. The NCAER Survey on consumption pattern revealed that at the lowest level income below Rs. 11,000 per annum at 1987-88 prices, the number of households was 81.9 million in 1987-88 and 90.3 million in 1992-93. These households also purchased modern manufactured goods. In 1992-93 they bought 1.85 million transistor radios, 0.68 million small black and white TV Sets, 0.67 million pressure cookers, 2.46 million bicycles, 5 million wrist watches and 8 million electric fans.

In rural area the proportion of households in lowest income category declined from 3/4th to 2/3rd during 1985-86 and 1992-93. The number above the lowest level of income i.e. Rs. 11000 per annum amounted to 65 million households or 365 million people in 1992-93 and at the highest level income, there were 3.6 million households. Rural market dominated in some manufactured products. Over 75% of bicycles, and portable radios, over 60% of table fans, sewing machines and wrist watches were bought in rural India in 1992-93. The NCAER study further reveals that between 1989-90 and 1992-93 the percentage of black and white TVs, bought in rural India went up from 44 to 47 percent, of colour TV from 19 to 31%, VCR/VCP from 5 to 8%, tooth pastes from 24 to 38%, creams from 24 to 26%, toilet soaps from 50 to 54%, edible oils from 65 to 68%, biscuits from 46 to 49%, tea from 54 to 57% etc.

There is concentration of purchases for most consumer durables in the middle income groups between Rs. 18,000 and Rs. 78,000. Low income households which form 58.5 percent of the population own 37% of group-I durable goods (price below Rs. 1000), 24% of group-II goods (price Rs. 1000 to 6000) and 10.5% of group-III goods (price more than Rs. 6000).⁶

The above data clearly indicate that the consumption of modern manufactured articles is becoming more and more popular among the people. This is definitely changing the consumption pattern and the reference scales of the households, poor or not-poor.

The World Bank's recent study "Poverty Reduction and the World Bank" contends that "across the world, far from decline in poverty there has been some deterioration in recent years." The World Develop-

poor and reasons that measuring poverty is difficult because of conceptual problems and data deficiencies and because all definitions of poverty involve social value judgements.

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Consumption of Cereals in India

B. K. Mohanty

Department of Economics,
Ravenshaw College,
Cuttack.

In the food basket of the Indian population, cereals enjoy supremacy. In spite of a continuously falling share of agriculture and allied activities in gross domestic product (GDP) at factor cost at 1980-81 prices, India still earns quite a substantial percentage of her national income from this sector. Agriculture alone has contributed 27.4 per cent of India's GDP in 1994. The output of foodgrains consists of cereals comprising both fine and coarse including pulses. While paddy and wheat fall under the first category, jowar, bajra, maize, ragi and small millets are the components of the latter variety. In the food economy of India, coarse cereals assume a strong supplemental role. In 1994-95, India had produced 177 million tonnes of cereals of which 30.4 million tonnes were coarse cereals. Of the total cereals raised, around 2.5 million tonnes were exported during the first half of 1994-95 thus leaving approximately 98.6 per cent for domestic final consumption. Since the Indian population relies heavily on cereals for the satisfaction of hunger, an in-depth study of the consumption of cereals by private final consumers may reveal certain facts of practical significance. The present study proposes to deal with the aspects like trend in expenditure on cereals, expenditure elasticity of cereals demand, poverty and the consumption of cereals, demand for the components of cereals in a rural-urban framework. In fact, the study aims at revealing the pattern of cereal consumption in India.

In order to study the changing pattern of demand for cereals in India, the time-series data on private final consumption expenditure are field appropriate. Such data are available from the published reports of the National Sample Survey Organisation (NSSO) of India. The consumer budget enquiry forms the most important part of the general programme of NSSO's activities. Till date, the NSSO has completed its 50th round (1993-94) but data on private final consumer expenditure on all India

Accordingly in the present study, NSSO data on cereals consumption in India (both rural and urban) from the 38th (1983) to the 47th round (1991) covering a period of nine years are used.

These data are available at current prices. With inflation as a prevailing phenomenon, nominal value of a variable creates delusion. With a view to doing away with the problem of money illusion, the variables need to be converted into their constant price equivalents by using price deflators. Accordingly, the year-wise monthly per capita data on consumption are converted at 1980-81 prices. Since price variations over time are not uniform for all categories of items of private final consumption like cereals, food items and both food and non-food category, there should be separate sets of price deflators (vide EPW Research Foundation 1996). The NSS provides consumption data in the form of monthly per capita expenditure (MPCE) on several items of consumption—both food and non-food, in rupee terms. Such expenditure data round-wise on (1) cereals, (2) total food and (3) total food and non-food for rural and urban India both at current and 1980-81 prices (vide 38th Round & then 42nd to 47th Round of NSS data).

TREND IN CEREALS DEMAND IN INDIA :

Consumption demand is never a static phenomenon. Time is the fundamental force to cause changes not only in consumer expenditure on food and non-food items but also in the share of each one in total family expenditure. The demand for food items is ordinarily inelastic with respect to total household expenditure which is essentially a valid fact in consumption. This conclusion not only holds for the households in a cross-section but also for time-series samples. With an increase in spending capacity of the households over time, the share of food expenditure as a percentage of total household budgets diminishes. Similar conclusion holds for the allocation of the total food expenditure to cereals. With an increase in total food expenditure, the proportional allocation to food items other than cereals like pulses, milk and its products, edible oil, vegetables, meat, egg and fish, sugar, beverages, spices etc. is ordinarily increased as these items are considered essential for the betterment in consumption standard.

Irrespective of the locational distribution of households in India, the MPCE on cereals, total food and both foods and non-foods at current prices have registered positive annual percentage growth rates throughout. In all these cases, the percentage rates of growth in urban India are higher excepting for the total household expenditure. The

picture is quite different if constant prices are used in lieu of current prices. There is a fall in MPCE on cereals both in rural and urban India and in total food in rural India at 1980-81 prices. Though MPCE on food group in urban India and on total food and non-food at constant prices have shown a rising trend, they are not statistically significant. Thus consumer expenditure on food items in general and that on cereals in particular have been highly affected. Two probable causes might be attributed to the phenomenon of falling cereals demand in India viz (1) near stagnated agricultural productivity and (2) increasing prices of cereals. During 1983-91, cereals production in India marginally increased by 2 per cent per annum while the prices of cereals increased by 11 per cent with 1980-81=100. Between these two, the latter appears to be a stronger deterrent to the increasing demand for cereals.

With the existing trend in cereals consumption, one has to guess bleak prospect for it. Starting with the 38th round through 47th round covering a period of nine years, both in rural and urban India, MPCE on cereals at 1980-81 prices has fallen and the fall is faster in the former. Though MPCE on cereals both in rural and urban India at current prices have registered positive growth rates over the said period of nine years (7.97 and 7.06 per cent per annum respectively for rural and urban India), in each case it is below the annual percentage rate of inflation in cereals of around 11%. The substantial difference between two percentage rates of change brings to the fore the failure of the households to maintain cereals consumption in the teeth of inflation. This observation has been supported by the trend in shares of cereals in household expenditure. The annual percentage decay in the shares of cereals in total food and total household expenditure taken separately both at current and constant prices for rural and urban India is marked throughout. Moreover, MPCE on cereals as a percentage of total food expenditure at current and 1980-81 prices have fallen faster in urban India.

Over the time period 1983 through 1991, the physical consumption of cereals (in kgs.) in India is almost stable at a higher quantity of consumption by rural households and a lower quantity by urban families. A coefficient of variation (CV) in cereals consumption by urban households being lower. The consumption of other cereals and of cereal substitutes obeys no rule both in rural and urban India. The consumption of other cereals in urban India and cereal substitutes in rural India in physical quantities are highly erratic as evidenced by the estimates of the

is low but stable in India which may act as a guide to policy-makers for agriculture. Drawing a comparison between per capita consumption of cereals in rupee term and in physical quantity, one has to deduce that the former is highly fluctuating in comparison to the latter.

EXPENDITURE ELASTICITY OF DEMAND FOR CEREALS :

In household budget surveys, expenditure elasticity otherwise referred to as Engel elasticity captures a place of significance. Its use is referred back to the writings of Prais and Houthakker (1955) which are considered to be the early scientific studies on family budgets. The computation of the coefficient of expenditure elasticity necessitates pre-specifying an Engel functional form. Since computation of expenditure elasticity is the only objective in the present context, the loglinear variant of Engel function will be the best choice as this functional form directly yields the value of the elasticity coefficient as the estimate of the regression parameter. Once the shape of the functional form is decided, the next problem lies in selecting appropriate variables to build the model. Conventionally, item-specific expenditure serves the role of the endogenous variable and per capita total household expenditure to stand for the exogenous variable in the Engel functional form. In the present context, we wish to depart from the usual practice of selecting the exogenous variable of the model. MPCE on cereals stands for the endogenous variable. But MPCE on food is taken to represent one of the exogenous variables in lieu of monthly per capita total household expenditure which includes both food and non-food expenditure. This is rationalized on the ground that households are ordinarily in the habits of distributing monthly total expenditure between food and non-food first, thereafter splitting the former among various food items and the latter among several non-food items of consumption. Since cereals constitute the principal component of the food-group, in all appropriateness, household expenditure on cereals will be better explained by total household expenditure on food rather than total household expenditure on both food and non-food. Moreover, household size influences consumption in general and the consumption of cereals in particular. Thus, household size is used as the second exogenous variable in the Engel functional form. This model so obtained will be estimated from all the seven rounds (38th through 47th) of the NSS data for rural and urban India taken separately. The model is given by

$$\ln Y_{ijt} = \beta_{0j} + \beta_{1j} \ln X_{ijt} + \beta_{2j} \ln N_{ijt} + u_{jt} \quad (1)$$

$$i = 1, 2, \dots, I$$

$$j = 1, 2 \text{ (1 if rural, 2 if urban)}$$

where Y = MPCE on cereals,

X = MPCE on food items,

N = average size of the households,

i = the i th expenditure class as mentioned in the NSS reports and

u = a stochastic error term.

The results of the model estimation give the following conclusions.

1. That, irrespective of the spatial distribution of households, the demand for cereals in India is inelastic with respect to total food expenditure as $\epsilon_{YX} < 1$ throughout.

2. That, household size is seen to have affected cereals consumption differently in rural and urban India. While in urban India it is inelastic with respect to household size irrespective of the rounds of survey as $\epsilon_{YN} < 1$, it is elastic till the 44th round (1988-89) for rural India as $\epsilon_{YN} > 1$ and thereafter it turns inelastic. But the size elasticities for rural India corresponding to the 45th and 46th rounds and in urban India corresponding to the 45th round are seen to be insignificant at 5 per cent level.

3. That, for each round, the expenditure elasticity of cereals in rural India (ϵ_{YX}) remains above the corresponding one (ϵ_{X2}). Therefore, even in both rural and urban India, demand for cereals is inelastic with respect to total food expenditure, the degree of inelasticity is stronger in urban India.

4. That, on the whole, the demand for cereals with respect to household size is elastic in rural India and inelastic in urban India.

One of the objectives of estimating both expenditure (ϵ_{YX}) and size (ϵ_{YN}) elasticities is to use them in ascertaining the nature of the food. By applying the choice criteria (Singh, 1968), it is obtained that for the urban India, cereals are necessities irrespective of rounds of survey. For rural India, cereals are quasi-necessaries (an equi-proportional increase in both expenditure and household size leads to a slightly less than proportional increase in expenditure on cereals and in the event of a further increase in the former, the latter diminishes) till the 44th round of survey. For the 45th and 47th rounds, the commodity is a pure necessity. For the 46th round, it is proved quasi-luxury (an equi-proportional increase in both food expenditure and household size leads to a slightly more than proportional increase in expenditure on cereals and in the event of a further increase in the former, the latter increases) for rural India. However, treating the estimate of β_2 as insignificant for

the round, one obtains cereals as necessary items. Thus, in both rural and urban India, cereals are proved to be inelastic with respect to household food expenditure and size.

Tobin (1950) introduces the concept of economies/diseconomies of scale in household budget analysis. Economies of scale in household consumption emerge with a larger household enjoying a better standard of living whenever both continue to afford a given level of per capita expenditure. In the reverse case, there appears diseconomies of scale. Several methods are proposed to ascertain the presence of economies of diseconomies of scale in household consumption, but in the present context the method suggested by Iyengar et al (1968) is used due to its ease in interpretation. The method specifies an Engel function of the type as given under (1). There is the presence of economies, neutrality or diseconomies of scale in consumption of the item according as

$$\begin{array}{c} > \\ \text{est.}\beta_1 + \text{est.}\beta_2 = 1. \\ < \end{array} \quad (2)$$

By applying the choice criteria (2) to the model estimation the existence of economies of scale in cereals consumption is located for all the rounds excepting for the 46th round in rural India. In urban India, diseconomies are exhibited for the 45th and 46th rounds. Thus, economies in cereals consumption are more marked in rural India than those in urban India with respect to household size.

POVERTY AND THE CONSUMPTION OF CEREALS :

The theme of the section is developed on the empty hypothesis that poverty of households affects the extent of cereals consumption not the reverse. In India, certain specialized institutions/organisations furnish poverty estimates from time to time by defining a poverty line. Among them, mention may be made of the NSSO of India and the Perspective Planning Division of the Planning Commission of India. Both define poverty line separately for the rural and urban India. While the NSSO makes use of private consumer expenditure data, the Task Force of the Perspective Planning Division relies on implicit deflator for private consumption expenditure as furnished by Central Statistical Organisation (CSO). Indian Council of Medical Research (ICMR) also, in a sense, recommends a poverty line equivalent to certain quantity of physical consumption of cereals per capita. In the present study, the NSS estimates of poverty line for rural and urban India are used. On the basis of the poverty line drawn, the MPCE on cereals by the households in rural and urban India are

(1) Irrespective of the rounds of survey, the MPCE on cereals by households below poverty line both in rural and urban India is almost the same. Thus, pattern of cereals consumption by both rural and urban poor is almost uniform.

(2) A lot of gap exists between MPCE on cereals by households above poverty line in rural India and that of the households above poverty line in urban India. Quite interesting is that families above poverty line in urban India throughout spend less on cereals than their counterparts in rural India.

(3) Households above poverty line are less distanced from households below poverty line in terms of MPCE on cereals in urban India than the distance between the rural households above and below poverty line. Thus, poverty affects consumption of cereals in rural India stronger than how it affects in urban India.

CONSUMPTION OF COMPONENTS OF CEREALS :

Households not only restrict their choice for cereals consumption to fine varieties like rice and wheat only but also they go for the consumption of cereals of coarse variety like jowar, bajra and maize. Monthly per capita physical consumption of fine cereals (rice and wheat) in rural India varies between 11.09 and 11.77 kgs. and in urban India it varies between 10.09 and 10.30 kgs. over the time period 1983-91. But the year-wise figure for urban India is always below the corresponding one for the rural India. Jowar, bajra and maize taken together, its monthly per capita consumption in rural India varies between 1.95 and 3.06 kgs. while in urban India its consumption ranges over 0.45-1.08 kgs. and that a lot of gap exists between year-wise consumption of coarse cereals in rural and urban India. In 1983, the consumption of coarse cereals is the highest both in rural and urban India and thereafter it has fallen and the fall is seen to have been quite rapid in urban India in relation to the rural India. Among the three coarse components of cereals, the consumption of jowar in physical quantity is the highest over the years 1983-91 irrespective of the locational distribution of households in India.

CONCLUSION :

The ICMR has prescribed a norm for cereals consumption in India. According to the norm, the minimum subsistence level of cereals consumption should be 11.58 kgs per month per person. This includes both fine and coarse varieties of cereals. On the basis of the data set as

per capita physical consumption of cereals, it is deduced that the rural households on an average consume total cereals exceeding the minimum subsistence but the average quantity of consumption by urban households is falling behind the national norm. Since, cereals are raised by the rural households, a part of the total produce is meant for self-consumption and therefore no much restraint is exercised whenever cereal prices increase. For the less well-to-do urban households, prices of cereals are major considerations for its demand. Undue economy may be exercised by these households in the event of increase in cereal prices. Moreover, an increase in the prices of food products, urban households may divert a part of their budget from cereals consumption to more qualitative items in the food category.

Cereals consumption both in physical quantity and value term are affected by the change in its prices. Rural-urban differences in cereals consumption are also affected by such price changes. The prices of cereals in India have increased, on an average, by almost 18 per cent in 1983 and 150 per cent in 1991 in relation to its price prevailing in 1980-81. Hence, over the time period 1983-91, cereals prices have shown an overall spurt. But the adverse consequence of a rise in cereals prices is felt more severely in urban than in rural India. It is seen that in times of high prices, the disparity between the rural and urban households decreased in terms of physical quantities of cereals consumed and increased in terms of expenditure on cereals. Thus, with an increase in cereals prices both rural and urban households come closer in respect of cereals consumption in physical quantities.

In India, the production of cereals is no more considered a lucrative activity. The inelasticity in cereals consumption taken along with the high cost of its cultivation has rendered the production of cereals a subsidiary status. The area under the cultivation of food grains has diminished by 0.025 per cent per annum over 1970-71—1994-95. Land under cereals cultivation has diminished by 0.062 per cent per annum over the same period while it has increased by 1.296 per cent per annum for non-food grains which constituted primarily of cash crops. Hence in India, the desire of the cultivators to go for cereals consumption has been adversely affected over time. For the Indian population, agriculture being the mainstay occupation and non-availability of uniform opportunities in all parts of the country for raising cash crops, have made the cultivators to go for the cultivation of cereals.

The results of the study possess implications for the production of cereals in India. In both rural and urban India, demand for cereals is

created if its price is reduced which turns difficult in view of the rising cost of cultivation. Unless some provision is made, domestic market for cereals will not be a source of encouragement to cereals production in India. These provisions may consist of (1) arrangement of subsidy on cereals production and (2) creating foreign market for Indian cereals. In the present economic scenario, the former may not be accepted and therefore, the latter appears to be one of the viable alternatives.

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Inter-State Variation in Consumer Expenditure in Rural and Urban India

Dr. Subas C. Kumar

Sr. Lecturer in Economics

Ekamra College, Bhubaneswar

In an earlier study, (Kumar and Das) we tried to probe in to the nexus between economic development (characterised by growth of national income) and the level of private final consumption expenditure (PFCE) in India in order to ascertain whether the growth of national income can be relied upon as a better indicator of level of living at the aggregate level. It is observed that rise in PFCE at aggregate level is more explained by the inflation and population parameter in comparison to the growth of national income (NNDP). This implies that the change in per capita income and consumption expenditure might have not been uniform over the years across the states. Regional disparity in per capita NDP has led to the debate on the temporal behaviour of convergent and divergent forces. This debate along with various empirical studies made so far have led to three distinct hypotheses, viz. 'self-perpetuation', 'accordian effect', and 'concentration cycle'³ hypotheses. Further, it is believed that there exists a trade off between economic development at the national level and reduction of disparities at the regional level. An important aspect of this which has attracted attention is the time pattern of change of regional disparities in levels of living in the absence of deliberate policy measures to remove these in the course of economic development.⁴ Though the strategy of decentralisation has surfaced and resurfaced as a prominent strategy of economic development, it has remained partiarchal.⁵ In view of economic reforms in support of liberalisation and marketisation, in India, the aspects of regional disparities, particularly in level of living, draws the attention of academics and policy makers in order to reduce it to the minimum in future. Studies in the past made by Murty and Pillai 1960, Iyenger and Bhattacharya (1961), Radhakrishnan and Sharma (1976), Ahluwalia (1978), Murty (1985), and recently Maity and Chattopadhyaya (1993) examined the time trends of disparity in the distribution of per capita consumption expenditure in both urban and rural sectors. Although findings of such studies

provide evidence of declining trend of disparity in the nominal per capita consumption expenditure they lack unanimity over the disparity in real per capita consumption expenditure.

It is therefore, assumed that the interstate disparities which existed in the past might have changed either way i.e. in the direction of convergence or divergence over the period of time. The present paper, keeping all these in view makes an attempt to examine the disparity trend in per capita consumption expenditure (PCE) across the rural and urban sectors of India.

1.1.1 Methodology and Data

The state wise estimates of average percapita consumer expenditure (PCE) at current prices are available on the basis of sample surveys conducted by the NSS of India. The latest year up to which these estimates are available is 1993-94. These estimates are available separately for the rural and urban areas.

Despite the limitations in the NSS data, consumer expenditure data provide a measure of the level of living of the people and when compared over the time gives an indication of the shifts in standard of living. In order to get an idea of the pattern of change across the states of rural and urban India by and large the study is spread over two decades covering four points of time. viz. 1977-78, 1986-87, 1989-90 and 1993-94. No specific merit is claimed for the selection of these years. The year 1993-94 is selected as the terminal year of the study for no other reason but availability of NSS data up to this year.

In order to give a quantitative touch to the empirical analysis a few simple statistical tools are used. For measuring variations and to assess trends in variations rank correlation matrix, disparity ratio, coefficient of variations (COV), Gini coefficient⁶ and state relatives have been employed. The state relatives for a state is defined as follows ;

$$R_{Pce} = \frac{PCE_s}{PCE_n} R_{100}$$

Where, s, n, and Pce stand for state, the nation and percapita consumer expenditure respectively. To prevent the results from being vitiated by comparisons between just two points of time (i.e. 1977-78 and 1993-94) such values are calculated for average values of four years (sample bounds in case of Pce) in the initial period and for average values of similar number of years in the terminal period. The states are arranged

group-2. The signs of change in RP_{ce} between initial and terminal period for the two groups are examined to assess the pattern of change. The states in group-1 experience convergent phase only if RP_{ce} are found positive and reverse is true in case of states in group-2. Further coefficient of correlation between the initial period and the percent change in it over the terminal period are estimated to substantiate the observation made on the basis of signs of RP_{ce} . The sign of coefficient of correlation is negative for convergent phase and positive for divergent phase.

Intra-state urban-rural disparity is defined as the absolute difference between urban and rural PCE as percentage of urban PCE. It is estimated as follows :

$$[\{ (U - R) / U \} * 100]$$

II

1.2. DISPARITY IN PER CAPITA CONSUMPTION EXPENDITURE

1.2.1 Rural Sector :

India lives in villages. Nearly three-fourth of India's population live in rural areas. Thus, it is utmost important to study their level of consumption expenditure and trend of disparity among states over time. In India good number of studies have been undertaken by various scholars to probe in to the incidence of rural poverty and inter regional variation in the level of consumption. In this section, we make an attempt to reassess the trend of inter-state variation in the level of PCE in rural India over the period of reference.

State specific data on monthly average of PCE are shown in table-1. No clear picture emerges from the table except that while Punjab occupies the top rank in all four points of time, reverse is true of Orissa and to some extent of Bihar. In 1977-78 the spread between Punjab and Orissa is very wide. While average PCE is 66% higher in Punjab, it is 23.8% lower in Orissa in comparison to all India average. Similarly, disparity in PCE among states is also noticed in 1986-87, 1989-90 and 1993-94. In the terminal year, average PCE of the rural population of Punjab exceeds the all India average by 53.8%, whereas on the other end of the scale PCE in rural sector of Bihar lags by 22.4%. This amounts to belief that inter-state disparity in PCE persists in rural India. Table-2 provides further evidence to these observations.

The rank correlation coefficients (Table-3) between different

over the reference* period. But if we consider the values of dispersion (Table-2) between 1977-78 and 1993-94 a converging trend is very much apparent. This is further substantiated by the fact that 7 out of 10 states in group-1 and 2 out of 5 states in group-2 are experiencing positive and negative changes in R_{pce} respectively (table-4). Moreover, the correlation coefficient between the R_{pce} initial period and percentage in it over the terminal period is -0.118 .

2.2 Urban Sector :

Despite the fact that less people in India live in urban areas in comparison to the rural areas, an increasing needs is being felt for studying the level of consumption of urbanites in view of increasing trend of rural-urban migration, massive unemployment, growth of informal sector and sluggish growth of industrial sector over the years.

TABLE—1

Comparison of Ranking of States by Average Monthly
Per Capita Consumer Expenditure—Rural

				(in Rs.)
	1977-78	1986-87	1989-90	1993-94
PNB (114.4)	PNB (211.7)	PNB (284.7)	PNB (433.0)	
RAJ (108.7)	HRY (198.7)	HRY (252.9)	KER (390.4)	
HRV (92.4)	KER (195.8)	RAJ (230.7)	HRV (385.0)	
MAH (79.9)	RAJ (157.2)	KER (227.9)	RAJ (322.4)	
KER (74.2)	GUJ (152.7)	GUJ (196.1)	GUJ (303.3)	
GUJ (70.3)	APR (140.0)	UP (190.2)	TN (293.6)	
APR (69.7)	TN (140.0)	MAH (189.2)	APR (288.7)	
UP (67.3)	ASM (139.7)	WB (188.9)	WB (278.8)	
KAR (64.9)	WB (139.3)	ASM (187.1)	UP (273.8)	
TN (63.3)	UP (138.8)	MP (181.3)	MAH (272.7)	
MP (60.0)	MAH (136.1)	APR (176.5)	KAR (269.4)	
WB (59.3)	KAR (129.2)	TN (175.1)	ASM (258.1)	
ASM (59.0)	MP (122.0)	KAR (160.1)	MP (252.0)	
BIH (57.4)	BIH (117.7)	ORS (154.1)	ORS (219.8)	
ORS (52.5)	ORS (114.2)	BIH (150.2)	BIH (218.3)	
IND (68.89)	IND (140.93)	IND (189.5)	IND (281.4)	

Note : States are ranked in descending order of per capita consumer expenditure with figures of monthly per capita expenditure within brackets at current prices.

TABLE—2

Inter State Disparity in Per Capita Consumer Expenditure—Rural

	1977-78	1986-87	1989-90	1993-94
Avg. Top six States	89.48	176.02	230.42	299.35
Avg. Bottom six States	58.58	126.33	139.74	221.77
Disparity Ratio	44.85	35.25	47.85	31.78
Co-efficient of Variation	24.63	19.46	18.46	20.11
Gini Coefficient	0.1272	0.1016	0.0986	0.1078

Estimated from Table-1.

TABLE—3

Matrix of Co-relation Co-efficients of Ranks of the States
in Terms of Average Monthly Pce—Rural

Year	1977-78	1986-87	1989-90	1993-94
1977-78	1.00000			
1986-87	.78105	1.00000		
1989-90	.84286	.82395	1.00000	
1993-94	.83214	.95621	.82500	1.00000

TABLE—4

State Relatives of Monthly Per Capita Consumer Expenditure
in 1987-90 and 1991-94—Rural

State	1987-90 R _{pce}	1991-94 R _{pce}	% Change	
Orissa	81.91	85.71	4.64	
Bihar	84.05	77.89	-7.33	
Karnataka	89.87	93.99	4.59	
Madhya Pradesh	90.2	90.79	0.65	
Maharashtra	91.11	105.89	16.22	
Assam	96.52	91.80	-4.89	Group-1
Tamil Nadu	96.56	97.73	1.21	
Uttar Pradesh	96.88	97.01	0.14	
West Bengal	97.73	98.52	0.81	
Andhra Pradesh	99.49	99.21	-0.28	
				r = -0.118
Gujarat	102.78	104.02	1.21	
Rajasthan	118.3	111.21	-5.99	
Kerala	128.66	136.84	6.36	Group-2
Haryana	137.37	140.71	2.43	
Punjab	151.6	149.01	-1.71	

TABLE-5

Comparison of Ranking of States by Average Monthly
Per Capita Consumer Expenditure—Urban

(in Rs.)

Sl. No.	1977-78	1986-87	1989-90	1993-94
1.	PNB 121.7	PNB 259.6	HRY 395.0	MAH 529.8
2.	MAH 110.3	MAH 243.1	MAH 348.8	PNB 510.7
3.	GUJ 100.9	WB 242.6	PNB 332.4	KER 493.8
4.	HRY 100.4	KER 233.9	GUJ 327.3	WB 474.2
5.	WB 97.1	RAJ 229.5	KER 318.1	HRY 473.9
6.	RAJ 95.7	ASM 219.9	RAJ 302.1	ASM 458.6
7.	ASM 94.4	TN 218.5	MP 286.0	GUJ 454.2
8.	APR 93.2	ORS 216.9	WB 285.2	TN 428.3
9.	MP 90.9	GUJ 212.5	KAR 279.1	RAJ 424.7
10.	KAR 87.6	HRY 212.2	APR 279.0	KAR 423.1
11.	ORS 87.0	APR 205.2	ASM 272.2	APR 408.6
12.	TN 86.1	MP 204.6	ORS 272.1	MP 408.1
13.	BIH 83.1	KAR 202.9	TN 269.1	ORS 402.8
14.	KER 82.7	BIH 191.8	BIH 268.8	UP 389.0
15.	UP 82.5	UP 188.4	UP 241.9	BIH 383.0
16.	IND 96.15	IND 222.65	IND 298.0	IND 458.0

Note : States are ranked in descending order of per capita consumer expenditure with figures of monthly per capita expenditure at current prices.

Source : Various issues of NSS reports, Govt. of India.

TABLE-6

Inter State Disparity in Per Capita Consumer Expenditure—Urban

	1977-78	1986-87	1989-90	1993-94
Avg. Top six States	104.35	238.10	337.27	490.17
Avg. Bottom six States	84.83	200.85	268.17	397.43
Disparity Ratio	20.30	16.73	23.19	20.25
Co-efficient of variation	11.21	8.78	12.63	10.56
Gini coefficient	0.0600	0.0494	0.0673	0.0599

TABLE—7

Matrix of Co-Relation Co-Efficients of Ranks of
The States in Terms of Average Monthly Pce—Urban

YEAR	1977-78	1986-87	1989-90	1993-94
1977-78	1.00000			
1986-87	.57143	1.00000		
1989-90	.77857	.57500	1.00000	
1993-94	.65357	.84643	.78571	1.00000

TABLE—8

State Relatives of Monthly Per Capita Consumer
Expenditure in 1987-90 and 1991-94 (Urban)

STATE	1987-90 R _{pce}	1991-94 R _{pce}	% Change	
Bihar	84.66	77.21	-8.80	
Uttar Pradesh	85.68	83.38	-2.68	
Karnataka	92.39	91.41	-1.06	
Andhra Pradesh	92.89	90.79	-2.26	GROUP-1
Madhya Pradesh	93.01	87.75	-5.65	
Orissa	93.96	95.66	1.81	
Tamil Nadu	95.6	100.54	6.21	
				$r = +0.126$
Rajasthan	100.04	96.3	-3.74	
West Bengal	100.87	103.71	2.81	
Assam	101.15	101.66	0.50	
Gujarat	101.56	98.38	-3.13	
Kerala	106.29	94.12	-11.45	GROUP-2
Punjab	107.19	114.19	6.53	
Haryana	109.86	100.31	-8.69	
Maharashtra	114.51	117.04	2.21	

Note : Based on NSS data. Four year averages are taken.

TABLE—9

Monthly Average Per Capita Consumer Expenditure by States
and All India Ranking of Urban-Rural Disparity

(In Rs.)

Sl. No.	1977-78	1986-87	1989-90	1993-94
1.	ORS 39.65	ORS 47.34	MAH 45.75	MAH 48.52
2.	WB 38.92	MAH 44.01	BIH 44.05	ORS 45.43
3.	ASM 37.5	WB 42.58	ORS 43.40	ASM 43.72
4.	MP 33.99	MP 40.37	KAR 28.36	WB 41.21
5.	BIH 30.93	BIH 38.63	GUJ 40.08	MP 38.25
6.	GUJ 30.33	ASM 36.47	APR 36.74	BIH 38.16
7.	MAH 30.28	KAR 36.32	MP 36.61	KAR 36.33
8.	TN 26.48	TN 35.93	HRY 35.97	GUJ 33.22
9.	KAR 25.91	APR 31.77	TN 34.93	TN 33.01
10.	APR 25.21	RAJ 31.50	WB 33.76	UP 29.61
11.	UP 18.42	GUJ 28.14	ASM 32.75	APR 29.34
12.	KER. 10.28	UP 26.33	KER 28.36	RAJ 24.09
13.	HRY 7.97	PNB 18.45	RAJ 23.63	KER 20.94
14.	PNB 5.99	KER 16.29	UP 21.37	HRY 18.76
15.	RAJ -13.58	HRY 6.36	PNB 14.35	PNB 15.21
16.	IND 28.35	IND 36.70	IND 36.41	IND 38.56

Table—5 shows the ranking of states in urban India by monthly PCE. It is marked that no significant changes in the ranking order have been achieved. While Punjab occupied the number one position in 1977-78, it is Maharashtra in 1993-94. UP and Bihar have continued to stay at the bottom during the period of study. The better picture is obtained when we compare all India average of PCE with the state at the top and the bottom in the ranking order. In 1977-78, Punjab was at the top with PCE of Rs. 121.7 which is 26.6% more than the average PCE of urban India. And it is 15.20% lower in case of UP in the same period. In the terminal year of the study, Punjab has moved to the second position, while Maharashtra has gone to the number one position. In Maharashtra, PCE level in urban sector exceeds all India average by 15.7% whereas Bihar lags behind by 23% in 1993-94. Further, the estimated figures of dispersion in table-6 reveal the presence of inter-state disparity in level of PCE in urban India in all four points of time.

The respective coefficients of rank correlation (table-7) between

93-94 are 0.57, 0.57, 0.78. and 0.65. These values indicate relative stability in the ranks over the period of study.

Further, the estimates of disparity ratio, COV and Gini coefficients (table-6) are found almost same between initial and the terminal year indicating perpetuation of inequality in the level of PCE between the states of urban India despite some fluctuations in the trend.

To further our understanding on the issue of disparity trends, state relatives for urban sector and the percentage change in it over the terminal period have been estimated and presented in table-8. From table-8 it is apparently evident that the trend is showing a diverging tendency in the level of PCE across the states over the period. This is because 5 out of 7 states in group-1 and 4 out of 5 states in group-2, are showing negative and positive changes respectively. However, the coefficient of correlation between the initial period and the percentage change in it over the terminal period is insignificantly positive (i.e. 0.126) which does not furnish any conclusive evidence in support of diverging trend in the level of PCE among different states of urban India.

1.2.3 Intra-State Urban-Rural Disparity :

Table-9 reveals that intra-state urban-rural disparity in nominal percapita consumption expenditure has registered a rising trend over the period of study. Between the states urban-rural disparity also varies widely. In 1993-94 it is the highest (i.e. 48.52) in case of Maharashtra and the lowest (i.e. 15.21) in case of Punjab. The level of urban percapita consumption expenditure in Maharashtra and Orissa is more than double the level of rural per capita consumption expenditure.

1. 3. CONCLUDING OBSERVATIONS :

In the foregoing analysis simple statistical measures have been employed for estimating the extent of disparities in the level of PCE among states in urban and rural sectors of India. The main empirical findings of the present study are as follows :

It is interesting to note that the states at the top or at the bottom continue to be so in terms of per capita consumer expenditure. While, developed states like Punjab, Maharashtra, Haryana and Gujarat are spending more, the reverse is true for the less developed states like Bihar, Orissa, Madhyapradesh and Uttarpradesh. Kerala's rank in terms of PCE has increased substantially and it is second to Punjab in 1993-94, with low level of income due to excessive

Inter-state and intra-state urban-rural inequality in the absolute level of PCE in nominal terms persists over the period of study. In the urban sector an apparent diverging trend of inter-state disparity in level of PCE can not be accepted as conclusive because of insignificant correlation coefficient between R_{pce} in the initial period and the percentage change in it over the terminal period. Disparity in PCE in the rural sector has been marked by a converging trend. However, intra-state urban-rural disparity in PCE has registered rising trend over the period of study. Thus, it is worth mentioning that mere opening of the economy to foster economic development at aggregate level can not reduce inequality in level of living between rural and urban sectors at regional level. The time seems opportune for deliberate policy measures in order to minimise the regional spread of inequality with reference to level of living without being over-optimistic about the free play of market forces.

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There are a number of alternative, but equivalent, formulae for the Gini coefficient. The formula followed in this paper has been defined as :

$$(1/n) \sum_{i=1}^n (n=2i+1) S_i$$

Where, n and S_i stand for number of states and share of i th state respectively. Further, see Malcolm C. Sawyer (1985), *The Economics of Industries and Firms*, Groom Helm Ltd. Kent, P. 20.

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Sectoral and Social Class of Household Consumption : A Primary Study of Phulbani

Dr. Sudhakar Patra

Lecturer in Economics,
Govt. College,
Phulbani, Orissa

This paper seeks to analyse the consumption patterns of Scheduled Caste, Scheduled Tribe and general Caste households of Phulbani district of Orissa. The study of consumption patterns has become one of the important fields of macro-economic research as it helps in prediction of demand for different commodities. The success of the economic system is measured in terms of its capacity to deliver goods and services to its members. Hence proper demand-supply management is one of the essential requirements of a healthy economy. Therefore, the study of consumption pattern and its effects of social classes and sectors are important aspect of it.

Phulbani district is located at southern region of Orissa. It is surrounded by other districts of the State and it has no coastal area. The district accounts for 7.4% of the state's territory and accomodates only 2.72% of the state's population. Scheduled Caste and Scheduled Tribe population constitute 18.55% and 38.94% of the district population according to 1981 census. In view of the substantial size of different social classes of people, it is expected that SC and ST households assume no less significant role in totality. In consumer expenditure pattern analysis, it is an implicit assumption that social class habits have significant effects on expenditure patterns. Hence the present study analyses sectoral as well as social class wise variation in consumption pattern in Phulbani.

1.1 OBJECTIVES OF THE STUDY :

The study aims at finding the expenditure elasticities of 14 different major commodity groups and variations of such elasticities across the classes. The objectives are specified below :

(i) To find out the percentage of total expenditure incurred on each

- (ii) To analyse the variation of proportion of expenditure in different units and villages in each commodity group.
- (iii) To find the elasticities for each commodity group and its commodity wise variations.
- (iv) To investigate social class wise variation of these elasticities for each commodity group.
- (v) To compare the elasticities of food items with non food items.

1.2 DATA SOURCES :

The present study is based on data collected from 100 rural households and 100 urban households from Phulbani district. Hundred rural households are selected from 4 villages, Rajangi, Kaladi, Teraguda and Ghodagadu. 25 households are selected on stratified sampling method from each village. From two important towns Phulbani and Boudh, 100 Urban households are selected on stratified sampling from each town. All the households are selected in such a way that 70 households belong to Scheduled Caste and Scheduled Tribe each and 60 households belong to general caste. Data are collected in printed questionnaires by the method of direct personal enquiries.

1.3 METHODOLOGY :

The study uses the Log linear regression models for each commodity as a whole and as separately for each social class. The first model used is as follows :

$$\text{Log } Y_i = a + b \text{ Log } X_i,$$

where Y_i = Expenditure on a specific commodity group.

X_i = Total consumer Expenditure.

The second model used is specified below :

$$\text{Log } Y_{ij} = a + b \text{ Log } X_{ij}$$

Where i stands for commodity group.

j stands for social class. (SC/ST/Gen.)

The third model used is as given below :

$$\text{Log } Y_{ik} = a + b \text{ Log } X_{ik}.$$

Where i stands for commodity group,

k stands for sector : Rural/Urban).

The regression coefficient b gives the value of expenditure elasticity directly.

1.4 ANALYSIS OF THE RESULTS :

From the per capita consumer expenditure data in rural area it

consumption. They are land owners and cultivation is their main occupation. But Scheduled Caste households are daily labourers and they are poor in the rural villages under study.

First set of regressions was fitted to the pooled data for all 200 households. Then the data were separated according to social classes and rural urban sectors. The results are analysed below in three sections.

4.1. Expenditure Elasticities and Commodity wise Variation :

In the first model regression results for all 200 households show that expenditure elasticities are high for nonfood items and low for food items. Among food items the elasticity is less than unity for cereals, pulses, vegetables and salt. It is lowest (0.20) for cereals which account for about one third of total consumer expenditure for many households. The commodity group which includes meat, fish, egg has elasticity of 2.02. Hence these items are still luxury food items for people in Phulbani. Vegetables and sugar have approximately unit elasticity.

TABLE—1
Expenditure Elasticities

Commodity	Model-I	Model-II		Model-III		
	Total	Rural	Urban	SC	ST	Gen.
Cereals	0.20	0.29	0.18	0.39	0.28	0.19
Pulses	0.98	0.78	0.69	0.65	0.72	0.61
Edible oil	1.72	1.23	1.01	1.32	1.12	0.99
Meat, fish, egg	2.01	2.11	2.10	2.56	1.98	2.32
Vegetables	0.98	0.92	0.73	1.02	0.97	0.98
Sugar	1.01	0.81	0.78	0.98	0.92	0.83
Salt	0.57	0.47	0.39	0.62	0.59	0.79
Spices	1.37	1.12	0.98	1.02	1.52	0.69
Total food	0.78	0.65	0.62	0.72	0.58	0.56
Pan, Tobacco	1.89	1.79	2.32	1.90	1.98	1.91
Fuel & Light	2.72	2.32	2.57	2.39	2.76	2.08
Clothing	1.42	0.99	1.21	0.69	1.53	1.21
Foot wear	2.56	2.31	3.21	2.72	2.36	3.02
Non-food total	2.02	1.25	1.69	1.52	1.73	1.78

Among non-food items fuel and light have elasticity as high as 2.72. With rise in total income, the proportion of expenditure on this group increases at high rate. The high values of elasticities for clothing (1.42) and for footwear (2.56), indicate that these are treated as items of comforts in the region. Non-food total group has elasticity of 2.02 which

1.4.2. Sectorwise Variation in Elasticities :

Urban sector has high elasticities for non-food items and low elasticities for food items compared to rural sector. The expenditure elasticity for total food is found to be 0.62 in urban sector and 0.65 for rural households. The elasticity for cereals (0.29) in rural areas is higher than that of urban area (0.18). In rural area the elasticities for pulses, edible oil, meat, fish, egg are 0.78, 1.23 and 2.11 respectively whereas these values in urban area are 0.69, 1.01 and 2.10 which are of little lower values. For vegetables the value is 0.73 in urban area compared to 0.92 in rural area. The elasticities are 0.81, 0.47, and 1.12 for sugar, salt and spices in rural area, whereas these figures are 0.78, 0.39 and 0.98 in urban area. The commodity group betle and tobacco show higher elasticity in urban area (2.32) than that of rural area (1.79).

Among the non-food items elasticity for clothing in rural sector (0.99) is smaller than that in urban area (1.21). Expenditure on fuel, light and foot wear is very high in per capita terms in urban area. Elasticity for fuel and light is 2.57 in urban area compared with rural elasticity of 2.32.

1.4.3. Interclass Comparison of Consumption Patterns :

Three major social classes such as SC, ST and General Caste households have wide variations in their consumption patterns. For all classes expenditure elasticities are less than unity for most of the food items and more than unity for non-food items. The magnitudes of elasticity for food total group are 0.72, 0.58 and 0.56 for SC, ST and General Caste respectively. These values are 0.39, 0.28 and 0.19 for cereals for the three classes. For pulses the trends are a little different which are 0.63, 0.72 and 0.61 respectively. Edible oil shows elasticity values to be more than unity which are 1.32, 1.12, and 0.99. Meat, fish, egg groups show that values of 2.56, 1.98 and 2.32 which are more than unity. Inter class differential for elasticity for vegetables is negligible (0.83, 0.97 and 0.98 respectively). The elasticity value for salt are 0.52, 0.69 & 0.79 and for spices 1.02, 1.52 and 0.69 for three classes. It is clear from the above analysis that among the food items interclass differences exist but do not follow any clear cut pattern according to the social class. But it is obviously inferred that the magnitude of elasticity is high for SC household and low for general caste when compared among three classes. These results satisfy Engel's hypothesis that with higher income, the elasticity for food items will decrease over time.

The expenditure elasticities for total non-food group are 1.52, 1.73 and 1.78 for SC, ST and General households. It has just the opposite trend compared to the food groups. The elasticities are more than unity for all non-food items for all classes except for clothing for SC households (0.69). Betle and Tabacco groups have elasticities of 1.76, 1.90 and 1.91 for SC, ST and General households. These values for fuel and light are 2.39, 2.76 and 2.08 in these classes indicating highest value for Scheduled Tribe households (Table-1). Clothing, one of the most important items in non-food group shows wide variations in elasticity values. The values are 0.69, 1.53 and 1.21 for three classes. Foot wear group shows these values to be 2.72, 2.36 and 3.02.

5. 1. Conclusion :

In all non-food items the trend is not clear according to the social classes. But higher elasticity values for general caste households imply that they are the richest social class. As income increases, the proportion of expenditure on non-food items goes on increasing. Hence the higher elasticity values for general caste households are due to their higher incomes. Scheduled Caste households are the most unprivileged, lowest income earning social class in the villages under study. Inter variations are very significant in Phulbani. Special policies and programmes should be initiated. The administrators and policy makers should attach importance to the social movements which will help to develop these two social classes. Their living and consumption standards must be improved so that they can participate in the main stream of Indian society.

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The Pattern of Consumption Expenditure on Cereals in India

Saroja Kumar Kanungo

Reader in Economics
Ravenshaw College, Cuttack

In a developing country like India, facing rapid growth of population, demand forecast for cereals seems relevant. Therefore, a study of consumption expenditure is imperative for policy makers. Hence, an attempt has been made in this articles to analyse the pattern and extent of consumption expenditure on cereals in the country.

OBJECTIVES OF THE STUDY :

The following issues are addressed in this article.

- (i) Is there any significant difference in cereal consumption among different classes ?
- (ii) If so, what are the factors responsible for causing the differences in cereal consumption between income classes and their relative influences ?

HYPOTHESES :

The following hypotheses are to be tested.

- (i) Cereal consumption does not vary with income variation.
- (ii) Structural changes do not influence pattern and quantity of cereal consumption.
- (iii) Cereal consumption is independent of the level of production over time.

DATA :

We have relied on data about expenditure on cereal consumption from the 38th and 43rd round of quinquennial survey on consumption expenditure by NSS, Government of India. Other relevant data are collected from various issues of Economic Survey Report of Government of India. The population of different years have been computed on compounding principles from the Census Report of 1981 and 1991. Simple averaging has been resorted to eliminate the bias in

the data base. The consumers are classified into four groups on the basis of their consumption expenditure in both rural and urban areas.

THE STUDY :

Household income and food prices strongly influence the pattern of food consumption. Many studies like those of Radhakrishna (1969), Gupta (1973), Mahajan (1980), Kannan (1995) have been undertaken to examine the influence of change in income on consumption pattern. Kumar and Mathur (1996) have explored the possibility of structural changes influencing consumption expenditure on cereals. Writers like George (1985), Choudhuri (1987) have traced a significant relationship between production, distribution and level of cereal consumption. The aforesaid studies are of piecemeal nature. Therefore, an attempt has been made here to examine the collective influence of these factors on cereal consumption.

It is observed from the NSS data of 38th and 43rd rounds that the ratio of cereal consumption to non-cereal consumption declines with increase in the level of income in both rural and urban sectors of all the states during both the years under reference. But this trend is more pronounced in the urban areas than the rural areas. However, expenditure on non-cereals is relatively more in the developed states as compared to backward states. It is in conformity with the findings based on Engel's ratio. Household income determines the level of expenditure and hence has a positive impact on consumption pattern.

This is also corroborated by the Analysis of Variance done for the consumption and income data in respect of both rural and urban sectors of all the states. However, the influence of income is more significant on cereal consumption in the urban areas.

This observation is also valid intertemporarily when the income and consumption changes across the 38th and 43rd rounds of N.S.S. survey are compared. Income of different consumption expenditure groups in 1987 (43rd round) is found higher than that in 1982 (38th round).

Structural changes bring about some changes in the consumption pattern of the people. When the people migrate from rural to urban areas, they get exposed to different avenues of life. The intake of carbohydrates is reduced and proteinous food intake like eggs, fish, meat, cake, etc. increases. So consumption expenditure on cereals is reduced.

It is evident from the data given in 38th & 43rd rounds that the consumption expenditure on cereals is less in urban areas than in rural areas. This is also true in advanced states as well as in under-developed

Production of foodgrains has a great bearing on the expenditure on cereal consumption. During a good harvest year, the supply of foodgrains increases and its market price gets depressed. Moreover, the dependence of people on the market declines on account of increased home supply. Hence, the consumption expenditure on cereals gets up-set.

In view of these conditions, it has been attempted to examine the individual impact as well as the joint influence of the said variables on the consumption expenditure on cereals. For this purpose, a Multiple Regression Model with least square method has been adopted which takes the form of :

$$Y = \alpha + \beta_{x_1} + \gamma_{x_2} + \epsilon_{x_3} + U.$$

Y = Consumption Expenditure on Cereals

X₁ = Per Capita Income

X₂ = Structural Changes approximated through the level of urban population

X₃ = Cereal Production

The relevant informations are presented in Table No. 1.

TABLE—1

Cereal Consumption, Per Capita Income, Urban Population and Production in Different States

Sl. No.	States	Cereal Consumption in Rs.	Per Capita Income in Rs.	Urban Population in lakhs.	Cereal Production in tonnes
1.	Andhra Pradesh	36.21	2124.8	151.5	9765.5
2.	Assam	46.54	1894.8	22	2061.6
3.	Bihar	49.73	1411.5	100	8929
4.	Gujarat	27.06	2606	124	3867.2
5.	Haryana	27.39	3378.5	34	7064
6.	Jammu & Kashmir	40.41	2365	15.5	1028
7.	Karnataka	34.72	2354.5	123	5092.8
8.	Kerala	33.93	2199	62	808.8
9.	Madhya Pradesh	36.15	1995	129.5	10272.8
10.	Maharashtra	39.46	3537	262.5	7478
11.	Orissa	51.02	1772.5	36.5	4714
12.	Punjab	21.97	4196.5	52.5	13549
13.	Rajasthan	30.28	1766	86	7227.2
14.	Tamil Nadu	41.87	2436	174.5	5572
15.	Uttar Pradesh	32.03	1820	237.5	26112

Consumption expenditure of all classes for both the rounds of survey are averaged for all states and taken as the dependent variable. Average of per capita income of 1982 and 1987 is taken as the income of urban population. This is taken as an indicator of structural change as the migration of people from rural areas to urban areas brings a change in consumption pattern. This is because the urban people are exposed to different varieties of goods and services available. The cereal production during both the periods is averaged to represent the production.

The results of the regression analysis is represented in Table-2.

TABLE-2

	X_1	X_2	X_3	R^2
Co-efficient	53.96510	(-).00652	0.026152	-0.00053
Standard Error	7.176568			0.427834
t' Value	-2.60788	0.880830	-1.45575	

The following observations are made from the results of the regression equation.

1. There exists a significant but negative relationship between consumption expenditure on cereals and the level of income.
2. The structural change influences cereal consumption significantly.
3. Strangely enough, cereal consumption has negative relation with agricultural production though the relation is insignificant. This is probably because of higher agricultural production and consequential increase in income, cereal consumption decreases—A further confirmation of our hypotheses.

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Private Final Consumer Expenditure in India (1950-51 to 1993-94) : An Empirical Analysis

Tushar Kanti Das

Research Officer (RBI-EU)

Dept. of A & A Economics

Utkal University.

Introduction :

One important contribution of Keynes to modern macro-economics was his invention of the consumption function. Aggregate consumer purchases of goods and services were a stable function of aggregate consumer income. It is clear from the analysis that 'income' he meant as 'disposable income'. Representing aggregate consumption by C and aggregate income by Y he postulated that $C=f(Y)$, where $\frac{dc}{dy}$ the 'marginal propensity to consume' is positive but less than 1. Keynes called this "a fundamental psychological law". This law was discovered by casual observation and introspection. The law implies (i) Real consumption expenditure are a stable function of real income. (ii) The marginal propensity to consume is positive, but less than 1. There have been three major attempts after absolute income hypothesis to theoretically explain the consumption behaviour. They are Relative income theory (Duesenberry), Permanent income theory (Friedman) and Life-cycle theory (Modigliani).

Relative income hypothesis states that consumers are not so much concerned about their absolute level of consumption as they are with their consumption relative to the consumption of people in their own income class. More generally people draw utility from their consumption relative to the average consumption of the population. The individual's average propensity to consume is a function of his relative position in the income distribution in the community. The present consumption is also affected by the levels of consumption attained in the previous period. In the Life cycle hypothesis, the typical individual has an income stream that is relatively low at the beginning and at the end of the life. Here the cross-section budget studies show marginal propensity to

the permanent income. Likewise transitory consumption is randomly distributed around permanent consumption.

Engel's law states that economic development is accompanied by declining food shares. The Engel relation $y=f(x)$ between per capita expenditure on a specific commodity (y) and per capita total consumer expenditure (x). As per the Engel law, with an increase in total expenditure (i) An increase in Engel ratio indicates that the commodity concerned is a relative luxury with an expenditure elasticity greater than unity and (ii) a decrease shows that the item is a necessary with expenditure elasticity less than or equal to unity. By Bennett's law, consumers typically switch to a more expensive diet, substituting quality for quantity. An extension of Bennett's law, more applicable to developing country situations, states that substitutions within the starchy staples (Principally cereals) towards the more expensive cereals is likely to occur before the switch away from cereals to the non-cereal foods. In Indian context this would translate into a switch away from the coarse cereals to either rice or wheat on both (Poleman, 1981).

Objectives :

The broad objectives of the study are as follows :

(i) To find the growth rate of consumer expenditure during 1950-51 to 1993-94. The growth of consumer expenditure on food and non-food items (PFCEF, PFCENP) is also estimated and compared with the growth rate of total consumer expenditure (PFCE). The period 1950-51 to 1993-94 is divided into three periods, i.e. from 1950-51 to 1967-68 [Pre green revolution period (PGR)], from 1968-69 to 1980-81 [First Phase of green revolution (FPGR)] and from 1981-82 to 1993-94 [Second phase of green revolution (SPGR)]. The growth rates for three types of consumer expenditure (PFCE, PFCEF, PFCENF) in these above mentioned three periods are also calculated.

(ii) The elasticity of total consumer expenditure with respect to total NNP is estimated for the same period. The elasticity of consumer expenditure for food and non-food items is also estimated for the period 1950-51 to 1993-94 and also for the above mentioned three periods.

(iii) To find out which model is exactly fitting the consumer behaviour.

data :

Private final consumption expenditure (PFCE) is defined to cover current expenditures on goods and services by households, including non-profit institutions (NPIs) serving households. There are two dimensions to the concept of PFCE : PFCE in the domestic market and PFCE of resident households. PFCE in the domestic market covers current expenditures of resident households and direct purchases by non-resident individuals and households and extra territorial bodies in the local market. It does not include resident households' direct purchases abroad. The final consumption expenditure of households is conceptually made up of outlays on new durable and non-durable goods and services minus net sales of second hand goods, scraps and wastes [UN, 1968]. The household consumption expenditure includes the imputed gross rent of owner occupied dwelling, consumption of own account production valued at producer or ex-farm prices and payments in kind of wages and salaries valued at cost, that is the estimated actual cost provision for food, shelter and clothing to farm labourers and other workers.

One of the most important determinants of consumption expenditure is the gross domestic product (GDP). Domestic product is an unduplicated total of monetary values of products generated at various kinds of economic activities during a given period, that is gross value of output minus intermediate inputs.

The data on private final consumption expenditure for the period 1950-51 to 1993-94 are collected from the National Accounts Statistics of India-3 published by EPW Research Foundation [EPW, 1995 : 2]. The data on PFCE on Food, Clothing, Gross Rent, Fuel and Power, Furniture, Furnishings, Appliances and Services, Medical Care and Health Services, Transport Communication, Recreation, Education and Cultural Services, Miscellaneous goods and services are collected from the same source. Gross domestic product at factor cost is collected from the National Accounts Statistics of India-1 published by EPW Research foundation [EPW, 1995 : 1] for the period 1950-51 to 1993-94.

All these data are in 1980-81 prices in order to delete the rise in prices due to inflation. They have collected these from the (i) Estimates of National Product and (ii) National Accounts Statistics Published by Central Statistical Organisation (CSO). Private final consumption expenditure is composed of expenditure on Food, Beverage, Tobacco, Hotels and Restaurants, Clothing and Footwear, Gross Rent, Fuel and

Communication, Recreation, Education and cultural services and Miscellaneous goods and services.

Methodology:

In order to find out the marginal propensity to consume the two variable linear model is taken into consideration. To estimate the growth co-efficient and elasticity co-efficient respectively, the semi-log model and double log model are used. In order to find the elasticity and growth co-efficient of the three periods PGR, FPGR, SPGR, the dummy variable technique is used.

Consumers' habit is a factor which also determines the consumers spending. Thus, consumption expenditure is taken to be a function of present year's consumption. Consumption expenditure is also taken as a function of last year's income. Here the parameters are estimated using the multiple regression model.

Findings :

The PFCE Showed a steady growth over 1950-51 to 1993-94 in real per-capita terms. Similarly the per capita income also showed a steady growth during the same period. The per-capita consumption expenditure as a proportion of per-capita income is around 93.84% in 1950-51. This gradually decreases with increase in income. In the year 1993-94 this ratio has decreased to 80.21%.

(a) Growth Rate :

The growth rate of per capita consumption expenditure is represented in Table 1. Private final consumption expenditure has increased at a rate of 1.28 % over 1950-51 to 1993-94. Expenditure on food and non-food articles increased at a rate of 0.68% and 2.21% respectively. In the PGR period the growth rate of consumption expenditure is 1.00% which has constantly increased in the FPGR period (1.11%) and in the SPGR (1.76%) respectively. Likewise the percentage growth of PFCE decreased from 0.783% in the PGR period to 0.475% in the FPGR period which again increased to 0.76% in the SPGR period. The growth of expenditure on per capita non-food articles gradually increases in the three periods. They are respectively 1.41%, 2.09% and 2.93% in the three periods PGR, FPGR and SPGR.

The growth rate of PFCE on food articles is maximum in the PGR period and is less than 1%. On the other hand, the growth rate of PFCE on non-food item is minimum in the PGR period and it gradu-

TABLE—1
Growth Rate of Consumption Expenditure

	Time	PFCE	PFCEF	PFCENF
AGT	(1950-93)	1.28%*	0.68%*	2.2%*
PGR	(1950-66)	1.001%*	0.783%*	1.4%*
FPGR	(1967-80)	1.11%	0.475%	9.095%
SFGR	(1981-93)	1.76%*	0.76%*	2.93%*

* Indicates significance of t-value at 1% level of significance.

(b) Elasticity :

The elasticity of per capita consumption expenditure with respect to the per capita income is represented in Table-2. Elasticity of PFCE & PFCE on food is less than one in the three periods (PGR, FPGR, SPGR). The elasticity of per capita PFCE with respect to per capita income is 0.843 during 1950-51 to 1993-94. The elasticity of PFCE on food items with respect to per capita income only 0.459 during the same period. Elasticity of per capita PFCE on food items gradually decreases during the three periods. This decline is from 0.63 in the PGR period to 0.546 in the FPGR to 0.289 in the SPGR period. On the otherhand elasticity of PFCE on non-food item is more than 1 in all periods except in pre green revolution period. If elasticity of consumption expenditure with respect to income is more than 1 then it indicates that it is a luxury good. In our analysis, in the pre-green revolution period, the non food articles are necessary commodities. But after the green revolution these expenditures are on luxury goods.

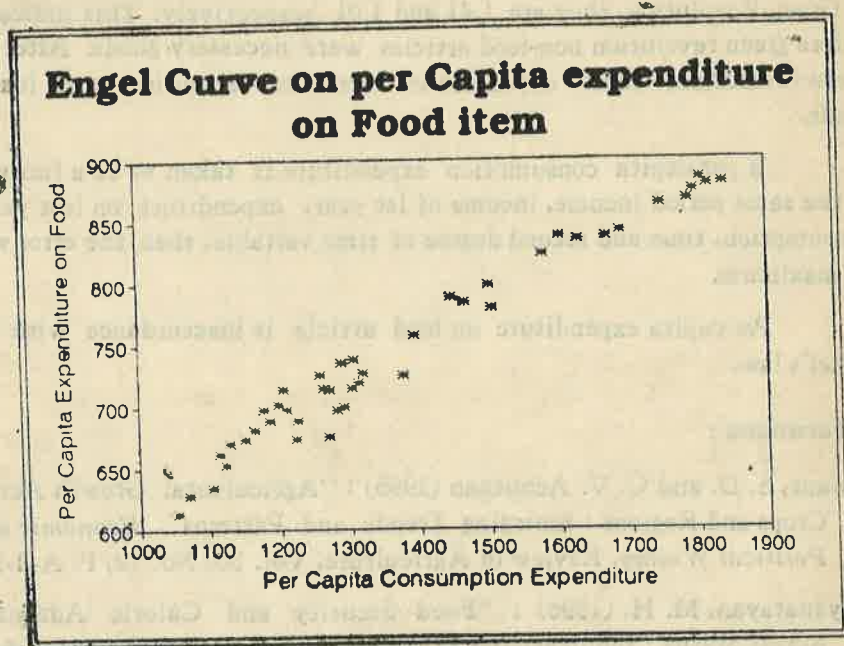
TABLE -2
Elasticity of Consumer Expenditure with respect to Income.

Period	Elasticity of Food consumption	Elasticity of Non-Food consumption	Elasticity of Total consumption expenditure
AGT (1950-93)	0.459 (21.84)*	1.41 (36.59)*	0.843 (47.79)*
PGR (1950-66)	0.63 (7.45)*	0.854 (6.77)*	0.71 (11.69)*
FPGR (1967-80)	0.546 (0.63)	1.41 (2.68)*	0.885 (1.85)**
SPGR (1981-93)	0.289 (3.17)*	1.01 (0.94)	0.615 (1.21)

* Indicates significance of t-value at 1% level of significance.

(c) Engel Law :

Engel's law states that economic development is accompanied by declining food shares. The Engel relation $y=f(x)$, is between per capita expenditure on a specific commodity (y)— and per capita total consumer expenditure (x). This is tested for India for the period 1950-51 to 1993-94 for per capita expenditure on food grain and is represented in the given figure. This indicates that expenditure on food in India during this period is in accordance with the Engel law.

**Limitation :**

In fitting different types of behaviour, the problems like spurious correlation, unit root problem and problem of co-integration are not taken into consideration. If this would have been taken into consideration the analysis would have been different.

Conclusion :

The following important conclusions are drawn from the study :

During the period of study Private Final Consumption Expenditure increased at a rate of 1.28%. Growth rate of Private Final Consumption Expenditure on food article is only 0.68% and non food article grew at a

Private Final Consumption Expenditure on food decreased in First Phase of Green Revolution and Second Phase of Green Revolution period. This indicates that growth rate of final consumption expenditure on non-food articles increased between Pre-Green Revolution, First Phase of Green Revolution and Second Phase of Green Revolution period.

Elasticity of expenditure on non-food article is more than one on the time period 1950-51 to 1993-94. In the Pre-green Revolution period it is only 0.85. In the First Phase of Green Revolution and Second Phase of Green Revolution they are 1.41 and 1.01 respectively. This indicates, before green revolution non-food articles were necessary goods. After the green revolution, these expenditures turned to expenditures on luxury goods.

If per capita consumption expenditure is taken to be a function of the same period income, income of 1st year, expenditure on last year's consumption, time and second degree of time variable, then the error will be maximum.

Per capita expenditure on food article is inaccordance with the Engel's law.

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Determinants of Consumption Expenditures in Rural U. P.

Dr. Binayak Rath

Professor of Economics

Raghunath Mahapatra

Project Associate

Department of Humanities &

Social Sciences

Indian Institute of Technology,

Kanpur

INTRODUCTION :

Aggregate consumption, being one of the key determinants of standard of living of the population of a country, has always drawn the attention of the planners, policy makers and decision makers to investigate and study various dimensions associated with it. While many have examined the aggregate consumption behaviour, the consumption expenditure patterns and the functional relation between consumption and income, no comprehensive study is available to highlight the various facets of consumption. Though the NSSO has undertaken many studies through its rounds of sample surveys, whereby they usually report the consumption expenditure for 6-7 households per development block, no attempt is made to find out the key variables those influence consumption. Moreover interblock comparative analyses are not available in such studies. Recognising this lacuna, in this paper an attempt has been made by us to investigate the consumption expenditure patterns as well as the key determinants of consumption of a few selected villages in rural U. P.

The Empirical Evidence :

The history of 'Empirical evidences' related to analysis of consumption expenditures can be traced back to the year 1857, when Ernst Engel (1821-1896), published a study on the conditions of productions and consumptions in the kingdom of Saxony. The study was based on the budget data of two hundred Belgian working class households. On the basis of the analysis of the data, Engel has formulated the famous Engel's Law, which establishes a relationship between total house hold

- (i) 'Food Item' constitutes the major share in consumption of a household.
- (ii) The proportion of income spent on food declines as the income of an individual increases.
- (iii) The proportion devoted to 'clothing' and 'housing' is approximately constant, while the share of the 'luxury items' increases with an increase in income of the individual.

Among the proponents of Engel curve analysis of household behaviour, the names of Allen, Houthakker and others merit mention.

In Indian context, the NSSO of India undertakes nation wide survey in consumer expenditure patterns.

CONSUMPTION EXPENDITURE PATTERN IN UTTAR PRADESH :

The pattern of consumption expenditure, as reported in the NSSO 50th round (July 1993—June 1994) for rural households goes for food including pan, tobacco and intoxicants. On the other hand, the share of fuel and light, clothing (including footwear), durable goods and miscellaneous goods in the household expenditure are : 6.94%, 7.71%, 2.88% and 18.21% respectively. In addition to this, the share of milk and milk-products is calculated to be 12.77% of the household budget.

Coverage of Our Study :

In order to accomplish our objectives, we have identified three zones of U. P., viz, Western, Central and Eastern for our field survey. Accordingly, our field survey has covered 8 villages around the National Capital Power Project (NCPP), Dadri, Ghaziabad in Western Zone : 5 villages around Auriya Gas Power Project (AUGPP), Dibiapur, Etawah in Central Zone : and 11 villages surrounding the Feroze e Feroze Gandhi Unchahar Thermal Power Project (FGUTPP) at Unchahar, Raiberali in Eastern Zone. Out of these three study zones NCPP being located within 50 km radius of the National Capital, New Delhi, represents an area with comparatively more urban influences : whereas AUGPP being located at about 235 km away from Lucknow is characterised by moderate urban influence on the consumption habits of the households : and the FGUTPP located at a distance of 120 km from Lucknow within Eastern Zone of U. P. and represents negligible urban influence on the consumption habits of the people residing there.

In order to collect the relevant data for our study we adopted a

on the basis of over-all caste composition of the study zone. As such, we have covered 100 households from each zone i.e the total coverage of 300 households, out of which 39% belong to higher caste, 35% belong to backward caste, 23% belong to scheduled caste and only 3% belong to muslims.

The households thus identified were interviewed by us with the help of a well-designed questionnaire. Further, to examine the income and consumption patterns of the households all the related informations and data were gathered with reference to the preceding year of our interview. In course of our interview, we had taken all care to collect information about the amount of expenditure incurred by the households on different items of consumption (in terms of rupees). Furthermore to assess the income of the households, we have used the value-added method, specially in case of calculation of agricultural incomes. The data thus obtained were analysed with the help of Regression analysis.

Income Consumption Patterns of The Households :

For a better understanding of the consumption characteristics in our study zones, where we examined the village-wise income-consumption frequency distribution of the sample households, we observed that while only 3 households are below poverty line in the NCPP zone, on the otherhand 20% and 13% households live below poverty line in AUGPP and FGUTPP region respectively. Moreover, 40%, 35% and 43% of the households in NCPP, AUGPP & FGUTPP enjoy income levels in between Rs.11,000 - 25,000 respectively, whereas 40%, 37%, & 29% of the covered households in the respective zones earn in between Rs. 25 to 50 thousand per annum. Furthermore, only 17%, 8% and 15% of the sample households covered in NCPP, AUGPP and FGUTPP area have income more than Rs. 50,000 in the reference period. In addition to this, the figures for the whole sample indicate that out of the 300 households covered by us, while 12% of them live below poverty line, 13% earn more than Rs. 50, 000 per annum. On the other hand, where 39% of the households enjoy an income level in between Rs.11,000 - 25,000, 13% of them earn within Rs. 25,000- 50,000 per annum,

But the frequency distribution of the level of consumption expenditures in the study zones of NCPP, AUGPP & FGUTPP reveals that while 3%, 21% and 17% of the households have a level below Rs. 11,000 respectively; 55%, 45% & 48% enjoy levels within Rs. 11,000-

study zones have consumption levels within Rs. 25,000-50,000. Only 4%, 1% and 1% households in NCPP, AUGPP and FGUTPP had consumption more than Rs. 50,000.

With a view to study the pattern of consumption expenditure of the households, we analysed the households data collected by us from our project sites. The broad items of consumption are food, medicine, clothings, social ceremony, housing, lighting, agricultural implements, milk and miscellaneous. The consumption of project-wise patterns vis-a-vis the All-India rural patterns reveals that while in NCPP area the food item constitutes 50.86% of the total household expenditure, in FGUTPP area the study zone with higher rural influences it constitutes 71.28% of the households budget. Moreover in AUGPP area, which is moderately influenced by urbanisation, the food expenditures constitutes 61.24% of the total household budget. Similarly, the share of expenditure on the medicine and housing in the household budget in NCPP, AUGPP and FGUTPP reflects a receding trend. But the milk consumption expenditure is high in the NCPP region. The data regarding the average expenditure for the entire sample indicates that in U.P. 61.12% of the household expenditure is spent for food items (the national average being 53.67%) followed by 10% on milk consumption (the national average being 9.49%), 8.24% on clothings, 6.86% on medicines and 3.10% on social ceremonies etc.. Thus, the all-India rural pattern given in the table extracted from the NSSO, 50th Round reflects more or less the trend as of our study zones, with a large degree of variations on expenses on lighting.

In addition to the study of the pattern of consumption, we have also attempted to identify the important factors which determine the consumption expenditure in rural U. P. To achieve our objectives, we have used "Regression Technique" for the quantitative and qualitative factors drawn from the filled-up questionnaires. Since our interest was to identify the determinants of consumption, we have taken the annual consumption expenditure in rupees (ct) as the dependent variable. Then consumption is regressed on the independent variables, such as, Present Income (yt), Land (Lt), Animal wealth (AW), Occupation of the Household (OCC), No. of persons Unemployed (UNEMP), No. of Family Members (FM), in terms of child (CH), Adolescent, Adult and Old (ADAD), Caste (CA) in terms of HC, BC, SC and MU Type of family (TF) in terms of Nuclear (NU), Joint (JO) and Extended (EX). Thus, we have used the following expended regression equation.

Furthermore, to obtain a good estimate we have defined occupational status of the households on the basis of different occupations carried out by its members. We have defined the different occupational categories, viz Agriculture (AG), Agriculture Labour (AL), Agriculture, Business & Service (ABS), Agriculture, Business, Service & Labour (ABSL), and Business & Service (BS). The project-wise number and households in different occupational categories show that a maximum number of households pursue both agriculture & labour as their source of earning (30%), followed by agriculture, business & service (24%), agriculture (19%), business & service (19%), and only 8% are engaged in all the other occupations.

Moreover, to determine the influential factors which determine the consumption of the poor households in our study zones, we have carried out a separate Regression Analysis for those who earn less than Rs. 11,000/- per annum by regressing the factors identified above on consumption. For the qualitative factors like Occupation, Caste and Family Type we have used the "Dummy variables" (0&1), where 0 indicates that the household does not belong to the category and 1 implies otherwise.

Thus, equation put to regression test for the poor sample households (36 in number) is represented as :

$$C(P)t = f(Y_t, Lt, AW, OCC, EMP, CA, TF)$$

where $C(P)t$ implies the consumption expenditure of the poor households in rupees.

Results of Our Regression Analysis :

Even though, we have carried out multiple regression analysis for each independent variable and then all variables for each zone as well as all the samples, we have reported the overall results and have retained those equations which are significant in terms of their R^2 and t-values. As per the same norm we have dropped three variables viz. Occupation ($R\text{-squared} = 0.03$) and type of Family ($R\text{-squared} = 0.04$). In addition to this, the lower t-value (< 1) calculated for all the above mentioned variables imply that these variables have no influence on consumption in our study area. Similarly, in case of the poor households, we have dropped the variables viz. Land ($R\text{-squared} = 0.005$), Animal Health ($R\text{-squared} = 0.08$), Occupation ($R\text{-squared} = 0.02$ & 0.06), Caste ($R\text{-squared} = 0.06$) and persons employed and persons unemployed ($R\text{-squared} = 0.03$). Even the respective t-values are less than 1 for these

consumption of the poor households. After dropping those variables we present below the relevant regression results which are retained for our analysis.

$$C_t = 8.98 + 0.47 Y_t; \quad R\text{-squared} = 0.59, \quad df = 298 \dots (1) \\ (20.76)$$

$$C(P)_t : 3.87 + 0.74 Y_t; \quad R\text{-squared} = 0.20, \quad df = 34 \dots (1P) \\ (2.97)$$

An analysis of the results contained in equation-1 indicates that current income and consumption are positively correlated and present income explains 59% of the consumption expenditures in our study area and poor households are compared with critical t-value $t\text{-squared} = 1.69$ at 0.05 level of significance. Co-efficient value establish 47% of the additional income is consumed by the households. This implies that the study zones being closer to industrial belts the people are influenced by urban habits. But the project-wise regression results reveal that, the Marginal Propensity to consume (MPC) is the highest (0.70) in AUGPP, followed by FGUTPP (0.39), and NCPP (0.38).

On the other hand equation (P) indicates that though 74% of additional income is consumed by the poor people in our study area but the R-squared value being relatively low implies that for the poor households only 20% of the variations in consumption is explained by present income.

Similarly to study the impact of land as an asset of the rural households on their consumption, we have regressed land on consumption and the result is as follows.

$$C_t = 18.36 + 1.13 L_t, \quad R\text{-squared} = 0.02, \quad df = 298 \dots (2) \\ (0.41)$$

Though the above function indicates a higher elasticity of land (1.13) in relation to the consumption, but a very low R-squared and lower t-value imply that in our study zones the effects of land on consumption is virtually insignificant. The project-wise figures also reveal the same trend. While land accounts for only 10% variation in consumption in NCCP, in AUGPP it has virtually no influence ($R\text{-squared} = 1.0007$), and in FGUTPP, land explains only 1.9% of variations in consumption expenditure. Furthermore, to find out the reasons for this interesting revelation, we have calculated the average land holdings, which reveals that, while in NCPP the land holding size of our sample is 1.42 acres, in AUGPP it is 1.34 acres, and in FGUTPP the size is the lowest (0.8 acres) which means the average land holding size in our study area comes to be

1.18 acres. In addition to this, we have also calculated the number of households in different categories of land alongwith landless households in our sample, the details of which are given in Table-1.

TABLE-1
No. of Households in Different Categories of Land

Sl. No.	PROJECT	NIL	<1	1.00-<2.5	2.5-<5	5>	TOTAL
1.	NCP	32	24	25	11	08	100
2.	AuGPP	22	43	16	15	04	100
3.	FGUTPP	32	40	24	02	02	100
TOTAL		86	107	65	28	14	300

Analysis of the above table further reveals that while in NCP area, 32% possess no land, 24% possess land less than 1 acre, 25% have land in the region more than 5 acres. For AuGPP zone, the figure reveals that while 22% has no land, 43% belong to marginal farmer category, 16% belong to small farmer category, 15% are medium farmers, and only 4% possess land more than 5 acres. Similarly in FGUTPP the respective figures calculated by us come to be 32%, 40%, 24%, 2%. This implies that in the study area while 29% of the households possess no land, on the other hand 57% possess land which is not economically viable (<2.5 acres), and only 14% of them have land which are economically viable (>2.5 acres). Also, to attain a better understanding of impact of land on consumption, we have undertaken a multiple regression test of land alongwith present income, which is presented below.

$$C_t = 8.98 + 0.47 Y_t - 0.001 L_t; R\text{-squared} = 0.59, \quad df = 297 \dots \dots \dots 3) \\ (20.29) \quad (-0.004)$$

The results in equation-3 indicate a startling revelation that land is negatively correlated with consumption which implies that any additional unit increase in land will have a negative influence on the consumption of the households. This indicates a noise in the function mainly due to the reasons stated above and hence, we have dropped land from our further step-wise regression tests.

The equation below indicates the influence of another important asset, i.e Animal Wealth, of the rural households on their consumption expenditures.

$$C_t = 18.98 + 2.00 AW; \quad R\text{-squared} = 0.12, \quad df = 298 \dots \dots \dots (4) \\ (6.54)$$

animal wealth results in doubling the consumption. Though the asset signifies only 12% variations in consumption, but a very high t-value clearly explains the higher significance of this asset in determining the consumption of the households. To analyse the influence of employment in organised sectors on consumption, we have regressed no. of persons employed in the households with consumption and the result is given below.

$$C_t = 19.08 + 7.05 \text{ EMP}; \quad R\text{-squared} = 0.20 \quad df = 298 \dots (5) \\ (8.72)$$

The above function reveals that in our study area which is characterised by a low average employment (0.56 per thousand), employment has a very high impact on consumption. The project-wise figure indicates that while in AuGPP (Av. 0.6), employment explains 31% of variation in consumption, in NCPP (Av. 0.5) and FGUPP (Av. 0.6) it explains 18% and 15% respectively.

In order to examine the impact of number of family members on consumption for the entire sample (av. Size-7.83) and the poor households (av. size 3.83) in our study area, we have undertaken the regression, which is given below.

$$C_t = 9.58 + 1.74 \text{ FM}; \quad R\text{-squared} = 0.31 \quad df = 298 \dots (6) \\ (11.75)$$

$$C(P)_t = 7.10 + 0.72 \text{ FM}; \quad R\text{-squared} = 0.24 \quad df = 34 \dots (6P) \\ (3.32)$$

An analysis of the above results indicates that while number of family members for all the samples explains 31% of their consumption behaviour, in case of poor households it explains only 24% of their consumption behaviour. On the other hand, though in both the cases this exerts a higher influence on consumption (t-value being 11.75 & 3.32 respectively), but in case of poor households the co-efficient of family members with respect to consumption is less than unity (0.72), whereas in case of the family members into no. of children (CH) and the others (ADAO), and regressed with consumption. The results are given in equation 7 and 7(P).

$$C_t = 8.50 - 0.39 \text{ CH} + 2.28 \text{ AADO} \quad R\text{-squared} = 0.36 \quad df \dots (7) \\ (-0.87) (12.41)^*$$

$$C(P)_t = 7.17 + 0.89 \text{ CH} + 0.68 \text{ AADO}; \quad R\text{-squared} = 0.24 \quad df \dots (7P)$$

An analysis of the above results reveals an interesting finding in our study. Whereas for the entire sample, number of children in a household has a negative impact (-0.39) on consumption, but in case of poor it exerts a positive impact (0.89). The marginal difference between the t-value of the variable and the critical t-value in case of the poor households also implies that the significance of child can not be totally ignored. The project-wise figure reveals that while in NCPP and AuGPP the respective coefficient values are negative (0.5-1.6), in FGUTPP the coefficient shows a positive value (0.8) alongwith a t-value of 1.51. This implies that, in the comparatively urbanised area of NCPP and AuGPP the households retain a part of their spending as savings to be utilised for the future expenses of the child, whereas this aspect is either absent or practised very rarely in the rural area of FGUTPP. The same reason also holds good for the poor households in our study area.

In addition to these simple regressions, we have conducted studies, the results are reported below.

$$t = 7.97 + 0.44Y_t + 0.82AW \quad R\text{-squared} = 0.61 \quad df = 297 \dots\dots(8)$$

(19.24) (3.86)

The results given above have established that present income and animal wealth together could explain 61% of the variation in consumption of the rural households in U.P.. When we added number of family Members to it, the results were as follows.

$$t = 5.03 + 0.36Y_t + 0.65AW - 0.12CH + 0.85 ADAO : R\text{-Squared} = 0.64$$

(14.13) (3.16) (-0.37) (5.10) df = 295 \dots\dots(9)

These regression shows interesting results, while income and animal wealth have retained their positive sign with some reduction in their coefficient values the children in the family have negative influence on consumption. However, all other family members have a positive correlation with consumption.

Next we have added employment to the above result and then arrived at our final regression, which is presented below.

$$t = 5.07 + 0.36Y_t + 0.66AW - 0.12CH + 0.84ADAO + 0.27EMP :$$

(12.35) (3.18) (-0.37) (4.98) (0.40)

R-Squared = 0.64 \dots\dots(10) df = 294

A close scrutiny of the t-values of the respective independent variable in above function reveals the present income holds a significant

family members excluding the children. Though Land fails to show any impact on consumption, but animal wealth has got significant influence on the consumption behaviour of the sample households. On the other hand, employment when regressed along with all the above variables, fails to show any significant influence on the consumption expenditure. The coefficient value of the variables reveals that any addition to a family other than children will bring about 0.84 unit change in consumption. Moreover, any additional unit of change in animal wealth will bring about 0.66 unit change in consumption. On the other hand, the result reveals that any additional unit of employment will bring about only 0.27 unit of change in consumption of the households. But due to insignificant t-value, it may not be influential on consumption.

Similarly, the final estimated regression result for the poor households is presented in equation 10(P), which shows that income and family member including children could explain 35% of the consumption expenditure.

$$C(P)t = 3.15 + 0.57Yt + 0.94CH + 0.47ADAO \quad R\text{-Squared} = 0.35 \quad df = 32 \dots (10P) \\ (2.35) \quad (1.62) \quad (1.78)$$

The respective t-values indicate that, present income is the most significant determinant of consumption, followed by the no. of family members except children and no. of children (1.62).

Conclusion and Policy Implication :

Our analysis of the results obtained through empirical investigations has established that;

(a) The propositions of the famous Engel's Law that food items constitutes the major share in consumption and proportion of income spent on food declines with a rise income, holds good for the households of the rural U. P..

(b) The basic tenet of the Absolute Income Hypothesis that the current income is the most influential determinant of consumption also holds good for the households.

(c) Employment too has got an influence over the consumption of the rural households but when regressed along with income, its value becomes insignificant due to high correlation between employment and income.

(d) A comparatively high coefficient and t-value for animal wealth signify the importance of promoting dairy related activity in the study area.

With the help of these results we have concluded that, since income is the crucial variable to determine the level of consumption of the people, any improvement in the socio-economic conditions necessitates, Income Augmenting Schemes on non-farm activities and dairy development activities should be promoted by the Government in our rural areas.

Conclusions and Policy Implications:

Our analysis of the results obtained through empirical investigation has established that:

14. The magnitude of the income effect is also affected by the magnitude of the income effect. The income effect is the change in the quantity demanded of a good when the income of the consumer changes, holding the price of the good constant. The income effect is the change in the quantity demanded of a good when the income of the consumer changes, holding the price of the good constant.

Consumer Expenditure in Orissa

Sri B. K. Tripathy

Director, Economics & Statistics

Orissa, Bhubaneswar

Introduction :

Data on Private Consumption are important not only from the point of view of aggregate expenditure on current account in the context of national income but also on account of their usefulness for studying changes in the level of living over a period of time.

The collection of data on household consumer expenditure was introduced in the 1st round of National Sample Survey (NSS) in 1950 and continued annually upto 26th Round. After the 26th Round, the Governing Council of National Sample Survey Organisation (NSSO) Government of India took a decision to conduct survey on household consumer expenditure once in every five years. Accordingly, quinquennial surveys on consumer expenditure, were conducted in the 27th, 32nd, 38th and 43rd Rounds of NSS. Besides, it was also decided to collect data on consumer expenditure covering a thin sample of only 2 households per sample village / urban Block in different rounds (excepting the quinquennial Rounds) starting from 42nd Round (the first in the new annual series outside the quinquennial surveys) onwards with a view to meeting the needs of the planners, Research scholars, administrators and the like.

The State Directorate of Economics and Statistics is associated with National Sample Survey Programme since 1958-59. According to the working pattern, the NSSO, Govt. of India and the State Directorate carry out survey in Orissa separately on matching sample basis.

2. Concepts and Definitions :

The expenditure incurred by a household on domestic consumption is the household's consumer expenditure. The household consumer expenditure is the total monetary value of consumption of various group of items, namely, (i) food, betel leaves, tabaco, intoxicants and fuel and light, (ii) clothing and footwear and (iii) miscellaneous goods and services and durable articles.

3. Need for Consumer Expenditure Survey :

The Consumer Expenditure Survey or in other words the Family Budget Enquiry is a priority need in the context of studying the changes in the levels of living over a period of time for different income or expenditure groups. The following are some of the areas where the family budget enquiry is required to dwell on :—

(i) The National Sample Survey Organisation has been collecting data on household consumer expenditure (private consumption) in every round through large scale enquiry with coverage extending almost to the whole of rural and urban India and the results are available separately for rural and urban areas (All-India) by broad expenditure classes for every round. The NSSO may suitably plan to build up estimates below the state level, i.e. for the districts which have hitherto not been done.

(ii) Collection of data on earnings (household receipts), and disbursement through large scale surveys on a regular basis to know the nature of distribution of household income from year to year in rural and urban areas.

(iii) Collection of data to workout estimates on savings in the un-organised sector both in rural and urban areas.

(iv) The principal objective of the family living survey is to provide weighting diagrams needed for construction of monthly consumer Price Index Numbers to ascertain the conditions and levels of living of a section of population.

(v) Poverty population is estimated by applying the updated poverty line to the corresponding adjusted NSS distribution of households by levels of consumption expenditure.

4. Behaviour of Consumer Expenditure :

Some of the important findings of the 50th Round Consumer Expenditure survey (1993-94), as the latest results available so far, on the behaviour of consumer expenditure in Orissa are as follows :—

(i) The Monthly Per capita consumer expenditure (MPCE) in the rural area was Rs. 219.80 as against All-India average of Rs. 281.40.

(ii) The MPCE in the rural areas under food-items was higher being 68% of the total expenditure as against 63% at All-India level leaving the expenditure under non-food items at 32% of the total expenditure as against All-India ratio of 37%.

expenditure in urban Orissa under the food items was higher (58%) compared to that under the non-food items (42%). The ratios of expenditure in urban areas at the All-India level were 55 and 45 under the food and non-food items respectively.

(iv) Cereals alone accounts for 57% of the total expenditure under food items in the rural areas and 34% in the urban areas of Orissa as against 38% and 26% in the rural and urban areas respectively at the All-India level.

(v) The ratio of expenditure under food and non-food items being 58% and 42% respectively in the urban areas of Orissa against 68% and 32% in the rural areas indicative of the fact that the quality of living in the urban areas is better than that in the rural areas.

5. Trend of Consumer Expenditure :

Although the proportion of expenditure on food items has always been higher to the expenditure under non-food items over years, yet the ratio of expenditure on food items to the total expenditure over years in Orissa has declined. The proportion of expenditure on food items to the total expenditure was 75% in the rural areas and 72% in the urban areas in the year 1972-73 (27th Round of NSS) which has declined to 68% in the rural areas and 58% in the urban areas in the year 1993-94 (50th Round of NSS). The rate of decline in the consumption of food items is more in the urban areas than in the rural areas. In other words, the proportion of expenditure on non-food items to the total expenditure has increased over years from 25% in the rural areas and 35% in the urban areas in the year 1972-73 to 32% in the rural areas and 42% in the urban areas in the year 1993-94. This is indicative of a gradual improvement in the minimum living standards of the people in both rural and urban areas of Orissa.

The behaviour of consumer expenditure at All-India level over years in 1993-94 compared to 1972-73 is similar with the mode of consumer expenditure in Orissa. The proportion of expenditure on food items to the total expenditure was 73% in the rural areas and 64% in the urban areas in the year 1972-73 (27th Round) which has declined to 63% in the rural areas and 55% in the urban areas in the year 1993-94 (50th Round). In other words, the proportion of expenditure on non-food items to the total expenditure has increased over years from 27% in rural areas and 36% in urban areas in the year 1972-73 to 37% in the

indicative of a gradual improvement in the minimum living standards of the people in both rural and urban areas at All-India level.

3. Monthly percapita consumer expenditure of Orissa as per the 50th Round NSS (1993-94) is one of the lowest in comparison to the major states of the country. The expenditure under the non-food items has increased over years in 1993-94 compared to 1972-73 which is indicative of a gradual improvement in the minimum standard of living of the people. But this rate of increase again has been one of the lowest in Orissa compared to other major states of the country.

The average monthly per capita consumer expenditure in Orissa in both rural and urban areas during 1993-94 for which the latest data are available stands below the All-India average of Rs. 281.40 and Rs. 458.00 in rural and urban areas respectively compared to Rs. 219.80 and Rs. 402.50 of Orissa. The percentage of expenditure under non-food items to total consumption expenditure in Orissa in both rural and urban areas during 1993-94 comes below the All-India average of 37% and 45% in rural and urban areas respectively as against 32% and 42% in Orissa.

7. Consumer Expenditure Surveys and their need for estimation of poverty :

Consumer expenditure data collected through different Rounds of NSS are used for estimation of population below poverty line. The Tax Force (1979) defined the poverty line as the per-capita expenditure level at which the average per capita per day calories intake was 2400 for rural areas and 2100 for urban areas.

To workout monetary equivalent of these norms (i.e. poverty lines) 28th Round (1973-74) NSS data relating to household consumption both in quantitative and value term were used. Based on observed consumer behaviour in 1973-74 it was estimated that on an average, consumer expenditure of Rs. 49.09 percapita per month was associated with a calorie intake of 2400 percapita per day in rural areas and Rs. 56.64 percapita per month with a calorie intake of 2100 per capita per day in urban areas. The Tax force (1979) defined the poverty line as the percapita expenditure level at which the calorie norms were met on the basis of the All-India consumption basket for 1973-74 base year). This was equivalent to Rs. 49.09 and Rs. 56.64 percapita per month for rural and urban areas respectively at 1973-74 prices.

The population with percapita consumer expenditure levels below the level defined by the poverty line is counted as poor. The data on the size distribution of population by expenditure class are obtained from the household consumption survey conducted under various NSS rounds. The ratio of the population below poverty line to the total population is the poverty ratio.

Following the recommendations of the Task Force on Projection of minimum needs and effective consumption demand (1979) the Planning Commission has been estimating the proportion and the no. of poor separately for rural and urban India at national and State levels. These estimates have been released from the year 1972-73 onwards using the full survey data on household consumption expenditure collected by the NSSO at an interval of 5 years. The estimates are available for the years 1972-73, 1977-78, 1983-84, 1987-88 and 1993-94 (preliminary estimates) which have been worked out by Planning Commission following the official methodology.

TABLE—1

Percentage of Population Below Poverty Line
(Officially Released Estimates)

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	NA	NA	NA	21.68	11.55	18.96

The above estimates are derived by the Planning Commission by using the poverty lines of Rs. 41 and Rs. 47 percapita per month for rural and urban areas respectively at 1972-73 prices corresponding to the poverty lines of Rs. 49.1 and Rs. 56.6 respectively at 1973-74 prices, Rs. 60.6 per capita per month for rural areas and the poverty line of Rs. 69.9 percapita per month for urban areas at 1977-78 price, Rs. 101.8 for rural and Rs. 117.5 for urban areas at 1983-84 prices, Rs. 131.8 for rural and Rs. 152.1 for urban areas at 1987-88 prices and Rs. 229 for rural and Rs. 264 for urban areas at 1993-94 prices corresponding to the poverty lines of Rs. 49.1 and Rs. 56.6 respectively for 1973-74.

This shows that measurement of poverty is based on NSS data where the main point of reference is consumption expenditure for the food groups of commodities where the actual consumption is recorded. Health, Education, Housing, Fuel and Lighting, Clothing, foot-wear, consumer durable etc. are the components of level of living, the expenditure on which, would indicate the quality of life on which the NSS data record the cash outlays incurred by households. Further, consumption of free goods and services provided by the state or charitable institutions is not recorded. Social consumption of these publicly provided services is in the nature of transfer from the Government to the people. In other words, the real level of living of the poor inclusive of social consumption is expected to be higher than what is reflected through the estimates of private consumption expenditure reported in NSS data. Therefore, there is a need to broaden the concept of poverty and extend it from estimation of food poverty to the poverty in general as well as minimum necessity to maintain a decent standard of living.

Changing Pattern of Food Demand in India : An Inter-State Analysis

**Dr. Shibabal Meher &
Damodar Jena**

(NKC Centre for Dev. Studies, Bhubaneswar)

Food demand is not merely determined by income and prices, rather by the consumers' tastes and preferences over time and region. This is mostly reflected in the changing preferences of food demand towards rich food all over the world (Meenakshi, 1996). The present paper examines whether the pattern of food demand has changed over time in India and in major states and tries to find out the reasons thereof.

Data and Methodology :

This study is based on household surveys on consumer expenditure by the National Sample Survey Organisation. The study utilises survey results of two rounds : 38th round (1983) and 50th round (1993-94). In each round information on average monthly per capita household expenditure on various commodities is presented for each state. The present study uses information on monthly per capita household expenditure on food items in both rural as well as urban areas of all India and three major states. The states have been categorised into three groups on the basis of their income, viz., High income, Middle income and Low income,

The study considers budgetary allocations of food expenditure alone, implying that the allocation of food expenditure is separable from that of non-food items. Within foods, a four-commodity classification is made : cereals and cereal substitutes ; milk and milk products ; meat, fish and egg ; and other foods. This paper concentrates specifically on the first three broad groups.

The price data in this study are taken from state-specific indices computed by Tendulkar and Jain (1993). However, the price indices are available for all broad commodities upto 1988-1989. We have,

for 1993-94. First of all, the trend growth of price indices from 1983 to 1988-89 are made and then the price indices of 1993-94 are estimated from 1988-89 using the trend growth rates. The real expenditures are calculated for the commodities consumed in 1993-94 with the help of these price indices.

The change in food demand is estimated by the expenditure elasticity of different food items as follows :

$$e_d^E = \frac{\partial(p_i q_i)}{\partial(\sum p_i q_i)}$$

where p and q refer to prices and quantities respectively, the subscript i denotes the i th food item and e_d^E is the expenditure elasticity of demand. By expenditure elasticity of demand we mean here responsiveness of change in real expenditure on i th food item due to change in real expenditure on total food items. The change in taste of food demand is observed at two points of time, viz., 1983 and 1993-94 for the three major states, both in rural and urban areas.

Empirical Results :

Table-1 presents the expenditure elasticities of different food items in rural area and as well as urban area of all India and the major states. In rural India, the expenditure elasticity of milk (1.45) is found to be greater than unity, indicating that change in the expenditure of milk

TABLE-1
Expenditure Elasticities of Different Food Items

States	Rural			Urban		
	Cereals & cereal substitute	Milk & Milk products	Meat, fish & egg	Cereals & cereal substitutes	Milk & Milk products	Meat, fish & egg.
1	2	3	4	5	6	7
<u>High Income State</u>						
Maharashtra	0.51	3.70	-0.97	2.08	-1.86	-1.16
<u>Middle Income State</u>						
Madhya Pradesh	1.45	1.49	-0.76	3.13	-23.17	-20.22
<u>Low Income State</u>						
Uttar Pradesh	1.14	2.19	0.18	0.64	1.80	1.00
All India	0.80	1.40	0.51	1.80	0.80	0.80

is more than proportionate to change in total food expenditure. On the other hand, the elasticities of lower than unity in cereals (0.80) and meat (-0.54) show that the expenditures on cereals and meat change at the lower rate with the change in total food expenditure. Furthermore, the negative expenditure elasticity of meat shows the declining expenditure of meat with the increase in total food expenditure.

On the other hand, in urban India the expenditure elasticity of cereals (1.32) is greater than unity, indicating that cereals expenditure increases more than proportionately with the increase in food expenditure. The expenditure elasticity of milk (-2.09), on the other hand, is negative. This indicates that milk expenditure in urban India declines at a greater rate than the increase in total food expenditure. The expenditure elasticity of meat (0.63) is, however, lower than unity showing a lower proportion of change in meat expenditure with the change in total food expenditure.

From the above discussion, it is clear that while in urban India the change in food demand appears to be in a direction away from milk and towards cereals, in rural India the demand is away from meat and towards milk. The increasing demand towards milk in rural area is more or less observed in different major states irrespective of their economic status. But in urban area no such systematic trend is exhibited. While the low income state (i.e., Orissa) in urban India shows preference towards milk as compared to cereals, the middle income state and the high income state show their preferences away from milk and meat, and towards cereals.

The increasing demand for milk in rural areas of the major states and all India might be due to changing taste preferences of food items as well as the increasing availability of milk in rural areas of different states. Furthermore, it seems that there is a substitution of milk for meat (within rich food) in almost all the rural areas of the major states (except Orissa) and all India. This might be due to the increasing availability of milk and declining availability of meat in rural areas. On the other hand, the decline in the demand for rich food like milk accompanied by change in the demand in favour of cereals in the urban areas of middle income states and high income states as well as all India might be due to the lower availability of milk and impact of a variety of other economic and socio-cultural factors.

Conclusion :

The demand for food items has changed over time towards milk

income states. On the other hand, there is decline in the demand for milk and meat, and increase in the demand for cereals in urban areas of high income states and middle income states. While the increase in demand for milk in rural areas can be attributed to changing food preferences as well as increasing availability of milk over time, the increase in the demand for cereals in urban areas might be due to the impact of a variety of economic and socio-cultural factors.

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Level and Pattern of Consumer Expenditure in India

Dr. Satyabrata Mishra

P. G. Deptt. of Economics,

M. P. C. College, Baripada

Per capita income of the country indicates the general development but data on per capita monthly consumer expenditure and more particularly Engel's ratio are vital determinants of standard of living of the people. Consumer expenditure is the basis for computation of persons living below the poverty line. Per capita income for both rural and urban areas are not separately estimated though such estimates for the country as a whole are available. But several rounds of NSS data on per capita monthly consumer expenditure for both rural and urban areas are collected on the basis of which percentages of population living below the poverty line are estimated. The National Task Force on Minimum Needs and Effective Demand constituted in 1979 defined poverty line as the per capita monthly consumer expenditure of Rs. 49.09 in rural area and Rs. 56.64 in urban area at 1973-74 prices and the corresponding daily calorie requirement of 2400 per person in rural area and 2100 per person in urban area.

Engel's law of consumption postulates that higher the level of income, lower the percentage of income incurred on food items and vice versa. The veracity of this proposition can be visualised from the analysis of per capita monthly consumer expenditure data from 27th Round to 48th Round of NSS as enumerated below.

TABLE—1

Monthly per capita consumer expenditure in India (In Rs.)

NSS Round (1)	Reference Period (2)	Rural (3)	Urban (4)
27th	1972-73	44.17	63.33
48th	1992-93	247.21	398.95

The above table reveals that MPCE has increased from Rs. 44.17 in 1972-73 to Rs. 247.21 in 1992-93 for rural area and Rs. 63.33 to Rs. 398.95 in urban area for the corresponding period. The percentage increase in MPCE in urban area has been more than commensurate with that of rural area. Consumer expenditure can be bifurcated to food items and nonfood items. In case of 27th Round NSS Rs. 32.16 i.e. 72.81% was incurred on food items and Rs. 12.01 i.e. 27.19% was incurred on Non-food items in rural area. In case of urban area Rs. 40.84 i.e. 64.49% was incurred on food items and Rs. 22.49 i.e. 35.51% was incurred on Non-food items. In case of 42nd Round NSS Rs. 92.55 i.e. 65.67% was incurred on food items and Rs. 48.38 i.e. 34.33% was incurred on non-food items in rural area. Analogously Rs. 128.99 i.e. 57.93% was incurred on food items and Rs. 93.66 i.e. 42.07% was incurred on Non-food items in urban area. In case of 48th Round NSS Rs. 149.12 i.e. 56.60% was incurred on food items Rs. 74.77 i.e. 33.40% was incurred on non-food items in rural area. Analogously Rs. 247.17 i.e. 53.16% was incurred on food items, and Rs. 217.78 i.e. 46.84% was incurred on Non-food items in urban area. This signifies that in case of urban area the percentage of expenditure incurred on food items is less than that of rural area. This reflects better standard of living maintained by urban area people compared to rural area people. Higher the percentage of consumption expenditure incurred on food items lower is the standard of living and vice versa. Over a span of 20 years the percentage of consumption expenditure incurred on food items in rural area has marginally declined whereas the percentage diminution in respect of urban area has been more than commensurate.

Engel's ratio exhibits the percentage of expenditure on food items to total expenditure. Higher the ratio lesser the standard of living and the level of economic development. Statewise Engel's ratio for 47th and 48th Round NSS are mentioned in Table—2.

In case of 47th Round the highest and smallest Engel's ratio in rural area have been recorded by Bihar and Maharashtra which signifies that the standard of living maintained by the people of Maharashtra is better off as against the worse off condition maintained by the people of Bihar. In 48th Round rural area people of Punjab have maintained highest standard of living and people of Bihar have lowest standard of living. In case of Orissa the standard of living has marginally improved as Engel's ratio has declined from 69.82 to 66.60 in rural area and 61.76 to 53.16 in urban area. But in case of Bihar the standard of living has declined as Engel's ratio has increased from 69.82 to 71.16 in rural area and 61.76 to 63.16 in urban area.

TABLE—2

Statewise Engel's ratio for 47th and 48th Round

Sates	Engle's ratio (in %)			
	47th Round		48th Round	
	Rural	Urban	Rural	Urban
1	2	3	4	5
A. P.	60.34	57.51	64.69	55.19
Assam	71.98	57.33	71.48	60.40
Bihar	77.06	63.59	75.49	67.52
Gujarat	69.55	59.50	69.32	58.56
Haryana	58.82	55.72	62.35	59.69
Karnatak	66.27	57.35	66.88	57.03
Kerala	58.43	49.47	60.30	56.39
M. P.	66.52	57.66	61.67	59.71
Maharashtra	50.50	53.01	62.95	55.44
Orissa	69.82	61.76	66.60	53.16
Punjab	59.18	56.99	57.28	52.77
Rajasthan	64.70	52.93	64.31	60.02
T. N.	63.60	53.01	63.83	48.92
U. P.	57.90	59.58	62.01	57.83
W. B.	69.60	57.05	67.60	53.77

Source :—NSS Report No. 388 & 397.

Haryana, Maharashtra, and others. At the All-India level Engel's ratio has remained more or less constant in 47th and 48th Round NSS. In case of urban area next to Punjab, People of Orissa have better standard of living and also better than All-India average.

Monthly per capita consumer expenditure with sub-division of food items and non-food items of consumer expenditure for the State of Orissa is presented in Table—3.

Table—3 reveals that in rural area total food items constitute 66.60% as against 53.16% in urban area. The constituents of food items exhibit wider discrepancy in rural and urban area. Among the food items Cereals, Vegetables, Meat, Fish, Egg constitute larger percentage in both rural and urban area. Non-food items also exhibit wider variation in both rural and urban area.

Monthly per capita consumer expenditure on selected items and percentage distribution in India during 48th Round are presented in

TABLE—3

MPCE on Selected Items and Percentage Distribution in
Orissa During 48th Round

Items	MPCE (in Rs.)		Percentage distribution	
	Rural	Urban	Rural	Urban
1	2	3	4	5
Total cereals	84.13	73.63	37.58	15.84
Pulses	6.75	13.32	3.01	2.86
Milk & Milk Products	5.37	21.74	2.40	4.67
Edible oil	8.89	19.27	3.97	4.14
Meat, Egg, Fish	10.29	27.67	4.60	5.95
Vegetables	15.81	28.59	7.06	6.15
Total (Food)	149.12	247.17	66.60	53.16
Fuel & Light	17.51	24.99	7.82	5.37
Clothing	17.68	28.80	7.90	6.19
Total Non-food	74.77	217.78	33.40	46.84
Total	223.89	464.95	100.00	100.00

Source : NSS Report No. 397.

TABLE—4

MPCE on Selected Items in India

Items	MPCE (In Rs.)		Percentage distribution	
	Rural	Urban	Rural	Urban
1	2	3	4	5
Total cereals	65.07	59.37	26.32	14.88
Pulses	9.74	12.63	3.94	3.16
Milk	23.31	41.55	9.39	10.41
Edible Oil	12.27	20.49	4.96	5.14
Meat, Egg, Fish	8.52	14.42	3.45	3.61
Vegetables	13.46	20.28	5.44	5.08
Total (Food)	160.58	223.58	64.96	56.04
Fuel & Light	17.38	25.19	7.03	6.31
Clothing	13.93	21.71	5.63	5.44
Total Non-food	86.63	175.37	35.04	43.96
Total	247.21	398.95	100.00	100.00

At the All-India level non-food expenditure and food expenditure incurred in urban area exhibit 102.4% and 39.2% compared to rural area. The higher percentage of MPCE on food items in rural areas compared to urban areas is mainly due to higher order of expenditure on cereals. Among food items per capita spending on milk and milk product in urban area is Rs. 41.55 as against Rs. 23.21 in rural area. The non-food items have recorded 43.96% in urban area compared to 35.04% in rural area. Thus it is evident that urban area people maintain better standard of living compared to rural area people.

All this implies that concerted efforts should be made to improve the standard of living of people along with quality of life. Huge investments are made now to alleviate the economic condition of the poor. But all these investments become infructuous due to the presence of large number of intermediaries in the process of development. Hence there is need to reorient plans and programmes so that people for whom they are designed can have effective role in project formulation and implementation.

Objectives of the Study :

The objectives of this paper is to study

- (a) The trend of state per capita income and to study the gap of the state per capita income with that of the nation.
- (b) The trend of the consumer expenditure in Orissa between 1961-62 and 1962-63.
- (c) The percentage of consumer's expenditure on food and non-food items (Engel's ratio) to gauge the standard of living of the people.
- (d) The difference between the estimated expenditure by consumer and the poverty line devised by individual researchers and the poverty line.

A Study of Consumer's Expenditure of Orissa

Dr. R. C. Mishra

Prof. K. H. Badatya

S. C. S. College, Puri

Consumer's expenditure is one of the important indicators of measuring the standard of living of a country. A higher consumer expenditure signifies affluence and vice versa. The provision of basic necessities of life such as food, clothing, housing, education, medical facilities, work opportunity and a minimum level of income is essential to maintain a decent standard of living for the population. The state is committed to provide basic minimum needs for its population. The different estimates made for the population below the poverty line by researchers and Planning Commission are based on consumer expenditure of the people. Moreover, the ratio of consumption expenditure between food and non-food items is a well recognised indicator of standard of living of the people. A smaller percentage of consumer's expenditure on food item indicates better standard of living and a higher ratio indicates the reverse.

Because of this it is essential to study the consumer's expenditure in Orissa to have a clear picture of the development of the state.

Objectives of The Study :

The objectives of this paper is to study

-) The trend of state per capita income and to study the gap of the state per capita income with that of the nation.
-) The trend of the consumer expenditure in Orissa between 1960-61 and 1992.
-) The percentage of consumer's expenditure of food and non-food items (Engel's ratio) to assess the standard of living of the people.
-) The difference between the estimated expenditure for consideration of poverty line devised by individual researchers and the Planning Commission and the actual per capita consumption expenditure of

Materials and Methods :

For the purpose of the study of the consumer's expenditure, the per capita consumer's expenditure of Orissa and India is collected from the N. S. S. data. To assess the standard of living, the percentages of expenditure on food and non-food items are collected from N. S. S. consumer expenditure data. The per capita incomes of Orissa and India are collected from the various issues of Economic Surveys of Orissa and India.

Simple tabular methods are used for comparison and presentation of the data. To study the trend of the per capita income and consumer expenditure of Orissa and India, moving average method is used. The per capita income of the state as well as that of the nation are shown in current and constant prices for comparing them with the consumption expenditure data provided by various researchers for calculation of poverty line. The period of study is limited between 1960-61 and 1992 because of non-availability of data before and after the period.

Results and Discussion :

There is an increasing trend of the state as well as national per capita income from 1950-51 to 1994-95. But the gap between the national per capita income and state per capita income is widening both in current as well as constant prices. During the year 1955-56 the gap at current prices was Rs. 30.87 which increased to rupees 88.95, 96.9, 136.8, 243.31, 480.30, 662.00 during 1960-61, 1965-66, 1970-71, 1975-76, 1980-81 and 1985-86 respectively. But the more alarming fact is that the gap at current prices was five times in 1990-91 of that of 1985-86 and keeps on rising at a faster rate from 1991-92 to 1994-95. During the period 1985-86 to 1994-95 the gap was five times of that of 1985-86.

At constant (1960-61) prices, the gap almost remains same during 1960-61 to 1975-76 which shows that the state although lags behind, has endeavoured to reach the national average. But at 1970-71 prices the gap is worth noting. In between 1970-71 and 1975-76, the gap was widening. But it is more alarming from 1980-81 to 1994-95 as the gap in 1994-95 was more than that of 1980-81.

Considering consumption expenditure (as expenditure depends

consumption expenditures keep on rising from 1960-61 to 1992 both in the state of Orissa as well as India. The gap between national average per capita monthly expenditure and that of the state at current prices in rural area was Rs. 5.1 in 1965-66 which became Rs. 13.7 (more than double) in 1983. It again increased to Rs. 26.74 in 1986-87 which was twice that of 1983. Between 1986-87 to 1992 it was between Rs. 26.74 and Rs. 35.00. It shows that the gap between the national average and state average has become 5 times in 1992 compared to 1965-66. This corresponds to the growth of the gap of the national per capita income and state per capita income at current prices.

As regards the urban consumption expenditure it is seen that the gap was Rs. 8.16 in 1977-78 and increased to Rs. 39.13 in 1991. It shows that the gap is also 5 times in 1991 as it was in 1977-78.

The percentage of expenditure on food items was 69.36 of the total expenditure in 1961-62. It increased continuously to 82.64 in 1968-69; then started falling continuously till 1991. Since higher percentage of food on consumption expenditure is the indicator of lower standard of living, the result shows that the standard of living of the people of Orissa deteriorated continuously from 1961-62 to 1968-69 which started rising from 1970-71 to 1991. But the percentage of expenditure on food items was 69.36 in 1961-62 which has shown a marginal fall in the year 1991 (67.69) indicating a marginal rise in standard of living of the people in comparison to 1961-62 in case of rural population.

The percentage of consumption expenditure on food item in case of urban population was lower than the rural population which indicates higher standard of living of urban people in comparison to rural mass during the entire period of study.

But the percentage of expenditure on food items in case of urban population starts rising from the year 1961-62 (63.25) till the year 1971-72 (73.33) which shows that the standard of living of the urban people also deteriorated upto the year 1971-72 as it was in the year 1961-62. From the year 1972-73 it starts falling upto 1991 (57.17) which indicates the rising standard of living of urban people after 1972-73. One significant improvement shown in this field is that between 1961-62 and 1991 the percentage of consumption expenditure on food items has been reduced to 6.08 per cent in the case of urban sector whereas the reduction in case of rural sector is to the extent of 1.7 per cent only. It shows that

As regards the number of people below poverty line various estimates are provided by researchers and Planning Commission. To compare the trend of consumer expenditure with that of the same provided by researchers and Planning Commission, the monthly consumer's expenditure data as given by Prof. Dandekar and Rath and Planning Commission are compared with the same in the respective year. It is seen that the per capita rural and urban consumption expenditure of Orissa was Rs. 18.76 and Rs. 31.95 respectively and requirement of consumption expenditure for construction of poverty line as provided by Dandekar and Rath was Rs. 15.00 and Rs. 22.50 for rural and urban sectors respectively. It is seen that both the consumption expenditures in rural and urban area were above the expenditure required for poverty line, although it was marginally higher in case of rural area but the margin was more in urban area.

In 1968-69, the required expenditure was Rs. 27.00 and Rs. 40.50 (Dandekar and Rath), and the actual expenditure was Rs. 28.55 and Rs. 43.02. The result shows that expenditures are marginally higher than that of the estimate. In 1979-80, the rural expenditure was below the estimated expenditure but the urban expenditure was higher than the estimated expenditure (to the extent of Rs. 30/-) in 1991-92. Both the rural and urban expenditures were higher than the estimated expenditures.

It shows that the rural expenditure was marginally higher than the estimated expenditure over the period from 1960-61 to 1979-80. But it was a bit higher in 1991-92. The urban expenditure was higher than the estimated expenditure and it became still higher in 1991-92.

From this study it can be found that there was not much improvement in poverty level between 1960-61 to 1979-80 in rural area. The improvement is seen during the period 1980-81 and 1991-92. There is a little progress, in urban poverty during the period 1960-61 to 1968-69 and it is faster in the period upto 1979-80, but still faster in the next period upto 1991-92. During the entire period of study, urban development is ahead of rural development.

But comparing the all India consumer expenditure figures with that of the estimated figures, it is seen that during the period 1979-80 to 1991, the consumer expenditure was higher than that of the estimated figure and it was much higher than that of the state of Orissa.

Conclusions :

1. There is an increasing trend of the state as well as national per capita income during the period 1950-51 to 1994-95 at current as well as constant prices. But the gap between the state and national per capita income is widening during the period 1951-52 to 1985-86 and it is alarming during the year 1985-86 to 1994-95 at current prices. In 1994-95 the gap was 100 times of the gap in 1955-56.

At constant prices (1960-61) it is almost the same between 1960-61 to 1975-76; The gap (at 1970-71 prices) increases 1.5 times between 1970-71 to 1975-76. and it has doubled (at 1980-81 prices) in 1994-95 over that of in 1980-81.

2. The consumer expenditure both in rural and urban areas keeps on rising over the period under study both in the state as well as in the nation. The gap between the national average and state average was about 5 times in 1992 as it was in 1965-66.

3. The percentage of consumption expenditure on food items in rural area continues to rise from 1961-62 to 1970-71 indicating lower standard of living. It shows a downward trend between 1972-73 to 1991. But this percentage was more or less equal in 1991 as it was in 1961-62 (59 per cent). In case of urban area there was a rising trend from 1960-61 to 1971-72 and then a falling trend from 1972-73 to 1991. The percentage on food items of urban population is higher than that of the rural population which shows better standard of living of urban people. But comparing the gap of national average with that of the state, it is seen that the gap is eight times between 1965-66 to 1992. Hence the standard of living of the people of Orissa is not only low but also deteriorating.

4. As regards the estimates of per capita expenditure and actual consumption expenditure, it is seen that the actual expenditure marginally higher than that of the estimated expenditure in rural area and a bit higher in urban area. But comparing national average, the estimated expenditures are much below both in rural as well as in urban area and the state lags behind the national level.

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A Study on Level and Pattern of Consumption, Expenditure in Farming House-holds of Puri Sadar Block (1993-94)

Dr. B. Bhuyan

Prof. of Agril. Economics, OUAT

Dr. B. Mohanty

Prof., Analytical & Applied Economics, Vani Vihar

Introduction :

Status of economic condition of any country is measured mainly through level and pattern of consumption expenditure. Total income and by the way the standard of living of a family is assessed generally through the expenditure incurred on both food and non-food items. If one is asked about his income he feels reluctant to reveal the same received through various sources and the income quoted often is less than the actual income. Hence the research scholars are trained to estimate total income through expenditure incurred on various items of consumptions. Expenditure method is known in economics as a proxy for estimating the income. One feels free and in fact takes pride to reveal the expenditure incurred for both food and non-food items by him for the family to indicate his standard of living and economic status. On the other hand he feels constrained when asked to reveal his annual income.

According to well known economist "Dusenberry" consumption expenditures in due course become conditional and less flexible and turn to be the habits of the consumers. In case of a fall in level of income, the level of consumption expenditures does not fall proportionately. A habitual smoker or tea taker finds it extremely difficult to reduce smoking or tea, in case his income goes down. Hence the level and pattern of consumption play an important role in regulating economic life of any individual or of the family. As per the laws of economics, the level of consumption expenditure on food items does not go up in

become less and less with the rise in level of income. The marginal propensity to consume determinant of the multiplier effect of development becomes less and less with the rise in income.

Studies are now needed to find out the level and pattern of consumption expenditures in an economy to know the level of economic development. Keeping this in view a study was undertaken in Puri Sadar Block to know the level and pattern of consumption expenditures among the farming house-holds belonging to various farm size groups, during the year 1993-94. The field study was undertaken at micro level and the objectives of the study are detailed below.

Objectives of the study are :

- (i) To study the demographic features of farming house-holds of the area.
- (ii) To study the level and pattern of consumption expenditures on different food and non-food items by the house-holds.
- (iii) To study the total consumption, marginal propensity to consume total income and savings of farm house-holds belonging to different farm size groups.

Methodology :

A systematic statistical procedure was followed for selection of sample households. The sample households had covered 45 villages of 11 Gram panchayats of Samangapat and Sarapat of the Puri Sadar Block. Both parts are water logged throughout the year and agriculture and allied activities around them are adversely affected.

The total number of households was 7,288 spreading over all the Grampanchayats. From each Grampanchayat atleast 50 cultivating households representing different land size had been selected making the total sample size 562. The selection was done on the basis of stratified random sampling.

All the 562 sample farmers belonged to different land size groups i.e. 0-1 ha, 1-2 ha, 2-4 ha, 1-4 ha, and the complete list of households are given in Table—1.

The field data were collected through field Investigators by direct contact with the head of the sample house-holds. The data were

TABLE-1

No. of Sample House-holds in Different Size Groups (1993-94)

Sl. No.	Gram Panchayat	0-1 Hect.	1-2 Hect.	2-4 Hect.	4 Hect & Above	Total No. of House-holds.
Samangapat						
1.	Balabhadrapur	15	8	1	—	24
2.	Gopinathpur	25	28	15	4	72
3.	Kerandipur	9	1	1	1	12
4.	Malatipatpur	6	4	1	1	12
5.	Samanga	24	21	11	4	60
6.	Sasan Damodarpur	50	18	13	4	85
	Total	129	80	42	14	265
Sarapat						
7.	Baliguali	24	26	29	9	88
8.	Bira Harekrushnapur	18	40	21	7	86
9.	Chalisbatia	15	16	8	4	43
10.	Garh Mrugasira	7	16	9	2	34
11.	Raigorada	28	10	5	3	46
	Total	92	108	72	25	297
	Grand Total	221	188	114	39	562
		(39.32)	(33.45)	(20.29)	(6.94)	

RESULTS AND DISCUSSIONS :

Demography working force and Literacy :

The data were analysed to know the magnitude of population, i.e. male, female, and working force between 15-60 years of age which had significant impact on the level and quantum of consumption both on food and non-food. Literacy rates were also assessed through analysis of data to findout the expenditure incurred on human resource development.

The total population were 4530, consisting of 1955 in 6 Gram-panchayats of Samangapat and 2575 in 5 Grampanchayats of Sarapat. Of this 2389 were males (52.74%) and 2141 were females (47.26%). The corresponding figures in Samangapat were 1033 (52.84%) and 922 (47.16%) and in Sarapat were 1356 (52.66%) and 1219 (47.34%). Percentages of male population were found to vary between 48.39 in Kerandipur Gram-panchayat to 57.89 in Malatipatpur Grampanchayat. Similarly the percentages of female population varied between 42.11 in Malatipatpur

Working force constituting both males and females within age of 15-60 years was estimated at 3200, i.e. 1473 males (32.52%) and 1223 females (27.00%). Male workers were 650 in Samangapat and 823 in Sarapat and respective female workers in Sarapat and Samangapat were 447 and 676. Percentages of male workers were found to vary between 31.71 in Sasan Damodarpur Grampanchayat to 35.42 in Gopinathpur Grampanchayat in Samangapat. In Sarapat area the variation in percentages of male workers was 31.22 in Raigorada Grampanchayat to 32.44 in Baliguali Grampanchayat. Percentage variation of female workers was 26.88 in Sasan Damodarpur Grampanchayat to 33.32 in Kerandipur Grampanchayat of Samangapat and 26.41 in Baliguali Grampanchayat to 29.44 in Raigorada Grampanchayat of Sarapat. Such high percentages of working force had significant impact on level of food consumption. Percentage of literacy was found to be 70.64 as against 49 at state level. Such high level of literacy called for higher expenditure on education and other trainings for effective human resource development in the area.

Consumption of expenditure on food and non-food items :

Data were duly analysed to find-out the level of consumption and consumption expenditures on food and non-food items. The food items included cereals, sugar and vegetables and non-food included beverages, health, education, social functions and other. Consumption of cereals was estimated both in physical and monetary terms whereas other items were expressed only in monetary terms.

It was observed that average consumption of cereals was 1.23 tonnes in Sarapat and 1.33 tonnes in Samangapat. Total consumption expenditure on an average for a family was estimated at Rs. 16,010.00 in Samangapat and Rs. 16,820.00 in Sarapat area. Maximum expenditure incurred by a family had touched the figure of Rs. 19,730.00 in Birahare-rushnapur Grampanchayat, minimum being Rs. 11,270.00 in Malatipatpur rampanchayat. Of this amount, expenditure on food items claimed Rs. 10,580.00 per annum (66.08%), non-food being Rs. 5,200.00 in Samangapat. A family was observed to spend about Rs. 230.00 on beverages, including tea, coffee and soft drinks. A family in Sarapat area was found spending about Rs. 9,620.00 on food items, Rs. 5,790.00 on non-food items and Rs. 230.00 on beverages, constituting 60.81%, 37.74% and 4.45% respectively. Percentages of variation in expenditure on food items were observed to be 56.90 in Baliguali Grampanchayat to 66.90 in Chalisatia Grampanchayat in Sarapat area and 66.06 in Malatipatpur Gram-

In the area, percentage variation in expenditure on beverages was between 1.07 in Gopinathpur Grampanchayat to 1.46 in Garh-mrugasira Grampanchayat.

Expenditure on food items included expenditures on cereals, sugar and vegetables and of total expenditure, 38.81% was spent on cereals in Sarapat as against 41.28% in Samangapat. Variation in expenditure on cereals in the entire area was observed to be 35.17% in Biraharekrushnapur Grampanchayat to 43.86% in Gopinathpur Grampanchayat. Sugar consumption was found to claim to the extent of 4.50% of total expenditure in Samangapat as against 4.05% in Sarapat. Variation in per cent expenditure was observed to be 2.48 in Malatipatpur Grampanchayat to 5.00 in Samang Grampanchayat. In monetary terms amount of expenditure on an average was Rs. 720.00 in Samangapat area and Rs. 640.00 in Sarapat area. Consumption of Vegetables had claimed expenditure of 3,250.00 in Samangapat area & Rs. 640.00 in Sarapat area. Consumption of vegetables had claimed expenditure of 3,250.00 in Samangapat area and Rs. 2,840.00 in Sarapat area. About 20% of total expenditure was allotted towards purchase of vegetables, varying within the range of 17.04% in Kerandipur Grampanchayat to 23.05% in Sasan Damodarpur Grampanchayat.

Consumption expenditures by families of different size group of farmers :

Data were analysed to know the consumption of both food and non-food items by the farming households belonging to different farm size groups, i.e. 0-1 hect, 1-2 hect, 2-4 hect and 4 hect. and above in both Sarapat and Samangapat area. Besides, level & pattern consumption, total income and savings were analysed. And all the sample families of all the Grampanchayats were analysed on the basis of above farm size groups and detailed analysis is shown in Table—2.

As revealed in the given table average expenditures on consumption of food and non-food items by a family were Rs. 15,820.00 in Sarapat area as against Rs. 16,010.00 in Samangapat area, constituting 81.19 and 66.79 percentages respectively of the total income. Respective percentage expenditures on food and non-food items were found to be 60.81 and 39.19 in Sarapat area as against 66.08 and 33.92 in Samangapat.

As size of farm was increasing expenditure on food was

TABLE—2

**Annual Income Consumption and Savings of Households in
Different Size Groups
SARAPAT G. P.**

Size Groups	Food (Rs.)	Non-food (Rs.)	Total Consumption	Total Income	Savings
0-1	7.20 (59.75)	4.85 (40.25)	12.05 (100.00)	13.89	1.84
-2	7.58 (64.46)	4.18 (35.54)	11.76 (100.00)	16.41	4.65
-4	10.45 (62.84)	6.18 (37.16)	16.63 (100.00)	18.55	1.92
and above	16.11 (55.70)	12.81 (44.30)	28.92 (100.00)	37.68	8.76
Average	9.62 (60.81)	6.20 (39.19)	15.82 (100.00)	19.49	3.67

SAMANGPAT G. P.

Size groups	Food (Rs.)	Non-food (Rs.)	Total Consumption	Total Income	Savings
-1	7.80 (71.56)	3.10 (28.44)	10.90 (100.00)	16.49	5.59
-2	10.27 (74.37)	3.54 (25.63)	13.81 (100.00)	21.57	7.76
-4	12.19 (54.95)	9.99 (45.05)	22.18 (100.00)	25.22	3.04
& above	22.44 (62.77)	13.31 (37.23)	35.75 (100.00)	67.13	31.38
average	10.58 (66.08)	5.43 (33.92)	16.01 (100.00)	23.97	7.96

(Figures in brackets indicate percentage to total consumption)

Total annual income of a family was estimated at Rs. 19,90.040 Sarapat as against Rs. 23,970.00 in Samangapat. Variation in income of families in different size groups of farmers was ranged from Rs. 13,890.00

was Rs. 16,490.00 in 0-1 hect. size of farm to Rs. 67,130.00 in 4 hect. and above size in Samangapat.

Further analysis was done to throw light on the entire area (combining the farm families of both Sarapat and Samangapat area) relating to consumption expenditure and saving in different size of farmers. The table below gives the details of the analysis.

TABLE—3
Annual Income, Expenditure and Saving of Farm House-holds

Size group	Food (Rs)	Non-food (Rs)	Total Consumption	Total Income	Savings
0-1	7.57 (66.70)	3.78 (33.40)	11.35 (100.00)	15.48	4.13
1-2	8.84 (69.50)	3.88 (30.50)	12.72 (100.00)	18.84	6.12
2-4	11.05 (59.63)	7.49 (40.37)	18.53 (100.00)	20.83	2.30
4 and above	18.28 (58.48)	12.98 (41.52)	31.26 (100.00)	47.80	16.54
Average	10.10 (63.36)	5.84 (36.64)	15.94 (100.00)	21.58 (73.86)	5.64 (26.14)

Average annual expenditure was Rs. 15,940.00 of which 63.36% was on food and 36.64% on non-food. Similar was the expenditures for families belonging to different size of farms. But percentage expenditures on food items were found declining with rise in size of farms and annual income. It was 66.70% for families in 0-1 hect. size and decreased to 58.48% for families in 4 hect. and above. Reverse was the case with respect to expenditure on non-food items.

Total annual income had increased more than three times with increase in size of farms. Similarly annual savings had also gone up more than 4 times with rise of savings from Rs. 4,130.00 in 0-1 hect. to Rs. 16,540.00 in 4 hect. and above size group. Rate of increase in saving was found higher than the rate of increase in level of income.

Marginal Propensity to Consume :

Marginal propensity to consumer analysis was observed to display

Economic implications as revealed in the analysis were that due to high MPC, there was comparatively less scope for investment in Samangapat area compared to that of Sarapat area and hence higher dose of investment was needed for the Samangapat area.

Level of Consumer Expenditure and Its Inequality in India

Dr. Manaranjan Behera

Department of Analytical and Applied Economics

Utkal University, Vani Vihar

Introduction :

For analysing demand patterns and measuring disparities in consumer expenditure, household budgets have often been studied. It is found from many research studies that socio-occupational factors are the important determinants of the pattern of consumer expenditure. The structure and pattern of consumer expenditure on food, non-food and combined items between various social groups for both rural and urban areas is very much important for policy purposes. Again, the various studies relating to consumption show that there exists wide variations in consumer expenditures in different social groups and at the same time significant difference is found in rural and urban areas. In the context of wide variations between various social groups both in urban and rural areas, global estimates serve limited purpose.

An analysis of the household consumption expenditure in terms of both size and social classes, extent of trends and causes of inequality will assume special significance in the context of development planning. Hence, in this paper an attempt has been made to examine the levels of consumer expenditure and its inequality on food, non-food and combined items among different social groups of both urban and rural areas in India.

Objectives :

The objectives of this paper are as follows :

1. To examine the levels of consumer expenditures on food, non-food and total items in rural and urban sector of different social groups in India ; and

Methodology :

The paper is based on secondary data provided by the National Sample Organisation from its 43rd round quinquennial survey conducted during July, 1987 to June 1988. The data relate to the average monthly per capita consumer expenditures of households on food, non-food and combined items of different social groups in both rural and urban sectors of different states in India.

For measuring the levels of consumer expenditure in India, the mean and median values of average monthly per capita consumer expenditure of different states have been taken into consideration. On the other hand, inequality measurement for consumer expenditure has been made by Ginni's coefficient and the formula is given below :

$$\Delta_1 = \frac{2}{n(n-1)} \sum_i \sum_j (X_i - X_j) ; (X_i > X_j) \\ (i \neq j)$$

where Δ_1 = Ginni's coefficient of mean difference

X_i = average monthly per capita consumer expenditure of i-th state ($i = 1, 2, \dots, n$)

X_j = average monthly per capita consumer expenditure of j-th state ($j = 1, 2, \dots, n$)

RESULTS AND DISCUSSION :

A. Levels of Consumer Expenditure :

The levels of consumer expenditure on food, non-food and total items of different social groups in both rural and urban sectors of India have been explained below. The mean consumption in rural sector is 175.51, whereas, it is 256.02 in urban sector. This implies that in rural sector, the mean consumption expenditure is 68.55 per cent of the urban sector and there exists a gap of 31.45%. Highest gap of mean consumer expenditure between rural and urban sectors is found among scheduled tribes and the gap is 31.55%. The gap between rural and urban consumption level among scheduled castes is found to be lowest, i.e., 22.58%. The mean consumption expenditures are more on food items as compared to non-food items among all social groups, but the percentages of gaps between rural and urban sector are higher on food items than that of non-food items. Again, it is revealed that the mean consumption expenditure in rural sector is always higher than the mean consumption expenditure in urban sector among all social groups. It is also

castes. Moreover, the mean consumption expenditures on food and non-food items are found to be highest among general castes.

With regard to median consumption expenditure, it is 161.17 in rural sector as against 253.46 in urban sector of India. Similar to mean consumption expenditure, the median consumption expenditures on all items are also highest in both rural and urban sectors among general castes. In median value case also, the median consumption expenditures among scheduled castes on different items are lowest both in rural and urban sectors except in two cases. Those are median consumption expenditures on non-food items (48.77) and total items (145.57) in rural sector. But these values are very near to the respective lowest values of 47.44 and 139.01 that existed in rural sector on non-food and total items of scheduled tribes. In median consumption levels, highest gaps between rural and urban sector are found among general castes on different items. But in mean consumption levels, the highest gap between rural and urban sectors is found among scheduled tribes which is statistically more reliable than that of the gap found in median consumption levels. The lowest consumption level gaps between rural and urban sector on food, non-food and total items are always found among scheduled castes.

B. Inequality :

The term 'inequality' intuitively suggests a dispersion from 'equality' the term which hardly has any universally accepted definition. Various inequality indices have been estimated for food, non-food and total items of different social groups and separately for rural and urban sectors. For comparisons among various social groups, Ginni's coefficients have been used.

The study shows that the inequality is relatively less in rural sector as compared to urban sector. This implies that existence of greater homogeneity in consumption in rural sector than in urban sector. Again, lowest inequalities are found among general castes as compared to other castes on food, non-food and total items in both rural and urban sectors. On the other hand, highest inequalities are found among scheduled castes on different consumption items in rural sector only. In urban sector, the inequalities among scheduled tribes on food, non-food and total items are highest. Thus consumption expenditures on different items among general castes are relatively more homogenous as compared to that among the other castes. On the other hand, the consump-

sector are least homogenous. In the urban sector, the least homogenous consumption expenditure is found among scheduled tribes. Moreover, more inequalities in consumption are found on food items as compared to non-food items among scheduled castes and scheduled tribes. But in case of general castes, the non-food consumption expenditures are less homogenous as compared to food consumption expenditures.

Conclusion :

From the above empirical analysis, it is observed that the levels of consumer expenditures are varying significantly among the social groups, i.e., scheduled castes, scheduled tribes and other castes. Such variations in the levels of consumer expenditures are not only found in rural and urban sectors but also on food, non-food and total consumption items. The percentages of gaps between rural and urban consumption levels are also varying considerably among different social groups.

The inequalities in consumption expenditures are found to be more among scheduled castes & scheduled tribes as compared to general castes. Again, inequalities are always more in urban sector compared to rural sector. With regard to consumption expenditures on different items, greater homogeneity is found on non-food items.

Thus, the levels of consumption expenditures and their inequalities are found to be different to a large extent among various social groups of rural and urban sector. For the better living of all groups of people of India, these gaps should be reduced and sufficient efforts should be made in this regard.

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Income Smoothing Vs. Consumption Smoothing

Jyoti Kar

Widely accepted contention that consumption expenditure is responsive to, rather dependent on income is validated by many empirical studies. However, the responsiveness of consumption to income change is not uniform for which the pattern of consumption does not stay the same with increase in income. The adjustment between the two takes different forms which could be broadly categorised under two heads: (1) Households adjusting consumption to the level of income—consumption smoothing process, (2) Households adjusting income to the existing pattern of consumption—income smoothing process.

To counter balance adverse income shocks it is observed that the lower income groups largely go for income smoothing by diversifying economic activities, increasing labour supply or by withdrawing their offsprings from the schools. On the other hand, the larger income groups try to cope with income fluctuations by adjusting their level and pattern of consumption expenditure with the postponment of durable or luxury consumptions.

In an attempt to test the empirical validity of the thesis in the Indian context, NSS data on consumer expenditure in different states are considered. Data corresponding to the 32nd and 43rd round are used for the present purpose. On the basis of the average per capita income for the corresponding years the states are categorised into high income and low income ones. Expenditure on food items and non-food items are examined separately to ascertain the income smoothing and consumption smoothing effects.

Results of regressions with income as the explanatory variable of expenditure on food and non-food items reveal that in the 32nd NSS round no relation could be stressed between consumption expenditure whether food or non-food or the totality and income of the low income states.

But in the 43rd round for the same group of states consumption is found to be positively correlated with income. More so in the case of

43rd round it may be concluded that consumption expenditure has responded to income changes. It is more obvious from the larger expenditure on non-food items during the 43rd round compared to the 32nd round. In a nutshell, in the poorer states consumption smoothing seems to be working.

Expenditure pattern of high income states also follows a similar pattern. When non-food items are more responsive to income the process of consumption smoothing is largely apparent in this case also.

Inter-temporal validity of the hypothesis is also examined by working out income and expenditure elasticities with reference to food and non-food items. In the lower income states income elasticity of the food items is higher than that for the non-food items. While in the high income states the reverse is true. Adjustment of non-food expenditure to income changes is reflective of consumption smoothing which is largely visible on the part of the high per capita income states as the non-food items are more elastic in response to income changes. High expenditure elasticities for the food items in the low income states and for non-food items in the high income states also extend support to the above contention.

To conclude, empirical findings of the present study vindicate the consumption smoothing hypothesis in the Indian context. However, income smoothing hypothesis is invalid in this case which is largely due to low scope for diversifying economic activities and lack of adequate employment opportunity.

Composition and Growth of Consumption Expenditure in Orissa

Sanjib Kumar Hota

Research Scholar

P. G. Department of Economics

Sambalpur University

Sambalpur-768 019

Though per capita income is often taken to measure the standard of living of a community, a more direct index of economic welfare and standard of living of the people depends on per capita private consumption expenditure. The levels of living differentials can be studied with the help of size distribution of consumer expenditure (S.D. Tendulkar 1987). The poverty line is specified in terms of consumer expenditure per capita per month though there exists a variation in its limit from time to time being affected by various endogenous and exogenous factors for rural and urban sectors in India. Out of different patterns or types consumer expenditure, the distribution per capita consumer expenditure is preferred as an important measure to the measurement of disparity in the level of living (see Dandekar and Rath, 1971, Bardhan, 1974, Vaidyanathan 1974, Rajaraman, 1975, Ahluwalia, 1976, 1978, Renaud, 1978, Meesook 1979, Datta & Meerman, 1980)

Further the study of levels, pattern, composition and growth of consumption expenditure is important in terms of the application of its utility for the human resource development in both Orissa and all India level. Some literature relating to this also provides emphasis on the changes in the trend and pattern of per capita consumption expenditure on the consumption of food items, due to the changes in consumer preference over time in both rural and urban India (see R. Radhakrishna 1991, R. Radhakrishna and C. Ravi 1990, 1992) given the negligible effect of other factors except income and quality variation of food items. The expenditure elasticity of food of a community group falls with total expenditure, the expenditure elasticity of non-food increases with total expenditure over time (R. Radhakrishna, 1990, R. Radhakrishna & Ravi

was possibly overstated especially for the household located at the upper end of the per capita consumption expenditure scale (S.D. Tendulkar, 1987). This shows a hypothetical trend that the higher the income per capita the more will be the per capita consumption expenditure on non-food items. A further study of the trend in cereal consumption in India over time shows a decline trend due to the changes in consumer choice even at a lower income in both rural and urban India being influenced by the quality rather than quantity (see J. V. Meenakshi, 1996). Thus the above introductory analysis provides an idea of the importance of the study of consumption expenditure and its changing trends over time due to the above mentioned facts in India. Thus the study of consumption expenditure is also equally important in Orissa to know its composition and growth for future policy prescription.

Theoretical Framework :

A decline in cereal (a food item) consumption could have occurred if income distribution had changed in favour of those who consume lower quantities of cereals. Empirically, however, changes in income distribution have not been significant enough to influence average per capita consumption, the Ginni coefficient for this was also relatively unchanged between 1972-73 and 1987-88 in both rural and urban areas in India (Tendulkar and Jain, 1995).

Further, with economic development certain changes in food habits come to be expected. For instance, according to Engel's law, economic development is accompanied by declining food shares. By Bennett's law consumers typically switch to a more expensive diet substituting quality for quantity. In particular, the starchy-staple ratio in the proportion of food calories derived from the cheaper sources of calories namely cereals, roots and tubers declines with economic growth. But Bennett argued that "General economic development and change in the composition of regional diets...in the direction of wider variety and greater expense, go hand in hand and are not separable one from other" [Bennett, 1954]. An extension of Bennett's law, hence, is applicable in Indian context. It is stated that, as a low level of total consumer expenditure is an indicator of under development, similarly a disproportionately high percentage of expenditure on food items as against non-food items is a characteristic of low income. Thus it follows from the above analysis that the lesser the income, greater is the proportion of food items consumed and thereby the lesser is the impact of consumption expenditure on the

Objectives :

On the basis of the theoretical analysis as mentioned above, the objective of the proposed study in the context of Orissa, is to observe the degree of monetisation in relation to the changes in the per capita monthly consumption expenditure on food and non-food items at some points of time and over time. And this can be studied with the help of the composition and growth rate observation of consumption expenditure on different items (like total food items and total non-food items) mentioned through the explanation of various tables as in the Annexure. Further this analysis carries out a comparative view of rural and urban Orissa on the basis of the data taken from different N. S. S. Rounds.

Data Base & Methodology :

The proposed study is based on secondary source of data collected from different rounds (i.e. 16th to 28th and 38th to 48th rounds) of National Sample Survey assuming the limitations generally imposed against secondary source of data as given. Further the sources like C.S.O. report, Economic Survey of Orissa (1983-84 to 1995-96) are referred for the same purpose.

For the proposed study semi-log model has been used to find the growth rate.

The equation :

Taking logarithm of both sides

$$\log X = \log A + \log B$$

Here, growth (G) = $[\text{Anti log } (\log B) - 1] \times 100$

For estimating the elasticity the double log model has been used that is

$$Y = Ax^B$$

Here $\log y = \log A + B \log x$

Here B is the elasticity coefficient

Empirical Analysis :

Table-1 shows that the monthly consumer expenditure on food items has decreased and that of non-food items increased in 1990-92 as compared to the other two points of time, both in rural as well as urban Orissa. These possibly indicate that the degree of monetisation has increased in both the rural & urban Orissa in 1990-92 as compared to the

total consumption expenditure is higher in urban Orissa than that of rural Orissa, possibly showing a higher degree of monetisation in urban Orissa. This may be due to the disparity in the level of income and employment between rural and urban Orissa.

Table-2, reveals that during the 1st period i.e. 1960-74 (i.e. from 16th to 28th N.S.S. Rounds), the percentage growth rate of monthly per capita consumption expenditure on food items is higher than that of non-food items in both the rural and urban Orissa. However, the difference seems to be higher in urban Orissa compared to rural Orissa. The importance of non-food items is found to be relatively more in rural Orissa compared to urban Orissa, indicating possibly higher growth of monetisation in rural Orissa. The period 1983 and 1986-87 to 1992 (i.e. 38th and 48th N.S.S. Rounds) however, presents a different picture. One notices higher percentage increase in all the items in both sectors over the 1st period. The importance of non-food items is also found to have increased compared to food item in both sectors. The difference in growth rate between food and non-food items seems to be very high in urban area compared to rural. The comparison between rural and urban area exhibits that the growth rate of consumption expenditure on non-food item has substantially improved and stands at a much higher level in urban area compared to the rural area. This possibly indicates a very high degree of monetisation in urban area. Comparison of growth rates over the time period in rural area further indicates almost less than two times growth in food item and more than two times in non-food item. In urban area however notices less than two times growth in food item but nearly two times growth in non-food items. This indicates that over time there is substantial improvement in the monetisation in urban area compared to rural area.

Table-3 shows the elasticity of per capita consumption expenditure, which refers to the change in the degree of responsiveness of per capita consumption expenditure with regard to a unit change in the per capita income level, ceteris paribus. For the period 1960-61 to 74 (i.e. 16th to 28th N. S. S. Rounds), the elasticity of per capita consumption expenditure is found higher for food items compared to non-food items, both in rural and urban Orissa. But when we compare the elasticity of food and non-food items between rural and urban areas, the elasticity of food and non-food items is found to be lower and higher respectively in rural areas compared to urban area. These correspond to observations made earlier in growth analysis. But for the period 1983 and 1986-87 to 1992

1992 (i.e. 38th and 42nd to 48th N. S. S. Rounds), the elasticity of per capita consumption expenditure is found to be higher for non-food items compared to food items in both rural and urban area. So the degree of monetisation is high in both rural and urban Orissa.

However, when we compare the rural and urban area the elasticity is found to be higher in urban area for non-food items as compared to rural area. But the elasticity of both rural and urban area for non-food item is greater than unity. Thus, even if there is improvement in the degree of monetisation in both rural and urban Orissa, it is higher in urban compared to rural area. Comparison of elasticity over the time period in rural area further indicates nearly 2 times increase in elasticity of non-food and a marginal increase of food items. In urban area one notices more than 4 times increase in elasticity of non-food items. This indicates that over time there is very much improvement in the degree of monetisation in both rural and urban area. These correspond to the observations made earlier in the growth analysis.

Finally, this analysis shows that the elasticity of consumption expenditure of non food items and that of total consumption expenditure in both rural and urban area are greater than unity, which implies that consumption is higher than income. The extra consumption expenditure is possibly maintained by means of borrowing, showing a trend of rising private borrowing for consumption needs and hence growth in indebtedness of both rural and urban households. But in this process, who will suffer much than whom, is a matter of further research. The only thing that can be said in this context is the expected rise in the level of income and employment is much brighter in urban area compared to rural area, which helps them to match the amount borrowed for extra consumption expenditure in future. But the interesting fact follows from this analysis in the context of rural area is that the extra consumption expenditure is not fully matched by the expected rise in income and employment in future since the prospect of this is low in rural area. Thus such situation makes them bound to borrow further which results in their growth via persistent indebtedness.

Summary & Conclusion :

It is found from the analysis that at different points of time as well as over the time period, the degree of monetisation is changing in Orissa (both rural and urban Orissa). From the analysis of Table-1, Table-2 and Table-3 it has been found that the consumption expenditure

compared to earlier time period taken for the study, in both rural and urban Orissa. But it is more in urban compared to rural Orissa. Thus the degree of monetisation is high in rural and higher in urban Orissa. This indicates the growth of both rural and urban households in indebtedness. And in this process the rural households possibly be indebted more & persistently since the prospect of their expected rise in income and employment in future is less compared to urban household. Thus, high degree of monetisation in rural Orissa is a challenge in its growth perspective.

Annexure :

TABLE—1

Average (3 yearly) of percentage distribution of monthly consumer expenditure on Food and Non food items in Orissa (Rural & Urban) at three points of time from 1960-61 to 1992.

Year/Items	Rural		Urban	
	Food Items	Non Food Items	Food Items	Non-Food Items
1963 to 66	75.84	24.16	67.14	32.86
1971 to 74	78.04	21.96	72.67	27.33
1990 to 92	67.92	32.28	57.17	42.83

Source : N. S. S. Rounds.

TABLE—2

Growth rate of monthly per capita consumption expenditure on food and non food items in Orissa (Rural & Urban) at two different series of time periods as per N. S. S. Rounds (in percentage)

Growth rate	1960-61 to 1973-74 (i.e. from 16th to 28th N. S. S. Rounds)		1983 and 1986-87 to 1992 (i.e. 38th & 42nd to 48th N. S. S. Rounds)	
	Rural	Urban	Rural	Urban
Fr.	7.6	8.68	11.62	11.86
Nfr	5.65	2.55	14.99	24.82
TEr	5.72	8.06	12.63	14.17

Source : N. S. S. Rounds and Economic Survey of Orissa.

N. B. : Fr : % Growth rate of per capita consumption expenditure on Food items.
 Nfr : % Growth rate of per capita consumption expenditure on Non Food items.
 TEr : % Growth rate of total consumption expenditure.

TABLE—3

Elasticity of per capita monthly consumption expenditure (edce) with regard to per capita monthly income (at current price) in Orissa (Rural & Urban) at two different series of time period (with respect to different N. S. S. rounds).

Items	1960-61 to 1973-74 (i.e. from 16th to 28th N. S. S. Rounds)		1983 and 1986-87 to 1992 (i.e. 38th & 42nd to 48th N. S. S. Rounds)	
	Rural	Urban	Rural	Urban
F	0.83424	0.93533	0.94270	0.9573
NF	0.55887	0.38364	1.1836	1.5974
TE	0.58967	0.87846	1.0146	1.1196

Source : C. S. O. and Economic Survey of Orissa.

The Level & Pattern of Consumer Expenditure

Dr. A. Chand

ABSTRACT

The NSS 43rd Round figures on per capita expenditure on cereals, food (total) and clothing shows that of the rural agricultural labourers in Orissa are at a great disadvantage. They consume more of cereals more of food and purchase less of clothing compared to all-India average, and the average of Andhra Pradesh and Madhya Pradesh. Since their income in Orissa is less, they are compelled to spend a larger percentage of their income on cereals and food. They have hardly any surplus income to diversify their expenditure. This deteriorates their economic condition and reduces their efficiency and skill for any sustained work.

TABLE-3

		1960-61 to 1971-72	1972-73 to 1973-74	1974-75 to 1975-76
		Rs. per capita per month	Rs. per capita per month	Rs. per capita per month
		Urban	Rural	Urban
Food		1.5000	1.5000	1.5000
Non-Food		0.5000	0.5000	0.5000
Total		2.0000	2.0000	2.0000

**THE ROLE OF NGOs
IN ECONOMIC DEVELOPMENT
OF ORISSA**

Scope of NGOs in Development of Social Forestry as a Means for Rural Development

Dr. Binayak Rath

Professor of Economics

&

Ms. Sabita Acharya

Research Scholar

Department of Humanities & Social Sciences

Indian Institute of Technology, Kanpur

I. Introduction :

The environmental awareness in the World in the 1970s has brought special interests among the policy planners and administrators towards environmental management. Since it was felt that life cannot be sustainable without maintaining ecological balances, many programmes have been introduced by the Governments to conserve, protect and promote our environment. In a growing economy like ours, where the population is growing at a faster rate and where growth of infrastructure and industry is inevitable, the conservation of forest, no doubt, becomes a difficult task. Hence, attempts should be made for a rational use of environmental resources. But such rationality will depend on whether the use is sustainable, equitable and growth-oriented.

In this paper we have attempted to examine and discuss ;

the significance of Social Forestry (SF) as a means for rural development ;

to highlight the problems associated with development of SF ;

to investigate the possible ways-out ; and

to examine the scope of NGOs in SF development.

II. Role of Forestry in Rural Development and need of Social Forestry :

As mentioned above, from time immemorial forest had played a crucial role for our rural sector by way of providing the basic

goods and services, preserving the environment and by providing ample employment opportunities for the rural people. But in the past, rural sector, i. e., the villages used to have their village-forests to meet their food, fuel, fodder and raw material requirements. The villages had access to those from nearby village forests and their produce. But the fast rate of deforestation due to heavy pressure on forest land has created a number of adverse effects on the economy like decrease in rural income, shortage of fuel and fodder, unemployment, environmental imbalance etc.

In order to correct these adverse effects, the Government along with other measures introduced the SF schemes with the following broad objectives :

- (i) increase green coverage ,
- (ii) produce and supply fire woods, fodder, small timber, and minor forest produce to the rural population,
- (iii) to create more employment in rural areas through afforestation.

Thus, SF is essentially a method of rural development and poverty alleviation and forestry activities are addressed principally through the participating villages. The above three objectives of SF can also help to solve a lot of problems arising due to deforestation.

III. Problems Associated with Promotion of Forestry & Ways-out :

The scope of SF which aimed at meeting the requirements of the rural people and to bring all round development, was enlarged and broadened on the basis of NCA. The Govt. introduced a number of structural changes and added farm forestry, shelter belts etc., but despite all these measures, the programme could not succeed in fulfilling the broad objectives due to lack of peoples participation.

IV. Role of NGOs in Development of Social Forestry :

It is well recognised that NGOs could act as agents of change for obtaining people's participation in the environmental movement in our country. The Great Chipko Movement, movement to protect the Silent Valley, Tehri Dam Movement and Narmada Bachao Movement are examples of NGOs' involvement for environmental causes. The

Change-Agent Role

Nursery Development and

Promotion of Co-operatives

Arrangement of Funds, and

Mediatory Role

V. Involvement of NGOs in Social Forestry in Orissa :

The latest published "Directory of Voluntary Organisations in Orissa, 1997", compiled by the People's Development Communication, Bhubaneswar, shows that there are 1741 voluntary organisations working in different fields of development, social welfare, environmental awareness and promotion. The districtwise division shows that the highest number of organisations are there in Khurda district (322). In terms of their activities there are 476 NGOs working in the field of environmental protection and 247 working in the field of plantation (including Social Forestry, Nursery Development, Agroforestry and Protection of Natural forests).

It is also found that the maximum number of organisations involved in Plantation activities are there in Dhenkanal district. In 1987-88 there were 637 NGOs involved in Nursery development which was 37.45% of the total number of nurseries. They produced 120.91 lakh number of seedlings which were 18.64% of the total number of seedlings raised. Thus, a large number of NGOs are already associated with environmental protection and various aspects of Social forestry. Most of the NGOs receive Central and/or State Government assistance for implementation of their programmes. Quite a few receive funds from foreign agencies like OXFAM, Community Aid Abroad, Swiss Aid, Action Aid, Switzerland Church etc..

In addition to the NGOs helping the communities to take up forest protection activities, there are Village Committees to promote and protect forests around the village. According to study by the SF Project (1995) there are around 2600 village committees engaged in protecting 3,32,000 hectares of forest. Orissa is also a pioneering State to adopt Participatory/Joint Forest Management (PFM/JFM) approach which is being adopted by most Indian States now. In this JFM approach both Government and Local people participate equally in the

Encouraging Community based forest management system essentially requires increased decentralisation and devolution of power to local communities. The present role of the Forest Department is very different from the erstwhile policing role. Till now the field staffs' task was predominantly the implementation of decisions taken at top and passed down the line. With the change in functions and roles, the field staff are now expected to play the role of facilitators helping in consolidating community action. This role requires increased initiatives and innovations at the field staff level. This requires flexibility and increased decision making powers at the lower (in the hierarchy) functionary level. Since the required flexibility is not present in the existing top-down FD organisations, in such a circumstance voluntary organisations have a great role to play as catalysts.

With a view to examining the performance of the forest development/protection programmes by the NGOs, we have undertaken a field study in the district where there are maximum number of NGOs, i.e. undivided Puri district.

1. Methodology and Coverage of the Study :

The methodology adopted has been purposive sampling, whereby we have chosen a district as the first unit. Then we have identified the important NGOs which are actively involved in environmental conservation and plantation activities in the area. Since our objective was to assess the role of NGOs in conservation and promotion of SF, we have identified one of the prominent NGOs of the study area as our unit of analysis. Then to assess its performance we have selected two blocks where the NGO is actively involved in undertaking the conservation and promotion programmes for the benefit of the people. Again within the selected blocks we have purposively chosen a few villages for our field investigation. At village level we have interviewed the local people and collected information in terms of their perceptions. In addition to their perceptions, our own observation/perception has been the basis of our analysis.

Since the available secondary data indicate that the maximum number of voluntary organisations (i.e. 520) are there in the undivided Puri district, we have chosen the same as the sample district. Further analysis shows that among those while 127 are engaged in conservation environment, 44 are involved in plantation activities. We have also

conservation and plantation projects. Among these important NGOs, as VASUNDHARA is mostly involved in conservation measures, we have selected the same as our sample unit for field investigation. Though Vasundhara was established in 1992, it started working in 1993. It is one of leading NGOs in the State which is deeply committed to the causes of the rural people, particularly in protection and conservation of forests around the villages in line of Chipko movement but in a slightly different pattern. It firmly believes that local resources can be well conserved and maintained by efforts of the local people. To achieve their goals it helps the Village Forest Committee (VFC) in the protection and maintenance of nearby forests, in conducting workshops, training programmes, assisting people and Government in changing rules and thereby tries to play a Change-Agent's role. It also helps the Forest Department officials in undertaking various research from time to time and organising various training programmes.

After selecting Vasundhara as our unit of study we have examined the area where it is very active and accordingly chosen Tangi and Ranapur block. Besides in that area there are more than 28,000 ha. of reserved forests and protected forests. Hence, we have selected these two blocks and then identified three villages, viz. Raipara, Aarada and Barapalli purposively as our sample area. Though we have made no claim that the selected villages can account for all the villages in the district, but these are certainly typical of villages close to forests. The particulars of the villages indicate that while in Raipara village 59.66% of the population belongs to higher caste, and 40.33% belongs to BC and SC, in Aarada 46.42% of the population belongs to HC, 53.57% belongs to BC and SC. In Barapalli the percentages are 50.61 and 49.38 respectively. Further our investigation has established that these people are very much dependent on forests. Their basic needs are extracted from forests. Though most of them work as agricultural labourers for their daily living, they collect fruits, roots, leaves etc. besides fuel and fodder from forest.

With the ushering in of the environmental awareness in the area during the 1980s, these villages started protecting and generating the forests. They realised that without forests it will be difficult to maintain their livelihood. Hence, in 1980, they started protecting forests with their own participation. However, in due course of time various problems like lack of leadership, scarcity of finance, lack of enthusiasm for

many things did not fulfil any of the assurances. In such circumstances, voluntary organisations came forward to help them and Vasundhara is one among them. In order to assess its performance we have visited these three villages and discussed the issues with 5 school teachers, 3 Sarpanchs, 3 Chairmen of these VFCs and 15 villagers. In our investigation we focussed on : (a) how have they formed their VFCs ? (b) how are they protecting the nearby forests ? (c) what type of benefits are they receiving after the protection ? (d) what is the role of Government officials ? and above all (e) what is the role of NGOs ?

VII. Findings of Our Study :

After discussion with local people and officials of the concerned voluntary organisation, we have realised that the organisation is involved in following activities in our study area.

a) Increasing Awareness of the people :

Vasundhara, through an Oriya magazine "BANA BARATA" is trying to increase the social awareness regarding protection of forests. In the magazine it includes articles describing various success of different VFCs in protecting their nearby forests. Also it describes the problems of those VFCs. Through this at least people get to know about the surroundings.

b) Formation of VFCs. :

According to villagers of Raipara there was neither any committee nor any support from Forest Department. With the assistance of Vasundhara they have formed VFCs for protection of forests and they are working smoothly now.

—In village Aarada, it is noticed that with demonstration effect, protection of forests started in 1980s. Initially they appointed one watchman ; but due to financial problem they managed the job on their own. In 1995 the forest department officials explained them the need of VSS (Vana Surakshya Samiti) to which the villagers were agreed. However, it was of no avail due to lack of co-operation from the Forest department. But with the initiation of voluntary organisations they could form their VSS with 5 Committee members which included 2 members from lower castes and 3 members from higher castes. From every household at least one person used to attend the meetings of the committee where they discuss matters like how to protect the forests, how much minor products (like fuel, fodder) to be taken away from forests and how to distribute those among all villagers. In this regard voluntary organi-

With the formation of such a Committee (VFC), which involves voluntary protection of forests nearby, there is no costs of protection as all the official posts are honorary. On the other hand, a number of benefits flow in the form of :

- deforestation is checked ;
- unnecessary use of woods is checked ;
- fuel, fodder, fruits are made available throughout the year which save a lot of time for rural people, particularly, for women;
- environmental stability is attained.

In addition Vasundhara is also playing the mediatory role which is described below :

(c) Mediatory Role

Barapalli is a bright example of Co-operative effort, where one VFC is formed for protecting 840 ha. of forests from 1987. Owing to this endeavour the area has become thick with forests which is shown as pasture field in 1988 in the Working Plan of Forest Department. Recently one rule is made by Government to allow 200 ha. of forest land for one Committee to protect and conserve. The villagers apprehend that due to the new Rule, they may have to be separated which they do not want. In this situation Vasundhara is helping people's sentiment to reach at official level. With its help people have succeeded in expressing their views systematically so that the Government can take some decisions in their favour. Thus, Vasundhara has played its mediatory role successfully.

(d) Training Programmes and Workshops :

Besides Vasundhara is also engaged in imparting training programmes in the area. It is trying to train people about how to protect the forests. Also different workshops are being organised where different VFCs take part and discuss their problems and successes.

In spite of these positive aspects, we have come across some weaknesses with the present practice. Some people have expressed their dissatisfaction in formation of VFCs. According to them although all villagers participate in the protection activities, the benefits are not shared by all—generally poorest should be given preference which is not maintained. Also female participation is very less. Many women felt that they had no place in these Committees nor in the meetings. The meetings according to them, had been held occasionally but no one had informed them in advance as to when and where to meet. It is also

On the other hand, the community organisations feel that there is lacuna in information flow from grass root level to top level because of which the Government policies are not in conformity with the ground realities. There should be increased consultation of local levels before framing of rules and policies. For this, there should be co-ordinating committees having local villagers, Forest Department and other local agencies both Government as well as NGOs at all levels especially at range level and divisional level which can provide feed back on policy changes required.

VIII. Conclusion and Suggestion :

Forestry has a great role to play in rural development of our economy, particularly in a backward state like Orissa. Realising these importances SF is being implemented to provide the basic needs of rural people. However, due to various reasons the programme has not been successful in fulfilling the broad objectives. Therefore it is recognised that to fill up the gap between policy-makers and general people, a Change-Agent is needed. In such a circumstance voluntary organisations emerged to play the catalytic role. Other activities expected from them are nursery development, promotion of co-operatives, arrangement of funds and above all mediatory role. Our case study from three villages of undivided Puri district has established that voluntary organisations are helping the people in formation of VFCs which are involved in the protection of nearby forests. Moreover, they are trying to perform the mediatory role, i.e. trying to lessen the gap between government officials and rural people. The workshops and training programmes organised by them have enhanced the social awareness.

Though NGOs are playing a catalytic role in regeneration and conservation of forests, still they keep themselves away from direct execution of any scheme of plantation or protection. Besides, we have noted that constant monitoring the work of NGOs is required in participatory projects. There should be periodical review meetings with the participating NGOs, besides workshops and seminars, where problems, exemplary performance of NGOs, innovations etc. can be discussed. Ultimately one question arises : Whether Government should co-operate with the local people or local people should co-operate with the Government. If we believe that "AAMA JUNGALA AAMARA" (Our Jungle is ours), then Government should co-operate with the local people. Of course in such circumstances, Voluntary Organisations have a long way to go in motivating the people for conservation and regeneration of forests for their own benefit.

NGO and Economic Benefits : A Case Study

Dillip Ray

Assistant Director,

Directorate of Economics

& Statistics, Orissa, Bhubaneswar

1.0 Introduction :

The continuing crisis of three Es (Ecology, Economy and Energy) has evolved uneasy concern in the development process of our state. About 17.5% & 6.4% of total forest areas in Orissa are ecologically sound forest & ecosensitive areas respectively. This has created negative externalities deteriorating the quality of life. The government efforts alone in this regard do not show the way out. The right choice towards a solution might rest with the efforts by NGOs and individuals. The question today is not the choice of responsibilities alone, rather it lies in the ways these agencies should achieve the goals.

2.0 One Option :

Social forestry offers the rightful option for averting the crisis of three Es being evolved due to fast depletion of forest cover in Orissa. Besides normal forestry operations, the Govt. of Orissa continues to prioritise social forestry activities through a series of plantation schemes having quantitative objectives like different plantation activities, technical objectives of ensuring a self reliant system of forest and forest resources, eco-restoration etc. and socio-economic objectives of making the rural poor resourceful and economically viable. It was expected that these efforts would recover the lost three Es to a great extent in the process of their implementation.

3.0 Social Forestry Project (SIDA Assisted) :

These goals started giving some distinct effects with the launching of SIDA assisted social forestry project in Orissa in two phases between 1983-84 and 1992-93. In terms of quantitative objectives, the project could fulfil one major issue of 1966 resolution that at least 10% of total villages in Orissa should be covered under village forests.

But in terms of developmental objectives, the project could not achieve much success basically for two reasons. First, the project

implementations were mostly confined to Govt. efforts only during the initial years. Second, the project is rather an experimental effort and its operation period is too short to achieve the real goals.

4.0 Need for NGOs :

Under the constraints of manpower, time factor and financial resources, the plantation activities by Govt. agency only were concentrated to limited space and limited target groups. But it essentially needed a kind of social revolution, which was lacking. Voluntary Organisations could effectively initiate the process of such revolution in a perspective manner.

5.0 Role of NGOs :

NGOs have a definite role to play where Govt. is constrained to take a broad view. The Govt. action alone can not check the cycle of land and forest degradation without the active people and community participation and motivation.

Under the crisis situation, the NGOs play the prime role in the following ways :

- (i) To act as an intermediate agency between Govt. and public interests and make public participation a part of decision making process of the government.
- (ii) To draw urgent attention of the Govt. to include such crisis situations in National Agenda.
- (iii) To act as a watchdog for various deficiencies in Govt's policy decisions and implementation from time to time.
- (iv) To support and supplement Govt. efforts where ever necessary.
- (v) To intensify non-forestry activities like awareness through the help of educational activities among people.
- (vi) To harness youth energy in the village itself in gainful occupation and motivation.
- (vii) To establish a self reliant system of forest resources base for rural poor.

6.0 Scope and Coverage of NGOs in

Social Forestry project :

The project intends to associate NGOs in many facets like

motivation, Social Promotion of forestry movement, Training to Villagers on Common Property Resources Management (CPR). Choice of species, Plantation sites etc., Nursery activity, Raising plantation, and Making of a model village for Social Forestry. But the project in its first 2 phases could not assign all these issues to NGOs in the state because of certain constraints existing both in Govt. and NGO levels. The constraints of Govt. include deficiency of financial support and incentives, difficulty in plantation site assignments; shortage of technical expertises; absence of an effective monitoring unit etc. While the constraints of NGOs include deficiency in their credibility and responsibility, absence of skilled manpower and required infrastructure etc.

7.0 NGOs Under the Project :

NGOs' participation sharply increased under Orissa social forestry project although their involvement is mostly confined to awareness education, training programme and nursery operation. The participatory role of NGOs has been quite encouraging although not quantitatively very successful. But NGOs' forestry operation and nursery work in specific areas increased during the Project period.

NGO nurseries in voluntary organisations, schools, farmers' residences and other institutions increased from a meagre 2.7% in 1984-85 to an overwhelming 37.5% in 1987-88. The seedlings production by NGOs increased from a mere 1.36% of total no. of seedlings in 1984-85 to 18.64% in 1987-88. Even in the 1st year of 2nd phase i.e. 1988-89, 150 NGOs were involved in environment awareness and educational and training programmes under social forestry. But a significant number of NGOs undertook nursery operation from the project during the year which included 555 no. of NGOs and 538 no. of farmers' nurseries as against 1351 no. of departmental nurseries.

8.0 NGO Nursery : Economic Benefit :

Nursery is an area where plants are raised for eventual outside planting. It not only embodies operational and motivational objectives, it also ensures poor man's economic wellbeing. Decentralisation of nurseries for better transportation, control over seedling mortality and success of plantation etc. had sharply raised the scope and coverage of NGOs and farmers. The project had managed to support the decentralised nurseries under the project which might require enough water supply provision, availability of skilled personnel, suitable soil condition, assured markets of seedlings raised, effective pricing etc. But its economic

Dept) nurseries from NGO and farmer (non-project managed) nurseries. Hence the private nurseries both NGO and farmers continued to rise at equal pace during 1st and 2nd phase of the project. Obviously, the Govt. left with the unequal option to choose between NGO and farmer nursery for ensuring better economic benefits to the target groups of rural people.

Economic benefits from nursery relate to income and employment generation. Risk, uncertainty, rationality might have influenced NGOs and farmers not to go in for nursery operation in the initial year of project. But its economic viability that raised the hope and interest of these people to accept it as a major source of off-farm occupation.

1 Income Generation :

Nursery operation is a major source of off-farm income for individual farmers as well as NGOs. The evaluation study of the project shows that under an assured marketability of seedling raised, definite survival percentage of seedlings, sufficient supply of nursery materials, scope of labour input used and size of nursery operation, the non-project managed nurseries (NGO and farmers) get better economic return than the departmental nurseries.

Among the NGO nursery & farmers' nursery, the latter gets marginally higher rate of economic return from nursery operation than that of NGO nursery till the size of nursery is limited to 10,000 seedlings less. But NGO nursery gains more than farmers with the increased size of nursery. Hence NGO nurseries having better scope of making larger nurseries with adequate manpower & financial network, higher chance of seedling survival etc. could derive higher income in nursery operation than that of the farmers' nurseries. The NGO has the added scope of removing the bottlenecks, risks & uncertainty towards the income earning potential under nursery operations that afflict the rational choice of farmers very often.

2. Employment Generation :

But the single most tangible benefit that nursery offers is the employment generation in terms of direct wage and self employment to mostly unorganised labour force of the rural sector. Labour input is high at every stage of nursery operation like seed bed preparation, seed selection, sowing, manuring, weeding, irrigation, farmyard manure application, transplantation, watching, resetting, gradings, shadings etc. It is basically a labour intensive operation where all types of labour, men, women & children are employed. The

the year. Decentralised nurseries (both NGOs & farmers) guarantee the employment potential to a significant extent. These nurseries usually employ family labour & hired labour.

8.3.1 NGO vs Farmers' Nursery :

This paper makes a study to objectively assess the impact of non-project nurseries (NGO & farmers) on employment generation. The study takes 1988-89 as the year of study. The scope & coverage of the study are all the 9 project districts of Orissa. The characteristics of average mandays generated per year by NGO & farmers' nurseries have been taken into consideration. The study uses secondary data from the project activities during 1988-89. The study is made under the hypothesis that there is no difference between NGO & farmers' nurseries in generating employment opportunities.

The study follows the methodology of small sample test for testing the significance between two sample means. This study observes that the impact of NGO nurseries in generating employment was statistically highly significant. Thus a shift from farmers' nursery operation to NGO nursery operation might be economically beneficial. NGO nurseries have the scope of creating higher employment opportunities than the farmer nurseries for unorganised labour force of rural sector.

9.0 Observations :

- (i) The study concentrates on the economic implications of NGO in plantation activity.
- (ii) It observes that NGO ensures higher income & employment potential than that of individual farmers' effort in nursery operation.
- (iii) NGO provides better economic return than farmers with increase in the size of decentralised nursery.
- (iv) More NGOs take up nursery works due to their commercial & economic feasibility.
- (v) In spite of NGOs' preference over farmers' nursery operation both are treated as complementary rather than competitive to each other.

10.0 Suggestions :

- (i) NGOs need to be given priority in nursery activities.
- (ii) It is required to avoid the coincidence between the period of

- (iii) The social security system of nursery workers needs to be strengthened.
- (iv) Funding agencies like banks, co-operatives should encourage NGOs through liberal loan facilities for undertaking plantation activities.

11.0 Conclusion :

Social forestry goes beyond the ethics of forestry operation. It attempts to correct the distorted equation among men, society & nature. Since Govt. can not shoulder this uphill task, the rightful option rests on NGOs. Their committed and purposeful efforts might avert 3 (three) Ds (Danger, Damage & Destruction) & restore the three Es.

The study follows the methodology of small sample size for testing the significance between two sample means. This study reveals that the impact of NGO activities in generating employment was statistically highly significant. Thus a shift from farmers' nursery operation to NGO nursery operation might be economically beneficial. NGO nurseries have the scope of creating higher employment opportunities than the farmers' nurseries in the rural sector.

9.0 Observations :

- (i) The study concentrates on the economic implications of NGO in plantation activity.
- (ii) It observes that NGO creates higher income & employment for the rural population than individual farmers' effort in nursery operation.
- (iii) NGO provides better economic return to farmers with income in the form of distributed nursery.
- (iv) More NGOs take up nursery work due to their committed & economic feasibility.
- (v) Impact of NGO's preference over farmers' nursery operation does not appear to be complementary rather than competitive to each other.

10.0 Suggestions :

- (i) NGOs need to be given priority in nursery activities.
- (ii) It is suggested to extend the co-operation between the period of nursery activities by NGOs & period of peak labour requirement in agriculture.

The Role of Non-Governmental Organisations in Development : An Overview in the Context of Orissa

R. M. Mallik

Professor of Economics,
Nabakrushna Choudhury Centre for
Development Studies (NCDS), Orissa,
Bhubaneswar-751013

The term non-governmental organisation (NGO) seems to be deceptively simple. It embraces a bewildering group of organisations varying in terms of innumerable parameters—thus, very difficult to define. No standard definition can include all organisations working at present under the title "NGO". Further, the role assigned to NGO in the process of development depends upon how do they conceive the concept of development and what action they choose to achieve it. This suggests therefore to make an account of their origin, size, programmes, ideology and control. The enormous growth of NGOs in recent years seems to have been resulted partly owing to the growing incapacities of the State for tackling the problems of the neglected and marginalised sections of society but mostly due to multiple as well as complex varieties of activities of welfare state in recent times. The NGOs argue that the power of the State has failed to resolve the crisis of the modern times and voluntary action groups could successfully work as an alternative (and could perform indeed effectively as well as adequately) to the over-centralised state system where governmental bureaucracy enjoys enormous power and sanctions as the agent of said change.

In a limited context, the primary purpose of this Paper is to spell out the details of activities undertaken by NGO's in Orissa in the light of their role in different areas in accelerating the tempo of socio-economic development where the State is failing or inadequately attending to. This proposes therefore, broadly to highlight with respect to their philosophy, policy programme, typology, role, strategy, funding, management, linkages and also their problems to counter the inefficiencies, inadequacies noticed in the plan programmes, policy strategies and more

The objectives the of paper is given below :

1. To bring out the characteristics of NGOs and to examine the nature and types of activities undertaken by them in amelioration of socio-economic incapacibilities of the disadvantaged and marginalised group of people in the Society.
2. To highlight inter-organisational interrelations and motives behind organisational activities.
3. To assess the impact of NGO intervention on policy making and in the material wellbeing of the beneficiaries including their benefits like sense of security, self reliance etc.
4. To make an overall assessment of grassroot level activities and realities on the basis of participatory observations, discussions with the functionaries as well as with the beneficiaries and to suggest a few remedial measures to overcome the incapacibilities in functioning with masses.

I

In this section, we propose to spell out the meaning and characteristics, typology, peoples' organisations and role of NGOs, genesis of the problem in the context of development. Historically, development was originally initiated by private sector in a free market economy with negligible government control, but later on there was intervention by the public sector on large scale to enhance the spread and speed of development. Subsequently, growth without development has provoked a rethinking resulting in a series of discussions, debates seeking alternative approaches where the roles of non-governmental and non-business sectors have assumed crucial importance.

In common parlance, any organised group of persons may be called a voluntary association if it is formed to further common interest of its members, if membership is voluntary ; neither mandatory nor acquired through birth and if it exists independently of the state (Sills, 1968). In this respect very few Indian associations seem to be voluntary to qualify as voluntary associations since in many cases their membership is acquired through birth and many tend to be partly funded by Government. Further, if we consider some other features

second, voluntary associations sustain on subscriptions from members; third, volunteers work on part-time basis. Needless to say that while voluntary associations in the Western Societies do not undertake economically remunerative activities for their members, a large number of these in India are engaged in income generating activities for their members. In India, a part of the resources of voluntary associations are subscribed by their members but they seek donations from individual institutions or corporate sector. However, normally they do not organise fund raising campaigns though invariably they do depend upon foreign funding agencies and the government resources. Though the staff in India as elsewhere are considered as paid staff the wages they receive are always lower than the market rate. Precisely, by voluntary association, we refer to a group which works to promote interests of its members. Further, it is not dependent on government alone for funds though each has a set of codified rules and regulations for conduct of daily business as well as administration. A cursory review on the activities of voluntary organisations in India or in the State of Orissa suggests that these associations work for the poor but by and large are led by outsiders. Evidently, the leaders do not belong to communities of people either socially, or economically and even culturally with whom infact they work. This often creates unharmonious relations and raises indeed questions relating to success in their endeavour. In other words, they almost work like service-delivery agencies but do undertake varieties of other activities too (Bhatt, 1989).

Voluntary action has many organisational expressions in a society since voluntary associations are involved in multifarious activities. An analysis of several typologies by scholars and development consultants with respect to activities of voluntary associations suggest that though their role has already been envisaged in literature, the role has been hardly investigated. Scholars often classify the associations on the basis of their activities. Sethi (1984) classifies voluntary associations into development and charity related groups, action groups, political groups and support groups. Clark (1991) distinguishes between two roles performed by voluntary associations—the doing role and the influencing role. When the action of the association is directed towards the change in the shape of the projects undertaken by official agencies, it performs its doing role but when it succeeds in influencing the critical aspects of development policy, it performs its influencing role. However, it is increasingly noticed that initially voluntary associations do concentrate in the doing role and as soon as they become mature and experienced in

their own field of actions, they gradually switch over to the influencing role. This is indeed a regular practice of many NGOs in all over the country. However, in the continuing socio-economic and cultural framework the roles and activities of voluntary associations may broadly be confined to roles like doing, inducing and influencing, and activities like developmental, midstream and upstream respectively.

The activities of NGOs with respect to developmental activities are aimed directly at the poor. There, the primary responsibility is to enable the delivery system more accessible and to shape the services of the programmes in a manner that could ultimately cater to the needs of people. As part of their doing role, NGOs appear to have brought changes in the livelihood of the people they serve. Apart from this, they also undertake catalytic activities to induce the public to act. This may be called inducing role which prompts the public to act on any issue of their concern. Some NGOs also involve themselves to persuade public activities on certain issues concerning people in the area and perform influencing or pressure group role. They succeed indeed in most cases to cause upstream change in the policy domain through effective implementation of the policy programme either by modifying the existing one or by initiating a new policy. Precisely therefore, irrespective of developmental, catalytic and political/social activist role the primary objective of the NGOs is to aim at improving their socio-economic conditions and to empower the poor, impoverished and marginalised group to share the benefit from developmental/anti-poverty programmes. As third party organisations, the essence of NGO approach is to mobilise people in to organised group for self reliance. But there are grassroot organisations which revolutionise the thinking of NGOs and therefore the latter put efforts to learn project of the people than the people are educated about the project of NGOs.

II

Role of NGOs in Orissa :

Interestingly, under a broad title of NGOs, a wide varieties of organisations are functioning in Orissa having striking differences in innumerable parameters. Their funding pattern and delivery of service are interesting. They work from international donor agencies to an indigenous service organisation or from government sponsored extension agency to a radical activist group—thus, often difficult to be called as NGOs expect the voluntarism in association. In any case, they do differ on the basis of

differentiated from each other exclusively on the consideration of their functions/activities. In fact their role changes according to the change in the types of their organisations. However, on the basis of observations, review of literature, case studies, discussions with some functionaries and association with some NGOs in Orissa in terms of participations in State as well as National level workshops, we make a limited attempt below to spell out an overview of the activities, programmes and organisations of NGOs in the state of Orissa.

A cursory review of NGOs in Orissa suggests that most of them are deeply committed to work for upliftment of the marginalised, alienated and disadvantaged groups of people in rural areas in general and tribal areas in particular by carrying out varieties of activities and issues concerning culture, women, child labour, forest, health, tribal, environment, Panchayati Raj Institutions, and many more. It is observed that NGOs have been trying to sensitize, organise and mobilise people at the village level, local community level, various other levels besides influencing the interested groups and poor tribals so as to enable them to pursue self-development, fight for their rights and apply pressure on Government when needed. Most of these NGOs in remote tribal areas and other rural areas in the State fight tooth and nail to motivate people for the cause of self governance of common property resource.

Further, development is transformation and no Government can transform a society. According to the current philosophy of development, issues like equity, gender equality, sustainability, participation and empowerment can not be taken up either by Government or NGOs alone. There, the role of NGOs is specific; an advocacy role to prepare the people to accept change in the development perspective. In Orissa, some NGOs seem to have become very keen in creating public opinion about Government Policies and also on social issues with respect to adult literacy, nutrition, prevention of child labour, health, sanitation, forest, environment and many more for empowering people to overcome psychological inhibitions and opposition of oppressors. But, while doing so in rural areas, often some of their activities are translated in to militancy when they become radical in their approach as development practitioners. However, their activities should be looked upon more as mobilisers, transformers and catalysts in society. In this regard, though various NGOs in Orissa either collectively or singularly have been somewhat successful in bringing certain issues of concern to the attention of the government; such as, poverty, environment, exploitation of women, incidence of bonded labour, unemployment, and many more, it is difficult

to evaluate their influence on policy processes. However, the impact of some NGOs in certain specific areas are indeed discernible.

Evidently, NGOs in Orissa are wide and varied in their size of operation, regional coverage and types of activities undertaken by them. But, it seems the impact of NGOs on development of the state in terms of resource mobilised or utilised, income or output created, assets acquired, number of beneficiaries served and employment generated etc. are insignificant compared to that of government. Such insignificant or limited impacts may be attributed to; first, unevenly scattered and non-coordinating functioning; second, lack of knowledge about development dynamism of the state; third, the income and employment generation are few or few to most of the existing NGOs; fourth, many believe that their size is small to make any considerable impact—for they not only suffer from limited vision but also often work in isolation without collective effort.

Most of the NGOs in Orissa provide multiple services and perform various roles simultaneously. Since, their major contribution to development is to organise, mobilise and utilise resources within and outside the community for its development, the essence of their approach should be more as organiser and to mobilise people. But, it should not be presumed that NGOs are unique solutions to all inadequacies and inadequacies of government. However, their primary role is confined to local levels as mobilisers of people and their resources for an indigenous self sustainable development. Needless to say that majority of the NGOs in Orissa seem to have missed essentially strong relationships with other NGOs under the impressions that they are not useful. This has weakened the cause of NGO sector.

However, since NGOs are local, they have a lot of advantages—proximity to the people, their needs, resource potential, power relations, etc. Besides, they enjoy other merits; such as feedback for pragmatic correction, cost effectiveness, proper identification of the problem and lower risk of experimentation. All these in consolidated form enable NGOs to give a human touch not only in disadvantaged areas but also to disadvantaged people and group.

III

Grassroot Realities & Solutions :

Though the basic philosophy of NGOs activities centres around dedicated work for the poorest of the poor by working with them, evidences suggest that dedication is on decline and the gap between

glaringly visible in case of sensitive issues like local leadership and peoples' participation. Some NGOs are gradually alienated from people and more attached to funding agencies. Insightful observations suggest that, a few are frequently lost in self-admiration, misuse of funds and also get involved in unhealthy competition, but remain away from any self-appraisal.

Further, some of those function as family establishments with majority of Governing Body members and organisational leaders drawn from family. In many cases, organisational assets are treated as family property with unwritten inheritance rights with increased flow of government and donor money. Many good organisations seem to have got used to huge budgets with little accountability. Therefore, despite the few success stories, impact of NGOs in Orissa on general economic transformation is insignificant. There is a need to classify and differentiate between different kinds of NGOs working in the State and provide appropriate registration as well as monitoring mechanism accordingly for each category with appropriate revision in the Societies Registration Act 1865 and also through grant of FCRA registration number for each category.

Evidently, there is a mushrooming of NGOs everywhere in the country and so also in the State of Orissa due to increasing relevance of a third sector and availability of fund. But, this needs a strategic approach for improved management practices and strengthening the existing structure so that these could effectively cater to the needs of underprivileged and marginalised group of people who have shared nothing or little from the development programmes. Observations show that some NGOs are increasingly bureaucratised and alienated from people but use to be attached more to funding agencies. This creates a wide gap between the expected and the actual roles.

In recent years some International donors and CAPART; a government sponsored funding agency have blacklisted a number of organisations which were found to have misappropriated funds. This has not only increasingly damaged the image of so called voluntary agencies who claim their concern for the underprivileged and down-trodden group of people, but at the same time have lost their credibility to work with people particularly in rural areas. For this, a self-imposed Code of Conduct have become contentious. In this respect transparency in the

activities undertaken by the organisations could no doubt minimise the corrupt practices and enable the government and the donor community to make a more realistic assessment.

There are innumerable myths about this sector. The common perception is that NGOs are by their very nature flexible, participatory, gender sensitive and transparent while government carries the baggage of red-tapism and rigidity. Experiences suggest that there is tremendous variation among NGOs themselves and within Government too. Some Government Programmes and departments also function with remarkable sensitivity and transparency under a dynamic head. On the other hand, there are instances where NGOs become rigid, rule-bound and insensitive to issues of economic social and cultural concerns. Therefore, corrupt practices, manipulation, power and control are not exclusively associated with Government institutions. These characteristics in reality are glaringly visible in many NGOs and are practised indeed at the grassroot level.

Needless to say that there are some NGOs which work at the grassroot level amidst situations of extreme poverty and illiteracy who get support from International organisations like 'OXFAM', ACTIONAID, NIVOS etc. (who support NGOs to formulate and implement strategic planning, documentation and the like, also NGOs entering in to the area of research and focusing attention on policy issues on social problems : NODAF, SANHATI take up such issues in Orissa with the help of the media). However, it cannot be denied that different skills are required for different areas of work. It is observed that in areas like gender, environment, reproductive health and education, their contribution has been invaluable, helping thousands of disadvantaged people who would otherwise have never been heard. Indeed many of these NGOs are themselves working through a silent revolution which is itself a great achievement. However, what appears to be missing in most cases is accountability—social accountability rather than financial accountability. In other words, much of the positive intervention made by NGOs has been obscured by allegations of personal *aggrandisement*.

IV

Admittedly, development organisations are under mounting pressure of increasing organisational inputs for development process due to emergence of voluntary action as the global agenda for twentyfirst

enhancing the effectiveness of the existing organisational initiations and partnerships. Further, a development entrepreneur is pressed to perceive the dynamics of social change keeping in view of the changing concepts of development and professional requirements to undertake modern challenges. However, this is not the challenge of NGOs alone but of increasing importance of independent initiatives to enable people to tackle their problems by themselves and this in essence provokes us to have a close look at NGOs as agreeable alternatives.

It is of great interest to notice the kind of relation among different NGOs. Many NGOs which have large scale operations in terms of number of projects, number of people served, amount utilised, income or employment generated have indeed poor participation of beneficiaries. Staffs are mostly paid and considered as employees of organisations. Expenses of full time organisers are also met by the concerned organisation. In most cases, NGOs view beneficiaries and staff as clients only and in the similar way, the staff and clients in turn consider the organisation as a source of income or benefit. In many organisations, some individuals make themselves rich while the cause for which they serve remains unfulfilled. However, there are also many organisations in the visibility zone who are quietly going about their work very successfully and effectively for socioeconomic wellbeing of the disadvantaged group.

It is admitted that in the development scenario, all developmental organisations need to work in a complementary way where all types of competencies and faculties get extensively exploited for overall socioeconomic development. In this context, NGOs with their social force should integrate with the political force of the Government and economic force of business organisation to yield an effective force for sustainable development. In the changing perspectives of world economic order and social challenges, NGOs instead of working on parallel to government, should interact and negotiate to derive more benefits for the beneficiaries from developmental programmes. On the other hand Government also by this can get grassroot information, cost effectiveness, better delivery system due to the complementary activities of NGOs where the latter secure improved access to policy information. There are no doubt some constraints in course of interaction between Government and NGOs due to lack of understanding of each other's goal, restrictive Government procedures, poor communication and conflicts over vested interests but, the degree of complementarity and the success of their mutuality deter-

Admittedly, interorganisational relations and linkages among various NGOs ensure and enhance effectiveness of NGO activities. But, the field experiences suggest that majority of NGOs do not establish harmonious relationships with fellow NGOs everywhere and so also with the State of Orissa to secure not only better understanding but also economies of scale. Their size, funding pattern, objectives, distance etc. create indeed differences and most of them do not intent to share the experiences and information that strengthen the cause of NGO sector. But, observations bear testimony to their unhealthy competition for which the inter organisational relation among the voluntary sector appears to be very thin in Orissa. Source of fund, item of expenditure, contact persons in Government organisations, composition of beneficiaries, decision making procedure are a couple of sensitive issues which make the works and styles of functions quite dissimilar at the grassroot level. However, there are a few NGOs in Orissa who organise their activities unitedly on common issues of socio-economic concern through interactions, discussions and decisions by reaching at consensus. This is indeed more vibrating, transparent to deal with sensitised issues under common platform and in most cases such effort seems to have succeeded in overcoming the incapacibilities of self-designed NGO in handling any issue alone.

A close look at different developmental activities undertaken by NGOs in Orissa highlights the enriched diversity existing in the field. Needless to say that the role of NGOs in Orissa in quantitative terms may not be impressive, the emergence of NGOs as a third sector and also as a supportive to alternative approach to development create a lot of enthusiasm among the policy makers and professionals. Further, it is glaringly visible that NGOs of yesteryears in the charitable or welfare oriented bodies have become increasingly development-driven organisations. Therefore, it seems the current watchwords in NGOs are 'empowerment' and enabling.

To conclude, since NGOs are heterogenous groups, a uniform action plan cannot be expected from all—for they have their own agenda of activities and philosophy. One of the major problems with NGOs with regard to development is that they get confused owing to their complexity character of development. However, many of them are not sceptical and do undertake indeed organisational activities without touching the existing social structure and without having thorough knowledge of the

components of development, growth, justice, participation, sustainability and gender equality, the world development scenario exhibits the failure of development efforts in many fronts and the signed failure is the inability of efforts to reach the poorest of the poor owing to the absolute poverty of millions. Organisation is an inevitable input for development nodoubt but, participation of government organisations and NGOs in the people's programme rather than people's participation in the programmes of third party organisation is the need of the day. The NGOs working in Orissa for the upliftment of the alienated, marginalised sections of the society are still to work with much vigour which will go in a long way to fulfill the mission they stand for—because Orissa still occupies lowest rank in terms of human development index.

(continued)

Since upon a first year of independence, NGOs, their leaders and workers were considered as the main force of the social and economic development. Gradually with the passage of time, the NGOs became increasingly associated with the growth of the country. But due to the failure of the government to carry out its social and economic programmes, the NGOs have been forced to take over the role of the government in the development of the country. The new recognition of the role of NGOs has led to a new spirit of co-operation at the national level. Policies are designed to shift power and authority from the state to people's own organisations. The government wants to involve the NGOs in the development effort without going through the various procedures of getting their proposals through various ministries that can result in people which the government itself is unable to do.

The Role of NGOs :

The NGOs have been assigned multiple roles covering human resources in social welfare and economic development. The role is now being defined by WOKRUP and follow up organisations. The NGOs are to

help the government in implementing and monitoring the implementation of governmental programmes.

Create awareness among people concerning different development programmes launched by government and to raise voice against

local malpractices & corruption.

To facilitate people's full participation in the process of development.

Initiate decision-making in implementation and planning.

NGOs in their Role of Sharing and Caring

Dr. (Mrs.) Sujata Pati,

M.A., M.Phil, Ph.D. (Uthal)

Lecturer in Economics

P. G. Department of Industrial Economics

Government College,

Angul, Orissa

Introduction :

Once upon a time, soon after independence, NGOs, their leaders and workers were considered as the voice of the poor and the agents to bring about socio-economic transformation. Gradually with the process of working closely with the govt. the NGOs became bureaucratised and lost their earlier clan. But due to the failure of the government to reach each and every person residing in each and every corner of our country, recently NGOs are assigned a far greater role in the governments' programme. The new recognition of the role of NGOs derives itself from its new spurt of activism at the grassroot level. Policies are designed to shift power and privilege from centralised state to people's own efforts. The government wants to involve the NGOs in the development effort without going through the onerous procedures of getting their proposals through various ministries, they can reach out to people which the government itself is unable to do.

The Role of NGOs :

The NGOs have been assigned multiple roles starting from awareness to social welfare and economic development. The role as has been defined by WCARRD and follow up conferences. The NGOs are to :

- * help the government in supplementing and modifying the implementation of governmental programmes.
- * Create awareness amongst people concerning different development programmes launched by government and to raise voice against local malpractices & corruption.
- * To facilitate people's full participation in the process of choosing, making decisions, organisation for implementation and taking action

own assets, (b) what demands in terms of rural upliftment they can postulate and present to the authorities, (c) the training they should undergo to acquire the skills they need for undertaking constructive work and for waging struggles and (d) the struggles they can foresee.

The Study :

On the background of the vital role assigned to the NGOs, the present study is an attempt to have a closer look into the functioning of two important NGOs operating in Angul district: the Utkal Navajivan Mandal and the Gram Seva Mandal. This study renders a close look into the activities they are undertaking, their achievements, the problems they are facing and finally a few suggestions to make the NGOs successful.

The Utkal Navajivan Mandal (U N M) :

The Utkal Navajivan Mandal was established in Oct. 1948, immediately after the Orissa tour of Thakker Bapa in 1947. Through the dedicate and consistent selfless effort of Late Nabakrushna Choudhury and Malati Choudhury this organisation has brought about significant transformation in socio-economic atmosphere of Orissa as a whole encompassing the districts like Koraput, Ganjam, Phulbani, Keonjhar, Sundargarh, Mayurbhanja, Dhenkanal, Angul and Kalahandi. The important activities of the organisation during the last 48 years have made the organisation a part of socio-economic and cultural life of the people of Angul.

ACTIVITY PROGRAMMES OF UTKAL NAVAJIVAN MANDAL

Economic Welfare

Social Welfare

Agricultural Development
Khadi and village Industries

Matrumangal Kendra	Training for women	Child Care	Kretch house	Old Age home	Early Childhood education	Non-formal education
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Every year at least 100 women deliver their children in Matrumangal Kendra of Angul. This centre has the reputation for providing best services to the mothers before, after as well as at the time of delivery. The state government gives financial help of Rs. 1500/- every year to undertake this activity which is certainly very meagre in comparison to

The programme to train women to engage themselves in various productive activities was started initially to train 9 women with the aid of OXAM. The sphere of training activity with continuous effort has been increased to train 400 women at present.

Child care centres initially were established at 4 places to look after the children of poor people. In 1996 there were 160 centres working in the district.

To look after the children of poor working women within age group 1-3 years kretch House centres are established at 4 places which help the poor working mothers, particularly the day labourers to leave their small children in these kretch Houses at the time of work. At present the Utkal Navajivan Mandal is running 14 such centres in the district benefiting 520 small children.

An old age home has been established in 1985 to accomodate 25 poor old people. Day care centres are also working to provide medical care, entertainment facilities and education to the old people.

Since 1985, 25 early childhood education centres are working to provide primary education. Under this programme atleast 30 students are getting primary education at each centre thus benefiting more than 1000 children every year.

Since, 1988, non-formal education centres are working in 100 villages benefiting 2805 people. In 1996 also 2666 people are benefited by these centres.

The founders of the UNM, Smt. Malati Choudhury and Sri Nabakrushna Choudhury being a true Gandhians have initiated the production of Khadi Cloth at various centres. Two new modern charakkhas are installed at two centres to speed up the thread making process. This programme was started with 56 women, 10 weavers and 10 others to make threads and cloth which have been increased to 495 women, 90 weavers and 623 other workers. These centres are producing both cotton and silk threads and cloth. In 1995-96 the worth of cloth produced by different centres of Angul district was Rs. 3,47,280.00.

Small economic activities like rice trading, making rope and bamboo work are being encouraged by this organisation by rendering financial assistance also. Various agricultural activities have been encouraged covering 150 acres of land benefiting 200 small and marginal farmers. The needy farmers are also given financial assistance to level unused land.

In spite of the sincere efforts and noble aim of the organisation severe financial crises are hindering the organisational activities. Scarcity of funds is hindering the wide spectrum of activities, inspite of the well organised, disciplined and devoted workers of the organisation. They are struggling hard to survive and to keep up with the activities they have undertaken.

THE GRAM SEVA MANDAL (G S M)

The Gram Seva Mandal was established in 1977 for fighting drought and building up the shattered economy of poor villages on the basis of concerted community efforts. But gradually with the passage of time other economic, welfare and awareness programmes are being undertaken by the organisation.

During 1977 to 1983, the Gram Seva Mandal has undertaken agricultural development work in 18 villages benefiting 900 people covering 274 hectare of land by establishing 16 lift irrigation points and 2 irrigation channels, providing seeds, fertilisers, pesticides etc. which continued till 1990-91.

Two women organisations were set up in 1989 for implementing income generation programmes. These organisations are encouraging women and helping them to undertake activities like basket making, preparation of food items like papad, achar etc. As a result of continuous effort in this direction 18 such organisations are working at present.

Since, 1983 the Gram Seva Mandal is mainly undertaking social welfare and awareness activities. Removal of untouchability is the main thrust of the Gram Seva Mandal. The full time workers and part time volunteers of the organisation are conducting meetings at village level, conferences at regional level, organising community dinners, group discussion, kirtan mandalies and common workshops to fight against the social problem of untouchability.

The welfare programmes for the aged have been undertaken by the Gram Seva Mandal to provide health care to the neglected old farmers, and poor labourers. 5 day care centres are established in 1983 for their health check up. They are being provided with medicines and enjoy the entertainment activities. Up to 1995 there were 55 day care centres working in the adopted villages benefiting 3712 people. An old age home is established with the help of Ministry of Welfare, Govt. of India to render services to 25 destitutes in 1993 where alongwith the

provision for accomodation, clothing & medicine, provision for relaxation are also available to them.

Gram Seva Mandal has established 30 Adult Education Centres to make adult people literate. 600 learners are given books regularly and helped to learn under this programme.

In order to bring about sustained development in economic and social sphere, the Gram Seva Mandal is working through 60 Yuvak Sanghas who are helping in the process of village development through self help and participation.

Besides these, community plantation, wasteland development, provision of fodder and fuel through plantation activities, provision of drinking water by digging wells and tube wells are also undertaken by the Gram Seva Mandal.

The Gram Seva Mandal is mainly conducting awareness activity programmes. The efforts yield very limited result because of the age long conservative habits in the society, particularly in village as well as due to the interdependence of social and economic factors on each other. In spite of the attempts of the Gram Seva Mandal, the progress of the works undertaken is not satisfactory, the response of the concerned rural people is found to be invariably poor. The villages are geographically cut off by rivers and nalas from the developing neighbourhood thus posing hindrances for continuous and regular work. The beneficiaries have not yet come to a position to be organised to take up social and economic upliftment of their non-areas.

Problems Encountered by NGOs :

1. The governments' entry into non-governmental sectors and the voluntary sector's entry into governmental programmes have always crippled voluntarism.

2. The danger to the development of NGOs today is much greater as they are bureaucratised and thus subject to interference from local politicians and party influential. For the NGOs sector, the new temptation of becoming development agents is combined with the new threat to their voluntarism and their ability to critically evaluate government policies on behalf of the people and intervene justly and creatively.

3. The participation of the people is too low. Most of the time non-participation is because the community has not been prepared suffici-

ently ahead of the launching of the programme and local leadership has not been involved.

4. Uneven development of voluntary effort in different parts of the country is posing as a constraint. There seems to be no relation between the size of the state and its population and the number of active voluntary organisations.

5. Despite the official policy of encouraging voluntary efforts NGOs do not get real support from the bureaucracy and political leaders. The style of functioning remains bureaucratic and there is an expectation that they will show their obeisance in the corridors of power to get grants. The unfortunate result is that genuine grass root level organisations get discouraged.

6. Quite often village factionalism, rural power structure and vested interests prevent the people from joining in specially if the programme challenges the existing system which denies social justice and exploit the poor.

7. Illiteracy, poverty and a low level awareness are acting as hindrances for the NGOs to achieve their targets.

8. In spite of the grants-in-aid now available, a majority of NGOs still face an acute problem of lack of financial resources which hampers their functioning. At times lack of financial resources forces the NGOs to give up an activity half-way through and pick up another for which funds are available. The NGOs depend heavily on foreign funds which are uncertain. Funding agencies have their own perceptions and often impose their priorities and programmes on the NGOs. Adhoc grants from government and other aid agencies tend to compel them to manage a variety of unlinked programmes which threaten both continuity and expansion.

9. NGOs are also facing leadership problem. Taking initiatives and making decisions become the prerogative of a few at the top. This increasing centralisation, affects flexibility of functioning, hampers democratisation of decision making and the views and concerns of other members of the organisation are often overlooked or suppressed.

10. The NGOs are not paying adequate attention to build the target group's capacity to change and develop and indentify their own leaders. The lack of efforts to develop viable organisations of the rural poor is one reason why despite the presence of NGOs and VOs for several

decades grass root organisations have not really come up to help general empowerment of the poor.

Recommendations :

Development work at the grass root level needs a committed cadre of development workers who can meet the challenges of the existing social and political structures. The deal with socially sensitive and politically fragile aspects of society and work with the people to bring about a perceptible change in their lives, which in its operational context is very difficult to achieve. Their involvement in the process of development should be continuous at least till such time as the people attain sufficient awareness of their lives and become self reliant.

1. The minimum conditions for the sustenance of such activities include.

- * Guaranteeing the beneficiaries the fulfilment of their minimum expectations.
- * The people participating in the process are guaranteed their minimum wage.
- * The need for growing village community assets to ensure increasing returns.
- * The income received by the beneficiaries as well as the initiators should at least be equal to their opportunity income.
- * Benefits from the development process should be so shared as to stabilise the participatory institution itself.
- * The mediation cost of the NGOs for their liaison with the state/donor agencies on the one hand and capacity building of the people and their own community based organisation must be minimal so that they can spread themselves graphically.
- * The levels of activities should stabilise at an equilibrium level which guarantees income benefits at a sufficiently high level to prohibit people to move out.

2. NGOs interface with several actors in the development process of the people, donor agencies, government organisations. Establishing relationships with all these actors need effective planning based on existing realities. These relationships are not static and should suitably adapt their development vision and mission to deal with a changing environment.

3. The quality and effectiveness of an organisation's work largely depends on its ability to acquire resources. With timely access to resources, the NGOs can execute developmental programmes effectively and in the later stage can develop necessary infrastructural facilities to make its interventions more meaningful and productive. The management skills both to build up resources and to utilise them properly for the envisaged objectives becomes a basic requirement.

4. Genuine voluntarism can not maintain its independence and its capacity to make the state and its plans accountable to people and cater to their needs if it depends on and is controlled by the Govt. It is not state that can create opportunities for voluntarism, it is the citizens who do that. Dependency on government funds will create vulnerability to total control. With a vested interest on the programme of the state, voluntary agencies can not also hope that they can resist the programmes when they turn anti people. The ability to say no implies full freedom from dependence and from an obligation to say yes.

5. Bringing about co-ordination among the staff to work in accordance with the development vision, constant reviewing to upgrade their work skills and providing them with renewed strength and vigour, are crucial for strengthening the NGOs as a potential development organisation. An NGO's leadership should be able to instill the NGOs' vision of development among all members of staff so that they can collectively become instrumental in bringing about a positive change in the lives and conditions of the focus groups and bind them together with a common thread of organisational vision.

Effective leadership, its equal treatment of all staff members, appropriate communication, building up of human relationships, understanding the genuine and human problems of the staff, appreciation of and feed back on good and useful work done, understanding the latest talents and skills of the staff and providing them with enough scope and opportunity to enhance these qualities are some important aspects that NGOs' man agements ought to look into if they anticipate effective, efficient and productive development interventions.

Concluding Remark :

NGOs' role as mediating agent between the government and people also acts to safe guard local resources and protect local interests and rights. Centralised resources in the form of finance, capital and

The thrust of policy should rest on the possibility of bringing about institutional changes through a process of participation. This process is rewarding not only due to economies of scale advantages but also to establish ecological sustenance. Both these economic and economical developments together can bring about a stable and steady growth in the village setting. Democratic participation needs a reversal transfer of power back to lower levels, back to the people, to the marginalised among them, to those deprived of their resources and livelihoods by the development process. The process of corporate living of the people through an active intervention by the NGOs also depends on the latter's commitment to the principle of sharing and caring. Then the question comes : How much of role of sharing that the NGOs are willing to practise with people where they are working ? Should they let the people gradually 'own' the responsibility of managing the development effort at the local level while concentrating their own role in dealing with the State/donor agencies ?

Acknowledgements :

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Role of NGOs in Rural Development of Orissa

—Problems and Prospects

Dr. K. K. Sen

M. P. C. College,
Baripada

Introduction :

Non-government organisations (NGOs) or voluntary organisations have been functioning in India for several decades. Before independence, Gandhiji had once desired to transform India through voluntary constructive action. However it was since the seventies that there has been a colossal growth in their numbers. By the end of the Second Five Year Plan in 1956, there were only 6000 voluntary organisations in the country. Today more than one lakh voluntary organisations are operating in India. In Orissa, the number of operating NGOs is about seven thousand. But less than 500 are really active. In addition to religion, philanthropy, social service, education and training of people, the NGOs operate over a wide range of activities, which include anti-poverty programmes, welfare of women and children, health care and family welfare, provision of safe drinking water etc.

NGOs under the Five Year Plans :

The voluntary sector has been duly emphasized in our five year plans. Particularly since the Third Five Year Plan, the NGOs have been increasingly associated with the implementation of the planned programmes. During the Sixth Five Year Plan the NGOs were assigned an important role in the management of the various developmental programmes. It was to avoid political and bureaucratic corruption that in the mid-eighties, Rajiv Gandhi wanted the NGOs to play a prominent role in rural development. Consequently in 1986 the Council for Advancement of People's Action and Rural Technology (CAPART) was formed, to finance voluntary action in different fields.

The Seventh Five Year Plan further recognised the role of voluntary agencies in accelerating the process of economic and social

- (a) providing a basis for innovation with new approaches, towards integrated development.
- (b) ensuring feedback regarding impact of various programmes.
- (c) securing the involvement of local communities, particularly those below poverty line.
- (d) organising the beneficiaries of anti-poverty programmes through awareness generation.
- (e) inculcation of appropriate skills.

The Eighth Plan Document laid down that a greater emphasis would be put on the role of voluntary agencies in rural development. A nationwide net work of NGOs would be created. To facilitate the working of this net work, three schemes relating to the creation/replication/multiplication and consultancy development have been worked out by the Planning Commission. Efforts would be made to evolve a system for providing one window service to NGOs working in the area of integrated development.

The Ninth Five Year Plan has given topmost priority to agricultural and rural development and provision of basic minimum services to the rural areas. For the achievement of these objectives, the Plan proposes to promote and develop people's participatory institutions like Panchayati Raj bodies and self-help groups. This naturally calls for a larger role of the NGOs in the future development scenario of the country.

Socio-Economic Profile of Orissa :

Orissa is one of the backward States in the Indian Union. It suffers from several socio-economic constraints. Particularly poverty and unemployment are colossal in rural areas. Unless the rural economy of Orissa makes a significant improvement, Orissa cannot make its mark in the Indian economy. Therefore, greater emphasis has to be given for rural development in Orissa.

Rural development has a wider connotation. It does not mean development of a geographical area, arbitrarily called "rural". It also does not mean the mere development of the agricultural sector. It implies transformation of rural life and activities in all aspects—economic, social, cultural, environmental and institutional—with the ultimate objective of improving the quality of life of the poorer and weaker sections of the society. Rural development thus has several dimensions

Role of NGOs in Rural Development :

Since the inception of planning, the Government have initiated several schemes and programmes for rural development. But due to various reasons, the strategy of development has not succeeded. It is in this context that the role of the NGOs in rural development and poverty alleviation programmes has been duly recognised. The voluntary agencies may play an effective role in rural development due to the following reasons.

(a) The NGOs are well-suited to the job of rural development. They function closely with the people and hence can better articulate people's changing needs and coordinate development activities.

(b) The World Conference on Agrarian Reform and Rural Development held in Rome observed that many rural development programmes failed in the developing countries due to the lack of people's participation. It thus felt that as the NGOs who work closely with the people and know their pulse, they can ensure people's participation in development programmes.

(c) As the NGOs are small and autonomous, they have a flexibility in approach and operation. There is a high level motivation among the functionaries. They can introduce new experiments to suit the conditions of a particular area and involve different categories of people for effective implementation of such programmes. They can also make periodic appraisal of the rural development scheme and take corrective measures to rectify mistakes.

(d) Even today there is a psychological gap which separates the rural masses from the administrators. The NGOs can act as a link between the Government and the people and mobilise local resources for additional investment. In addition to economic development, they can also bring about socio-cultural changes and organise women and other backward communities to prevent atrocities on them.

Problems :

During the last two decades there has been a phenomenal rise in the number of NGOs. But growth of voluntary movement suffers from several limitations and problems.

(a) The majority of the NGOs are steeped in corruption. These organisations are often started by people of dubious character and are used as a medium of earning some easy money. Many NGOs are just letter-head organisations. Sometimes, several voluntary organisations are

CAPART had blacklisted more than 564 NGOs during 1995-96. Out of these about 300 were simply non-existent. 22 blacklisted NGOs belonged to Orissa. One out of three NGOs had swindled CAPART funds.

The big NGOs again are engaged in ugly demonstration of opulence and wasteful expenditure. Some premier NGOs in Orissa spend as much as 55 to 60 percent of their total budget on frivolous items. During elections, a lot of NGO money is diverted for fighting elections. In 1994 Andhra elections, some 35 independent candidates were openly supported by a big foreign-funded NGO.

Very few NGOs enjoy a strong administrative and financial infrastructure. Most of the NGOs are not self-supporting. They depend on domestic or external donors. This may effect their autonomy.

Among the NGOs one may witness a lot of inequality. According to a report about 70% of all grants in Orissa are received by only five premier voluntary organisations.

Besides organising the rural poor, the NGOs often come across social, economic and political tensions. Sometime back an official of an NGO in Rayagada was implicated for fomenting political unrest among the tribals. The brutal murder of Sanjay Ghose, the Secretary of AVARD-NE in Assam, shows that the NGOs often have to operate under inhospitable and risky situations.

During the last decade, the voluntary organisations have received massive assistance. But it is not possible to correctly evaluate their performance, because voluntary agencies interact separately with various Ministries and Departments. Absence of a common mechanism to evaluate and monitor the progress of voluntary organisations in different sectors is a serious problem. Recently, the Government's proposal to monitor their activities and impose financial accountability has been strongly resented by the NGOs.

Suggestions :

A major charge against the NGOs is their corrupt practices. To curb this, it is necessary to make them accountable. The CAPART has already decided that no NGO would be given more than Rupees one crore for any single project. There would be random inspection of NGOs who

It should be the legal responsibility of every NGO to place its detailed budget involving income and expenditure for the knowledge of its employees, the donor agencies, as well as the public.

The Government should impose some restriction on the mushrooming of voluntary organisations. In India there are more than a lakh NGOs. On the other hand hardly 7000 NGOs operate in Latin America. To ensure the reliability of the NGOs the authorities may gather information about the nature of office bearers, the source of its income etc. Only a genuine and honest NGO should be associated with rural development.

The Government and NGOs should complement and supplement each other in promoting rural development. In fact, there could be a division of activities. The major tasks might be performed by the Government. But in several other fields, such as identification of beneficiaries, evaluation or monitoring of the programmes, the NGOs could play an effective role, due to their proximity to the people. The Government-NGO partnership must be strengthened. It calls for a system of closer interaction. Efforts have to be made to develop linkages with various Government Departments and NGOs. This will also help in coordination of the activities of different NGOs.

The Sivaraman Committee on the role of voluntary organisations observed that they could play a very useful role in planning and implementation of the area development plans. However, they must have necessary expertise, proven standing and practical experience for the same.

Government Policy :

The Government of India set up a group to examine some specific problems of the voluntary agencies, which recommended the following :

- (a) greater dissemination of information about the developmental schemes through the media. The CAPART was to act as a clearing house for rural development information.
- (b) Simplified procedures and time bound disposal of applications for assistance.
- (c) Preparation of a grant-in-aid code and a manual giving details of procedures.
- (d) The Planning Commission had set up a Task Force. Along with

good track record should be replicated. To provide a forum for them, it further suggested the setting up of a national grid of voluntary agencies.

Conclusion :

At present a large number of programmes of the Central and State Governments and Central Ministries numbering more than 150 are being administered and implemented through NGOs. The political scenario in the country is fast changing. With increasing marketisation and liberalisation, the role of the State in developmental activities is to go through a sea-change. In such a set up the NGOs are likely to play a more prominent role. Rural development in the future is going to be increasingly privatised. As such there should be a transformation in the character of NGOs so that they can play an active part in rural development.

Indian agriculture is a staple in the economy. In the irrigation system, the farmer is the main stakeholder. The irrigation system is a complex system that involves the farmer, the government, and the private sector. The farmer is the one who is most affected by the irrigation system. The government is the one who is responsible for the irrigation system. The private sector is the one who is interested in the irrigation system. The irrigation system is a complex system that involves the farmer, the government, and the private sector. The farmer is the one who is most affected by the irrigation system. The government is the one who is responsible for the irrigation system. The private sector is the one who is interested in the irrigation system.

NGO and Participatory Irrigation Management in Orissa

—An Apparent Revolution

Dr. Sridhar Behera

Senior Lecturer,
Government College,
Angul.

Introduction :

Indian economy is basically a rural economy. Therefore any strategy of development must contain the development of rural areas. This has been well realised by the planners and policy makers since 1951 and various steps are taken for upliftment of the rural poor. Rural development is a concept that connotes overall development of the rural areas. The 8th plan gave greater emphasis to participation of NGOs and the beneficiaries themselves for effective implementation of the rural development programmes.

The rural development must contain the strategy of growth, welfare, response and integration. Participatory Irrigation Management (PIM) is a strategy of agricultural development. Since the latter is a strategy of rural development, PIM automatically becomes the first alternative in the comprehensive rural development package. The PIM strategy aims at motivating the farmers to participate in the process of managing the irrigation system in line with equity and justice. The NGOs are assigned the responsibility of motivating and organising people to participate in the development process. Farmers' participation in irrigation management aims at achieving growth and welfare on the basis of response from the beneficiary and the process is integrated by the NGOs—the catalysts. Therefore PIM contains the integration strategy from the NGOs' point of view and growth, welfare and response strategy from the farmers' view point. It is believed that the NGOs would better integrate the process of rural development without any fear or favour and

Participatory Irrigation Management (PIM) : Concept and History :

Indian agriculture is a gamble in the monsoon. So the importance of irrigation in India is hardly exaggerated. Irrigation is considered to be a vital and technical input for agricultural productivity. This input is scarce in the country and is not evenly distributed between the states and within the states due to various economic and geographical reasons. Moreover, the irrigation potential in our country is quite insufficient from the view point of growing demand for food. Therefore, management of irrigation water is strategically important. Farmers' participation in Irrigation Management is equally important since they are the beneficiaries of irrigation water and their participation in the distribution of irrigation water will be more egalitarian and democratic.

Participatory Irrigation Management is a very old concept in India. Even before the British rule, the irrigation systems were usually managed by the farmers. The then rulers were providing and developing the water source but the operation and maintenance (O & M) of water distribution were assigned to the farmers. The examples of farmer managed irrigation systems are the Phad system of Nasik and Dhule districts of Maharashtra, Vijaynagar canals built by Vijaynagar Empire in Karnataka and Tank Irrigation in Tamilnadu, Karnataka and Andhra Pradesh. These systems do exist today and the farmers are used to manage the repair and maintenance of the system.

After independence, agriculture was given high priority and thus attainment of self sufficiency in food became the strategy of first Five Year Plan. Major, Medium & Minor Irrigation projects were commissioned by the State governments for the twin purpose of enhancing irrigation network in the country and providing water to the farmers. But the irrigation sector did not develop substantially during the plan period due to heavy emphasis on creating capital assets in the country and inadequate budgetary provisions. Realising this the National Water Policy 1987 gave high priority to the establishment of water Users' Associations (WUAs) with a purpose to distribute water equitably and develop agriculture. The policy states that efforts should be made to involve farmers progressively in various aspects of management of irrigation system particularly in water distribution and collection of revenue.

Prior to the National Water Policy 1987, some water users' co-operative societies were formed during 1978-84 in case of minor

to new thinking with respect to any reform in the organisation of farmers through the WUAs. In 1985 the Ministry of Water Resources also accorded high priority on farmers' participation in irrigation management. Accordingly all the state Governments were requested to adopt the strategy of farmer participation in minor irrigation projects on pilot basis in an area of 500 to 1000 hec. in each CAD project. The Ministry also suggested that NGOs should be persuaded to organise the farmers for the better management and distribution of irrigation water. The state governments formulated their water policies in line with the national policy or with some modifications.

In India, the efforts of organising farmers and involving them in water management are very slow over time. Hence the progress in this line is not promising. Some farmers' organisations are existing in the country and very few of them are functioning well. However, Maharashtra is the pioneering state in organising farmers in the irrigation management. Participatory irrigation management, especially on small irrigation system is a tradition in Maharashtra. Organisation of farmers in the major system of Godavari canals was made in 1937 while forming the Big Bagaitdar Society at Samavastar village in Ahmednagar district with a command of only 100 hec. Similarly, the Government of Maharashtra has prepared guide lines to involve the farmers in Water Management at minor level by forming water users' co-operative societies. In this respect the main thrust and responsibilities were given to the NGOs.

In Orissa, the programme was started by the Govt. in collaboration with World Bank and the responsibility of forming WUAs was given to the NGOs. Under the System Improvement and Farmers Turnover (SIFT) scheme, Govt. of Orissa has undertaken the rehabilitation of the existing irrigation systems with a view to achieving equitable and assured water deliveries to all the farmers in the command area. Under this scheme, the Govt. will entail participatory approach by promoting water users' association of farmers at the minor/distributary level. The association will work jointly with the Department of Water Resources and share rights and responsibilities. The Department will take the charge of operation and maintenance of the main system but the WUA will take up the O & M responsibilities from the distributary/minor and below. It is expected that this will improve the irrigation intensity leading ultimately to increasing productivity in the rural areas.

Role of NGOs in PIM :

A co-ordinating group is necessary to facilitate peoples participation in the development process. The said groups are the catalyst agents between the initiator of rural development process i.e. the Govt. and the ultimate beneficiary farmers. In the absence of a catalytic agent there may be an information gap between the Govt. and the receiving farmers. The NGOs can fill up this gap.

The developing countries like Philippines and Mexico have introduced participatory approach and experienced that the NGOs can better organise the people for effective participation in irrigation management. In India, Action Research Programmes on irrigation management was undertaken since 1985 which suggests that NGOs are efficient in organising the farmers and they have better understanding of the operational problems. Similarly the Ministry of Rural Development was of the opinion that the NGOs can better motivate the people for managing common property resources and can help distribute benefits equally among the beneficiaries. However, at present the working of the NGOs in the irrigation sector is inadequate. Hence, efforts should be made to activate organisation of people in the rural development process.

Performance of NGO in PIM :

The irrigation network in Orissa is hardly 30% of the total cultivated area which is much less than the developed states like Punjab and Haryana. And what is more distressing is that there is colossal misuse of irrigation water. This is mainly due to the absence of farmers' organisation in respect of distribution of water and lack of management and repair of the canals by the irrigation department. Realising this the Govt. of Orissa gave importance to the formation of Water Users' Association under Farmers' Organisation and Turnover (FOT) scheme, a component of SIFT. The scheme has been introduced on experimental basis in four irrigation projects and later on it will be extended to other irrigation projects.

The Govt. of Orissa have made a target of implementing the rehabilitation of four irrigation projects in the first phase of the SIFT programme. The projects are Ghodahada entire command—7390 hec., Musikulya part command distributary No. 11—6570 hec., Derjang entire command—5970 hec., and Aunli entire command—1742 hec. The basic

gation management system through participatory approach i.e, involving the farmers in the operation and management of the irrigation water in Orissa. The present programme of Farmers' Organisation and Turnover (FOT) and its implementation through the NGOs is an innovative task. Since the programme is implemented on an experimental basis and is based on a new approach, it seems to be an apparent revolution in the field of water management and time will prove its efficiency and workability.

The present study is an attempt to make a provisional appraisal of the role of NGOs in organising farmers and forming WUAs under the FOT programme. The Youth Service Centre (YSC), Angul is choosen as the NGO for evaluation of its performance in participatory irrigation management. The YSC, Angul has been assigned the responsibility of organising WUAs in the command of Derjang & Aunli irrigation projects. The organisation has taken up the charge of forming 13 WUAs covering 52 villages under the Derjang command and 4 WUAs covering 8 villages under Aunli command.

The YSC, Angul is a district level NGO in the Angul district being registered in 1984 under the societies Act. The organisation is actively engaged in rural development programmes including water resources and agro development. It has been assigned the responsibility of organising WUAs as per the recommendations of the district authorities. The organisation started the FOT programme under the Derjang and Aunli command area only from April'96. Since the programme is completely new in Orissa and it is started by the sample NGO (YSC) less than a year ago, the present study makes a provisional appraisal of the role of YSC (the NGO), in participatory irrigation management.

Implementation of FOT :

The implementation process of FOT is divided into four phases : (a) Preparation, (b) Assessment, (c) Organisation, (d) Joint Management leading to turnover. The preparation phase is of one week duration and the NGOs are exposed to FOT concept through the orientation work-shops conducted by WALMI. The YSC in this phase, identified the aykut area and various non-formal meetings were conducted with the farmers in the area of operation. Data relating to the system and problems faced by farmers were collected.

The YSC has identified 5851 hec aykut area (out of 5970 hec) under

have already been formed. With regard to Aunli Irrigation Project an area of 1746 hec has been identified and 4 WUAs have already been formed. The initiation and motivational efforts of the NGO are promising since the number of farmers present in the group meeting is sufficiently higher than the number of farmers contacted. For example a total number of 6242 farmers from Derjang project have been contacted for motivation whereas a total number of 7575 farmers are found present in the meeting but in case of Aunli, it is less promising. However the membership enrolment is less due to the farmers' engagement in harvesting. It is expected that the enrolment and membership will increase soon after the harvesting season is over. It is observed that the motivational efforts of the YSC has made the farmers enthusiastic to participate in the irrigation management system.

The assessment phase is of three months duration within which the NGO has to collect data relating to the problems of the irrigation system. The YSC alongwith the I.D. staff and farmers have made a "Participatory Walk-through" of the minors and sub-minors and realised the practical problems relating to distribution of water through the minor/distributary. By this field work, the farmers, the NGO and the ID department became aware of the priority improvement of the system in respect of the canals. In collaboration with the project engineer, the YSC has prepared a detailed map of the command area of the respective WUAs. A base line survey relating to the existing agricultural sub-system (cropping pattern, productivity, water use etc.) by the YSC is in progress. After obtaining the above informations, future course of action will be decided upon for further improvement in the system.

After the assessment phase is over, the organising phase starts which actually covers a period of 4 to 6 months. The YSC is now in the stage of organising the farmers in forming WUAs. It is noticed that the YSC has organised a large number of meetings to motivate the farmers about the benefits from FOT under the Derjang command area whereas the organisation of meetings in the Aunli area is relatively less. As per the guidelines of the FOT, the NGO in this phase should ensure that the farmers are committed to maintaining the improvements done and operation and maintenance of the system will be ultimately handed over to them. The YSC has motivated a total number of 6310 farmers under the Derjang command and 1687 farmers under Aunli irrigation project, out of which 3504 farmers from Derjang and 990 farmers from Aunli became members by paying Rs. 10/- each as membership fees. Similarly, quite

The YSC during the assessment and organisation phase of the FOT has identified various problems faced by the farmers. The farmers in the Derjang and Aunli irrigation projects expressed grave concern over the management process by the department. Most of the farmers expressed their views that they are not getting water neither at the time of necessity nor adequately as per their requirement. The main reason of this inequality in the distribution of water is frequent leakages of water both at the minor and distributary level by the individual farmers and lack of timely repair and maintenance of the system by the ID. At the initial period the farmers did not have confidence in maintaining the system and they held the view that when the department is unable to manage the system properly, how can they themselves will be able to manage the system. But at present the farmers have been able to gather confidence in operating the system.

When the farmers will manage the system collectively, the leakages in water distribution may be removed and collective efforts in the operation and maintenance will remove the difficulty of repair both in the minor and the main system by the Department. One important problem the NGO (YSC) under study is facing is the problem of co-ordination. The NGO has to co-ordinate between the departments of Rural Development, Agriculture, Irrigation and Water Resources. When the farmers are motivated and become conscious about the benefits from their participation in the irrigation management, the government departments become more active. Thus, the NGO under study has not only motivated the people to participate in the FOT activities but at the same time made the departments active in the field.

The final phase of FOT (which is yet to be started) is joint management leading to turn over. In this phase the NGO will act as a catalyst between the WUAs and Department of Water Resources including WALMI for enabling the members of the WUA in learning management of distributaries, reading of water levels, operation of water gates and operation and maintenance of the system. It means, in this stage, the farmers will learn different aspects of the system. On the other hand, the Irrigation Department will also make the farmers informed on the availability of water from the storage, seepage losses in different sections of the main canals, water consumed/used during the session. Thus, the "Irrigation Literacy" of farmers would be raised and they would be

very low in Orissa) among the farmers may be a limiting factor to the learning process of the farmers. But this will be self-combating since the farmers can learn a lot about the system through "learning by doing" during their course of participation.

Conclusion :

Participatory Irrigation Management is a new approach of agricultural development which is started in Orissa from April'96 on an experimental basis through FOT programme under the comprehensive package of SIFT. The programme is carried forward by the NGOs and by now two out of four phases have been completed by the YSC, the NGO under study. The YSC is now in the phase of organising farmers to participate in the process and the performance of YSC so far is promising. The present study forecasts a good future of the FOT programme in the context of agricultural development through PIM in Orissa.

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Role of NGOs in Informal Credit Delivery System

—A Study of the Rural Credit Linkage Programme Through the Self Help Groups (SHGs) in Keonjhar District

Dr. Surendra Nath Behera

Sr. Lecturer in Economics
D. D. College, Keonjhar

The multi-dimensional nature of rural development makes it imperative that voluntary efforts are to be tapped to promote rural development and make decentralised planning a meaningful one. In the U.N.'s terminology voluntary organisations are called—non-governmental organisations (NGOs). Voluntary efforts lead to participation and involvement of members of the community in endeavours of social and economic well being. Voluntary efforts aims at helping people to help themselves by mobilising their own resources, tapping their potential for finding solutions to their problems and implementing them to realise their goals.

India has a strong NGO movement enriched time and again by early missionaries, philanthropists, Gandhians, Social workers, common people and professionals. Mahatma Gandhi had strongly supported collective social action in preference to the role of the state. Vinobha Bhave and Jayaprakash Narayan had also endorsed his views. The need for involvement of voluntary organisation in development has been duly recognised in the official documents in the post-independence era. They are supposed to mobilise community support for developmental activities, particularly in rural areas. They prepare comprehensive development plans, conduct feasibility studies and cost benefit analysis and explore ways and means to induce local participation in planning and implementation. Association of Voluntary Agencies for Rural Development (AVARD) provides consultancy service in project formulation and technical support.

They have an innovative role to play in securing the involvement

government promised to move towards a process of development "where the people operate and the government must co-operate". The document further added "involvement of voluntary agencies and other peoples' institutions is essential for effective micro level participatory planning." NGOs complement very well the development endeavours of the government by filling gaps in terms of geographical coverage and programme needs.

Voluntary effort is sometimes used interchangeably with people's participation. The purpose of a participatory approach to development through the NGOs is not only to reduce the 'Dependency' on government but increase actual empowerment of the people and democratise the process of development. The new paradigm and normative level of development emphasise that development should be people centred. It is right to give priority to those who are more deprived, physically weak, isolated and vulnerable.

The NGOs play the role of intermediaries between the govt. and the rural people. They are the sources of direct contact with the rural people and it is through them that the rural development programmes find a meaningful reality. People's participation in development process will involve identification problems and issues through PRA techniques, enabling to arrive solutions, pooling resources, making effective management and equitably sharing the benefits and making further probe for other development avenues.

Our study is confined to Keonjhar district which is a backward district of Orissa with a large majority of the tribal poor in the mining belts. Percentage of rural population to the total population in the district is 87.33 and the percentage of SC population and ST population to total population in the district is 11.16 and 44.82 respectively. The literacy percentage in the district is 44.7, below the state average of 49.09 % as per 1991 census.

Among the 44 NGOs functioning in the district of Keonjhar some of the praiseworthy organisations are Keonjhar Integrated Rural Development and Training Institute (KIRDTI), Harichandanpur; Dhakotha Subak Sangha (DJS); People's Association for Rural Reconstruction, Naranpur; Bharatiya Institute for Rural Development (BIRD), Kanto; Voluntary Association for Rural Reconstruction and Appropriate Technology (VARRAT), Swampatna; Antodaya Chetana Kendra, Hadgarh; Training and Research Institute for Mass Socio-Economic and Ecological Development (TRIMSEED), Keonjhar ; Adivasi Vikas Samiti, Bhadrasahi and others. They undertake different types of social work.

Role of NGOs in Informal Credit Delivery System—Linking of SHGs, NGOs and Banks :

One of the main objectives of decentralised credit planning is to identify credit gaps in rural areas and take steps to bridge them. He who earns bread for the family borrows money at one time or other to meet various types of needs ranging from pure consumption purpose to pure production oriented activity. Further, in poorer house holds, women members also work as partners in earning income for the families. So they also need credit at one time or other. The number of rural families and of these, the number of poor families in the district are as under.

(a) No. of rural families as on March, 92	—	2,11,610
(b) of which number of families living below poverty lint (BPL)	—	1,75,533

If the credit need of at least one main worker from all the 2,11,610 rural families and one woman worker from all the 1,75,533 BPL families are attempted, then we should have at least 3,87,143 live accounts with our 136 micro credit delivery units working in rural areas in formal sector (47 PACs/LAMPs, 3 PLDBs, 35 Branches of RRB & 51 branches of CBs). It means that a unit should have 2,846 number of live accounts. Presently per unit average number of loan accounts is around 1000. This indicates that 65% of our rural borrowers still continue to depend on informal sources, among which the share of rural money lenders is just near total.

One of the major reasons which obstructed the formal sector credit delivery units to reach them is that the credit needs of the persons of small means or weaker sections belonging to the category of SF/MF, agricultural labourers, rural artisans, petty traders etc., are often of short duration, in small quantities and on repeated occasions. Further, the dividing line between consumption and production purpose is also sometimes blurred. In this complex back-drop, the cost of infrastructure and manpower for credit appraisal, supervision and recycling would be too high and, therefore, prohibitive.

To break the impasse, the formal credit delivery agencies have evolved strategies to reach the un-reached through informal credit delivery system. The two modules adopted so far are (1) Credit linkage to Self Help Groups (SHGs) either directly or with the intermediation of NGOs

(1) Credit Linkage to SHGs :

A Self-Help Group is an informal association of 15 to 20 persons of small means belonging to the similar vocation/trade/socio-economic stratum sprung up either spontaneously or with the active involvement of Service Area Branch or NGO undertaking mobilisation of savings among its own members and using such resources to the emergent credit needs of the members of the group. They act as mutual benefit funds highly localised and growing with periodical subscriptions. The credit decisions as regards who should get, for what purpose, how much amount, at what rate of interest and for what period are all made in the group meeting. The utilisation of loans and recovery performance have been found to be nearly 100% due to democratic set-up and working of pressure groups. They are operating since 1992-93 as per the RBI guidelines and their growth has taken a rising trend.

If such SHGs are in active existence for a period of 6 months, then the credit gap of a group (ie assessed aggregate requirement of credit by members minus the internal savings generated) can be met upto 4 times the internal saving generated by any formal credit delivery agency.

NABARD gives 100% refinance support at 6.5% rate of interest p.a. against all such disbursements by all types of credit agencies. The SHGs get it at 12% rate of interest per annum. In case, the disbursement is done with the intermediation of an NGO, then the bank charges 10.5% rate of interest p.a. thereby giving a reasonable margin of 1.5% to the NGO.

Reserve Bank of India has issued instructions to all the scheduled commercial banks to treat the SHGs' linkage programme as their normal business activity.

Due to various meets, workshops and training programme conducted by NABARD in the district during the last 3 to 4 years, about 110 SHGs have been formed in the district.

Out of the above 110 SHGs, 26 has so far been linked with a credit assistance of Rs. 34,055/-. The details of physical performance are as under.

Credit Assistance of the S H Gs through N G Os.

Year	Name of the Bank	No. of S H Gs linked	Credit Amt. (Rs.)	Promoting NGO
1994-95	Bank of India			
	Tarini Temple	9	5,325/-	IDP Kendudiha
1995-96	Bank of India			
	Tarini Temple	2	2,100	IDP Kendudiha
1995-96	BGB Dhakotha	4	15,250/-	DJS Dhakotha
1995-96	BOI Harichandanpur	10	4,280/-	KIRDTI Harichandanpur
1996-97 (up to Oct.'96)	BOI Dhenkikote	1	5,000/-	Kasibeda VVV club
Total		26	31,955/-	

Source : NABARD Keonjhar Branch.

In the areas of operation of the above NGOs vast scope exists for promotion of new SHGs. Besides, the participation from the other NGOs may be sought by the banks for the purpose.

(2) Bulk Lending to NGOs for the On-lending :

In order to meet the credit requirements of individuals or small groups which for one reason or the other are not formed into SHGs immediately, a scheme of bulk lending by banks to NGOs with refinance support from NABARD has been introduced in 1993. The main objective of the scheme is to provide easy access and timely credit to the poor, small artisans/craftsmen/micro entrepreneurs who will be ultimately converted into SHG. The rates of interest, security from the ultimate borrowers, documentation etc., are left to the agency's discretion. On a selective basis NABARD has also been providing revolving fund assistance directly to NGOs.

The NGOs have played the role of intermediaries between the banks and the people. Given the fact that the poor in the rural and urban areas do not have the necessary capabilities to approach and negotiate with organised credit institutions, the linking of formal credit institutions with the rural and urban poor through intermediaries such as non-governmental organisations (NGOs) must be thought of as an alternative mechanism for meeting the credit needs of the poor. The linkages between the credit agencies and self-help groups (SHGs) and NGOs are

till in the process of evolution and serious efforts are called for to explore this area fully. The establishment of self help Group can be traced to the existence of one or more common problems around which the consciousness of the rural poor is built. The group is normally a response to perceived need and also promotes savings among their members & uses pooled resources to meet the needs of their constituents. Initiating and monitoring the credit programmes can be more effective, less costly and can also contribute towards quality of lending ensuring timely need-based loans and keeping the loan size within the repaying capacity of the borrowers.

The main advantage of the bank in linking the SHGs and NGOs would be the externalisation of a part of work items of the credit cycle viz, assessment of credit needs, appraisal, disbursal, supervision and repayment reduction in formal paper work and the transaction cost. Large mobilisation of savings and improvement of recovery performances also strengthen the cases in their favour. The NGOs undertake the responsibility of repayment of the loan and have helped not only in helping the rural poor of SHGs but also have helped the commercial banks in effective credit flow. The SHGs can be recognised by the banks as the Self Help promotional Institutes' They are financed under Pilot project and collective efforts launched by the NABARD.

The scope for lending to SHGs should be included by the banks as part of their lending to the weaker sections, inclusion in service Area approach. The extent of lending activities depends upon the extent of poverty, support of NGOs and above all the need and desire among the poor to form groups for mutual benefits. To get the benefits of catalytic service of NGOs the names of the NGOs dealing with the SHGs will be indicated on a block-wise basis in the service Area Credit Plants. Experience has shown that group dynamics and poor pressure have brought in excellent recovery from the SHGs.

The operational structure of the credit linkage programme with interest rates is shown below.

Linkage process	Rate of interest
NABARD to Banks (Refinance)	6.5%
Banks to SHGs	12.0%
Banks to NGOs/VAs	10.5%
NGOs/VAs to SHGs	12%
SHGs to members	As decided by the SHGs

With a view to studying the functioning of SHGs and NGOs for expanding their activities and deepening their role in the rural sector, the RBI Governor had in Nov. '94 constituted a Working Group comprising the NGOs functionaries, academicians, bankers and consultants under the Chairmanship of Shri S. K. Kalia, Managing Director of NABARD. The members of the working Group visited a number of NGOs and SHGs in the country, held widespread discussions and studied several issues concerning SHGs and NGOs through a sample of 171 SHGs, 49 NGOs and 97 Bank branches. The Working Group is of the view that linking of SHGs with the banks is a cost effective, transparent and flexible approach to improve the accessibility of credit from the formal banking system to the unreached rural poor. Further suggestions were made for a follow-up action.

To spread the message of 'Development Through Credit' and educate rural borrowers on healthy credit ethics, Vikas Volunteer Vahini (VVV) Programme is under implementation in the district. Under this approach, a service Area Branch of a Commercial Bank/Regional Rural Bank or a Credit Institution having maximum presence in a rural area organises, either independently or with the help of NGOs/Research Institutions/Agricultural Universities, a Farmers' club. The members of the club are those who have made efficient use of credit, increased their income and repaid the loan instalments in time and regularly and have volunteered to share their experiences with the fellow villagers. The membership strength of each club is about 15 and one among them is designated as Chief Volunteer. The volunteers meet at least once in every two months and these meetings are also attended by the officials from the maintaining branch & NGO, concerned Block level Government Extension Officers, LDM & AGM (DD), NBs.

So far 10 such clubs have been organised in the district. These are spread in 8 out of 13 blocks. Bank of India, Bank of Baroda, Baitarani Gramya Bank and Keonjhar CCB are the sponsoring banks. Of these 10, 2 are working with NGO participation and one is all-women club.

During 1996-97, VVV satellite clubs are being opened with the participation of Bank of India.

Operational Problems :

Despite the achievement and success of the NGOs in various specific functional areas they are confronted with inherent weaknesses and defects which have acted as obstacles. If overcome, they would

Lack of dedicated leadership and politicisation of organisers and leaders have created a crisis of leadership and a vacuum. There is a tendency towards monopolisation and interlocking of leadership. With expansion of area and scope, some prominent personalities often begin to assume overriding powers in running the organisation and this increasing centralisation affects adversely flexibility of functioning and hampers democratisation of decision making. It has caused politicising welfare by 'political mileage'. There has been a failure to enlist popular participation. Adequate attention is not given to build the target groups capacity to change and develop and identify their own leaders. The lack of efforts to develop viable organisations of the rural poor is one reason despite the presence of NGOs grassroot organisations has not really come up.

Isolation of most of voluntary organisations functioning at local level without any linkage among them has made their action fragmented without any visible impact on the life of the community.

NGOs are less developed in rural areas as compared to the urban areas due to the backwardness and ignorance of the rural people and lack of enthusiasm among social workers to work among the rural people.

All these drawbacks have to be removed to improve operational problems.

Tribal Development and NGOs in Phulbani

Mrs. Kabita Sahu

Research Scholar, NKC Centre for
Development Studies,
Bhubaneswar.

Dr. Sudhakar Patra

Lecturer in Economics,
Government College,
Phulbani.

Non Government Organisations have played a very important role in the socio economic development of Post independent India. New forms of Organisational activities have evolved, corresponding to the increase in social awareness and the complexity of socio-political issues. NGOs are non profit organisations and formed, established and managed by a group of people with a specific purpose. After the registration under Societies registration Act with seven or more persons, they can start their operation with office bearers and members. They maintain a registered office and are accountable to the Government and funding agencies. Since money provides motion to all the activities, there are certain agencies who provide financial assistance to the NGOs. After acceptance of project proposals submitted by the NGOs, these funding agencies sanction money to them.

1.1 Objectives of the Paper :

The basic objective of this paper is to analyse the role played by two important NGOs in Socio-Economic development of tribals in Kondhamal (Phulbani) district of Orissa. These two NGOs are NIPDIT and NISWASS. They tried to supplement the efforts of the Government in helping communities, that are struggling to come up on their own. They undertake various projects related to nonformal education, health of tribal women and children, organisation and empowerment, forest and environment etc. This study seeks to analyse the achievements of various projects implemented in tribal areas. The specific objectives of this

- (i) To outline the major area and projects that are undertaken by the NGOs.
- (ii) To list out the funding agencies and extent of their support to implement the projects.
- (iii) To discuss the number of beneficiaries and participants in each of the major projects.
- (iv) To investigate success and failure of the project by analysing the quantitative and qualitative aspects of the programmes.
- (v) To find out the limitations to the successful implementation of the projects and difficulties in operating in tribal area.

1.2 National Institute for People's Development, Investigation and Training (NIPDIT) :

NIPDIT is a non Government Organisation established in 1983 under the Societies Registration Act with its headquarter at Phulbani. The main focal group of the Organisation is Scheduled Caste, Scheduled Tribe, Women, Children, landless labourers, rural artisans and other weaker sections of the society. The objective of the NIPDIT is to help the oppressed, through awareness building to create confidence for self-help among them. It is engaged in providing development input related to human resources and to some extent material resources. For the last one decade it is undertaking various projects for the betterment of the under-privileged section of the society.

1.2.1. Area Coverage and Staff :

Primarily NIPDIT started its work in the tribal and hilly regions of the Phulbani district of Orissa. But later it extended its activity to the most vulnerable regions of the other districts like Bolangir, Keonjhar, Mayurbhanj, Kalahandi, and Nayagarh. At present, it covers 377 villages and 37 Gram Panchayats in 7 Blocks. It has taken some programme which covered the whole state. It maintains net working relationship with other like-minded NGOs and government departments.

At present 37 full time staffs and 100 part-time animators and community mobilisers are involved in this organisation.

1.2.2. Project and Funding Agencies :

NIPDIT undertakes different projects from Government and non-government organisations who provide funding and non-funding support to run its activities smoothly.

The important projects which have been implemented during the last three years are as follows :

- (i) IPME—Innovative Primary Mass Education.
- (ii) ITDP—Integrated Tribal Development Programme.
- (iii) GRE—Grass Root Education.
- (iv) SCGJ—Sustainable Centre for Gender Justice.
- (v) CADP—Comprehensive Agricultural Development Programme.
- (vi) ICDP—Integrated Community Development Programme.
- (vii) IRADP—Integrated Rural Action and Development Programme.
- (viii) CDD-WATSAN : Control of Diarrhoeal Diseases and Water Sanitation Programme.
- (ix) EESD—Environmental Education for Sustainable Development.

Extension approaches are adopted to plan, implement and evaluate the project and programmes. Social machineries are developed in the areas in the form of CLOs, VLO, Youth Organisations, Women Organisations to provide inbuilt propelling force of social action.

The agencies which provided funds to implement the projects are given below :

(i) NOVIB	:	Netherland
(ii) CAA	:	Bangalore
(iii) KFO	:	Austria
(iv) NORAD	:	New Delhi
(v) CAPART	:	New Delhi
(vi) BFW	:	Germany
(vii) MISERIOR	:	Germany
(viii) Central and State Governments.		

1.2.3 Achievements :

The tribal and backward classes are almost illiterate and the case of women is still worse. NIPDIT organised education committees to activise mass education. The literacy activities are taken up through night schools. The attitude of parents are influenced in favour of education through personal and group counselling. Total number of night

TABLE—1

Quantitative achievements in mass education

Activity	Number	Participants
Teachers Meeting	42	422
Guardians meeting	12	256
Committee member meeting	10	162
Teachers Training	07	142
Vocational Training	09	NA
Children Fair	08	882
Padajatra	38	1239

Source : Annual Report 1994-95, NIPDIT.

NIPDIT through its community Health projects has handled the geriatric and paediatric problems of tribals. The achievements on community health are satisfactory and enlisted below :

TABLE—2

Achievements of Community Health Projects 1994-1995

Activity	Number	Participants
Health Workshop	02	112
Meeting on Health Insurance	04	097
Health Awareness camp	40	426
Village Sanitation	62	558
Immunisation	4141	—
Liquor Prohibition	252	—

Source : Annual report 1994-95, NIPDIT.

NIPDIT has strived hard in creating awareness among general masses about the value of forest and perspectives of afforestation. It formed 62 Forest protection committees with 1168 members. 6 forest workshops are organised with 1670 participants. It created new forest area which is about 2150 acres.

For Organisation and Empowerment, NIPDIT has arranged 65 youth club meetings, 75 VLO meetings and 60 CLO meetings. For empowerment of women, it organised 73 meetings of women, and formed 12 women organisations. It has organised 211 women meetings.

For Income generation among tribals it has taken up micro enterprises on slate making, weaving, processing of food-stuff and preparing jam, jelly, squash and pickles. It provides weaving training to 12 people and slate-making to 6 people. It has covered 45 villages with total participants of 408 to form income generation groups.

It is difficult to measure the qualitative changes made in the tribal community by NIPDIT. It can be concluded that the achievements and progress of this NGO are tremendous and eye catching, of course development in its holistic form is yet to be achieved, but it is expected, that this organisation is likely to make tremendous change in tribal life and society in near future.

1.3 National Institute of Social Works and Social Sciences (NISWASS) :

NISWASS was established in 1971 as a non-profit organisation with the objective of supplementing the efforts of Governments in helping the communities who are disadvantaged and poor. Since its inception it has been engaged in exploring, analysing and trying to understand the multifarious problems affecting the inhabitants of the fourth world. It is also devising ways and means of helping them to reduce their existential difficulties through education, research, training and action.

The Institute has three main divisions dealing with Training, Research and Action programmes. The present study intends to analyse three major programmes such as Non-formal education, Health and TRYSEM which are specially intended for tribal development in Phulbani.

1.3.1 Nonformal Education (NFE) :

Universalisation of elementary education is the basic philosophy behind the nonformal education. Specially it is meant for out of school children who are either pushed out, pulled out or dropped out. At present the programme is functioning in 100 villages in Phulbani block of Kondhamal district. Out of 100 centres 10 are upper primary and 90 are primary. 110 persons, called the facilitators look after the working of the NFE. 8 supervisors are effectively administering and supervising the programme with the project director with a master degree in social work. NISWASS is assigned this project of NFE in Phulbani. The area covered by NFE is mostly inhabited by Scheduled Tribes and Scheduled Caste people.

(i) *Project Officer :*

The entire administrative and financial powers for running the project are vested on the project officer. He coordinates between supervisors and instructors and supervises the centres.

(ii) *Supervisors :*

One supervisor looks after 10 to 12 centres and assists the project officer in the field level.

(iii) *Village committee :*

Each NFE centre has a village committee headed by the village headman and it supervises the daily activities of the centre.

(iv) *Facilitator/Instructor :*

Each centre has one instructor for primary section and two for the upper primary section. With minimum qualification of 8th pass, the instructors teach for 3 to 4 hours a day, generally in the evening from 5-30 P.M. to 8-30 P.M.

(v) *Class room and teaching materials :*

The classes are generally conducted in the 'Puja Mandap' or in village "Community hall". The teaching materials and text books are generally provided by State Council of Educational Research & Training (SCERT).

At present 2678 children are being educated, out of which 80% belong to SC/ST. Class wise detailed number of students are as follows :

Class	Students	Class	Students	Class	Students	Class	Students
	976	III	423	V	310	VII	33
I	523	IV	356	VI	34	VIII	23

NISWASS had a vast network in Phulbani and it has developed its own strategies to suit the local needs and necessities. Language is not a problem as the instructors teach the children in local language. This NFE programmes implemented by NISWASS has gained much popularity in tribal areas of Phulbani.

3.2. TRYSEM :

The Project on Training for rural youth for self employment (TRYSEM) was implemented by NISWASS in the year, 1991 and the project has its registered office at Phulbani. Ministry of Welfare, Government of India provides all necessary facilities for the project.

present there are six units of TRSYEM which provide training to scheduled caste people who are poorest of the poor. The units are as follows :

TABLE—3

Unit	Duration	Number of students
1. English Typing and Stenography	6 Months	10
2. Weaving	6 Months	10
3. Rope, papochh making	4 Months	10
4. Tailoring	6 Months	10
5. Leaf plate and cup making	3 Months	10
6. Cane chair work	3 Months	10

Only Scheduled Caste people above the age of 18 who are the residents of Phulbani and live in rural area are provided with training. Each one receives a stipend of Rs. 150/- per month. The trainees are given certificates after successful completion of their training.

1.3.3 Health :

Health project is a centrally funded project started in the year, 1991 in Daringibadi area of Phulbani by NISWASS. With its registered project office at Candahapa, Daringibadi, it covers 103 villages of that area. It has one ambulance, 2 doctors, 2 technicians, 2 nurses, 2 peons and it works as a mobile hospital. These villages are untouched by government dispensaries and health services. All these villages are tribal dominated and the centre provides free medical treatment with medicines. Whenever required, it works as a referral centre to the patients and forwards their cases to the main hospitals. Daily turnout and treatment of patients vary between 80 to 100. Most common patients treated suffer from malaria fever, bloodlessness, jaundice and cough. This project almost provides good health services to the people of these 103 villages.

1.4 Problem and Difficulties of NGO's Operating in Tribal Area :

Phulbani has a number of hills along with dense forest in some areas. Except a few, most of the villages are scattered over the hills and forests and beyond the reach of the roads. Of course, two wheelers could be used in some areas, but the rest of the villages can be reached only

a lot of difficulties in creating confidence among them, explaining the purpose of their projects and involving them in their work. The problems can be briefly outlined as given below :

- (i) It is difficult to reach most of the villages and people due to lack of rural roads and communications.
- (ii) People are so illiterate and dogmatic that they do not accept the offer to participate in the activities of the NGOs.
- (iii) Infant mortality rate is the highest in this district compared to other parts of India, and Malaria is the main cause of death. NGOs working for children and women development become helpless as they are not approachable.
- (iv) Government machinery is highly inefficient in tribal area and it does not supplement the activities of NGOs.
- (v) Evaluation of success and failure of projects is difficult in tribal area as the beneficiaries and participants do not respond properly to the evaluation.

5 Conclusion :

The progress and achievements of two NGOs namely NIPDIT and NISWASS for tribal development in Phulbani are quite encouraging, these NGOs supplement the government effort in a big way in bringing tribal development. NIPDIT encourages individual development, specially children and women. NISWASS undertakes projects on education and health which indirectly help the tribal people. These two NGOs are opening the ways and means for holistic development of tribal people since more than last 10 years. The tribal people trust and also participate in activities of these two NGOs more sincerely than in Government projects. It is expected that these NGOs will collaborate with more like-minded NGOs for development of the tribals, the poorest section of the societies.

Role of Voluntary Agencies in Promoting Rural Housing :

—A Case Study of Gram Vikas, Mohuda (Ganjam)

Dr. Bhagabat Patra

Reader & Head,
Department of Economics,
Berhampur University,
Berhampur (Ganjam)

Mr. Umesh Chandra Panigrahy

Lecturer in Economics,
Gopalpur College, Gopalpur-on-Sea
Gopalpur, Ganjam

"...We cannot sincerely and effectively plan rural housing from a city office work. We have to go to the village and plan for their real needs"

—Lourie Backer.

The villages are playing a vital role in the overall development of the economy in the country. About 76% of the country's population lives in villages but the housing conditions in villages are far from satisfactory. The estimated housing shortage by 2000 AD is in the order of 410 lakh housing units of which 255 lakh fall in rural areas alone.

Providing shelter to teeming millions of rural people has been a challenging task to the Government of India. The very vastness of the problem and constraints like poverty and resource crunch necessitate the intervention of voluntary agencies in rural housing development. The success of rural housing programmes depends upon the active participation and willing cooperation of the rural people through self-help organisations and voluntary agencies. Realising the importance, the National Housing policy also invites the participation of Non-Governmental Organisations (NGOs) in implementation of various housing schemes to achieve the goal of "Shelter to all" by 2000 AD.

The response from the voluntary organisation has also been quite encouraging. The decade of nineties has witnessed a tremendous prolife-

rural housing issues. The yeoman service rendered by the Centre of Science and Technology for Rural Development (COSTFORD), Thrissur Independent Initiatives, (New Delhi), Centre of Science for villages (Wardha), Gram Vikas (Ganjam) etc. gives us a ray of hope in our relentless fight against houselessness.

In this light, this paper examines in brief about the history and development of Gram Vikas and its role in rural housing. An attempt has also been made to discuss the negligence of State Government in promoting NGOs in housing sector.

Gram Vikas—Origin and Role :

Gram Vikas, a leading voluntary organisation of Southern Orissa, works in partnership with marginalised people for a sustainable future with improved quality of life. Gram Vikas has its origin in the Young Students' Movement for Development (YSMD), a Chennai based Students' Organisation. In 1971, a group of YSMD volunteers came to Orissa to undertake relief and rehabilitation efforts of cyclone affected coastal area of the state. This group set up a base at Mohuda village, 12 Km from Berhampur of Ganjam District.

Gram Vikas emphasises the development of rural Orissa with giving priorities to tribals, women, schedule castes, and other economically weaker sections of the Society. At present, it has undertaken the programmes to develop education, health, biogas, water and sanitation, housing and women welfare and environment.

Gram Vikas receives subsidies and grants for specific development activities under various schemes of the Government of India and the state. Foreign funding agencies and other Indian NGOs also provide support to Gram Vikas in its work.

Rural Housing Activity :

For about a decade, the Gram Vikas has been working in rebuilding and reinforcing rural housing as an area of its major concern. On the one hand, it has been working on the research side of rural housing, i.e., experimenting with alternative technologies and low cost building methods. On the other hand, the Gram Vikas has been continuously applying these research outputs in housing construction projects, both state funded and private. Its utilisation of these methods is vital to

Gram Vikas started its housing scheme in 1990 as an agent of the Council for Advancement of People's Action and Rural Technology (CAPART). CAPART has taken up the mission of promoting rural housing through voluntary agencies and has been providing funds across the country for the construction of houses with infrastructure like roads, sanitary needs and other common facilities. CAPART has funded rural housing to the tune of Rs. 30 crores till 1996.

Gram Vikas has completed five housing projects in eight villages covering two districts and constructed 409 houses. Recently it has started its sixth project at Samiapalli village of Chatrapur Block. Projectwise house construction is given below.

Project	Year	Name of Village	Name of Block	District	No. of houses
1	1990-92	Patharapatasala	Dharakote	Ganjam	75
2	1992-93	Koradakana	Seragada	Ganjam	74
3	1993-94	Tamana	Kukudakhundi	Ganjam	80
3	1993-94	Gangabada	Rayagada	Gajapati	24
4	1994-95	Ellesore	Rayagada	Gajapati	25
4	1994-95	Talburutal	Patrapur	Ganjam	26
4	1994-95	Tamana	Kukudakhundi	Ganjam	15
4	1994-95	Patharaganda	Gosani	Gajapati	24
5	1995-96	Patharapatasala	Dharakote	Ganjam	42
5	1995-96	Kantagaon	Rayagada	Gajapati	24
6*	1996	Samiapalli	Chatrapur	Ganjam	80

* Samiapalli Project is not completed.

Source : Gram Vikas Housing Project File.

Selection of Villages :

Gram Vikas has selected villages for its subsidised housing scheme by following certain basic parameters. For example, the villages like Patharapatasala and Koradakana were chosen as the people of these villages became houseless during 1990 flood. Similarly, the villages of Gajapati district like Gangabada, Ellesore and Kantagaon were selected because these were located on the hill top and there was no communication facilities. The villages like Tamana, Talaburutal and Patharaganda were chosen as they were tribal dominated villages. At present the village Samiapalli is chosen for its sixth project of housing scheme. The

Identification of Beneficiaries :

Generally, the beneficiaries are selected from among the people who come under below poverty line irrespective of caste, creed and religion. However, Gram Vikas also gives priorities to the households affected by flood, fire, earthquake, cyclone and other natural calamities. Displaced persons, and widows of defence personnel are also chosen for subsidised housing facility. Of course, Gram Vikas has assured CAPART that the benefits of non-SC/ST families should not exceed 40% in a project.

The land for the house should be in the name of the female member of the beneficiary household or in the joint names of both wife and husband. If land Patta is in the name of the husband, a "family settlement agreement" on plain paper is to be signed so as to confer joint title to the husband and wife on the house.

Location of Houses :

Housing construction has been made on the residential lands given by the beneficiaries. The location of house plots is generally chosen by them. Houses are built either by individual scattered basis or microhabitat approach. Generally, Gram Vikas adopts micro-habitat approach for the reduction of cost of construction and to facilitate the development of infrastructure such as street roads, community drainage, drinking water supply, street lighting, etc. However, care is taken to ensure that the houses are located nearer to a village so as to ensure safety and security, nearness to work place, and social communication and integration.

Housing Design :

Gram Vikas designed the houses in accordance with the desire of the beneficiaries in order to provide proper living place, kitchen, ventilation, sanitary facilities and smokeless chulhas. Generally, it follows a common housing design, for all its housing project. The houses are constructed on 450 Sq. Ft. of plinth area. Each house has two bedrooms, one kitchen and one sanitary latrine room. Houses have 30 sq. ft. worth of front and back verandah and two windows for ventilation.

Cost of Houses :

The housing projects are financed by the CAPART and bene-

	Plain Area	Hill/Difficult Area
1. Construction of house (Basic cost)	Rs. 12,500	Rs. 14,300
2. Construction of Sanitary Latrine & Smokeless Chulha	Rs. 2,650	Rs. 3,180
	Rs. 15,150	Rs. 17,480
3. Beneficiary contribution (10% of the CAPART assistance)	Rs. 1,515	Rs. 1,750
Total	Rs. 16,665	Rs. 19,230

Source :—Gram Vikas Housing Project File.

However, Gram Vikas constructed houses on the basis of an estimated cost of Rs. 100/- per Sq.ft. Thus, the total cost of each house is Rs. 45,000/-, out of which Rs. 15,150 is provided as subsidy by CAPART and the rest has been arranged from the Housing and Urban Development Corporation (HUDCO) at nominal rates of interest of 9%, and with 15 year instalment repayment period. Commercial banks and HUDCO provide finance to the beneficiaries keeping Gram Vikas as a guarantee. Gram Vikas takes the responsibility to collect the loan amount on instalment basis from the beneficiaries.

Gram Vikas provides financial facility in terms of grant and loan only to purchase materials and skilled labourers to construct the house. The unskilled labour is mainly supplied by the beneficiaries themselves.

Delivery Mode :

The spirit of Gram Vikas initiated rural housing programme is that the houses are not constructed and delivered by an external agency. Gram Vikas also does not act as the supplier of houses. On the other hand, it involves beneficiary families to construct their houses with the help of technical assistance and guidance of Gram Vikas. Generally, the housing project is undertaken and implemented by appointing a project co-ordinator. A supervisor is appointed by Gram Vikas to supervise the housing scheme for every village. Generally construction of houses started during leap seasons when the beneficiaries find leisure time.

Low cost eco-friendly Technology & Local Materials :

Gram Vikas has a long tradition of experimenting with alternative technologies and low cost building methods. Technologies using burnt bricks, cement and steel, on a large scale, are discouraged. Gram

Vikas gives encouragement to use wood substituted, burnt brick substituted and lime and lime surkhi, which are vital to check deforestation and over use of natural resources. Thus the houses are eco-friendly in nature.

However complete freedom is given to beneficiaries to decide which materials and construction system to be used subject to the guidance of Gram Vikas. This will result in economy of cost, ensure quality of construction and lead to satisfaction on the part of the beneficiary. Generally, Gram Vikas encourages to form small committees of the beneficiaries in each village project to finalise the design, acquisition of materials, coordination of construction work with the farmer.

Conclusion :

In spite of phenomenal growth of NGOs in Orissa a less significant number of them are engaged in the housing Sector. Again, it is a point of fact that the NGOs in Orissa have not received the attention or support they deserve from the state government. Neither the planner nor the politician seems to know how the NGOs can be effectively utilised in the housing sector.

Role of NGOs in Promoting Saving Habits and Nutritional Education Among the Women—A Case Study

Gitanjali Panda

Senior Research fellow

Department of Analytical & Applied Economics

Utkal University, Vani Vihar

Starting from a "top-down" development philosophy, the governments in developing countries have generally concentrated on providing basic services and infrastructure through different schemes of poverty alleviation, rather than enabling the people to do more for themselves. Government had seen development as something to be done for, rather than done by people.

Now, things have changed. Because of the failure of the governmental agencies to percolate the benefits to the deserving poor, the NGOs have increased in number and have acquired greater importance by putting up new experiments in economic development. In the present scenario, the donors are showing greater interest in channelising their money through the NGOs.

One of these experiments concerns the women's issues. Both NGOs as well as the government have recognised the fact that the increase in income level of women benefits the entire household. And also the nutritional and educational status of the family is determined to a large extent by women's economic status. Because women spend more of their income on child welfare and household requirements. Thus, providing higher incomes for women is the best way to develop them and their families.

There are two approaches to raising women's income:— The employment approach, whereby women are employed in a production unit owned and run by an NGO and the empowerment approach, which involves forming village groups and developing self-confidence and enabling women to increase their incomes through collective action and group savings.

In this paper, I have examined a case study of CARE which is an acronym for cooperative for assistance and relief everywhere, in one of

their projects, i.e., small economic activity development (SEAD) project in Chatrapur block of Ganjam district. Following an approach of empowerment, their objective has been to provide financially sustainable savings and credit services to economically poor women. Imparting nutritional education was another component of this project.

The SEAD aimed at improving the health of 0-6 year old children belonging to ICDS mothers through an integrated strategy of increasing the income of the mother and improving their knowledge regarding proper health and nutritional practices. The implementation of the project started in the month of August 1992 in the Chatrapur block which was a Non-DWCRA and non-world bank assisted block.

Strategy of their Project :

Firstly, they formed 32 SLAs (Savings and Loan Associations) in the project area and in these 32 SLAs there are 603 women members as project participations. In order to involve the participants more effectively, group discussions were conducted to gather specific information on each women related to IGA, literacy mobility, willingness to save and avail loan to practise or expand IGA etc.

Group funds were created by interested woman members of SLA who save in order to help each other at the time of need. The concept of mandatory savings of Rs. 12/- to Rs. 20/- per member per month was systematically facilitated to inculcate the savings habit among women. At a later date, voluntary saving was also introduced and facilitated. The total savings as on June 1996 were more than Rupees Five Lakhs since the inception of the two methods of savings.

In order to inculcate banking habits, the groups were facilitated to open saving accounts either in the bank or post office. Now they are even thinking of availing loan facilities from the bank and self help group financing scheme of NABARD.

The other facet of financial status of SLA is loans. There are two types of loans that a member of SLA can apply at a point of time i.e., IGA or production purpose loan and consumption purpose loan. Loans were taken and invested and repaid to SLA along with interest as per the fixed repayment schedule.

As the groups matured in managing money and loaning activities out of their savings amounts and as the credit demand increased, external funding was given to the groups and was repeated as and when the credit

demand was more. The repeated doses of capitalisation was provided subject to group cohesiveness, 90-95% repayment rate, high fund revolve-ment, regular savings and regular meeting etc.

SLA women were trained on the basis of IGA management skills such as how to calculate profit and loss from an IGA, how to maximise profit, how to pursue forward and backward linkage to the present IGA, how to expand and start an IGA.

For the nutritional component, baseline survey on nutritional knowledge and attitude of SLA women was conducted after the formation of 14 SLAs. Keeping in view the goals of the project, the nutrition education was imparted to all the SLA women in two rounds by AWWS who were trained by the ICDS supervisors and project staff.

Observation :

1. This saving based project has resulted in a total voluntary saving of Rs. 5 lakhs 7 thousand 432 as on June 1996. The rate of interest given on savings to the members is 8% per annum.

2. The concept of group fund has enforced collective responsibility in the group. The group funds have been supported by external funding only after 6 to 8 months after the group formation, i.e., only after the groups matured in managing money and loaning activities out of their savings amount.

3. The average production loan size is Rs. 3275/- as on June 96. The effective loan term is 6-7 months. The number of loans disbursed is 2636. The rate of interest on loans is 24% to 36%. Total capitalisation from CARE was Rs. 9,46,800/-. The size of the group fund is around 18 lakhs. The total portfolio in circulation is 83% and repayment rate has been fluctuating between 80%—90%.

4. The capital need of the rural women who are basically engaged in agriculture, agro based activities, trading and vending varies between Rs. 300/- to 1500/-. Their needs have been partially taken care of by the SLA fund and their dependance on money lenders has reduced to some extent.

5. In the nutritional component of the project, it has been

6. The project operators have faced major difficulties at the time of group formation. Getting the right kind of group is key to success of such community development projects. This process was time consuming in the initial period as it involved women in particular and family and community in general. Also to form women groups in a rural setting in which the socio-economic status of women is not equal to that of men.

Suggestion and Conclusion :

The performance level of the project is quite encouraging. The purpose of bringing the women together to empower them by increasing their savings habit has been successful. The economic benefit was essentially an off shoot of their empowerment. The SLA's major contribution was to instil self confidence by providing economic security through savings. But the range of options and management capabilities is limited to the local area. The incremental income can perhaps be increased if some better alternatives compared to the traditional opportunities are given. The NGOs should provide some inputs in terms of management support, technology and market linkages.

Such projects are likely to be replicated in other areas of Orissa. Even though the environmental and cultural characteristics are different in other regions, the right kind of adaptation to the different situations will ensure the success of such projects.

We can conclude that NGOs have been accepted by the people, government and businessmen because they emphasise more on the basic concepts of development, i.e. empowerment, participation, transformation and sustainability in their functioning. The range of issues that they deal with ranges from human rights to the entire mosaic of development concerns. Their presence is now being felt even at the international level.

But the relationship between government and non-government organisations is not a matter of GO vs NGOs—both of them are not substituting each other, they are complementary to each other.

The Role of NGOs in Economic Development of Orissa with Special Reference to Koraput District

Dr. K. Nana Buchi

Reader in Economics,
Vikram Dev College, Jeypore

&

Sri Surendra Swain

Sr. Lecturer in Economics
Vikram Dev College, Jeypore

In India the voluntary effort has been an integral part of our culture and social tradition. The term voluntary effort implies 'an effort from one's own volition'.¹ It leads to the participation and involvement of the members of the community for social and economic wellbeing. It aims at helping people to help themselves.

In the voluntary effort peoples' participation is institutionalised through setting up of a voluntary organisation. The VOs are formed through the initiatives of the people who are interested in the welfare and development of the Society.² As the VOs can deal better with the poor of the society and deliver the basic needs like housing, water, health, education, family planning, sanitation etc. at lower than the market prices to them, VOs/NGOs are also known as the 'Poorman's' 'Private Sector'.³

The NGO's role in national development is considered as vital because they have the first hand experience and knowledge of local needs, problems and resources at the grass root levels. They are closer to the people and can operate with greater flexibility.

Some think that the terms NGOs and VOs mean the same thing. But all VOs are not NGOs because VOs are initiated by individuals or groups for welfare & development whereas NGOs are initiated, sponsored & constituted by the Government as autonomous bodies for pursuing some specific development objectives. The VOs may or may not be registered under an appropriate Act, but NGOs are registered under the appropriate

while NGOs receive funds mainly from the Government and channel them to VO's for the implementation of the programmes. Further, the VO's can be both non-political and political or ideologically oriented, but NGOs are usually non-political in nature. However the term NGO means wider entity to encompass VO's. Both of them are involved in activities outside the Government sector.³

During the pre-independence period, the voluntary efforts were organised by several religious groups for the welfare of the people. The missionaries too played an important role in organising social services. But after independence, the National Government gave much importance to the role of NGOs/VO's for the rural development as the Seventh Five Year Plan recognised that Government alone could not handle the task of rural development. So it announced a policy for involvement of NGOs/VO's in rural development in a big way. The plan also recognised the role of NGOs/VO's in securing people's participation, ensuring rural development, acting as a link between administration and people, supplementing governmental programmes in rural areas by offering a wider variety of choices and alternatives, functioning as watch-dog of the people at the local level, activating the delivery system, demonstrating how local initiatives and resources can be effectively used and facilitating the process and change in social and economic structure, so that the benefits can reach to a large number of people.

The plan also recognises the participation of NGOs/VO's in the areas with programmes like I.R.D.P., implementation of land ceiling and distribution of surplus land, identification and rehabilitation of bonded labourers, development of Scheduled Castes and Tribes, supply of drinking water, afforestation, social forestry, family planning, health care programmes for women and children in rural areas, literacy programme, development of cottage and village industries, rural housing, promotion of science and technology in rural area etc.⁴

Recognising the importance of NGOs/VO's in the process of social and economic development in the state of Orissa, the State's Eighth Five Year Plan document has placed great emphasis on people's participation through the NGOs/VO's in rural development of Orissa. Realising the importance of NGOs/VO's different consulting committees have been constituted at the state level, district level and coordinate committees at the block level. Their participation in the implementation of different programmes of the schemes particularly in poverty alleviation programmes

The Directory of Non-Govt. State Organisation of 1994 shows that there are 5817 NGOs in the state. All these are registered. Probably the number is more now. All the NGOs are functioning in the State for implementation of various schemes and programmes like poverty alleviation, social welfare, adult education, training and rehabilitation, health, sanitation, drinking water, development of khadi and village industries, non-formal education etc.

At present there are 119 NGOs in the district of Koraput. The District Social Welfare Office gives the details of the NGOs in all the 14 blocks of the district. All the 14 blocks are largely concentrated by tribal population. The tribal population alone constituted 50.6% of total population. There are 188.2 thousand rural families in the district of which 29.7 thousand Scheduled Caste families, 99.0 thousand Scheduled Tribes and 34.2 thousand other families under the poverty line.⁶

Though 99.5% of the rural families are below the poverty line in Pottangi block, there are only 3 NGOs functioning in that Block. Similarly, there is only one NGO in Lamtaput block though 97.8% rural families are below the poverty line. It is found that 27 NGOs in Koraput block and 22 in Jeypore block are urban in nature. Of the total of 119 NGOs, the study reveals that only 29 are active.

Table—1 indicates the financial assistance received by the 18 NGOs from the Government sources between 1987-88 to 1993-94 for various developmental programmes and schemes in the district of Koraput.

TABLE—1

Grants received by the NGOs from the State Government.

Sl. No.	Year	Amount ('000 rupees)
1.	1987-88	5570.8
2.	1988-89	5560.7
3.	1989-90	2188.4
4.	1990-91	1163.8
5.	1991-92	4606.4
6.	1992-93	4164.8
7.	1993-94	13696.7
Total :		36951.6

Source : Office of the District Social Welfare Officer, Koraput (Figures

Of the total of Rs. 36951.6 thousand, Nandapur Gramdani Sangha, Nandapur, WIDA, Similiguda and HIRDA, Kotpad received Rs. 643.8 thousand Rs. 11737.0 thousand and Rs. 218.4 thousand respectively. These grants were received from the Government during the period between 1987-88 and 1989-90. Similarly, the Sarvodaya Samiti, Koraput, the ANKURAN, Narayanpatna, Boipariguda Kshetra Samiti, Boipariguda, SHED, Toyaput, Laxmipur and Bright Career Academy, Jeypore received Rs. 11389.3, Rs. 3097.4, Rs. 425.8, Rs. 6400.2, Rs. 290.8 in thousands respectively during the period from 1991-92 to 1993-94.

In addition to the State finance, some of the NGOs received foreign financial assistance to a tune of Rs. 1566.1 lakhs for their developmental activities during the period from 1987-88 to 1994-95 (Table-2). Of the total, foreign assistance during the year 1993-94, 8 NGOs of the district received Rs. 136.2 lakhs. Likewise 6 NGOs received such contribution amounting to Rs. 119.7 lakhs in the year 1994-95.

TABLE—2

Foreign Finance received by the NGOs in the Koraput District

Sl. No.	Year	Foreign contribution received
1.	1987-88	3.5 lakhs
2.	1988-89	10.3 "
3.	1989-90	152.7 "
4.	1990-91	—
5.	1991-92	18.6 "
6.	1992-93	16.0 "
7.	1993-94	168.1 "
8.	1994-95	1196.9 "
Total :		1566.1 lakhs

Source : Office of the District Welfare Officer, Koraput (Figures compiled)

An attempt has been made to evaluate the working of some of the NGOs of the district. The study reveals that most of the NGOs are inactive and they are in the district only for names sake. Some NGOs are active and involved themselves in the developmental activities only when they receive financial assistance either from the state government or from foreign contribution. For instance, Health and Integrated Rural Development Agency (HIRDA), H...

year 1985 for the purpose of health awareness, building for self reliance and training and rehabilitation, was active till 1989-90 since it received financial assistance from the State Government between 1987-88 and 1989-90. During that period it received Rs. 209.8 thousand as assistance from the State Government. Its own/others' contribution was only Rs. 8.6 thousand. At present the organisation has no role to play in the development activities due to paucity of finance. Another NGO——Integrated Rural Development of Weaker Sections of India (WIDA), Similiguda, though established in 1981 for the purpose of community development, health and nutrition programmes of the community. Womens' programmes and community assets building programme, is inactive since the year 1991 due to non-receipt of any financial assistance. For the implementation of development programmes it received Rs. 116.5 lakhs during 1987-88 to 1989-90. During the same period the organisation spent an amount of Rs. 86.1 thousand as its own funds for implementation of its programmes.

During the study it is also further revealed that some NGOs are quite active and their activities relating to the development of the areas are quite exemplary. For instance, Boipariguda Kshetra Samiti, which was established since 1961-62, was defunct for quite a long period and started functioning again since 1989 due to change in the functionaries. The very purpose of the organisation is to provide training and rehabilitation, Khadi and village industries programmes, social welfare programme and adult education in the locality. At present the organisation is actively engaged in the production of Cotton Khadi. The organisation provided employment to 58 women workers of which 40 are scheduled tribes and 18 scheduled castes, in spinning. It also provided employment to 40 schedule caste male workers in weaving. In addition to Khadi, sometimes it also provides employment in oil-ghani, carpentry and blacksmithing. It established a school complex in the year 1994 which provided education from class 1 to 3 to 40 tribal girls. The NGO received Rs. 425.8 thousand as assistance from the state government from 1991-92 to 1993-94. It is revealed that it has not faced any financial problems for implementing Khadi and Village industries programme, which is its main objective, since it avails the financial assistance from the Khadi Commission.

ANKURAN, Narayanpatna is functioning since 1988. The objectives of the organisation are to provide education to tribals, organising tribal men and women for employment, community health and agriculture.

own funds and contributions from others. Between 1991-92 and 1993-94 received Rs. 4.3 lakhs as state contribution. During the same period it received a contribution of Rs. 3 lakhs from others for the implementation of its programmes to fulfil its objectives.

Another NGO namely Society for Health Education and Development (SHED), Toyaput, Laxmipur, which is registered in 1984 has implemented the programmes like community health, formal and non-formal education, vocational training, population education and environmental development by receiving Rs. 109.2 lakhs and Rs. 346.2 lakhs from state government and foreign financial assistance respectively during 1977-88 to 1993-94. The organisation also extended its area of operation to the neighbouring state of Andhra Pradesh.

Problems of the NGOs are :

1. Though grants are available to some NGOs, a majority of them are still, facing an acute problem of lack of financial resources which hamper their functioning. Due to this reason sometimes the NGOs are forced to give up an activity in halfway and choose another for which funds are available. This leads to half-hazard and lopsided development in the district.

2. The NGOs have employed the workers by offering low salaries which hinder their genuine interest and commitment. The workers accept the jobs as an interim arrangement till better ones are available to them.

3. Most of the NGOs lack administrative and technical competence to prepare project proposals and apply for grants.

4. The NGOs are not getting any real support from the governmental agencies. The attitude of these agencies towards the NGOs is apathetic. From the point of view of the VOs—"governmental agencies particularly in the district level and below are not willing to use their power of taking up the development programmes. They claim superior knowledge and expertise in the implementation of rural development programmes".

Conclusion and Suggestions :

As in the district at present only 29 NGOs out of a total of 119 NGOs are actively engaged themselves in rural development and the rest are inactive due to non-availability of financial assistance. It is suggested that as the district has a tribal economy and a backward one, liberal

Peoples' participation is lacking in the district. Therefore, there is not much of success in the implementation of the developmental activities. Success of NGO 'Will depend largely on its capacity to involve people at the grass root level in formulating and implementing developmental schemes so that development _____ at _____ door steps' becomes a reality _____.⁸ Therefore it is suggested that there should be peoples' involvement at all the levels of planning and development.

Conscious efforts must be made by the NGOs to improve their organisational structure and administrative competence. Therefore the government should support the NGOs in this respect.

The developmental government agencies must change their attitude in dealing with the NGOs. It is very important for the effectiveness of the NGOs.

The activities of the NGOs should be above the petty politics of the area. The local petty politics sometimes creates groupism among the members of the NGOs. This groupism sometimes hinders in the implementation of the programmes and schemes of rural development.

Some NGOs complained that they are involved at the level of policy making but they are ignored and side-tracked at the implementation level. So there must be better coordination between the bureaucracy and NGOs in plan formulation and execution.

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LIST OF MEMBERS

INSTITUTIONAL MEMBERS

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

LIST OF LIFE MEMBERS

A

- | | |
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Govt. Evening College,
Rourkela

B

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Prof. in the HSS Deptt.
IIT Kanpur-208016 (UP)
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Deptt. of Economics,
Ravenshaw College, Cuttack
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Deptt. of Economics,
Rajdhani College, CRP Square,
Bhubaneswar
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Principal, Nalco Nagar College
Nalco Nagar, Angul-759145
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Friends Colony, Bajrakabati
Cuttack
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SIDBI, IPICOL House,

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A/M-39, Kapila Prasad,
Bhubaneswar-2
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Retd. Prof. in Economics,
Canal Street, Gandhi Nagar-2
P.O.-Berhampur, Dist-Ganjam
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Deptt. of Economics,
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Bhanja Vihar, Berhampur-7
Dist-Ganjam
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Bhanja Bihar, Berhampur-7
Dist-Ganjam
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5. Dr. Bedabati Mohanty,
Prof. in the Deptt. of A&A Eco.,
Utkal University, Vani Vihar,
Bhubaneswar-4

6. Dr. Balaram Mishra,
Deptt. of Economics,
Bhadrak College, Bhadrak

7. Sri Bhikari Behera,
Deptt. of Economics,
Godavarish Mahavidyalaya,
Banpur, Dist-Khurda

8. Sri Basanta Kumar Mohanty,
Deptt. of Economics,
U. G. College, Khamar,
Angul-759118

9. Sri Biswambhar Jena,
Deptt. of Economics,
D. K. College, Jaleswar,
At/PO. Dhansimulia,
Balasore-756084

10. Miss Bandana Pathak,
Deptt. of Economics,
J.K.B.K. College,
O.M.P. Square, Cuttack-3

11. Sri Bharata Bhusan Mohanty,
Deptt. of Economics,
S.A. College, Balipatna,
Khurda

12. Sri BinodBihari Nayak,
Deptt. of Economics,
Bamra T.F. College, Bamra,
Sambalpur

13. Sri Bidyadhar Praharaj,
Deptt. of Economics,
S. C. College, Kanilapada

34. Miss Bharati Das,
Deptt. of Economics,
P. N. College, Khurda

35. 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,
Chandrasekharpur,
Bhubaneswar-13

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

D

1. Sri Dayanidhi Pal,
Deptt. of Economics,
Kendrapara College, Kendrapara

2. Sri Dayanidhi Samantray,
Narayan Mishra Lane,
Behind Grand Cinema, Cuttack

3. Dr. D. Chaudhury,
Deptt. of Economics,
Dalmia College, Rajgangpur

4. Smt. Dipti Panda,
Deptt. of Economics,
S. C. College, Kanilapada

5. Sri Durgasankar Sarangi,
Deptt. of Economics,
Bhadrak College (Morning Shift)
Bhadrak
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
- Sri Digambar Chand,
Deptt. of Economics,
Bamra T.F. College,
Bamra, Sambalpur
9. Sri Dhananjay Patnaik,
Deptt. of Economics,
Seva Mahavidyalaya,
Bidanasi, Cuttack-8
7. Dr. Gyan Chandra Kar,
Director, N. K. Choudhury
Centre for Development Studies,
Chandrasekharapur,
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

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
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
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

Miss Ifat Nawaj,
Deptt. of Economics,
S. A. College, Balipatna,
Dist-Khurda

J

Smt. Jharana Roy,
Deptt. of Economics,
R. D. Women's College
(Morning)
Bhubaneswar

Dr. Jayanta Kumar Parida,
Deptt. of Economics,
Banki College, Banki,
Dist-Cuttack

Smt. Jyotsna Udgata,
Deptt. of Economics,
Jatni College, Jatni,
Dist-Khurda

Sri J. S. Mahaprasastha,
Dsptt. of Economics,
Christ College, Cuttack
Sri Jagannath Lenka,
Deptt. of Economics,
Ravenshaw College, Cuttack
Smt. Jyotirmayee Kar,
Research Officer, RBI Chair,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar

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

K

Sri Kartik Ch. Rath,
Deptt. of Economics,

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,
B.J.B. College, Bhubaneswar
5. Sri K. Srinivasan, I.A.S.
Retd. Comissioner 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,
Govt. Evening College,
Phulbani
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,

13. Sri Kishore Chandra Nayak,
Deptt. of Economics,
K.S.U.B. College, Bhanjanagar
Dist-Ganjam
14. Sri Kishorehari Badatya,
Deptt. of Economics,
S.C.S. College, Puri
15. Dr. Kasturi Sahoo,
Deptt. of Economics,
P.N. College, Khurda

L

1. Sri L. N. Panigrahi,
Deptt. of Economics,
Godavarish Mahavidyalaya,
Banpur, Dist-Khurda
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

M

1. Dr. Manoranjan Das,
Deptt. of Economics,
G. M. College, Sambalpur
2. Sri Manoj Kumar Hui,
Deptt. of Economics,
D.S. College, Bhubaneswar

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,
Ravenshaw College, Cuttack
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

N

1. Dr. Nagen Chandra Mohanty,
C/o. Ideal Nursing Home,

2. Sri Natabar Raut,
Deptt. of Economics,
S.V.M. College, Jagatsinghpur
3. Smt. N. Pravat 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
6. Sri Narsingh Charan Acharya,
Deptt. of Economics,
Rajsunakhala College,
Rajsunakhala, 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 University,
Bhanja Vihar, Berhampur-7
11. Dr. P. C. Mohapatro,
Deptt. of Economics,
D.A.V. College, Koraput
12. Sri Pratap Keshari Nayak,
Deptt. of Economics,
Dhenkanal College, Dhenkanal
13. Dr. Prahallad Panda,
Prof. in Deptt. of Economics,
Berhampur University,
Bhanja Vihar, Berhampur-7
14. Smt. Pratima Sarangi,
Deptt. of Economics,
Ravenshaw College, Cuttack
15. Smt. P. K. Singh,
Deptt. of Economics,
V. Deb College, Jeypore,
Dist-Koraput
16. Prof. Pravat Kumar Patnaik,
Jawaharlal Nehru University,
New Delhi-110067
17. Prof. P. R. Bramhananda,
Retd. Prof. of Economics,
University of Bombay
18. Sri P. K. Mohapatra,
Deptt. of Economics,
Khemundi College, Digapahandi,
Dist-Ganjam
19. Sri Prabhat Kumar Mohapatra,
Deptt. of Economics
B. J. B. College, Bhubaneswar
20. Sri Purna Chandra Minj,
Deptt. of Economics,
Rajdhani College, CRP Square,
Bhubaneswar
21. Dr. P. C. Dhal,
Deptt. of Economics,
Nimapara College, Nimapara,
Dist-Puri
22. Sri Prafulla Kumar Mansingh,
Deptt. of Economics,

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 Mohanty,
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,
Karanja College, Karanja,
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,
Chirst College, Cuttack-8
23. Sri Patitapaban Sahoo,
Deptt. of Economics,
Panchayat College, Bargarh
24. Ms. Puspa Das,
Deptt. of Economics,
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,
M.S. College, Baramba,
Dist-Cuttack
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,

Sri Ramakanta Sahoo,
Deptt. of Economics,
G. C. College, Ramachandrapur
Dist-Jajpur

Sri Rabindra Kumar Nayak,
Deptt. of Economics,
Ravenshaw College, Cuttack
Dr. R. K. Panda.

Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar

Sri R. P. Behera,
Deptt. of Economics,
Rajendra College,
Dist-Bolangir

Dr. Ramchandra Mishra,
Deptt. of Economics,
S. C. S. College, Puri

Sri Ramesh Chandra Mishra,
Deptt. of Economics,
Khallikote College, Khallikote
Dist-Ganjam

Sri Ranjan Kumar Sahoo,
Deptt. of Economics,
S.S.D. College, Gurudijhatia,
Dist-Cuttack

Sri Rabindra Nath Ray,
Deptt. of Economics,
V.N. College, Jajpur Road,
Dist-Jajpur

Prof. R. Padhy Sharma,
Director, Institute of Economics
Studies Manasi Menson,
Jayprakash Nagar,
Berhampur-10

Dr. R. K. Sahoo,
Principal,

19. Dr. Rabi Narayan Patra,
Deptt. of Economics,
Govt. Women's College,
Keonjhar

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,
Keonjhar

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,

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-Puri
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,
Deptt. of Economics,
Bhadrak College, Bhadrak
15. Sri Siben Kumar Bose,
Deptt. of Economics,
Christ College, Cuttack-1
16. Smt. Surangini Mishra,
Deptt. of Economics,
R.I.B. Morning College,
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,
Govt. College, Phulbani
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,

38. Sri Satrugna Nath Das,
Deptt. of Economics,
Ravenshaw College, 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-Puri
 42. Sri Sukanta Chandra Swain,
Deptt. of Economics,
Godavarish Mahavidyalay,
Banapur, Dist-Puri
 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,
Chandrasekharpur,
Bhubaneswar-13
 47. Sri Srimanta Upadhyaya,
Deptt. of Economics,
Nirakarpur College, Nirakarpur,
Dist-Puri
 48. Sri Sanyasi Sahoo,
Deptt. of Economics,
3. Sri Satrugna Nath Das,
Deptt. of Economics,
Ravenshaw College, Cuttack
 4. Sri Saroj Kumar Kanungo,
Deptt. of Economics,
Dhenkanal College, Dhenkanal
 5. Dr. Satyakam Mishra,
Deptt. of Economics,
Ravenshaw College, Cuttack
 6. Dr. S. C. Koomar,
Deptt. of Economics,
Ekamra College, Bhubaneswar
 7. Smt. Sujata Mohanty,
Deptt. of Economics,
Ravenshaw College, Cuttack
 8. Dr. Sridhar Behera,
Deptt. of Economics,
Govt. College, Angul
 9. Sri Sangram Kumar Mohapatra,
Deptt. of Economics,
Gopalpur College, Gopalpur,
Dist-Balasore
 10. Smt. Sanjukta Patnaik,
Deptt. of Economics,
S.M. College, Rengali,
Dist-Sambalpur
 11. Sri Sushanta Kumar Mallick,
Deptt. of Economics,
University of Warwick,
Conventry CV4 7AL.U.K.
 12. Smt. Saudamini Rout,
Deptt. of Economics,
Bhadrak College, Bhadrak
 13. Dr. S. M. Ali,
Deptt. of Economics,
S.S.B. College, Mahakalpara,

49. Dr. (Smt.) Sujata Pati,
Deptt. of Economics,
Govt. College, Angul

T

1. Dr. Trilochan Mohanty,
Deptt. of Economics,
J.K.B.K. College,
O.M.P. Square, Cuttack-3

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,
Udala College, Udala,
Dist-Mayurbhanj

5. Dr. Upendra Pathy,
Deptt. of Economics,
Kalinga Mahavidyalaya,
G. Udaygiri, Phulbani

LIST OF ANNUAL MEMBERS

A

Miss A. Badatya,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla

Sri Antaryami Panigrahi,
Sahapada, P.O.-Badamal,
Dist-Jharsuguda

Miss Anupama Das,
Deptt. of Economics,
Belpahar College, Belpahar,
Dist-Jharsuguda

Sri Ashis Das,
M.II, CR-26, Chhend,
Rourkela

B

Sri B. Baghar,
Research Scholar,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Sambalpur

Sri B. K. Patnaik,
Deptt. of Economics,
T.T. College, Purusottampur,
Dist-Ganjam

Sri Banshidhar Behera,
Deptt. of Economics,
Govt. College, Sundargarh

Sri Bidyadhar Mahanta,
Deptt. of Economics,
S. College, Champua,
Dist-Keonjhar

5. Dr. Benudhar Bhuyan,
Professor of Agricultural
Economics, OUAT,
Bhubaneswar
6. Sri Bhaktabandhu Pradhan,
At-Basiapada, P.O.-Jujumara,
Dist-Sambalpur

C

1. Sri Chintamani Nayak,
Deptt. of Economics,
Kendrapara College, Kendrapara

D

1. Sri Dharendra Kumar Patra,
Deptt. of Economics,
N. B. Samant College,
Kamardia, P.O.-Balitutha
Dist-Jagatsinghpur
2. Sri Dukhishyam Mishra,
Deptt. of Economics,
Vinoba Bhawe University,
Hazaribagh, Bihar
3. Sri Dharendra Kumar Nayak,
Deptt. of Economics,
Sidhartha College, Binika,
Dist-Sonepur
4. Dr. Dillip Halder,
Prof. of Economics,
Jadavpur University, Jadavpur,
Calcutta

5. Sri Damodar Jena,
Research Officer,
NKC Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar-13

G

1. Sri Gajendranath Das,
Deptt. of Economics,
Nilasaila College, Rourkela
2. Sri G. N. Majhi,
Deptt. of Economics,
Brajrajnagar College,
Brajrajnagar, Dist-Jharsuguda

J

1. Sri Jitaram Dey,
Deptt. of Economics,
Karanjia College, Karanjia
Dist-Mayurbhanj
2. Sri Jaysingh Choudhury,
At-Bolangi Bahal,
P.O. Loising, Dist-Jharsuguda

3. Sri Jayant Kumar Das,
Deptt. of Economics,
D. K. College, Jaleswar,
Dist-Balasore

K

1. Sri K. P. Sahoo,
Deptt. of Economics,
B. P. College, Antei,
Dist-Kendrapara

2. Dr. Krutibas Dutta,
Prof. of Statistics,
Sambalpur University,

3. Sri Kushadhar Panda,
Deptt. of Economics,
Madhupur College,
P.O.-Madhupur, Dist-Jajpur

4. Sri K. C. Udgata,
Deptt. of Economics,
S. S. College, Biramitrapur,
Dist-Sundargarh

5. Dr. K. K. Sen,
Deptt. of Economics,
M.P.C. College, Baripada,
Dist-Mayurbhanj

L

1. Miss Lopamudra Mishra,
Research Scholar,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla

M

1. Sri Manoj Kumar Barik,
At-Samara, P.O.-Tusra,
Dist-Bolangir

N

1. Sri Nakul Charan Khilar,
Deptt. of Economics,
Vedavyas Mahavidyalaya,
Vedavyas, Rourkela

2. Sri Nityananda Ray,
Deptt. of Economics,
Gandhi Mahavidyalaya,
Rourkela

P

1. Sri Prasanta Panda,
Deptt. of Economics,
Harishankar College,
Harishankar, Khaprakhol,

. Sri Prabhat Kumar Sahoo,
LCR-416, Chhend Colony,
Rourkela

. Sri P. K. Panda,
Asst. Commercial Tax
Officer, Rourkela

. Sri Pradip Kumar Patnaik,
Deptt. of Economics,
K. D. Science College,
Pochilima, Dist-Ganjam

. Sri Pradeep Kumar Jena,
Rourkela

. Dr. Padmaja Mishra,
Deptt. of A & A Economics
Utkal University, Vani Vihar,
Bhubaneswar-4

R

. Sri Rasananda Panda,
Indian Institute of Management
Vastrapur, Ahmedabad-380015

. Sri Raghunath Mohapatra,
H.S.S. Department,
Indian Institute of Technology,
Kanpur, U.P.

. Sri Raghumani Behera,
Deptt. of Economics,
U. N. College, Nalagaja,
Dist-Mayurbhanj

. Sri RKNS Burma,
Deptt. of Economics,
Ekamra College, Bhubaneswar

. Dr. Radhamohan Mallick,
Professor of Economics,
N. K. C. Centre for
Development Studies,
Chandrasekharpur.

6. Sri Ramesh Kumar Mahana,
At-Katapali, P.O.-Bardoli,
Dist-Bargarh

7. Dr. Raj Kishore Meher,
N.K.C. Centre for
Development Studies,
Chandrasekharpur,
Bhubaneswar-13

S

1. Sri Sunil Kumar Rath,
Deptt. of Economics,
P. N. College, Bolgarh,
Dist-Khurda

2. Sri Sanjib Kumar Hota,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla

3. Sri S. K. Majhi,
Deptt. of Economics,
Panchayat College, Bargarh

4. Sri Sudhir Pattanayak,
Deptt. of Economics,
B. B. Mohavidyalaya,
Chhatabar, Dist-Khurda

5. Sri Sudhansu Sekhar Mohanty,
Deptt. of Economics,
Vedavyas Mahavidyalaya,
Vedavyas, Rourkela

6. Smt. Sanjibani Patnaik,
Deptt. of Economics,
S. G. Women's College,
Rourkela

7. Sri S. K. Parida,
J.R.F., Deptt. of Economics,
Sambalpur University,

8. Smt. Swastika Padhi,
Deptt. of Economics,
Berhampur City College,
Berhampur, Dist-Ganjam
9. Smt. Sabita Das,
Deptt. of Economics,
Ispat College, Rourkela
10. Miss S. Mishra,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla
11. Miss S. Panda,
Deptt. of Economics,
Sambalpur University,
Jyoti Vihar, Burla
12. Dr. Surendra Nath Mishra,
Deptt. of Economics,
NKC Centre for Development
Studies, Chandrasekharpur,
Bhubaneswar-13
13. Sri Sapan Kumar Panda,
Deptt. of Economics,
S. D. Women's College,
Rajgangpur
14. Miss S. K. Acharya,
HSS Deptt, Indian Institute
of Technology, Kanpur,
Uttar Pradesh

T

1. Sri Tusharkanti Das,
Research Officer,
Deptt. of A & A Economics,
Utkal University, Vani Vihar,
Bhubaneswar-4

U

1. Sri U. S. Dash,
Deptt. of Economics,
Panchayat College, Bargarh

LIST OF PRESIDENTS

<u>Year</u>	<u>Host</u>	<u>Venue</u>	<u>President</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	Women's College	Keonjhar	Prof. Ajit Kumar Mitra