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ORISSA ECONOMICS ASSOCIATION

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Editor :
Prof. Baidyanath Misra
17, Saheed Nagar,
Bhubaneswar

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As the Secretary, Orissa Economics Association I have the profound pleasure in welcoming you all to the 27th Annual Conference of the Orissa Economics Association.

The Orissa Economics Association was founded in the year 1967-68 by the eminent economists of the state with the objectives of

1. organising Conferences, Seminars, Symposia etc. to discuss various economic problems in general and those of the state of Orissa in particular;
2. stimulating research in the subject with special reference to the problems of economic development of Orissa.

The Orissa Economics Association has at present 220 members out of which 185 are Life Members. It publishes a journal each year which contains the research papers prepared by its members and discussed in the Annual Conference.

The Orissa Economics Association is the only forum in the state in which various economic problems of national and regional dimensions are discussed. Distinguised economists, administrators, planners, businessmen participate in the deliberations of the Conference. It is the forum, the august body of eminent academics and experts, that has from time to time undertaken the task of studying the genesis of the problems of economic development of Orissa and recommended policy measures.

Finance has now been a serious constraint on the activities of the Association. It has not been possible to realise all its objectives on account of the paucity of resources. The volume of the journal has consi-

derably increased along with the printing cost. On this head, the Association has to spend around Rs. 10,000/- per year. We receive a maximum grant of Rs. 4,000/- from the Government of Orissa and another two to three thousand from the new members. At the time of the founding of the Association, it was proposed to organise Annual Conference, Seminars, Symposia etc. from time to time. Due to serious resource constraint, it is not now possible to organise all such academic activities. The Annual Conference is being organised regularly in which the host institute plays a crucial role. Association taken alone could not have been able to meet all expenses of organising the Annual Conferences.

This year, we have selected two topics of discussion in the present Conference.

1. Dimensions of Urbanization in India — its Economic and Social Implications for Future Development.

2. Structure and Promotion of Small Scale Industries in Orissa — Lessons for Future Development.

While the former is of national importance, the latter has implications for the development of manufacturing sector in Orissa.

Since 1987, we have been organising an endowment lecture in honour of Bhubaneswar Mangaraj — an illustrious teacher from Banki. Eminent economists of the state deliver their valuable lectures on this occasion at the time of the Annual Conferences. Dr. Sanatan Mohanty, Retd. Professor of Economics has given his kind consent to deliver this year's lecture on a topic of contemporary interest 'Gandhian Economics and Development Through Decentralisation'. We express our deep sense of gratitude to him for having accepted our request.

With grief and sorrow I say that the founding-father and the first President of the Association Dr Sadasiv Misra passed away due to old age three months back He was a constant source of inspiration to us. It is his guidance which has brought the Association to its present height. His sad demise is a great loss to all of us. May his soul rest in peace in his heavenly abode.

I am extremely grateful to Professor K. P. Mohanty, the Principal of the College who is also the Chairman of the Reception Committee, Local Secretary Professor S. K. Mishra, the staff and students of the P. N. Mahavidyalay, Khurda for their tireless efforts in organising the Confere-

nce. I really owe a great deal to all the members of the Executive Body of the Association in general and President Professor Benudhar Mishra in particular for their kind co-operation and timely advice. I express my deep sense of gratitude to Professor Baidyanath Misra for having spared his valuable time while editing the Orissa Economic Journal. My special grateful thanks are due to all the former Presidents and Secretaries of the Association for their timely advice. My thanks are due to the Proprietor and staff of the Nabajivan Press, Cuttack for completing the printing of the journal in time. I also thank M/s Dash and Associates, Chartered Accountants who took the trouble of auditing the accounts of the Association without charging a fee.

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

Thanking you all.

Bimal K Mohanty
Secretary,
Orissa Economics Association.

Presidential Address

Prof. Benudhar Mishra
Joint Secretary to Govt. of Orissa,
Department of Higher Education.

Esteemed Chief Guest Hon'ble Justice Sri Mohapatra, Guest of Honour Major Patra, Principal, Prananath College and Chairman, Reception Committee Major Mohanty, revered teachers, Respected past Presidents of the Association, Vice-President Major Sahu, Secretary Dr. Mohanty, Office Bearers and Members of the Orissa Economics Association, Members of the Press, Distinguished invited elite, dear colleagues and students, ladies and gentlemen.

Today is a holy day and a holiday. We are observing the sixtieth birth anniversary of Orissa as a separate province. Today is Utkal Dibasa. We are meeting here in Prananath College, Khurda this renowned citadel of higher education named after one of the prominent leaders of our time, Sri Prananath Patnaik, on such an auspicious day on the occasion of the 27th Annual Conference of the Orissa Economics Association.

At the outset, I would like to put on record my sincere gratitude to the valued members of the Association to have bestowed on me the rare honour of the august position of the President of the Annual Conference. It speaks of volumes of love and affection which they have for my humble self as a teacher in economics for the last thirty four years. My acquaintance with economics as a student dates back to early fifties of the current century when we were introduced to the subtleties of the economics discipline by a team of celebrated, dedicated and highly accomplished teachers of the subject in that centenial institution—the Ravenshaw College. It is a matter of great loss to all of us that the real moving spirit, the live force behind this tradition is no longer amongst us. I am referring with a heavy heart to my revered preceptor, Prof. Sadasiv Mishra who was responsible for building up the academic tradition in teaching of economics in Ravenshaw College which has been recognised and has also earned acclaims throughout the country. My head bows down with reverence and profound gratitude for him and all my

esteemed teachers who did inspire me to read economics at the Intermediate stage and continued to guide me at higher stages of specialised study in the discipline.

I would also like to mention here our deep sense of appreciation to my esteemed friend and colleague Major Khirod Prasad Mohanty our host-in-chief and Principal of the College for the magnanimity he has shown in sportively accepting my proposal for holding the 1995 annual conference of the association here in this college. We are thankful to his colleagues in the economics and other faculties of the college for their efforts in organising this grand show for the occasion.

We in this association have always shown our concern for the economic development of the country in general and that of Orissa in particular. Keeping with that tradition we have chosen two very relevant topics for discussion in this conference, both having an eye on the future time period. We have chosen to deliberate upon Dimensions of Urbanisation in India—its Economic and Social Implications for future development. The World Commission on Environment and Development points out that by the turn of the century almost half of humanity will live in cities. The world of the 21st Century will be largely an urban world. The rate of expansion of urbanisation has simply become astounding in the present century. Over only 75 years, the developing world's urban population has increased ten fold from around 100 million in 1920 to more than 1 billion today. This suggests that the developing world must, over the next few years, increase by 65% its capacity to produce and manage its urban infrastructure, services and shelter merely to maintain today's often extremely inadequate conditions. Few city governments in the developing world have the power, resources and trained personnel to provide their rapidly growing populations with the land, services and facilities needed for an adequate human life : clean water, sanitation, schools and transport. This speaks of a major urban crisis on their hands. The economists have to play a crucial role in this situation in outlining a suitable strategy encompassing different vital economic parameters to face the oncoming crisis in the field of urbanisation. The twentyfirst century is knocking at the door. We the economists must look back on to the tools available with us with a view to suitably augmenting their stock to be able to provide appropriate strategies for meeting the emerging challenges of the new times.

The other subject for discussion in this Conference is the structure and promotion of Small Scale Industries in Orissa—lessons for future

development. The conventional classification of economic activities into three sectors—primary (agriculture), secondary (industry) and tertiary (commerce and other services) has become increasingly ambiguous. Some economic activities cut across all three. Furthermore the services sector has emerged to occupy an important place of its own in industrialised economies. But the fact remains that industry is pivotal to the economies of modern societies and an indispensable motor force for growth. It is essential to developing countries, to widen their development base and meet the growing needs. The interdependence between the primary and the secondary sector has resulted in a situation where all nations require and rightly aspire for efficient industrial base to meet their changing needs.

Our experience in the sphere of industrialisation both in the developed and the developing world has led us to the obvious situation of its impact on the environment. Industry and its products have an impact on the natural resource base, of civilisation through the entire cycle of exploration and extraction of raw materials, transformation into products, energy consumption, waste generation and the use and disposal of products by consumers. These impacts may be positive, enhancing the quality of a resource or extending its uses, or they may be negative, as a result of process and product pollution and of depletion or degradation of resources. Experience shows that prior to second world war the negative impact of industries was more or less local in nature. But the reckless expansion of industries after the Second World War has resulted in an ever increasing environmental hazards symbolised by the Los Angeles Smog, the proclaimed 'death' of Lake Erie, the progressive pollution of major rivers like the Rhine and Elbe. These problems have also raised their heads in many parts of the Third Wold as industrial growth, urbanisation and the use of automobiles spread. The Green House effect threatening to raise the sea level and submergence of a large number of coast based cities in the world, in the first quarter of next century, the CFC and smoke nuisance in metropolitan cities, the notice served on twenty five industries along the embankment of the Ganges by the Cehtral Pollution Control Board, to pull down their shutters, the smoke effect on the Taj Mahal by the Oil Refinery of Mathura are only a few selective examples of environmental hazards and degradation resulting from wide scale and indiscriminate industrialisation without providing for the necessary correctives both in the developed and developing world.

It is against this back drop that one thinks of small scale industries. The indication here is definitely not to promote 'small is beautiful' as a

substitute for 'large is indispensable'. One of course is at a fix at this point, more so an economist – both theoretical and the practising economist. Because economics is a social science and ought therefore to be able to suggest a proper strategy for the relative role of small and large scale industries. This is a new challenge. Perhaps this is the greatest challenge facing in the present century. We must be able to live up to the occasion.

A very interesting and scientifically significant incident took place in human history in the middle of the present century. As the World Commission on Environment and Development elaborates : "we saw our planet from space for the first time. Historians may eventually find that this vision had a greater impact on thought than did the Copernican revolution of the 16th century which upset human self-image by revealing that the Earth is not the centre of the Universe. From space we see a small and fragalee fall dominated not by human activity and edifice but by a pattern of clouds, oceans, scenery and soils. Humanity's inability to fit its doings into that pattern is changing planetory systems fundamentally. Many such changes are accompanied by life threatening hazards This new reality, from which there is no escape must be recognised and managed."

The Phisiocratic ideology that economic strength and well being of the society lies in human behaviour completely being reconciled with the natural laws and uniformities finds a renewed relevance in modern times. "From space, we can see and study the Earth as an organism whose health depends on the health of all its parts. We have the power to reconcile human affairs with natural laws and to thrive in the process. In this our cultural and spiritual heritages can reinforce our economic interests and survival imperatives". (World Commission on Environment and Development)

These scientific achievements have added a new dimension to economic analysis and policy. The new crucial variable which has made silent entry into the models of economic development is the notion of sustainable development. By sustainable development we mean "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This concept of sustainable development (SD) has gained currency since 1987 with the publication of the seminal report of the World Commission on Environment and Development. Of course earlier than that a reference was made to the idea of sustainability in the report on "World Conservation

Strategy : Living Resource Conservation for Sustainable Development" prepared jointly by the World Conservation Union, United Nations Environment Programme and World Wide Fund for Nature, 1980.

It is relevant to remember that sustainable development has come to mean all things to all people just as concepts like liberty, socialism and secularism. It is difficult to define these concepts as these are having wide ramifications which cannot be easily quantified with a view to effectively including them in any analytical model for the purpose of formulating policy guidelines. But the fact remains that we must take note of the critical significance and relevance of the concept, understand its complexities, obstacles and challenges so that we can use it in our models for economic development

As Prof. Saleth observes, "Sustainable Development" (SD) is a multi-dimensional concept defined by the three critically interacting dimensions of ecology, economics & ethics. In a visual context, SD can be considered as the area common to three intersecting circles, each representing respectively ecology, economics and ethics. As a development paradigm SD is a synthesis of three superficially competing but metaphysically mutually dependent development paradigms centered respectively on free market economics, ecology and egalitarian principles. If we could succeed in this stupendous task of integration and ensure our current development to be sustainable not just in an environmental sense but equally also in an economic and equity sense, we are rest assured to usher into the sustainable society or sustainable future, the hallmark of which is a perfect balance and harmony in man-man and man-nature relationship."

This crucial aspect of thinking in economic policy formulation was not given its due importance in the past. We confined ourselves to the physical world only without trying to turn our attention to the ethical or metaphysical aspects of the issue. Pigou while prefering to concentrate his intellectual efforts only to economic welfare assumed away all these types of forces through, his ceteris paribus consideration of 'Stable Culture of England' under which economic and non-economic welfare were not likely to come into conflict with each other. We are taught that land is a gift of nature and hence lacks supply price. This simple concept has a deep ethical significance so far as the human society is concerned. Since land is a gift of nature to humanity at large it should not be monopolised by any individual or group of individuals. It should be equitably made available to the entire humanity for meeting its respective needs. We have very casually ignored this aspect and hence have landed ourselves in

a very uncomfortable situation where we have so many goods and services available with us in macro sense yet we feel unhappy. Our welfare to that extent has become limited. Goldsmith's prediction that as wealth accumulates, men decay has become strengthened. Prigou's contention "efforts devoted to the production of people who are good instants of production may involve a failure to produce people who are good men" has ultimately been realised. We have landed ourselves in an anamolous situation like this because all our efforts have been concentrated in achieving technical exactness of the models that we have built upto recommend a particular type of policy mix or the other. We have unwittingly forgotten to see the repercussions of our exercise on an ethical or metaphysical plane.

While economics presumes a world dominated substitutes, ecology believes in a world characterised by fundamental interdependence and complementarities. A particular resource has not only economic significance but also an ecological worth and ethical import. Thus the model which has become crucial in modern times is a model of general equilibrium, not of the variety with which we have been familiar ever since the writings of Leon Walras but one in which trade-offs between ecological, economic and social goals could also find their relevant positions. It was Pigou who rightly pointed out that "Human beings are both ends in themselves and instruments of production. It is for each society to choose between man who is attuned to the beautiful in nature or in art, whose character is simple and sincere, whose passions are controlled and sympathies developed and .one who can perform complicated industrial operations". The former contributes directly to the non-economic welfare whereas the latter only indirectly contributes to the economic. We have neglected the former on the ground that it is nonquantifiable or on the consideration that it is automatically realised in a society characterised by a stable culture.

It was Mill who said, "utility or the greatest happiness principle holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure and the absense of pain, by unhappiness, pain and the privation of pleasure". Of course pleasure was not taken to mean in the baser sense i.e. the pleasure of the swine but pleasure in the higher pursuits of life—man being an end himself. But in the past, our exercise has concentrated on the happiness of the modern physical world to the utter neglect of the world beyond.

Pigou distinguishes between desire and satisfaction. The term 'satisfaction' has its roots in one's consciousness while the term desire is suited to talk of man's behaviour in the ordinary business of life where he may not always be conscious. The task of economic models ought to be to create conditions for bringing as large a portion of the unconscious behaviour of man in the ordinary business of life to the conscious plane and herein lies his welfare. The progress of man or increase in his welfare comes about as more and more of his desires turn into satisfaction. But all our efforts in planning for economic development has been devoted to desires only wrongly assuming that desires turn into satisfaction as they are fulfilled through availability of various goods and services.

It was Mill again who observed that "the main constituents of a satisfied life appear to be two, either of which by itself is often found sufficient for the purpose—tranquility and excitement. With much tranquility many find that they can be content with very little pleasure with much excitement many can reconcile themselves to a considerable quantity of pain". This element of anomaly can be eradicated if we are able to strike a balance between tranquility and excitement the trade off between the two being determined at a harmonious level. It is because of this lack of harmony that we eventually have landed ourselves in that state which Tibor Scitovsky has described as the "Joyless economy" which is "An enquiry into human satisfaction and consumer dissatisfaction". Thus what we have achieved so far as the affluent and growing economies are concerned is that we have created a market primarily for the purpose of functioning as a want satisfying mechanism but closing our eyes to the more important fact that it has become in reality a want creating mechanism. Thus instead of creating more of tranquility it has generated enough of exitement and tension. Prof. E. J. Mishan therefore concludes "it is just not possible for the economist to establish a positive relationship between economic growth and social welfare".

These ideas of great economists at least indicate that we have to incorporate into our development models certain variables like ecology, ethics, metaphysics, tranquility, man-being-an-end-in-himself, environment and the like knowing fully well that almost all of them are difficult to be quantified in terms of the measures that are available with us. We have therefore to devise new methods of including them in our models, new devices of making them play their role as crucial levers in these models. This is the global imperative of the time. Environment has been defined as the sum total of *all* conditions and influences that

affect the development and life of organisms. Thus environment is where we all live and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable. However, it is observed that many of the development paths of the industrialised nations are clearly unsustainable as they do not pay due attention to both these variables in their exercises. Hence the development decisions of these countries because of their crucial political position in the international sphere, have a deep adverse effect on the ability of all peoples to sustain human progress for generations to come. What is therefore needed now is a new era of economic growth—growth that is forceful and at the same time socially and environmentally sustainable. It is pertinent to remember here that historically we have been quite serious about environment. The basic philosophy has been one of harmony with nature as against the western concept of conflict with nature. Unfortunately we have concentrated all our attention on the latter and not on the former.

As Prof. R. M. Saleth concludes "Although ecological, technological and economic issues are often emphasised, SD in the ultimate analysis remains basically an ethical issue. Could we revive, preserve and promote ethical commitments and moral obligations under an almost changed socio political milieu ? This is the real challenge for SD. In many ways, the model for our target of a sustainable society appears to be not in the future but in the past where moral imperatives and the principles of coexistence between man and nature had respect and legitimacy."

The question that is asked at this stage is "Could the self-centered homo-economicus so assiduously preserved and promoted in economic theory and policy, convert himself to become the proverbial born-environmentalist and moralist motivated by mutual interest and common future ?" Could it be possible on our part to change the present scenario of 'hominibus plenum, amicis vacuum' full of men empty of friends to a close knit community where each admits a stake in the conduct of the neighbour ?

This perhaps is the most important challenge that the economists face in the present juncture. Historically, in India our leaders were aware of the fact that the process of economic development does have a significant impact on the environment. Pandit Nehru, the prophet of industrialisation in our planning frame was so much concerned for maintenance of the environmental balance that had we given it its due

importance in the plan models we would not have been held up in the present environmental mess. Time has therefore come when sustainability in development has to be considered as the most cruical objective for our plan process and we the economists have to devise the right technique for this purpose. What has been attempted through this brief write up is to provoke a thought process, discussion and debate on the issue, rather than talking with an air of finality. I will consider my humble effort in this regard amply rewarded if this little bit is achieved and my young friends both teachers and students at least devote time and energy to think on the issue with a view to finding out the right strategy in this regard. The task is difficult and complex but can no longer be neglected. We need collective wisdom not only from economists but also from various other disciplines to solve the problems associated with sustainability in development which are multi-disciplinary in scope. Let everyone contribute one's might in this effort of a global nature. "आ नो भद्राः क्रतवो यन्तु विश्वतः" Let knowledge and noble thoughts come to us from all sides.

Reference Literature :

1. Our Common Future — The World Commission on Environment and Development.
2. The Costs of Economic Growth — E. J. Mishan
3. Sustainability Critical Challenges — R. M. Saleth

Mangaraj Memorial Lecture

Gandhian Economics and the Model of Decentralised Development

Dr. Sanatan Mohanty

In the economic policies and planning adopted in our country since independence, the objectives have all along been to achieve growth with social justice. Whatever have been the achievement—in fact the achievements are not to be under-estimated—it has to be admitted that growth in terms of G.D P. has been the focuss, whereas the reduction of poverty and inequality has been relegated to the periphery. No doubt, the rate of growth of income has increased over years, but the growth rate of employment has declined consistently in spite of special employment programmes launched during the eighties. Though the percentage of people below poverty line has declined from about 54% to about 40% in course of 20 years between 1972 and 1991, 30 crore Indians are still poor.

The Indian economy, which was functioning under a system of controls, has now been opened to competition. Far reaching changes are taking place in the economic scenario. Large scale industrialisation is taking place in the wake of globalisation of economy. In the face of these changes, we should pause for a while and consider if the Gandhian model of decentralised development, where "the supreme consideration is man"[1], could be given a fair trial.

Gandhi—the practical idealist

Gandhi was not an economist in the traditional sense of the term. He was a humanist. There was hardly any issue, political, social, religious, ethical or economic, involving the welfare of man, which did not concern him. His economic philosophy can be traced in the innumerable speeches and writings, which appeared in the contemporary journals, e. g., Indian Opinion, Young India, Navajivan and Harijan, the letters he wrote to individuals, rich & poor, and the Government records.

Gandhiji was inspired by the ideals of simplicity and egalitarianism of Leo Tolstoy, and was greatly influenced by the writings of Ruskin.

According to his own confession the book 'Unto this Last' brought about an instantaneous and practical transformation in his life. He was convinced that the utilitarian doctrine of the greatest good of the greatest number was 'a heartless doctrine and has done harm to humanity. The only real, dignified, human doctrine is the greatest good of all'[2]. His approach was holistic. He was for the integrated development of man in society. His ideas and activities bear the impressions of his study of the scriptures of different religions of the world, the spiritual ideas of the great saints and seers. He believed that the lasting solution to all our problems could be found only on the basis of the twin principles of truth and non-violence.

Like any economist Gandhiji was convinced that no body could fulfil all wants. He was equally convinced that satisfaction was a mental condition, and that man could achieve fuller life by following the principles of simple living and high thinking. He wanted that man should not have any lust for wealth for the sake of luxurious life. Material progress should be subservient to moral growth. Thus he wanted to limit wants.

Regarding the system of roduction and distribution, Gandhiji had practical ideas. He advocated that certain harmonies must be maintained in the economic system. Requirements of the people must be in harmony with the available resources ; and production technique must suit the requirements of the country. Production should be need-based and not want-based. Need can be determined by biological, social and other requirements. He wanted to establish a productive system which would ensure employment to each and every individual in the society.

Gandhi had lived and moved with all classes of people in the society and studied intimately the problems of the teeming millions of the Indian sub-continent for about half a century. The ideas and principles advocated by him were original and eminently suitable for the solution of the socio-economic problems which human beings faced in their oridinary business of life. He did not prescribe solutions which could not be practised, because he first experimented ideas in the laboratory of his own life before suggesting solution.

Unfortunately Gandhian principles have not been given a fair trial even in his own land. Rather, we are drifting away gradually. But a time has come when Gandhian concepts deserve serious consideration as an alternative policy for integrated rural development.

A Spiritual Socialist

Gandhi was not interested in the much eulogized concept of Socialism and its variants. Though he held that he did not know economics, he had great insight into the economic issues and problems of the people. In a heirarchical society riddled with exploitation, class conflict and inequality, when the Marxian doctrines were considered epoch-making, Gandhi did not agree to the Marxian prescriptions. His 'opposition to the socialists and others consists in attacking violence as a means of effecting any lasting reform'[3]. He sought the solution to the problems in our tradition and culture.

> Socialism was not born with the discovery of the misuse of capital by capitalists As I have contended, socialism, even communism, is explicit in the first verse of "Upanishad".[4]

The first verse of Ishopanishad runs as follows :

> ईशावास्यमिदं सर्वं यत्किञ्च जगत्यां जगत् ।
> तेन त्यक्तेन भुञ्जिथा मा गृधः कस्यस्विद् धनम् ।

What ever is available on earth, whether animate or inanimate, belong to God, the Creator. One should accept that much which is necessary and is ordained for him by God. One must not claim the rest, as the same is meant for others.

This mantra chanted by Indian saints five thousand years back inspired Gandhi to formulate the concept of "Trusteeship" for solving the problem of socio-economic inequality and exploitation. The ideas of 'Aparigraha' (non-possession) of the Upanishad and 'Samabhava' (equability) of the Bhagabad Gita became the infallible guide of conduct for Gandhiji ; and were in fact the basic tenets of his doctrine of trusteeship[5]. According to this doctrine every thing belongs to God. Wealth is for God's people as a whole, and not for a particular individual. If any individual holds more than his proportionate share of wealth, then he becomes a trustee of that surplus for the people of God. The state has the right to regulate the ownership and use of wealth in the interest of the welfare of the society.

Gandhi has been misunderstood. There are some who feel that the radical thinking of Gandhi regarding fair distribution of income and wealth became blurred with his concept of trusteeship—that the rich could keep their wealth if they acted in the interest of the underprivileged. Gunnar Myrdal, for example, felt that "this notion was a practical compromise, mainly motivated by his (Gandhi's) rejection of

violence and his realisation that the rich would not willingly give up their possessions[6]. But Gandhiji's conviction was clear and positive. The doctrine of trusteeship was based on the faith that human nature was never beyond redemption. He also did not leave the transformation of the owning class entirely to the sweet will of the owners. Grandhiji believed that the sanction lay with the people. If the owners failed to play the game and did not become guardians of the poor then Satyagraha or the non-violent organisation of the people was the ultimate sanction. He was convinced that privilege abolished by legislation has the knack of entering in by the back door under a variety of faces. When the people understood the implications of trusteeship and the atmosphere was ripe for it, the people themselves at the panchayat level could introduce appropriate sanctions. It should not come from above.[6]

Khadi Mentality

Gandhiji's emphasis on 'Charkha' and 'Khadi' is considered by some as primitive and anti-progress. This is far from truth. Gandhiji acknowledged the contribution of science for the progress of humanity; but he was against materialism. Large scale industrial production and the abuse of machine are responsible for concentration of wealth and the growth of soulless industrial civilisation.

As we know, Nehru had a preference for the western model of industrial development. In fact he was impatient to build the base of economic development of the country through large scale industries with the help of modern science and technology. Socialist Nehru had the conviction that the evils of capitalism could be eliminated by expanding the public sector. The industrial and economic policies of the country reflected his ideas. Gandhi differed from Nehru.

> Pandit Nehru wants industrialisation, because he thinks that, if it is socialised, it would be free from the evils of capitalism. My own view is that the evils are inherent in industrialism, and no amount of socialisation can eradicate them.[8]

Charkha and Khadi, which are considered as anti-progress, are not really so. Neither Gandhi was short-sighted, nor was he irrational and against modernism. It is true that Charkha had a special appeal in the context of non-violent non-cooperation against the British rule. People misunderstand him because they miss the spirit behind the concepts used by hi .. His own statement is meaningful and symbolic :

> Khadi mentality means decentralisation of the production and distribution of the necessaries of life. Therefore, the formula so far evolved is, every village to produce all its necessaries and a certain percentage in addition for the requirements of the cities.[9]

He insisted on a change in our approach to development by emphasizing upon 'Khadi mentality'. At the same time he leaves scope for modifications in policy to suit changing conditions. He was not dogmatic.

Large scale production lacks in-built security

In this connection we should realise the sufferings of humanity due to the mad rush for higher production, and the impending disaster our civilisation is destined to face in this thoughtless pursuit for so-called prosperity. The conventional wisdom in the western economic thinking is reflected in the following words of Prof. J. K. Galbraith :

> The ancient pre-occupations of economic life — with equality, security and productivity have now narrowed down to a pre-occupation with productivity and production. Production has become the solvent of the tensions once associated with inequality, & it has become the indispensable remedy for the discomforts, anxieties and privations associated with economic insecurity.[10]

Inequality is even justified on the ground that it is more functional and encourages capital formation. Increased production is considered as alternative to redistribution. It is held that distortions and hardships due to abnormal situations like depression and was could be corrected through macro-economic measures, whereas micro-economic social security measures could be undertaken only to benefit the limited number of people marginalised in the process of production.

But the cycles of prosperity and depression and the wide spread unemployment and social tensions in the developed economics of the world bear ample proof that there is no in-built social security in a system of excessive mechanisation and large scale production. The situation in the developing countries is even worse. Poverty, sickness, low expectation of life and death are normal hazards which the people face. Unemployment is not even a misfortune. It is a normal fortune.[11]

Gandhiji had solutions to the problems both for the developed and the developing countries of the world. He was convinced that large scale

production led to exploitation; and exploitation was the essence of violence. Non-violence can not be built on factory civilisation. Self-contained villages with decentralised rural industries will certainly eschew exploitation and violence. He was convinced that the poor in the world could be helped by production by the masses and not by mass-production.[12]

The Farm Sector

Excessive exploitation of land through large scale mechanisation and heavy chemicalisation have drifted men away from real touch with living nature and have led to environmental degradation and health hazards.[13] Problem of agricultural unemployment has been aggravated due to commercial farming. Farmers are being alienated from land. People are migrating to towns to live wretched life in the urban slums.

Subsistence farming on the Gandhian model can ensure health and happiness for the rural masses. The limited land can be utilised effectively by applying the utilised natural resources available in the village itself in the form of nitrogenous wastes of the human and cattle population, and the compost prepared out of waste materials. The rural people can use the renewable sources of bio-energy and solar power. All these would ensure better health for the people and cleaner sanitary atmosphere in the village.

The farm produce can be processed in the village itself for local consumption and for sale in the neighbouring towns. Ancillary and subsidiary cottage industries can supplement agricultural activities, and meet the needs of the people. That would ensure uninterrupted employment, peace and prosperity.

Humanity is destroying itself

In the frantic pursuit for material prosperity, modern industrial civilisation is rapidly exhausting the once-for-all resources of the world available for us in the shape of fossil fuel (coal), oil, natural gas and uranium. Uneven geographical distribution of these resources in the world, specially petrol, has led to severe competition and armed conflicts to control these resources. The developed countries of the world in North America and Europe, inhabited by a small proportion of world population, have been using the major share of oil to lead luxurious and extravagant life, wheaeas the large number of developing countries in Asia, Africa and Latin America, with a large proportion of world

population, have a very small share out of this limited non-renewable energy source.

There is the dangerous possibility of uranium being used for military purposes. This radio-active material is also a source of danger both for men and nature inspite of safety precautions. Greater use of fossil fuel is responsible for thermal pollution. River, lake and even ocean water and the air are being contaminated due to industrial effluence and poisonous gas, creating health hazards. The existence of the antiquities like the Taj Mahal are in danger. Ozone layer is being thinned out. The environmental degradation is causing danger for the people of both the rich and poor countries. According to a recent report, the people of a Chilean town, Punta Arenas, have been advised by the environmentalists not to come out in sun without using dark eye glasses and applying sunblock to the exposed portions of the body due to ozone hole.

The affluent societies of the west do not bother about social ethics and morality. They value ends above means. Liberal thinkers in the world lament over such a wrong attitude to happiness. Schumacher, for example, warns that it is not possible to eradicate the grave dangers to our physical and social health 'by simply making faster use of science and technology or a more radical use of the penal system'.[14] He agrees with Gandhiji that the earth provides enough to satisfy every man's need, but not for every man's greed and pleads for the introduction of a 'soft technology', 'a technology with a human face' and the use of renewable natural resources for development. He advocated 'a new orientation of science and technology towards the organic, the gentle, the non-violent, elegant and beautiful'.[15]

Sarvodaya and Gram Swaraj

Gandhiji had realised that the problem in India was not only achieving independence for the country. He had the bitter experience of foreign domination both in India and South Africa and the demoralising effects it had on the personality of men. His primary mission was to develop courage and a sense of self-respect among the people. Independence brought initial success. The courage and confidence with which the unarmed Indians resisted the powerful British rule and succeeded in securing freedom is unparallel in human history. For Gandhi that was not the end of the journey. He wanted to bring about socio-political and educational reforms along with economic reforms. Thus the problem was many-sided. The solutions he envisaged were simple but revolutionary.

He wanted to establish 'Sarvodaya', a social order which would ensure greatest good for all, where economic progress and social justice would go together. The utilitarian concept of greatest good of the greatest number did not appeal to him. Nor was he interested in establishing an affluent society based on materialism.[16]

'Sarvodaya' envisaged the establishment of an autonomous and self-contained village as the unit of social existence, which would ensure intimate human relationship. As Prof. Humayun Kabir rightly remarked—"The small village community would thus avoid the risk of dictatorship of the State and anarchy of Statelessness".[17] To quote Gandhi :

> My idea of village swaraj is that it is a complete republic, independent of its neighbours for its own vital wants, and yet inter-dependent for many others in which dependence is a necessity. Thus every village's first concern will be to grow its own food crops and cotton for its cloth. It should have a reserve for its cattle, and recreation and play ground for adults and children.[18]

The village can grow useful money crops. It will maintain school, public hall and provide clean drinking water.

Gandhiji prescribed the administrative frame-work for Gram Swaraj. Panchayat of five persons elected for one year by the adult villagers, male and female, possessing prescribed qualifications will conduct the affairs of the Panchayat and perform legislative, executive and judicial functions. Panchayats would also have power to levy taxes.

Gandhian Model is not a Stereotype

There is multiplicity of programmes for rural development in our country and multiplicity of operating agencies of different departments of the Central and State Governments, and even non-Govt voluntary agencies funded by Government and the international official and non-official agencies. There is no transparency in the selection of beneficiaries and execution of schemes. People's participation is only in pen and paper. It is widely acknowledged that only a fraction of the funds, meant to benefit the poor at the lowest level, reach the targeted people. There is no wonder that after half a century of independence about 40% of Indians are still below the proverty line, and the rich-poor and urban-rural gaps widening.

On the other hand we can not ignore the waves of liberalisation and globalisation, which are sweeping the entire world at enormous speed. Probably it is neither possible nor desirable to arrest this global process, which has broken down the iron curtains of the Soviet Union and China, and has succeeded in transforming the economies of the socialist countries of the world. We must have to hold our own in the face of this global onslaught. Gandhian model of Gram Swaraj can come to our rescue The individual in the remote village should be allowed to decide his own destiny in his limited sphere of activity. Gandhian model of development is not going back, nor is it a stereotype. The ideal of Gram Swaraj can be given a fair trial with modifications to suit the changing situations. Gandhi was a practical idealist. He did not expect that those who were in charge of our economic policies would adopt straight away all the precepts that he had laid down for the realisation of a "Sarvodaya" order.[19]

India is a country of continental dimensions, with States at varying levels of development ; and even different regions in the same State having socio-economic disparities. Bio-physical and cultural diversities should also be taken into consideration in formulating schemes of development. Uniform pattern is not workable. For development to be sustainable, programmes should suit the requirements and resources of the region and involve the people who are to benefit People's participation should not be mere ritual.

Constitutional Provision

The Constitution (73rd Amendment) Act, 1992, which came into force with effect from April 1993, provides scope for initiating action for rural and regional autonomy. The three tier system of Panchayati Raj at the village, the intermediate and district levels, recommended long ago by the Balwantrai Mehta Committee, has gained constitutional sanction. Election to these bodies and the provision of Municipal Finance Corporations at intervals of five years, have become mandatory. Panchayats can now prepare and execute schemes in respect of a variety of subjects, e.g., minor irrigation, water management, roads, electrification, fuel, fodder, education, health, Khadi and village industries etc.

But constitutional backing is no guarantee that powers would really be delegated to the local authorities. Our politicians and bureaucrats are in the habit of holding the strings of power to serve narrow ends. So far Panchayati Raj has remained as a populist slogan. Implementation

of the spirit behind constitutional provisions depends upon the sincerity of both the Central and State leadership to delegate real power to the elected local authorities. Because all the subjects listed for the Panchayats are already there either in the State, Central or the concurrent list. There should be a broad agreement among the States and the Centre to specifically demarcate areas of operation for the Panchayats without interference. State laws should be formulated correponding to the spirit behind the constitutional provisions. Otherwise there will be no use in proliferating development agencies from the Centre down to the villages with all paraphernalia of election. What is required is a strong political and administrative will to implement the spirit behind the constitutional provisions. Before I conclude I would like to quote the feelings of the great economist Gunnar Myrdal so passionately expressed on the occassion of the birth centenary of the Mahatma in 1968:

> "Often when labouring with India's staggering development problems, I have felt inclined to believe that what that great country needs today, more than foreign aid and day-to-day adjustment of policies to meet the recurring emergencies, is a spiritual leader of Gandhi's greatness, his love, and fearlessness. Together with the group of patriots who would come to surround such a leader, he might electrify the nation to undertake, late but perhaps not too late, revolutionary changes in social, economic and political institutions, attitudes and practices which are now so desperately needed".[20]

Notes and References :

1. M. K. Gandhi, Young India, 13-11-1924.
2. Selected work of Mahatma Gandhi, Vol-VI, Ch-20, Navajivan Ahmedabed, 1968.
3. Ibid, P.-237.
4. Ibid, P.-236.
5. M. K. Gandhi, An Autobiography, P. -198, 1966.
6. Gunnar Myrdal, Mahatma Gandhi—100 years (Ed), Gandhi Peace Foundation, 1968.
7. Pyrelal, Mahatma Gandhi—100 Years (Ed).

8. M. K. Gandhi, Harijan, 29-9-1940. Op. Cit. Selected Works of Mahatma Gandhi, P. 378.

9. Op. Cit., Selected Works of Mahatma Gandhi, PP. 385-86.

10. The Affluent Society, P. 93.

11. Ibid, P. 84.

12. Op. Cit., Selected Works, P. 343.

13. Schumacher, Small is Beautiful, P. 105.

14. Ibid, P. 28.

15. Ibid, P. 29.

16. Morarji Desai, Mahatma Gandhi—100 years (Ed) 1968.

17. Humayun Kabir, Mahatma Gandhi—100 years (Ed).

18. Op. Cit., Selected Works of Mahatma Gandhi, P. 345.

19. Pyrelal, Mahatma Gandhi—100 years (Ed) P. 300.

20. Op. Cit., Mahatma Gandhi—100 years (Ed) PP. 268-69.

DIMENSIONS OF URBANIZATION IN INDIA —ITS ECONOMIC & SOCIAL IMPLICATIONS FOR FUTURE DEVELOPMENT

Basic Needs and the Urban Population of India

B. K. Mohanty
Deptts of Economics
Ravenshaw College
Cuttack-753003

I. Introduction

In the nineteenth century, urbanisation was identified with the process of industrialisation of the European and American societies and hence it was their prerogative. In the current century, urbanisation no more remains exclusive to these societies and industrialisation is no longer the only root cause of urbanisation. Even the industrially backward nations may exhibit the growth of large urban centres. In this respect, World Bank's (1979) projection merits mention, that 'urbanisation has increased until now, over 30 per cent of the population of developing countries live in urban areas, and by the year 2000 over half the population of the world is expected to be urban'. According to an estimate of the United Nations (1987), the world's urban population had reached 1983 million in 1985, of which three-fifths lived in the less developed regions of the world. By the year 2000, it is predicted that more than two-thirds of the urban dwellers of the world will reside in the less developed region. Hence, in the present century, urbanisation is experienced to be more rapid in less developed countries than in the advanced ones.

The speed of industrialisation in India has never been uniform over the years beginning with 1901. However, it has althrough been favourably biased towards urbanisation. The Indian decennial census findings support the above proposition.

The annual growth rates of the Indian urban population has been always higher than the annual growth rates of total population and the extent of urbanisation (as measured by the percentage of urban population to total) is continuously shifting its horizon ahead. However, of the annual percentage growth rates of the urban population in India, all is not due to their natural increase. The sources of intercensal growth of urban population in India are portrayed below.

TABLE–I

Percentage Rates of Urbanisation in India

Census Decades	Annual Percentage Growth Rates of Total Population	Annual Percentage Growth Rates of Urban Population	Urban Population as a percentage of the Total *
1	2	3	4
1901–1911	0.58	0	10.27
1911–1921	–0.03	0.77	11.18
1921–1931	1.10	1.79	12.01
1931–1941	1.42	3.33	13.87
1941–1951	1.33	4.09	17.28
1951–1961	2.15	2.74	17.96
1961–1971	2.48	3.80	19.90
1971–1981	2.46	4.68	23.31
1981–1991	2.39	3.63	25.71

* Computed at the end-year of the Census decade
Source : India, 1993.

TABLE–II

Sources of Growth of Indian Urban Population

Intercensal Period	Annual Percentage Growth rate of urban population	Estimated Annual percentage Rate of Natural (exponential Increase in Urban population	Estimated Annual percentage Rate of Urban Growth from other sources
1	2	3	4
1901–1911	0	0	0
1911–1921	0.77	–0.03	0.80
1921–1931	1.79	1.04	0.75
1931–1941	3.33	1.33	2.00
1941–1951	4.09	1.25	2.84
1951–1961	2.74	1.96	0.78
1961–1971	3.80	2.20	1.60
1971–1981	4.68	2.22	2.46
1981–1991	3.63	2.14	1.49

Source : India, 1993.

'Other sources of urban growth' emanate basically from internal migration (rural to urban). In India rural-urban migration has been the outcome of both economic and non-economic causes of which the former is more powerful. The set of economic causes may include (1) a set of push-pull factors, (2) rural-urban wage differentials, (3) job-search and a relatively higher probability of securing urban jobs, (4) higher man-land ratio in the rural area (Preston, 1969) and (5) unequal distribution of land resources in the rural India (Oberai and Singh, 1980). The last cause may be accepted as a variant of the push-pull factors. Concentration of land resource (which is treated as their single invaluable asset by the rural population) in the hands of a few necessarily deprives population of the same asset at the other end of the distribution scale. Hence, both categories (rich and poor) of rural population develop a tendency to migrate. While the former category is pulled by better urban economic opportunities, the latter is pushed by rural unemployment, poverty and deprivation. To the former group of persons, such movement is a source of increasing their economic and social status, but to the latter it is a means for eking out a living. Irrespective of the causes of internal migration, it remains as a powerful determinant of urbanisation.

A very interesting feature of India's urbanisation process is that growth of urbanisation has taken place more rapidly in towns/cities with higher total population. The following table illustrates the fact.

TABLE—III

Growth of Urbanisation in India by Class of Towns

Class of Town/City (by population size)	Urban Population of India as a Percentage of Total				
	1951	1961	1971	1981	1991
1,00,000—above	44.63	51.42	57.24	60.42	65.20
50,000—99,999	9.96	11.23	10.92	11.63	10.95
20,000—49,999	15.72	16.94	16.01	14.33	13.19
10,000—19,999	13.63	12.77	10.94	19.54	7.77
5,000—9,999	12.97	6.87	4.45	3.58	2.60
Below 5,000	3.09	0.77	0.44	0.50	0.26

Source : India, 1993.

The rapid growth of bigger towns and cities may be attributed to (1) initial larger population, and (2) exodus of rural people to these

centres. Hence in India, urbanisation is not uniformly spread over space. This is corroborated by the fact that during 70s, on an average urban centres in India grew at a rate of 46.2 % while the million-plus metropolis grew only at 29.6 per cent during the same decade. Thus, it is raquired to introduce a systematic spatial planning for urbanisation in India in order to alleviate the inequality in the distribution of the growth of urban centres.

Concern about the present state of urban growth in India revolves around two major issues, i. e. (1) the growth of employment opportunities for growing urban population and (2) the capacity of physical and social infrastructure to accommodate this population growth. Of these two, the latter causes greater concern. It is estimated that in the LDCs with the present rate of natural increase, the existing physical and social infrastructure is inadequate even to accommodate the absolute increase in numbers. Hence, high natural growth of population in urban areas and the flow of rural population to urban centres have caused the growth of spontaneous or slum settlements.

The growth of slum settlements is quite rapid and extensive, more particularly in the LDCs. In the early part of 1970s, approximately 90 per cent of the population of Addis Abba lived in slum settlements (Thomson, 1984). The growth of slums in four big metropolitan cities of India draws a dismal picture. On the basis of the NSS 31st Round Survey (1976-77) data, it is estimated that the percentage of slum dwellers to total city populatioa of Bombay, Calcutta, Delhi and Madras stood at 9.73, 18.95, 19.40 and 34.33 respectively (Mitra, 1990). However, these figures underestimate the true ones as the percentages were computed on the basis of the informations collected from the 'declared slums'. If undeclared slums and slums in the outskirt of the cities had been included in the scope of the survey, the figures would have been substantially larger.

The growth of slums more particularly in the urban settlement of the LDCs has been a great cause of concern to the respective governments. Anticipating fully, the implications of the present day urbanisation for the quality of living standards, the World Employment Conference (WEC) of the International Labour Organisation (ILO) adopted a Programme of Action (ILO, 1977) under the heading 'Basic Needs' which begins as follows :

"1. Strategies and national development plans and policies should include explicitly as a priority objective the promotion of employ-

ment and the satisfaction of the basic needs of each country's population.

2. Basic needs ... include two elements. First they include certain minimum requirements of a family for private consumption : adequate food, shelter and clothing, as well as certain household equipment and furniture. Second, they include essential services provided by and for the community at large, such as safe drinking water, sanitation, public transport and health, educational and cultural facilities."

Hence the conference emphasized that the basic needs satisfaction by the urban population would be ensured by a combination of (1) private consumption expenditure and (2) the provision of essential services by the State.

The present study aims at ascertaining the extent of basic needs satisfaction by the Indian urban population in general and the urban poor in particular with their own means and efforts. That is, how far the private consumption expenditure of these people would be eligible for their basic needs satisfaction. This paper does not explore the possibility and extent of basic needs satisfaction by these people through the provision of essential service by the State.

II. Methodology and the Data :

In order to examine the adequacy of the private consumption expenditure to satisfy the demand for basic needs of the urban population of India, the necessity arises as to analysing their pattern of demand. The methodology approves of utilising the tool of Engel functional form. Though alternative functional forms are available, in the present enquiry only one such model is used, i.e. the Working (1943)—Leser (1963) model which belongs to Price Independent Generalised Loglinear (PIGLOG) class. The choice of such model is not arbitrary rather is based on the unqualified advantage that the model enjoys in Indian household budget analyses. Working-Leser model has been tested several times (Ray, 1980, 1982, 1985; Murty, 1984; Majumdar, 1985; Iyengar and Raghuprasad, 1988) with household budget data to ascertain its appropriateness to Indian conditions. Its appropriateness in each case has been proved beyond doubt. Moreover, the Working-Leser model is consistent with known household budget data, it is simple to be estimated largely avoiding the need for non-linear estimation. The criteria of homogeneity, symmetry

and adding-up are also fulfilled by the model (Deaton and Muellbauer, 1980). The model is given by

$$y_{ij} = \alpha_i + \beta_i \ln x_j + u_{ij} \qquad (1)$$

$$i = 1, 2, \quad I$$
$$j = 1, 2, \quad J$$

Engel aggregation conditions are

$$\sum_{i=I}^{I} \alpha_i = 1 \text{ and } \sum_{i=1}^{I} \beta_i = 0 \qquad (2)$$

and the elasticity coefficients are computed from

$$n_{ij} = [\alpha_i + \beta_j (1 + \ln X_j)] y_{ij} \qquad (3)$$

and $$MPC = [\alpha_i + \beta_i (1 + \ln X_j)] \qquad (4)$$

where $y_{ij} = Y_{ij} / X_j =$ the budget allocation ratio relevtnt to the ith group and the jth class of households,

Y_{ij} and X_j per capita specific expenditure and total expenditure of the jth class of households respectively.

Our main interest lies in computing the expenditure elasticity coefficient for each commodity group by using (3) above and to interpret them in order to reveal the extent of basic needs fulfilment by the urban households of India.

The data necessary for computing the coefficients of expenditure elasticity have been obtained from the published reports of the National Sample Survey Organisation of India (NSSO) starting from 1983 through 1989-90. NSSO has been furnishing the household budget data both for rural & urban India on quinquennial basis till its 38th round survey operation (1983). To maintain the continuity of survey data, the NSSO started providing annual series (with both rural and urban break-up) in addition to quinquennial series from its 42nd round survey operation (1986-87). The latest NSS data on consumer expenditure is collected in its 45th round covering the period 1989-90. Hence, it is proposed to ascertain whether the urban population of India were capable of meeting the basic needs right from the year 1983. The selection of the year is rationalised on the following grounds :

1. that, the Programme of Action under the heading 'Basic Needs' is adopted by the ILO in 1977,

2. that, Indian urban household budget data are available since 1983 (NSS 38th round) immediate after 1977— the year of adopting the Programme of Action by the ILO for urban dwellers.

By 'basic needs', ILO means certain goods and services of household consumption which may be classified under two broad groups.

Group—I : Food, Shelter and Clothing, Household Equipment and Furniture

Group—II : Safe Drinking Water, Sanitation, Public Transport and Health, Educational and Cultural Facilities.

We have excluded the Group-II from our study as the provision of these essential services is made by the public bodies for the community at large over which no private individual either in the capacity of a consumer or a producer has any control. Moreover, all goods included under Group-I have not been incorporated in the study for the reason that NSS data are not available on these goods taken individually. Therefore, in the present context, by 'basic needs' we mean goods like

1. Food.
2. Fuel and Light and Durable Goods
3. Clothing and
4. Rent

by keeping in conformity with ILO description and the NSS data.

III. Empirical Findings

The findings from the empirical investigations can be arranged under two broad heads, i.e. (1) interpretation of the coefficients of expenditure elasticity and (2) interpretation of the calorie intake.

1. Expenditure Elasticity : In household budget analysis, the coefficient of expenditure elasticity serves a very meaningful purpose by assuming the role of an index on the basis of which the nature of the corresponding commodity can be ascertained. The estimates of the coefficients of expenditure elasticity along with the MPC for the 'basic items' of urban consumption are given in Table—IV. All elasticity coefficients are positive indicating an increasing (decreasing) item-wise expenditure due to an increase in total household expenditure. Irrespec-

tive of the rounds of data collection, it is seen that almost for all commodities, the expenditure elasticity is larger than unity confirming the fact that specific expenditure increases more than the proportion in which total household expenditure is increased. Therefore, the urban households of India, on an average are meeting the expenditure on 'basic commodities' by reducing expenditure on other non-basic commodities. A society with better standard of living necessarily devotes less than the proportion in which total household expenditure increases to basic goods (food items in general) than to the other goods. Hence, the urban India has not yet been able to reach near saturation in consumption of basic goods and thus continues to remain deprived.

TABLE–IV

Estimates of the Coefficients of Expenditure Elasticity (n_i) and MPC for Basic Items of Urban Consumption in India.

NSS Rounds/ Statistics	Basic Items of Consumption			
	Food	Fuel and Light & Durables	Clothing	Rent
1	2	3	4	5
38th Round (1983)				
1. n_i	0.877	0.588	3.366	2.253
2. MPC	0.568	0.064	0.064	0.056
42nd Round (1986-87)				
1. n_i	1.008	0.919	5.524	4.261
2. MPC	0.634	0.087	0.057	0.035
43rd Round (1987-88)				
1. n_i	0.737	1.312	2.193	1.761
2. MPC	0.442	0.143	0.079	0.056
44th Round (1988-89)				
1. n	1.046	1.385	2.320	1.429
2. MPC	0.608	0.138	0.049	0.031
45th Round (1989-90)				
1. n_i	1.386	1.603	0.554	0.086
2. MPC	0.800	0.153	0.080	0.049

This does not mean that all households of urban India are to face the same sorry state of affairs. Since, the conclusion reveals an average behaviour of urban households, may be the consequence of the manner of basic goods satisfaction by the less-well-to-do class outweighing the same of the economically more prosperous class.

2. Calorie Intake : Calorie intake and the sources from which these calories are obtained are the indicators of the nutritional status of the population. Calorie intakes are generally defined with respect to 'per consumer unit per diem intake'. The average intake of calories per consumer unit per diem calculated on the basis of the 38th round NSS data (1983) for the urban India is seen to be 2574 lower than the minimum requirement of 2700 calories per diem per unit consumer. While the households belonging to the lowest per capita expenditure class in urban India derive hardly 24 per cent of average calorie requirement from food on which 62 per cent of total expenditure is incurred, the households in the highest expenditure bracket spend hardly 44.5 per cent of their total expenditure and derive 166 per cent of actual calorie intake. Hence, in urban India, a lot of gap exists between the qualities of dishes of both categories of households belonging to lower and upper expenditure classes. The latter group of persons rely more on cereals than on pulses, milk, meat, fish and egg to derive the calorie intake. It is confirmed by the fact that to the lowest income class, cereals provide as high as 85.12 per cent of total calorie intake while the highest expenditure class derive 55.61 per cent of their calorie intake from the consumption of cereals.

IV. Conclusion :

In a country like India with rural base, anti-urban bias may be quite strong. In order to study the problems, prospects of urbanisation and to recommend measures for overcoming the problems of urbanisation in India, the National Commission on Urbanisation (NCU) was appointed which submitted its final report after its two and half years life in 1988. The NCU extended a positive attitude to urbanisation for India. It has all praise for urbanisation in general and that of India in particular on the following counts.

1. Urbanisation is a catalyst for economic development.
2. For millions of people, urbanisation is a certain route to a better future.
3. Urbanisation is of vital importance for the development of rural areas.

If urbanisation is of 'rural prosperity-induced' may be a source of positive benefit to the society. On the contrary, 'poverty-induced urbanisation' may be a liability on the nation as the economy of the country may be required to subscribe substantially even to the satisfaction of the 'basic needs' (may be in the form of subsidies and grants to the production of food and non-food articles of common urban consumption) by these people which should have been satisfied by them with their own means. Since in India, most part of urbanisation (excepting urbanisation in few states like Pujnab and Haryana) is poverty-induced, must not be looked as enthusiastically as the NCU has foreseen.

References :

Caldwell John C. (1969) : African Rural—Urban Migration, Australian National University Press, Canberra.

Deaton A. and J. Muellbauer (1980) : An Almost Ideal demand System, American Economic Review, Vol. 70, No. 3, PP. 312-326.

ILO (1977) : Declaration of Principles and Programme of Action, Geneva.

Lyengar N. S. and S. Raghuprasad (1988) : Estimation of Additive Engel Curves in the Presence of Heteroscedasticity, Journal of Quantitative Economics, Vol. 4, PP 329-339.

Kundu A. (1989) : National Commission on Urbanisation : Issues and Non-issues, Economic and Political weekly, Vol. XXIV, No. 21, PP 1185-1188.

Leser C.E.V. (1963) : Forms of Engel Funitions, Econometrica, Vol. 31, PP. 694-703.

Majumdar A. (1986) : Consumer Expenditure in India : A comparison of the AIDS and LES, Sankhya, Series-B, Vol. 48, PP. 115-143.

Mehta M. & D. Mehta (1989) : Priorities in Urban Planning and National Commission on Urbanisation, Economic and Political Weekly, Vol. XXIV, No. 21, PP. 1178-1184.

Mitra A. (1990) : Duality, Employment Structure and Poverty Incidence : The slum Perspective, Indian Economic Review, Vol. XXV, No. 1, PP. 57-73.

Murty G.V.S N. (1984) : Consumer Behaviour : An Application of the AIDS, Anveshax, Vol. XIV, PP. 1-47.

Oberai A. S. and H. K. Manmohan Singh (1980) : Migration Flows in Punjab's Green Revolution Belt, Economic and Political Weekly, March, 29, 1980, pp A2—A12.

Paul R. R. (1989) : Rural—Urban Migration in Punjab, Himalaya Publishing House, New Delhi.

Preston D. A. (1969) : Rural Emigration in Andean America, Human Organisation Vol. 28, No. 4.

Ray R. (1980) : Analysis of Time-Series of Household Expenditure Survey for India, Review of Economic and Statistics, Vol. 52, PP.. 595—602.

—— (1982) : The Testing and Estimation of Complete Demand System on Household Budget Survey : An Application of AIDS, European Economic Review, Vol. 17, PP. 349—369.

—— (1985) : A Dynamic Analysis of Expenditure Patterns in Rural India, Journal of Development Economics, Vol. 19, PP. 283-298.

Thomson A. M. (1984) : Urban Poverty and Basic Needs : The Role of the Public Sector, in Basic Needs and the Urban Poor (ed). P. J. Richards and A.M. Thomson, Groom Helon, pp. 9—39.

United Nations (1987) : The Prospects of World Urbanisation, Department of International Economic and Social Affairs, New York.

Working H. (1943) : Statistical Laws of Family Expenditure, Journal of the American Statistical Association, Vol. 38, pp. 43—56.

World Bank (1979) : World Development Report, Washington D. C.

The Theory of Migration and City Growth : The Case of Urban Informal Sector in India

Kishor C. Samal
NKC Centre for Development Studies, Bhubaneswar

Over the years, some of the smaller villages became large. The craftsmen exchanged their produced commodities for food grown by other families. Gradually as exchange increased and trade developed, the craftsmen started to live together and such villages gradually developed into towns in India. Thus, in earlier period, towns in India were the centres of capital and investment. The earliest city in India was Mohenjo-daro.

In the modern times, concentration of capital and investment led to the emergence of urban centre (Engels : 1978 : Safa : 1982; Sethuraman : 1981). There is an "urban bias" in the development process for which urbanisation is a process of capital accumulation in the urban centre draining from the country side (Lipton : 1977). The contradiction between town and country is one in which town necessarily plunders countryside (Tung : 1971). So, in developing countries, the city growth and the process of urbanization have not been associated with a rate of economic growth (McGee : 1975). Thus, the capital investment on manufacturing, social overhead and infrastructure creates urban centres and migration adds to the growth of city to a great extent.

In recent times, Migration to the cities played an important role in the process of urbanization throughout the 1950s and 1960s accounting for about 58 per cent of city growth. From 1950 to 1975, sixteen largest cities in developing countries recorded an average annual growth rate around 5.4 per cent (Sinclair : 1978). There is a considerable variation in regional pattern and timing in the rate of growth of cities. However, the cities in developing countries as a whole achieved peak rates of growth in the early 1970s (U.N.O. 1987).

I

Rural-to-Urban Migration : Theory and Realities :

Rapid urbanization and growth of employment in informal sector have been observed taking place simultaneously in the developing countries. The two phenomena are considered most often to be a result of large-scale rural-urban migration.

1. Theory : "Push" or "Pull" :

The most popular model to explain the pattern of migration and its link with informal sector is of Todaro (1969). According to the Todaro model, the decision to migrate from rural to urban centres is fundamentally related to two principal variables : (i) urban-rural income differential, and (ii) the probability of obtaining a job in an urban area. On the other hand, talking of modern migration, Amin (1974) criticises the individualistic approach like that of the Todaro model since the society of origin which the migrants quit is hardly considered. To him, there is a "Push" effect—a force of expulsion—in the process of rural-to-urban migration. The nature of this push effect is closely related to the social transformation that the rural areas undergo such as (i) capitalist production in agriculture (ii) destruction of rural domestic industry and (iii) consequent dire poverty (Lenin : 1973, 1977; Mark : 1974).

2. Realities in India :

In India, some studies (eg. Papola : 1981) show "Pull" factors such as expected current earning differential as responsible for rural-urban migration. The "Push" factor as the cause of migrants to move out of their villages is observed in some other studies on migration in India (eg. Connell *et al* : 1976, Sovani : 1966 and Banerjee : 1986). The role of "Push" factors as a cause in the process of migration is also apparent since the general socio-economic condition is deteriorating gradually in rural society in general and rural labourer in particular due to increasing trend of proletarization, declining trend of wage employment, worsening inequality in the distribution of land and rural assets and increasing incidence of rural indebtedness among rural labourers.

Of course, it may be difficult to bring a distinction between "Push" and "Pull" since both imply that destination is seen as having an economic advantage over the origin As is also revealed by various studies in India, the presence of "Pull" factors can not be denied. Yet the "push" is found to be stronger than "pull" (Samal : 1990).

II

Macro-Economic Factors For City Growth and Migration

With respect to city growth and rural-urban migration, two principal hypotheses have been advanced : (i) socio-economic transformation 'pushing' rural labourers into the cities, and (ii) strong economic forces 'pulling' migrants into the cities.

I. Fundamental Forces "Pushing" and "Pulling :

The fundamental forces pushing and pulling migrants to the city in developing countries according to recent literature (Becker, *et al* : 1986; Becker *et al* : 1992; Williamsons : 1991) are :

(a) *endogenous "limits"* to city growth such as public social overhead and private housing investment and urban cost that influence migration decision.

(b) *exogenous external events* such as (i) the demand for foreign capital, (ii) the price of traded goods in World market and (iii) increase in the price of energy.

(c) *exogenous internal events* such as (i) scarcity of agricultural land and (ii) urban bias.

2. The Case of India :

The economic development of India since 1950s does not fully fit in with the above stylized facts. Williamson (1991) uses a computable general equilibrium model to examine the urban growth in India. The rate of city growth during 1960-64 was 6.4 per cent which fell to 3.6 per cent thereafter. Through his model Willamson cites causes of slow growth rate of urbanization in India as (i) drop in productivity in manufacturing, (ii) relatively unfavourable economic and demographic condition and (iii) urban policy in India.

(A) Productive growth rate :

When rise in productivity is comparatively higher in manufacturing (Table—1), city growth rate, rural-urban migration and urban employment increase in India, as during 1960-64. The growth of productivity decreased from 1965 to 1977 and hence the rate of city growth fell.

(B) Economic and Demographic Environment :

The economic environment was unusually favourable to the growth of cities in the early 1960s. But these conditions disappeared soon after

and so the rate of city growth fell in India. For examples, terms of trade between agriculture and manufacturing goods favoured manufacturing in the 1960s and agriculture in the 1970s. Similarly capital inflows fell steeply after early 1960s and were negative during the emergency period in the mid 1970s.

(C) Urban Policy in India :

The third factor is urban policy in India such as (i) restricting rural-urban migration and (ii) urban bias in economic development.

Capital inflows and productivity in manufacturing go together. Thus, the pattern of urbanization and migration is shaped by the entry of developing countries to global capitalist economy and their dependence on advanced industrial countries for capital, technology, export market etc.

III

Growth of Urban Informal Sector :

The growth of formal manufacturing output in India was poor compared to the rest of Asia. Employment growth in this sector fell short of the national (much less uaban) rate of population growth from 1965 to 1979. The "Engine of Growth" Thesis—manufacturing is the engine of growth of cities—is not proved for Indian cities. The city growth in India coexisted with low and falling rate of employment in the formal manufacturing sector. Therefore, the city growth and rural-urban migration led to the rise in the size of urban informal sector.

1. Urban Size Class Hypothesis :

The size of the urban informal sector may be a function of the size of the urban centre. The urban size class hypothesis can be tested in direct as well as in an indirect way. There are some speculative arguments about the relationship between the city size and the informal sector. There are two main contrasting views on the relationship between city-size and informal sector. One view suggests a negative correlation between the two implying that informal sector employment tends to decline as the size of the city increases (Balsubramanian and Raju : 1986, Elshakhs : 1984; Richardson : 1984). In contrast, the second view presumes that informal sector employment tends to increase as the size of the city expands, thus establishing a positive correlation between the city size and urban informal sector (Hilhorst : 1984; Kundu and Mathur : 1984).

2. Urban Informal Sector in India :

Analysing the size of informal sector employment in different towns and cities in India from various studies (eg. Breman : 1977 ; Joshi and Joshi : 1976 ; Papola : 1980 ; Samal : 1990 ; Sathuraman ; 1981), we came to conclusion that the proportion of informal sector employment, in small cities and towns in general, is higher than the proportion in metropolitan cities. A similar type of conclusion is also found in another study in India (Balsubramanian and Raju ; 1986). According to this study in South India cities of one lakh and above population except for capital cities of the states of Andhra Pradesh, Karnataka and Tamil Nadu, population size and informal sector are inversely related. That is, the South India cities with larger population have smaller proportion of informal sector.

Inspite of the limitations of insufficient information and deficiency of data, we can postulate a hypothesis that in the earlier stage of development, of a city from a very small size to an optimum level, the size of informal sector is positively correlated with the city size, while after the optimal level, the two are negatively correlated. The question remains how to define "optimal level".

IV

Conclusion and Policy Implication

There is growth of urban informal sector since rural-urban migration and city growth coexist with low and falling rate of employment in urban formal manufacturing sector in India. But it is not advantageous to check migration since it will widen rural-urban wage gap and create social inequality. It is better to radicalize the institutes to assist productive entrepreneurs of urban informal sector and not to have any urban bias in the economic development of the nation.

TABLE–I

Estimated Growth in Total Factor Productivity in Indin by Sector (1960-81)
(Average annual percent)

Period	RURAL		
	Agriculture	Services and Manufacturing	Public services
(1)	(2)	(3)	(4)
1960-64	0.18	3.07	3.19
1965-71	–0.19	–0.25	3.59
1972-77	1.43	0.91	1.17
1978-81	–0.85	1.38	5.28

Period	URBAN			
	Manufacturing	Modern services	Informal services	Public services
(1)	(2)	(3)	(4)	(5)
1960-64	3.56	–0.40	3.23	–0.38
1965-71	–0.76	0.45	1.07	0.13
1972-77	0.07	3.43	2.34	0.90
1978-81	1.00	1.28	1.32	1.45

Source : (i) Becker, Williamson and Mills (1992)
(ii) Williamson (1991)

References :

Amin, Samir (1974), *Modern Migration in Western Africa*, OUP, London.

Balsubramanian, K. and P. L. N. Raju (1986), "Population size and informal sector : An exploratory study of South Indian Cities", *Nagarlok*, Vol. XVIII No. I, pp. 10-74.

Banerjee, B. (1986) *Rural and Urban Migration and the Urban Labour Market : A Case Study of Delhi*, Himalaya Publishing House, Bombay.

Becker, C. M., E. S. Mills and J. G. Williamson (1986) : "Modelling Indian Migration and City Growth 1960-2000", *Economic Development and Cultural Change*, Vol. 35, 1-33.

Becker, C. M., J. G. Williamson and E. S. Mills (1992), *Indian Urbanization and Economic Growth since 1960*, John Hopkins University Press.

Breman, Jan (1977), "Labour relations in formal and informal sector : Report of a case study in South Gujarat", *The Journal of Peasant Studies*, Vol. 4, No. 3X, pp. 171-205 and 337-359.

Connell, John et. al. (1976), *Migration From Rural Areas : The Evidence from Village Study*, OUP, Delhi.

El. Shakhs, Salah (1984), "On city-size and the contribution of the informal sector : Some hypotheses and research question", *Regional Development Dialogue*, Vol. 5, No. 2, pp. 77-81.

Engels, F. (1978), *Anti Duhring*, Progress Publishers, Moscow.

Hilhorst, J. G. M. (1984), "On city size and the informal sector", *Regional Development Dialogue*, Vol. 5, No. 2, pp. 86-95.

Joshi, Heatler and Vijaya Joshi (1976) : *Surplus Labour and the City : A Study of Bombay*, OUP, Delhi.

Kundu A. and Mathur, P. N. ; "Informal sector in cities of different size : An explanation within the core theoretic framework", *Regional Development Dialogue*, Vol. 5, No. 2, pp. 82-85.

Lenin, V. I., (1973), "Capitalism and Workers' Migration" *Collected Works*, Vol. 19, Progress Publishers, Moscow, pp. 454-57.

—— (1977), The Development of Capitalism in Russia, *Collected Works*, Vol. 3, Progress Publishers, pp. 21-607.

Lipton, Michael (1977), *Why Poor People Stay Poor : A Study of Urban Bias in World Development*, Temple Smith, London.

Marx, Karl (1974); *Capital*, Vol. I, Progress Publisher, Moscow.

Mc-Gee, T. G. (1975); *The Urbanization Process in the Third World : Explorations in Search of a Theory*, G. Bells and Sons Ltd., London.

Papola, T. S. (1981), *Urban Informal Sector in Developing Economy*, Vikas, New Delhi.

Richardson, H. W. (1984), "The role of the Urban informal sector : An overview", *Regional Development Dialogue*, Vol 5, No. 2, pp. 56-62.

Safa, Helen I. (1982), *Towards Political Economy of Urbanisation in Third World Countries*, OUP, New Delhi.

Samal, Kishor C. (1990), "Urban informal sector and rural-urban migration : A Case Study", *Nagarlok*, Vol. XXII, No. 3, pp. 30-38.

—— (1990) *Urban Informal Sector*, Manak Publication Pvt. Ltd., Delhi.

Sethuraman, S. V. (1981) *The Urban Informal Sector in Developing Countries : Employment, Poverty and Environment*, ILO, Geneva.

Sinclair, S. W. (1978), *Urbanization and Labour Market in Developing Countries*, Croom Helm, London.

Sovani, N. V. (1966), *Urbanization and Urban India*, Asia Publishing House, Bombay.

Todaro, M. P. (1969); "A Model of Labour migration and urban employment in less developed countries", *American Economic Review*, Vol. 59, No. 1, pp. 138-148.

Tung, Mao Tse (1971), "On Contradiction" *Selected Readings from the Works of Mao Tse Tung*, Foreign Language Press, Peking.

United Nations (1987), *The Prospects of World Urbanization*, New York.

Williamson, Jeffrey G. (1991), "The Macro-economic dimension of city Growth in Developing countries : Past, Present and Future", *Proceeding of the World Bank Annual Conference on Development Economics, 1991.*

Dimensions of Urbanisation in India : In Economic and Social Implications for Future Development

Shri B. K. Tripathy,
Director, Economics and Statistics
and
S. Gopangana,
Asst. Director, Directorate of
Economics and Statistics, Orissa

The rapid growth of urbanisation in India (also in all the Third World Countries) in recent years has drawn the attention not only of economists but also of all type of social analysts. In fact, urbanisation is an offshoot of industrialisation which brings about migration from rural areas to industrial areas in search of employment and livelihood Further political and social factors become as important as economic factors under the process of urbanisation. Thus urbanisation is closely interlinked with industrialisation and modernisation. Yet those terms are not synonymous. Urbanisation refers to the spatial shift of population from rural settlement to urban settlement whereas industrialisation means structural shift of labour force from primary to secondary mode of production. In other words urbanisation indicates concentration of people whereas industrialisation means economic activities. Modernisation denoting technological advancement and its application in day-to-day life alongwith changes in socio-cultural values lead to reinforcement of urbanisation in industrial areas.

Economic Dimension—'Employment'

One of the most important economic dimensions of urbanisation is availability of employment opportunities. There is a great pressure of population on land in rural areas in an agrarian country like India. Hence as economic pressure or 'push' in the rural areas mounts continuously, it pushes out people to the cities which can provide them employment. Thus push from the rural areas lead to rural-urban migration resulting in urbanisation even if there is no demand for labour.

The main factor causing worker to leave agriculture is the lower level of income in that sector than in other sectors of the economy. Further that the opportunity or scope of expansion of employment in industrial and tertiary sectors has encouraged movement to urban areas.

(a) Industry and Occupation :

Industrialisation leading to urbanisation not only creates employment opportunities but also changes the nature of work. N.S.S. report on "The distribution of the gainfully employed population by industry and occupation in rural and urban areas" reveals that a little more than one-fifth of the gainfully employed persons are in agriculture in urban India whereas 78% (approx.) are employed in agriculture in rural areas. Manufacturing industries cover nearly 24% of gainfully employed population in the urban sector. Professional services are the largest single group in the rest industries in the urban sector followed by trade and commerce. Thus at the first phase employment rises in the industrial sector. But then with rapid urbanisation it gradually moves to various tertiarry sectors and trading activities. In other words, the proportion of gainfully employed population in agricultural occupation declines progressively with rise in the size of towns whereas availability of administrative and professional services in the urban sector rises with the size of the town Similarly employment in trade and commerce also rises proportionately with the size of the town/city.

TABLE—1

India : No. of persons per 1000 persons employed according to rural status by Sex and Rural Urban residence status.

NSS Round	Rural		Urban	
	Male	Female	Male	Female
1	2	3	4	5
43 (1987-88)	529 (160.5)	323 (92.0)	506 (55.0)	152 (14.7)
38 (1983)	547 (152.7)	340 (98.4)	512 (47.3)	151 (12.3)
32 (1977-78)	552 (140.7)	331 (80.9)	508 (33.4)	156 (9.3)
27 (1972-73)	545 (127.2)	318 (70.6)	501 (31.3)	134 (7.2)

Source Results of the 4th Quinquennial Survey of Employment and Unemployment (All India) NSS 43rd Round (July' 87 to June' 88) Surveykshana Sept. 1990.

Note : Figures in parentheses are aggregates in Millions.

Implication—Unemployment and Underemployment

It is true that industrialisation and urbanisation are interlinked. However, a number of problems arises when the pace of industrialisation remains behind the pace of urbanisation (migration). As in a developing country like India, urbanisation, that is rural urban migration is determined by 'Push' factor instead of demand for labour factor and it results in over urbanisation. As a result these migrated people either remain unemployed or get employment with low productivity and low wages. Thus over-urbanisation brings about unemployment/underemployment. The excess migrant gets engaged in low productivity employment like handicraft production, retail trading, domestic services in urban areas.

However, some economists do not agree with this. They admit that there is unemployment in urban areas and migrants to urban areas are engaged in low productivity employment. Yet they opine that any kind of urban employment is by and large more productive than the pre-migration rural employment. It has been found all over the world that percapita income in urban areas is higher than the percapita income in the rural area. Hence, with modern technological improvement and opening up of new tertiary sectors the existing problem of unemployment/under-employment in urban may change.

Production and Productivity :

Alongwith urbanisation and industrialisation production side of the economy also prospers. It happens because of advanced education, new forms of business organisation, new administrative practices, new technologies and opening up of new markets in the economy. With urbanisation more rural labourers get employed in the urban area and their productivity also rises due to the use of new and modern technologies.

Change in Consumer Markets :

The rise in productivity further leads to rise in income resulting in rise in the standard of living. As a result it affects the market/demand of the consumer in a different way. With rise in the standard of living there will be more demand for durable and luxury goods in place of basic essential consumer goods.

Implication :

It is believed that more demand for durable and luxury goods will divert investment for the production of those goods by neglecting the essential sector of production. In other words demand for less productive projects will be made on the available scarce capital resources of the

economy. It will result in inflation at the early stages of development. It will also lead to inequal distribution of income in the economy.

Social Dimension and Implications :

Urbanisation has affected the social life of both rural and urban areas in various ways. The effects of urbanisation of some aspects of social life are found to be drastic. The problem of housing comes under this category.

Housing Problems :

With rapid migration to urban areas dwelling has become an important problem. As people generally migrate to the nearby areas of industrial growth or areas having political importance, we can say that migration takes place only to certain urban pockets. Therefore migrants prefer to settle down in the surrounding places of those urban pockets raising the demand for houses. As a result, house rents begin to rise and the price of houses and lands for residential purposes also rise.

Consequently, the poor people that is, labouring class, who can not afford to get houses at high rent start to live in slums. Thus, with rapid urbanisation slums begin to develop here and there. With slums other new problems arise like health hazards, environmental pollution and so on. The recent break down of plague in Surat is a bright example of such adverse effect of slum life.

With the scarcity of housing different house construction agencies have started their business. Further financial agencies to promote house construction loans also have started functioning in the so called urban areas. Thus a new trend has been found in the urban areas.

With the existing rate of growth of population, it is expected that the problem of housing needs in future will be more and more grave and uncontrollable. The standard of house is also going to be degraded day by day.

Education :

It is a fact that the level of literacy and education is generally higher in the urban areas than in the rural areas. Further, female literacy in particular is also higher in the urban areas. However, female literacy both in urban and rural areas is lower than male literacy. It is because, with industrial development establishment of schools becomes a bare necessity. Further it has been found that proportions of persons with

technical or professional qualifications is 2.96% in the rural population and it is 10.15% in urban population (as found by NSS report No. 16). The N. S. S. Report (No. 16) indicates that the proportion of literates and persons with higher educational attainments gradually rise as the size of the urban centre rises.

Family Types :

Urbanisation has affected the institution of family in the worst way. It has gradually broken down the joint family system and has yielded to nuclear types of family under the process of urbanisation. This has happened mainly due to economic problems. People are forced to leave their family, old and dependent parents behind while they come to the urban areas in search of employment and livelihood. Very often their earnings do not become sufficient to maintain a large family in the town areas. As a result they prefer a nuclear family to a big family with more dependents. Moreover housing problem has also become another reason for rise in the system of nuclear family in the urban areas.

Health Factor :

With rapid urbanisation, provision for better medical facilities has increased. More hospitals have been opened and qualified doctors have been appointed to give good medical services. Consequently the mortality rate has been improved over the last two decades.

However, it is not possible to avoid the health hazards created by the overurbanisation process. The unhealthy atmosphere developed due to existence of slum areas, absence of sewerage facilities, lack of provision of supply of drinking water, lack of disposal facilities for the waste materials and environmental pollution created by industries are still creating health hazards in urban areas.

Environmental Pollution :

Environmental pollution created by industrial growth, over population, slum areas, degradation of forests has become an important matter of discussion in urban areas. This problem has become so accute that both Government and N. G. O.s have to take initiative to control it. Environmental pollution becomes more and more drastic with rapid industrialisation followed by urbanisation.

Social Values :

Rapid industrialisation and urbanisation have modernised the value judgements in the society. Education has an important role in it. Age at

marriage has been risen. People prefer to have a small family with one or two children. Inter-caste marriage has become common. In other words occupation in factories has made people to adopt new values like cleanliness, broadmindedness, compulsory education in place of caste and religious taboos. Nuclear family instead of joint family has become the predominant household unit in many parts of the country. In brief we may say that people have acquired freedom from caste, family in terms of occupation, food habits, intercaste relations and family responsibilities.

Morality :

It seems that there has been moral degradation with urbanisation. Rates of crime in urban areas are much higher than in rural areas and therefore it has become a major concern to many urban residents. Reasons for higher urban crime rates are many. One of these reasons is unemployment among educated youths. Other important reasons are drug addiction which relates to drug-related crimes and working parents who can not make time to look after their children. Recently white-collar crimes have become rampant among the people of higher income groups.

Political Dimension and Implication :

With development of urban areas it has become necessary to look after the allround development of each urban area by the local people. In a democratic country like India people are elected and form Government to look after the urban local bodies. This ULBs have been empowered to collect revenue from some lacal taxes like Octroi, Licence fees of vehicles etc. The political activities of these ULBs also affect the political activities of the State and also of the Nation.

Conclusion:

It is not true that India is moving towards complete Westernisation with rapid urbanisation and industrialisation. India has its own strong cultural and economic background. As India is basically an agrarian country and more than 70% of the people depend on agriculture, till now industrialisation has not been able to overshadow this sector. However cities are playing an important role in abandoning traditional social practices, in establishing modern factory industry and in originating and spreading political movements. Therefore, we may say that urbanisation can be expected to play a dynamic role in social, political and economic transformation of India.

Growing Urbanisation and Developmental Issues : An Overview

R. M. Mallik
NKC Centre for Development Studies, Bhubaneswar

In recent years rapid growth of urbanisation and the resulted environmental deteriorations at an accelerated rate have agitated the minds of development planners, policy makers, researchers and environment scientists owing to a host of environmental issues concerning the urban dweller. Accelerated urbanisation coupled with population explosion and growing industrialisation have indeed created an ecological and economic imbalance of unprecedented magnitude that has also threatened the development process. Because, growing urbanization leads to rapacious demand for food, water, fuel, land and other natural resources, besides the provision of jobs, housing and urban services. The concentration of industries in urban centres/in the peripheries is owing to the access to gevernment office, availability of means of transport, communication facilities of all sorts, financial markets and availability of skilled labour which give rise to concentration of people, in which variations of economic activities are performed, and most of these are environment-sensitive as well as of ecology-concerns.

Needless to say that the subject of urban environment and ecology has been inadequately studied/not properly addressed to a host of emerging issues (in the literature)which are of recent origin in the development process. Because, this remained as a domain of geographers and sociologists, who failed to encompass the essential parameters of ecological studies, which are in fact multi-disciplinary in character. The factoral ecology approach to examine the extent of modernisation from an archetyped prematured metropolies was first used by Brain and Rees (1969) in Calcutta and subsequently by others. Today, we notice a large segment of urban population is becoming environment conscious. After so much of economic development at the end of twentieth century, there is still around one-third of world's population who have inadequate situation and around one billion do not have access to safe drinking water.

Further, 300 to 700 millions of women and children in the world at present suffer from indoor air pollution from cooking fires. In such global scenario, the situation is very critical in case of developing countries like ours and with growing urbanisation, the environmental conditions in such areas are a source of critical concern owing to exposure of urban population to problems of waste disposal, noise and congregation, lack of open space, health and sanitation, air pollution, water pollution, housing environment and poverty etc.

The primary purpose of this paper is to discuss some selected environmental issues, their magnitude, impact and to propose at the end, a couple of remedial measures to do away with environmental pollutions concerning urban inhabitants, with special reference to Orissa. The paper is broadly divided into four sections. Section one discusses the nature and magnitude of urbanisation in the state, and a few selected environmental issues that concern people at large, since growing stresses and accompaning environmental issues are now a part of development process. Section two spells out the impact of urbanisation on environment and ecology of the area. The proposed remedial measures are briefly discussed in section three and the concluding remarks in policy perspective are mentioned in the concluding section.

I

Urbanisation is a social process. A number of economic, social, cultural, political and historical factors, besides the process of economic development attribute to rapid growth of urbanisation. This process is again supported by population growth and increasing industrialisation. These in consolidated lead to several multi-dimensional environmental issues. The major among those are air, water, noise pollution, solid waste, sewerage and drainage, increasing number of slum and the resulted local climatic change. The influx of people from rural areas for job search (due to disguised unemployment in agriculture) particularly on the informal sector (which is on rise) due to construction of buildings, parks, roads, makes urban cities problematic in different ways. Because, rapid growth of cities beyond a threshold size causes congestion, increases crime and pollution. As a result, *one finds that urbanisation inadvertently modifies the local environment and ecology*. This is possibly one of the grave consequences of growing urbanisation, which is often unplanned.

In Orissa, during 1901 to 1991, there has been increase in number of urban towns from 14 to 124 (39 in 1951). According to population

census 1991, 13.43 per cent of total population in Orissa live in urban towns compared to the national average of 25.72 per cent. However between 1951 and 1991, the increase in urban population is a little less than three and half times (from 4.06 per cent in 1951 to 13.43 per cent in 1991). But compared to national index, the degree of urbanisation is somewhat very low. Further, Orissa secures the lowest position in terms of composite index of urbanisation.

Table 1 explains growth of population in Orissa from 1951 to 1991 with rural urban break up. Evidently, there is a positive trend of urbanisation during the period, though such increase is at a diminishing rate. A declining trend is glaringly visible in the rural population from 95.94 per cent in 1951 to 86.57 per cent in 1991. But, the decadal growth of urban population shows a sharp decline during 1981-91, ie 36.1 per cent compared to 68.5 per cent during 1971-81. This is partly due to declining trend of rural urban in-migration (inside the state) and possibly, this is due to declining job opportunities in urban areas, besides the growing industrial sickness in the so called small scale and medium scale industries and resulted displacement of labour. On the other extreme, one may also expect inter-state migration from urban cities of Orissa to other states.

The growth and concentration of urban population across regions in the state is more interesting, while coastal districts (Cuttack, Puri, Balasore and Ganjam) with 38.62 per cent of state's urban area demonstrate 50.0 per cent of urban population, the Inland region (rest nine undivided districts) with 61.38 per cent of state's urban area sustain the rest 50.0 per cent of its urban population.

The density of urban population in five selected towns (Berhampur, Bhubaneswar, Cuttack, Rourkela and Sambalpur) at three points of time (refer to table—3) interestingly shows the increasing pressure of urban population to live in such towns — resulting increasingly varieties of economic activities leading to environmental deterioration. Of course in such computation, increase/decrease in urban geographical area might have caused some change, but this must have been very marginal. In all such five selected towns, we notice almost one and half times to two-fold increase of urban population during 1971-1991 excepting Cuttack. The inclusion of vast geographical area in Cuttack must have distorted the trend. In 1991, we find, all these towns to have greater density than the all-Orissa average of 1728. Interestingly, Bhubaneswar has around two times higher density of the state average.

As a point of fact, rapid increase in urban population density does not commensurate with the expansion of infrastructure and rapid economic as well as industrial growth — thus, leads to high level of pollution. Such pollution stems from three principal sources : (a) Transportation, (b) Industry, (c) Domestic sector. In transportation, it appears in the form of air emissions oxides of sulphur and nitrogen, carbon monoxide and unburnt hydrocarbons. The increasing number of motor vehicles especially two and three wheelers plying on roads and especially on limited as well as narrow kacha roads, industries, power plants, besides the domestic sources create uncongenial atmosphere to live in due to air pollution. Similarly, industrial pollution puts severe impact on air, water and land resources when wastes are dumped into landfills Further, water pollutions from industry come from disposal of toxic chemicals. Industrial water from large and medium scale industries besides from small scale and cottage industries is discharged to nearby rivers without anv treatment. Due to lack of sewerage facilities, city water is also discharged to water streams which are by and large used by the inhabitants living in the adjacent places. The most polluted Brahmani river in Orissa bears testimony to severe water pollution. In the domestic sector, air pollution stems from air pollution owing to use of bio-fuels and raw coal used by poor sections of the urban community, who, in fact ill-afford to pay for LPG or electricity. However, the limited economic capacity of the low income groups leads to the use of raw coal or biomass as cooking fuel. Besides, lack of sewerage facilities/inefficient sewerage system in urban areas cause more environmental pollution when such large wastes are directly discharged to water bodies with little or no treatment.

II

Urban areas consume (due to increasing population over years) more energy, raw materials for transport, construction, production and packaging. The urban people themselves do not produce much of their own food, fuel and water. These urban areas also generate vast amount of solid waste. Increased volume of demand creates demand for power and thus, creates environmental pollution and health hazards. Population explosion and congregation in one place create air, water, noise and space pollution.

This is but natural that when many people congregate in a limited geographical space, local climate and environment undergo some change. Such change may be in terms of enhancement in the temperature of the place compared to adjacent rural areas This is technically called "Heat

Island Effect". Such effect reduces urban heating requirements in winter, and thereby reduces energy demands. But, during summer, it increases demand for power and therefore, demand for air conditioning and refrigeration. Further, urbanisation increases surface humidity, slowing of wind, evaporation, stimulation of rainfall and heat stress etc. Thus, air, temperature, humidity, wind, speed and sunshine have pronounced effect on human comfort. Therefore, accordingly, climate influences comfort and human health.

Noise pollution is in fact an udesirable and unpleasant sound. In urban areas, transportation by rail, road and air causes noise. But, when large number of motor vehicles are on road, and pollution is not hindered in any way, such pollution becomes poisonous. Further, community noise is again more alarming. This may be due to domestic appliances, electric and electric audio-visual, barking of dogs in the streets, street hawkers etc

Space pollution emerges due to over-crowding, which is a salient feature of urban areas. In such areas, children of the low income group are the worst victims due to deplorable environmental conditions. Because they suffer from diarrhoea, dysentery, typhoid owing to environmental deterioration in the areas. Therefore mortality among the poor in these areas is much higher. It is estimated that infant mortality in slums is 123 per thousand compared to 62 for the total urban population (Orissa).

Health problems in urban areas by and large are linked with quality, quantity of water besides its availability and disposal. Admittedly, urban dwellers do not have access to safe drinking water though they use water from wells, streams and other surface sources. Water in many areas is not only inadequate but also unsafe. The construction of buildings, lack of adequate revegetation and plantation of trees cause ground water sources more apprehensive and uncertain, since in many areas water tables undergo very deep. High growth of population enhances demand for more water for varied social and economic activities and the resulted shortage of water leads to varied problems for cooking food, washing and cleaning utensils.

Another magor adverse consequence of urbanisation is the disposal of solid waste which creates more environmental pollution. It is estimated that around 48 per cent of India's urban population have access to sanitation. The same estimate confirms that one-fifth of slum households depend upon common toilets. Lack of adequate and suitable facilities creates more pollution and health hazards.

Land is the key natural resource with important economic, ecological and aesthetic functions. In urban areas, rapid industrialisation converts fertile agricultural land into non-agricultural use. Besides, conversion of large acres of green tracts within and around cities into residential, official & commercial establishments creates environment & ecological imbalances. It limits the open space available per person. Growth of population and the consequent rise in demand for housing lead to encroachment of public areas, children's play ground open parks. All these in consolidated not only encroach fertile land, but add further to environmental pollution, and ultimately accentuate the ecological crisis.

Poor people no doubt suffer from environmental deterioration since they live in inappropriate and unsuitable human habitations, which are more prone to acute pollutions and health risks. Inadequate piped-water supplies, lack of sewerage facilities, drains, health care, use of bio-fuels and raw coals result in high morbidity rate among the poor, who basically live in slums. These poor people concetrate in such places with all possible unhealthy environments, do not hesitate to take risk of their lives, but do not prefer to shift to other places at the cost of their job/ economic activities which may hinder their subsistence. The inefficient and inferior varieties of fuels, animal wates, agricultural wastes, charcoal used by them for cooking purpose pose serious threat to respiratory problems.

Urban population no doubt is increasing faster than national population, but the urban slum population is increasing even faster than urban population itself. It is estimated, on an average, slum population in cities constitutes around 30% of most of the urban cities in India. It may vary in degree across regions and states, but the environmental problems associated with slums are almost common. However, if such trend continues, this may lead to a situation where majority of national population will live not only in urban cities, but in slums. In the present growing urban scenario, slum explosion perhaps is an unavoidable, irreversible and incurable process, which needs a multipronged approach to cause a decline in the growth of such slums, it could not be done away with altogether. In such a situation, from the point of view of environmental sustainability, there is need to bring improvement in slums and in the living conditions of slum dwellers rather than their clearance. Because, in the ongoing socio-economic and political perspectives and over all change in the urban scenario their clearance appears to be remote.

Therefore, their rehabilitation commensurates with healthy environmental conditions is of urgent need in the development process without jeopardising living conditions of other urban dwellers.

III

In this section, a host of policy options are proposed for sustainable growth of urbanisation, which would ensure healthy environmental conditions and preservation of ecological balance—causing no threats to life of the urban dwellers. But, these need a variety of fiscal, regulatory and technical initiatives to reduce at least urban pollutions. Basically, environmental crisis being a cross-sectoral and multi-dimensional issue, any remedial measure to do away with the crisis, would need a multi-sectoral approach at different levels in the development strategies to yield some positive results. These encompass multi-dimensional activities at the local, state and central levels. More especially Local Bodies need to be financially sound to take up varied activities to counter environmental issues arising at the local level. In this respect, the role of NGOs can not be overlooked, who could take up small projects at the micro-level to protect and improve their immediate environment by supporting the pressure groups in the locality & also could fight with local bodies as well as appropriate authrorities for desired action.

(a) Since urbanisation inadvertently modifies the local climate and environment, and also raises temperature of the urban area, this could be adequately mitigated by greening the areas, parks, vegetation cover around buildings and colonies etc. Thus, wide spread greening of the area could counter adverse implications of environment and could ensure sustainable environment conditions for pollution-free living to urban dwellers.

(b) Trees attenuate noise. Noise pollution could be minimised by putting planned efforts to plant large number of trees in both sides of roads, streets, parks, etc. Particularly neam, casuarina trees dilute noise pollution for ensuring healthy living conditions.

(c) No doubt, economic development causes air, water, industrial and municipal lands polluted. Therefore, periodic monitoring of air, water, noise pollution and suitable measures by appropriate authorities could limit environmental deterioration, if could not reverse the situation in totality.

(d) A sustainable balanced development needs lower, slower and balance population growth. Appropriate as well as effective measures need to be monitored in this area from time to time which include

involvement of women in decision making management and policy formulies so as to yield effective results.

(e) Major environmental concerns for women are water and sanitation. Creation of awareness amongst women about the importance of clean drinking water and sanitation help in improving the immediate environment and health of urban people, particularly those who live in slums. Involvement of women could help immensly in creating awareness and transfering technology quite effectively.

(f) Environmental hazards of women cause problems to eyes and respiratory systems owing to use of bio fuels and raw coal in cooking. Involvement of women to create awareness and in introducing smokeless cooking stoves, bio gas burners, conservation of fuels by using efficient cooking gadgets could counter environmental sufferings. This needs demonstration in the under developed urban pockets and slum areas. Supply of high quality fuels could marginalise environmental pollution.

(g) Evaluation and assessment of the role of small scale sector in economic growth and environmental degradation need to be periodically examined. The industries need to be instructed not to discharge waste water into rivers and stringent action may be initiated for violating the environmental rules. Therefore, to keep the environment free from pollutions, implementation of laws enacted for the purpose may be enforced to cause some impact.

(h) As regards air pollutions caused by motor vehicles, suitable designed vehicles may be introduced with the use of pollution-free fuels. Further, to limit congestion of motor vehicles on the road in urban cities (especially two and three wheelers) personalised transport be substituted by mass transport. This could at least encounter air pollutions and noise pollutions.

Conclundig Remarks in Policy Perspective :

The foregoing discussion makes it very clear that rapid growing urbanisation and the resulted environmental issues need cross-sectoral and dimensional approach in the process of development to counter accelerated environmental deterioration at local, state and central level to ensure a healthy and pollution-free living for urban dwellers. In this context, an environment-friendly development requires not only the formulation of imaginative and far-sighted policies, but also well thought-out incentives, and penalties to ensure effective implementation. Besides, a wide variety

of fiscal, regulatory and technical initiatives need to be set up in place so as to reduce urban pollution. One way to reduce it, would be towards the internalisation of environmental costs for activities that are economically viable. Among all, the overriding priority however, should be to decrease the total number of motor vehicles to ensure an air pollution-free urban society. Since most of the environment and ecology concern activities are keenly tied with the regular activities of women in domestic front, and so also in the outside, their involvement in management, decision making and policy formulies assume crucial significance for not only in restoration of narure and environment, but also a pollution-free urban society to live in.

TABLE—1

Rural, Urban Population of Orissa from 1951 to 1991

Year	Rural	Urban	Total
(1)	(2)	(3)	(4)
1951	14,051,876 (95.94)	594,070 (4.06)	14,645,946 (100.00)
1961	16,439,196 (93.68)	1,109,650 (6.32)	17,548,846 (100.00)
1971	20,099,220 (91.59)	1,845,395 (8.41)	21,944,615 (100 00)
1981	23,259,984 (88.21)	3,110,287 (11.79)	26,370,271 (100.00)
1991	27,279,615 (86.57)	4,232,455 (13 43)	31,512,070 (100.00)

Figures in parantheses refer to percentage of total.

TABLE—2

Decadal Growth of Urban and Total Population in Orissa from 1951 to 1991

Year	Urban Population	Total Population
(1)	(2)	(3)
1951-61	86.8	19.8
1961-71	66.3	25.1
1971-81	68.5	20.2
1981-91	36.1	19.5

TABLE–3

Density of Urban Population in five selected towns in Orissa from 1971 to 1991

Urban	Population Density per sq. km,		
	1991	1981	1971
(1)	(2)	(3)	(4)
1. Berhampur	2638 (79.8)	2135 (76.15)	1548 (76.0)
2. Bhubaneswar	3319 (124.70)	2359 (92.91)	1622 (65.03)
3. Cuttack	2630 (153.0)	2978 (109.95)	3138 (73.32)
4. Rourkela	2536 (157.02)	2320 (139.04)	1417 (121.73)
5. Sambalpur	2155 (89.50)	1812 (89.50)	1370 (76.69)
ORISSA	1728	—	—

Note : Figures in parentheses represent area in sq. kms.

References :

Berry Brain, J. Z. and Rees, P. H. (1969) *The Factoral Ecology of Calcutta.* Am. J. Sociology, March.

Ghosh A. K. (1985) *Urban Ecology : A Case Study of Calcutta.* Institute of Local Government and Urban Studies, Monograph Series–2, Government of West Bengal.

Ghosh A. K. (1991) Ecology and Environment of Calcutta. *In Calcutta's Urban Future* by Biplab Dasgupta (eds) Government of West Bengal.

Muttagi P. K. (1989) Urban Environment– The Bombay Scene, *Nagarlok* 25 (2).

Kulkarni A. and et al (1993) Air Pollution in Urban Households in Environment Protections in Developing Countries (Eds) Oxford & IBH Publishing Co. Pvt Ltd, New Delhi.

Understanding Urban Poverty in India

Niyati Padhi
Govt. B.A. College,
Berhampur
and
Dr. B. P. Patro
Deptt. of Economics,
Berhampur University.

Poverty and Urbanization :

Urban poverty in India is believed to be the outcome of the process of rapid urbanization and urban population growth. Unlike the western countries where urbanization was a slow and regular process, in Indis it has been mostly unplanned and haphazard. This is evident from the striking contrast it exibits by the coexistence of sky scrapers using latest technology and architectural design that erupt like rashes and the poor man's hutments in the big cities and metropolies. This indicates the irrational adjustment pattern forced upon the urban dwellers.

Not only India, most of the developing countries in the world today are facing this uneven growth of urban centres due to the erroneous process of urbanization. Urbanization by itself is no cause for alarm, what is alarming are the "gross inefficiencies and inequalities" that characterize urbanization in the developing world.

An UNESCO seminar, held about a decade ago, put forward the view that, Asian countries in general are suffering from over-urbanization. This means that the proportion of people employed in non-agricultural occupations is quite low when compared to the degree of un-planned and rapid urbanization that these countries are undergoing.

The third world is currently passing through "pseudo-urbanization" as there is very little "creative urbanization". The economic structure of the cities of the third world was largely shaped by the needs of the colonial masters. The principal cities in the colonies were mostly centres for transactions and they were not allowed to develop as an industrial base. Even after the process of decolonization began many of these

cities continued to be the linking centres between industrial nations and their own raw material centres thereby delaying the process of their own industrialization. This slow process of industrialization prevented these cities from playing the urbanizing role being successfully played by western industrial cities. Thus this 'pseudo-urbanization' (Desai and Pillai) process gives a deceptive look to the current rapid growth of the cities as indicator of economic development of underdeveloped countries.

Urbanization and growth of urban poverty have been the twin pressing problems of the third world countries. Even within the developing world "four patterns of urbanization" can be identified. A group of countries comprising Argentina, Mexico, Colombia and Brazil have initiated a process of urbanization which is well underway. Population of these countries is more than half urban and has relatively high income. There is little pressure of population on arable land and natural resources.

Algeria, Egypt, Korea, Philippines ahd Malaysia are in the second group where urbanization experience is more recent. Over half of their population still live in rural areas. There exists the pressure of population on land and income is relatively low.

Countries like Ivory coast, Nigeria, Sudan, Kenya & upper volta are predominantly rural but they are urbanising rapidly. These countries fall in Group—III.

The Group-IV consists of India, Pakistan, China and Indonesia where the pressure of population on land is much higher than other developing countries. Here the process of urbanization is quite low and unplanned. (State of India's Organisation, 198, p. 20). The criteria by which urban and rural localities are distinguished vary from country to country. However in India the definition of an urban area essentially remained unchanged since the census of 1971, although some refinements were made in the census of both 1981 and 1991.

An urban area satisfies the following characteristics.

(A) All places with a municipality, corporation, cantonment board or notified town area committee etc.

(B) All other places which satisfy the following criteria :

(i) a minimum population of 5,000.

(ii) at least 75% of male working population engaged in non-agricultural pursuit, and

(iii) a density of population at least 400 persons per sq. km,

As such there are two distinct types of urban areas : those which have some type of statutory notified agency and the other type of urban areas would satisfy the demographic and economic criteria (i), (ii) and (iii).

Categorisation of an area as urban depends on various socio-economic and administrative factors. It is the outcome of the process of economic development and industrial growth that represents the "spatial dimension" of the process. Here the factors of production, manufacturing units and localities become increasingly specialised. In India contrary to what the National Commission on Urbanisation (1988) believed, urbanisation is neither spatially well distributed nor growth patterns well balanced overtime. It is polarised around a few cities leading to aenemic small towns, neglected villages and stagnated national space economy. This is evident from the fact that until now more than 70% of our population live in the villages though India has some of the largest cities of the world. There are almost nine "million plus cities" where population is increasing at a rapid rate but unfortunately the urbanization rate is not yet remarkable. With the concentration of large population in these areas India is now facing a great challenge from the profile of urban population. There is a pronounced tendency for the urban population to concentrate in large towns and cities.

Almost 65% of the urban population in 1991 lived in 300 cities (with population 100,000 and more) and only about 35% lived in almost 3,400 smaller urban places designated as towns. Almost half of the city population lived in 1991 in the 23 million plus cities, more than 17% of it lived in the four mega cities — Delhi, Bombay, Calcutta and Madras. There are similar concentration in large towns. (Source : Quoted in EPW, December, 21, 1991, p. 2939). This increasing concentration of urban population in large cities is due mainly to "progresive increase in the number of both cities and million plus cities" (Sudhir Kumar).

The number of cities increased from 216 in 1981 to 300 in 1991, while the number of million plus cities almost doubled from 12 to 23 during the same period. Another significant fact is that in both 1971-81 and 1981-91, the growth rate of cities and large towns has been significantly higher than the rate of growth of small towns (EPW, Dec. 21, 1991, p. 2939). The urban population of India as per the 1991 census was 217,177,625. This

figure includes the projected urban population of Jammu & Kashmir as on March 1991.

Comparing to the other developing countries where an important aspect of demographic phenomenon has been the growth of urbanization and in particular the rapid growth of the cities, Indian scene is rather different.

In a study relating to the impact of urbanization on poverty in the urban sectors, Indian data reveal that, the incidence of poverty is low in high urbanized states like Maharastra, Gujarat and Punjab where as it is high in low urbanized states such as Bihar, U.P., Orissa and Madhya Pradesh. Poverty incidence is low in the moderately urbanized states of Andhra Pradesh and Karnataka and low in several low urbanized states like Himachal Pradesh and Jammu and Kashmir. Though the data provide a mixed result, a closer examination of data show that the aggregate urbanization pressures have increased poverty in India. Thus the greatest impact of modernisation is felt in urban areas.

Urban Poverty — An outflow of Rural Poverty

Urbanization as a process is the result and consequence of many "complex webs of forces and process, spatial, social, economic, political, cultural, and demographic". It has been essentially a process of migration to the city. When migrants reach the city, they invariably find themselves pushed into the slums and squatter settlements. This phenomenal growth of big cities and metropolies with large number of migrants from rural areas is a recent phenomenon in the history of India's industrial urbanization.

During its four decades of independence India has seen dark and bright days and has experienced various levels of development in general and economic development in particular. This economic development has resulted in the mobility of population followed by its geographical distribution with the process of urbanization underway, migration has become a pressing problem for the developing countries and India is no exception. The rapid expansion of urban areas and increase in urban population have been ascribed to 'rural to urban migration'.

Often it is seen that a fraction of the population that constitutes the more dynamic members of a region migrate to the city thereby diverting the national resources towards the urban centres. Here the obvious questions arise—

(i) Who are called the migrants ?

(ii) Why at all migration takes place ?

(iii) When migration takes place ?

(iv) What are the consequences of migration ?

Answer to the above questions can be had only in terms of economic development (Sudhir Kumar, Migration & Economic Development). According to the NSS-survey, a migrant is defined as a person whose residence a year earlier was different from the place of enumeration.

The census definition on the other hand is based on the place of last residence being different from the place of enumeration. Also in the census, the migrants so defined are further classified by the duration of stay in the place of enumeration. During for less than one year can also be a "proxy for the desired estimate of annual flow of migrants". The census of India (1971) classifies migrants in two ways.

(i) Migrants by place of Birth (POB)

(ii) Migrants by place of last residence (POLR), (R. K. Puri, Problem of migration into Delhi, P. 29).

The POB migrants are life time migrants where as POLR migrants are sub-classified into various duration of residence such as : less than one year, one to four years, 5 to 9 years, 10 to 19 years and 20 years and above.

Many explanations to the problem of migration have been offerred which are quite varied and complex. Most of the studies that explored the reasons and consequence of migration found that this problem is primarily economic in nature.

There are various types of migrants who come to big cities in search of employment. Studies on 'temporary migration' focus on rural out migrants who bring their problems to the city. Thus "rural poverty is carried over to the city by the mechanism of rural-urban migration" (Dandekar & Rath). This is mostly visible in the slums and squatter settlements resulting in environmental deterioration and low level of health and nutrition. There are three types of temporary migration which differ significantly from each other in both their causes and migrants' socio-economic characteristics. So does urban-urban migration from urban' rural migration. Temporary migration is not "a one-way process" (Xiushi

Yang, 1994). Urban-rural migration carries to the rural areas the much needed science and technology.

'Inter-state migration' on the otherhand is the result of uneven development levels of the states. Migration is the consequence of population mobility which is again the result of high population growth. The weak relationship between urbanisation and migration strongly pleads about "low level of industrialisation in a country". This results in massive unemployment. People who fail to earn the basic means of livelihood generally migrate in search of employment. The other types of migration such as inter-district, intra-district and inter-state migration are also found to be the result of low economic development in rural areas.

Migration in India is certainly not a blind phenomenon. It is a "cautious, discerning and reversible subject" (P. K. Majumdar), which is evident from the various socio-economic studies relating to the topic.

Migrants originate both from the poorest and richest families. The poor migrate for higher wages, the rich on the otherhand are attracted by higher social opportunities and standard of living in urban areas. The qualitative difference in the life style is a major cause of attraction to the city. The urban complex offers the opportunity to overcome the limitations of social obligations demanded in the rural set up. This is evident from the massive migration of landless agricultural labourers and peasants from marginalised villages directly to the large metropolitan cities, causing over congestion, proliferation of urban informal sectors and slums. Landless agricultural labourers try to escape from stagnation by moving out. In the city they are accomodated somewhere and somehow. Thus migration helps the poor to overcome the deprivation faced in the traditional social environment. In fact the 'Push' of rural poverty accelerates the process of migration but this certainly does not exchange rural deprivation with urban misery. Most of the rural migrants are attracted to the cities as they find there wide range of employment opportunities. Rural migrants who are largely unskilled and illiterate also get absorbed in the urban informal sector.

It has been widely accepted that the primary reason for rural-urban migration is economic in nature and the rural poor migrate mostly to the city "in search of employment rather than better employment opportunities" (Alfred de Souza). Of course the urban-rural wage differential prompts most of the migrants to leave their place of origin and settle

down in urban set-up, as the rural-urban migration of labour mostly takes place due to the "real income differential and the probability of obtaining a better job". (Todaro)

Many a models have been developed that deal with the demand side of the employment problem in the cities. However literature relating to the study of migration does not throw much light on determinants of urban 'labour supply' which is equally important in the above process. There seems to be some important gap in the available literature on the migration pattern of urban slum dwellers in Indian cities. In most of the cases it is the push-pull force which is in action behind the process of migration.

The Indian metropolitan cities which ushered in an era of greater economic prosperity on the advent of planning in early fifties are now passing through a critical phase of unwarranted migration. The migrants clustered in the slums are increasing at an alarming rate there by hindering the process of modernisation. The horrifying conditions of life led by the migrants in big cities have become a challenge for human habitation in a civilized society. What is more alarming is that, the problem of these migrants does not seem to be any where near solution in India. Thus they have come to be accepted as a living reality.

Urban slums : A riveal ation of urban poverty.

Slums in India :

No Indian city today is free from the slums due to heavy exodus of population from the rural areas and the problem seems to be more acute in the metropolitan cities. Indian metropolies and large cities are fast degenerating into extreme filth and undesirable squalor. Even within the slums sub-human conditions have reached a low level due to pressure of population. The denial of minimum space to the masses of illiterate and unskilled peasant from the marginalised and pauperised villages add to their misery when they are further denied with the provision of even minimum amount of water, sanitation, electricity and health care facilities in the slums.

"The decaying tenements of the slum dwellers and the hutments of squatte rs are the most pervasive symbol of urban poverty". (Alfred de Souza)

The growth of slums is essentially a problem of urban poor where there is lack of high wage employment opportunities and also lack of decent legal shelter. The shelter problem in major urban areas is mani-

fested in the tremendous over crowding, proliferating slums, unauthorised colonies and inadequate access to basic services though slum dwellers form a part of the urban economy.

According to a report of the United Nation's urban land policies, a slum is "a building, a group of buildings or area characterised by over-crowding, deterioration, insanitary conditions or absence of facilities or amenities which because of these conditions or any of them endanger the health, safety or morals of its inhibitants or the community".

Slum does not constitute an isolated building. It is an area or a situation that can be identified by a combination of physical attributes. There is a considerable range of variation in regard to the manifestation of each one of the phycical attributes like substandard houses, high density and congestion, over crowding, insanitary conditions, absence of basic amenities of life etc. Depending on the situation in which a slum emerges a number of problems arise in the studies relating to the above issue.

The grouping of the migrants and their accessibility to some common space in the city leads to their spontaneous settlements through self built home and illegally occupied lands. Thus the spatial configuration of the poor in course of time take the form of slums in the city. (T. K. Majumdar).

Slum dwellers are mostly poor and unskilled workers who are engaged in low-wage jobs in the Informal sector. The city administration considers such a settlement as illegal and therefore does not provide municipal services to them. The result is the inevitable growth of slums that provides a substandard living. Sometimes deterioration of a group of building in the old part of the city also leads to slum situation. The area gets congested and overcrowded in course of time and due to lack of adequate municipal services unhealty conditions arise.

With industrialization taking place rapidly in the metropolitan cities it is mostly observed that the city expands thereby making place for the migrants who settle down at the periphery adding to the number of slums and hutment colonies in the city. Poor immigrants who come to the city in search of employment seek a place of shelter in the already established slum or start a fresh slum settlement on a vacant plot in the urban set up.

There has been a large number of studies on slums in Indian metropolitan city. One such study reveals that the 'slum population constitutes

about 20-30% of the urban population'. This is true of Delhi, Calcutta and Madras whereas Greater Bombay provides a more horrifying picture. In Ahmedabad it is estimated that 45% of the total population lives in slums and squatter settlements In Calcutta Sivaramakrishnan estimates that one out of every 3 to 4 persons lives in a bustee.

Thus the phenomenon of slum has come to be regarded as a major problem of urbanization. Slums differ in respect of the degree of cohesiveness of their social organisation in different places. The organised nature of a slum however depends on the socio economic and other characteristics of its population.

An important area of investigation in the study of slum is migration and settlement pattern of the migrants. Whether it is the katras, gallis, juggi-jhopdis of Delhi, bustees of Calcutta or jhopadpaties of Bombay slums are a black spot on the face of modern civilisation. Urbanisation which is believed to be the main cause of the origin of slum carries with it both hope and despair for the poor slum inhibitants and it is the development process that provides the opportunity to fulfil their aspirations in a city environment.

Policies to tackle Urban Poverty :

The resolve to eradicate poverty has been a major plank of our national objectives and economic policies. Planning has been frequently thought of as a 'deliberate measure' to achieve this objective. From time to time, the government has undertaken a number of measures to tackle the problem of poverty, unemployment and under employment for rural as well as for urban sector. But it is evident from the Five Year Plan documents that for nearly two decades after the inception of economic planning in India, poverty alleviation was not conceived as a separate goal to be pursued through specific programmes A significant reduction in poverty was expected as a 'natural outcome' of the process of economic growth itself. In this sense, the objective of poverty eradication was integrated at least in theory with the objectives and processes of overall development.

The First and Second plan do not treat poverty as a separate concept. During the Third plan however, poverty has been treated along-with the problem of unemployment. The Fourth plan was started with the objective of producing a direct impact on the 'economic status of rural poor'. Though the Fifth plan eloquently proclaimed the historic availability of its anti poverty thrust, removal of poverty was the foremost objective of Sixth plan.

However, all the programmes implemented during the first six plans exclusively aimed at reducing poverty in rural areas. Urban poverty as such has never been dealt with separately. It is the Seventh Five Year plan that identified Urban poverty as a serious problem requiring policy measures. As a result schemes like SEEUY, SEPUP and Nehru Rojgar Yojana were launched to combat the plight of urban poor.

Conclusion :

In a democratic society, there are no quick fix solution to check the influx of the poor to urban areas No legislative fiat can be able to achieve this. Institutional innovations such as large scale social banking are difficult to design and implement for addressless entrepreneurs or head loan carriers. The lack of clear appreciation of urban rural linkage compounds this problem Consequenty urban poverty alleviation programmes tend to by-pass pavement dwellers and slum dwellers in cities.

However attempts are still going on and various measures have been suggested to save the urban India out of such distress.

It is necessary that all round socio-economic development of rural parts of India be urgently made, from which massive migration of poverty-induced people occurs to the cities.

Secondly restructuring of the space economy of large cities is urgently necessary which can lead to internal development and not external dependency.

Massive employment generation and strengthening the linkage between the formal and informal sector can increase the productive efficiency of the surplus labour force. This combined with a more humanistic urban planning and housing for the urban poor can definitely have some positive impact on the efforts continuously being made to combact the problem of urban poverty in India.

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Effect of Urbanisation of Employment in Agril. Sector in Puri Sadar Block

Dr. B. Bhuyan
Prof. & Head Agril. Economics
&
Sri B. Mishra
J. A. O., Directorate of Agril.
& Food Production, Govt. of Orissa

Introduction :

The problom of unemployment has assumed alarming proportions with the growth of population in the State. Inspite of launching several employment oriented schemes the growth rate of employment has not increased significantly. Poverty and unemployment continue to be the main thrust of the Planning Process in the State since 1970. It seems, due to lack of infrastructure, skill, assets and work opportunities the poverty eradication programmes failed to achieve their objectives as envisaged. The educated unemployment at present has posed serious problem. As revealed by the State employment exchange, up to the end of December, 1993, there were 5.70 Lakh educated unemployed in the State comprising 66.0 per cent of the total applicants. Number of educated unemployed has increased from 4.29 Lakh in 1986 to 5.70 Lakh in 1993 recording an increase of 32.9 per cent over a period of 5 years. The potentiality of the public sector to provide employment opportunity to the educated unemployed is very much limited in the State as economy continues to be dominated by agriculture. The condition in unorganised sector in rural areas is worse as it suffers from large scale disguised unemployment and under employment. The rural people are generally uneducated and engaged mostly in agricultural activities. But agricultural sector cannot offer employment to these people for the entire year. Hence agricultural sector accounts for the maximum percentage of under-employment. Even the employment oriented schemes like TRYSEM, SEEUY, JRY and IRDP have not come with a big help. The proportion of main workers to total population remains still at 32.78 per cent and marginal workers at 4.75 per cent.

As a measure of solution to this staggering problem, urbanisation is considered to be important. As per the Census, 1991, the percentage of urban population .constitutes only 13.43 in the State and industrialisation is creating more and more opportunities for employment to the neighbouring rural inhabitants. House construction, small business, shops, biddi making, road construction etc. are the activities being taken-up more and more in towns and cities creating employment opportunities. Growth centre approach adopted by the Govt. of India essentially implies urbanisation which opens up opportunities to the neighbouring unemployed youth. The economic conditions of the surrounding villages are undergoing significant changes in terms of cropping pattern and cropping intensities. Vegetables and cash crops are given preference to traditional cereal crops, to meet the demand of the consumers of urban population. The cropping pattern being biased towards vegetables and cash crops calls for engagement of more number of hands. Urban centres, like Rourkela, Bhubaneswar, Cuttack, Paradeep etc. are expanding and multifarious activities are assuming massive engagement.

To make an objective assessment on the extent of additional mandays generated in rural areas due to urbanisation, an microlevel study has been attempted in Puri Sadar Block. A lot of developmental activities are being undertaken in Puri Sadar Block and Puri Town itself. The floating population of Puri town and pilgrims have constituted a huge consuming population and on their demand for various agricultural products, the cropping pattern in neighbouring villages has undergone a radical change creating additional mandays of employment.

Objectives

Specific objectives of the study are :—

I. To study the relationship between farm size and level of employment both in urban and rural villages.

II. To compare the level and pattern of employment between urban and rural villages.

III. To compare the probability of increasing scope of employment in urban and rural villages.

Methodology :

The study covers four villages with two each from urban and rural areas in Puri sadar Block and centres on 48 sample farmers from each category of villages representing different size of farms. Thus total

sample size comes to about 96. The period of study refers to the year 1993-94. All the 150 villages of Puri Sadar Block were classified into two categories, i.e. urban villages and rural villages. The villages within a radius of 10 K. Ms. from Puri town were taken as urban villages while those beyond 10 K. Ms. as rural villages. Through random sampling techniques 2 villages from each category were seleted i.e. Bharatipur and Alikia as urban villages while Alapur and Sundar as rural villages. Four sizes of farms are (i) Land less, (ii) 0.01—1.0 hect, (iii) 1.01—2.0 hect. and (iv) 2.01 hect. and above. From each size group, six holdings were selected in each village, thus making the total, holdings 96.

RESULTS AND DISCUSSIONS

(I) SIZE OF FARMS

The average size of farms together with percentage of area held by each size group, which has got most significance for the present study has been illustrated in Table—1.

TABLE—1

Average size and percentage of area held by farmers in various size groups in two categories of villages.

(Area in hectares)

Farm size	Urban Villages			Rural Villages		
	Area	% to total	Average Size	Area	% to Total	Average Size
0.01—1.0	130.30	38.77	0.76	92.76	31.66	0.85
1.01—2.0	59.30	17.63	1.23	62.39	21.29	1.60
2.01 & above	146.40	43.60	3.57	137.85	47.05	3.73
Total	336.00	100.00		293.00	100.00	

It is seen that the average size of farms for all the size groups is larger in case of rural villages than urban villages. It is also observed that big farmers having a farm size of 2.01 ha. or above enjoy large chunk of total area in both the types of villages. It is further seen from the table that while farms in size group of 0.01—1.0 account for a greater percentage in urban villages than the rural ones, the case becomes vice versa for the other two size groups.

(II) INTENSITY OF CROPPING

Increase in cropping intensities generate additional employment. Cropping intensity of various size groups in two categories of villages is listed below.

TABLE—2

Intensity of cropping of sample farms in both types of villages.

Farm size in ha.	Urban Villages			Rural Villages		
	Net Cropped Area	Gross Cropped Area	Intensity of Copping	Net Cropped Area	Gross Cropped Area	Intensity of Cropping
0.01—1.0	0.46	0.90	195.65	0.63	1.20	190.47
1.01—2.0	1.39	2.37	170.50	1.57	2.59	164.96
2.01 & above	3.45	5.24	151.88	3.64	5.35	146.97
Average	1.77	2.84	160.45	1.95	3.05	156.41

It is observed that urban villages with an average cropping intensity of 160.45 more or less tally with rural villages with an average cropping intensity of 156.41. It can be noticed that intensity of cropping is decreasing with increase in size of holding for both types of villages. It is also seen that the cropping intensity for all the size groups in urban villages is more than the respective size groups in rural villages.

(III) LABOUR UTILISATION & EMPLOYMENT :

(a) Days of Employment :

The number of family members along with their strength does not decide the employment capacity of holdings in a rigid manner. It depends on number of days of employment for family members. The total days of employment consist of both farm and non-farm employment. There is great difference between mandays available and mandays employed. In this context it is important to study the availability and actual employment among various size groups of two types of villages. Tables 3 and 4 give an idea about this

It is seen that urbanisation increases level of employment. Urban villages provide higher level of employment both in absolute and percentage terms. Again the variation between two villages is very significant : while it is 80.47% in urban villages the figure falls sharply to 67.19% in rural villages.

TABLE—3

Distribution of total days of employment of family labour per farm per year in varying farm sizes in two categories of villages.

Farm size in ha.	Urban Villages		Rural Villages	
	Total mandays available	Total mandays employed	Total mandays available	Total mandays employed
Land less	930	731 (78.80)	961	613 (63.77)
0.01-1.0	778	630 (81.00)	929	641 (69.00)
1.01-2.0	900	722 (80.22)	990	672 (67.88)
2.01 & above	961	788 (81.98)	1141	776 (68.00)

(Figures in brackets indicate percentages of mandays employed to total mandays available)

(b) **Employment of Family Labour :**

TABLE—4

Family labour employment in farm enterprises among varying size groups in two types of villages per annum.

Farm size in ha.	Urban villages		Rural villages	
	Total mandays employed	Total mandays employed in farm enterprises	Total mandays employed	Total mandays employed in farm enterprises
Land less	731	622 (85.09)	613	570 (92.98)
0.01-1.0	630	512 (81.27)	641	571 (89.23)
1.01-2.0	722	578 (80.05)	672	585 (87.05)
2.01 & above	788	599 (76.01)	776	668 (86.08)
Average	717.75	577.75 (89.49)	675.50	598.75 (88.70)

(Figures in parentheses symbolise percentages of mandays in farm enterprises to total mandays employed).

The above table highlights the fact that farm employment of family labour is higher in rural villages than urban villages irrespective of size of holding. It is seen that farm enterprises provide bulk of employment to family labour at 80.49% and 88.70% to urban and rural villages respectively. This signifies the fact that agriculture continues to provide the major part of employment opportunity. It is further observed from the table that farm employment of family members and size of farms are inversely proportional for both types of villages.

(c) Non-Farm Employment :

It is as important to study non-farm employment of family labour as farm employment because many farmers having large land holdings generally prefer to have some non-farm employment. Table-5 explains the extent of non-farm employment among varying size groups in two types of villages.

TABLE—5

Total employment of family labour outside the farm in two types of villages with varying size groups.

Farm size in ha.	Urban villages		Rural villages	
	Total mandays employed	Total mandays employed outside the farm	Total mandays employed	Total mandays employed outside the farm
Land less	731	109 (14.91)	613	43 (7.02)
0.01-1.0	630	118 (18.73)	641	69 (10.77)
1.01-2.0	722	144 (19.95)	672	87 (12.95)
2.01 & above	788	189 (23.99)	776	108 (13.92)

(Figures in brackets indicate percentages of mandays employed outside the farm to the total mandays employed)

For the above table it can be clearly inferred that urbanisation induces non-farm employment. It is seen that non-farm employment is higher both in absolute and percentage terms for all the size groups in

urban villages than rural villages. It is also observed that non-farm employment increases with increase in size of holdings irrespective of the type of village.

(d) Relationship Between Employment and Gross Cropped Area :

Simple linear equation of the model $Y = a + bX$ was fitted to the data for two types of villages.

$Y = a + bX$

Where Y – Total labour employment
X – Gross cropped area (in hectare)

Village type	Equation	R^2
Urban	$Y = 342.45 + 132.15\ X$	0.49
Rural	$Y = 314\ 08 + 118.50\ X$	

From the above analysis it is seen that both regression co-efficients are significant at 1% level of confidence. The regression co-efficients suggest that 49% of variation in total labour employment in urban villages is due to gross cropped area while the corresponding figure for rural villages is 46%. The above equation also indicates that by one hectare increase in gross cropped area, the total labour employment is increased by 132.15 days for urban villages and 118.50 days for rural villages.

Conclusions :

It is observed through critical analysis of data that urbanisation has tremendous impact on level and pattern of employment due to more of commercialisation of agriculture. Because urban villages exceed the rural villages by providing additional employment to the extent of 13.26 per cent. Rural villages are found lagging behind in providing non-farm employment to the extent of 8.21 per cent and the wage structure is found to be favourable to the labourers in urban villages compared to that of rural villages. Analysis through regression technique confirms that while one hectare increase in gross cropped area generated additional employment of 132 days in urban villages, it is only 118 days in rural villages. Distribution of employment is more even in urban villages through-out the year compared to that of rural villages. Non-farm employment is more significant in urban villages.

Urbanisation and Employment

Dr. R. P. Sharma
Professor of Economics,
Berhampur University

Urbanisation is one of the most important factors that influences the structural change of the society. It encourages economic activity, determines the political system and transforms the social and cultural behaviour of the country. Urbanisation is a process of population concentration characterised with a high density of population in an area.[1] As early as 1976, the UN conference on "Human settlement" regarded urbanisation as the most crucial challenge that would face mankind in near future. Urbanisation can be defined from many aspects, but most of the urban economists define it with two of the important characteristics : (1) Demographic attributes, i. e. by the size of the population and density of population, and (2) Economic variables, with non-agriculture occupation of the people exceeding 75 per cent.[2] Different countries defined a town or an urban area demographically on different size of population. In Canada and Russia a town is identified with 1000 people while in Japan it is as high as 30,000.[3] In India, from the census of 1901 a town is identified as a place with at least 5000 of people. In some cases the government declares it as a town even though size of population is less than 5000.

Urbanisation develops due to migration of people. The nature of migration can be classified into three :

(1) Migration from rural to urban settlements.

(2) Migration from one urban area with a smaller size of population to another urban area with higher size of population.

(3) Rural to rural migration also creates new towns.

The percentage of urbanisation is lowest in the countries like Bhutan and Burundi with 6 percent while there is 100 percent urbanisation in Singapore. There is high correlation between urbanisation and economic development as it can be seen from the figures presented in Table-1.

TABLE–1

Urbanisation and percapita GNP of the world.

Nature of the economy	Percent of Urbanisation 1970	1992	Percapita GNP US Dollars 1992
Low Income	18	27	390
Lower Middle Income	46	62	2490
Upper Middle Income	54	72	4020
High Income	74	78	22160

Source : World Development Report 1994; Table-31.

In the developed countries the cities are evenly distributed while in the developing countries they are concentrated in a few centres. In every country the cities become the defacto controlling points in the national economy and also influence the territorial power structure.[4]

Indian Scenario :

India now occupies fourth position in respect of urban population in the world after China, USA and Russia. But India has very low percentage of population; at the beginning of the century only 10.8 percent of people lived in urban settlements and after 90 years almost at the end of this century, the percentage of urban population is only 25.72 according to the census figures of 1991. In respect of the trend of urbanisation in the developed economies, it is found that more and more people are now concentrated in the cities with a population of one lakh and more. The trend can be seen from Table-2. In the year 1901 about 23 percent of urban population lived in Class-I cities and during the last 90 years the percentage has gone up to around 65 percent.

TABLE–2

Percentage of Population in each size-class of town to total Urban Population in India.

Year	I	II	III	IV	V	VI
1901	22.9	11.8	16.5	22.1	20.4	6.3
1951	41.8	11.1	16.7	14.0	13.2	3.2
1991	64.8	10.9	13.3	7.9	2.6	0.3

Among the states in India the percentage of urbanisation is also directly related to the economic development of the states. As it can be seen from the data shown in Table-3, the three states which have lowest

percapita state income, such as Assam, Bihar and Orissa, have the lowest percent of urban people with below 14 percent while the states of higher percapita income like Gujarat, Punjab etc. have percentage of urban population of 30 and above.

TABLE—3

Percent of Urban People and State Percapita Income among the States of India.

Percentage of Urbanisation	States	Mean percapita income of the group of states in Rs.
Up to 14	Assam, Bihar, Orissa	3,734
15 — 24	M.P., Rajasthan, U.P.	4,150
25 — 29	A.P., Kerala, W.B. & Hariyana	6,065
30 and above	Gujarat, Karnataka, Maharastra, Punjab & Tamilnadu	6,976

Urbanisation takes place mainly due to migration. Table-4 shows the growth of total population, growth of urban population and growth of population in the urban settlements due to migration into urban areas. In this century in the first 30 years, urbanisation was very slow because of slow growth rate of total population of only 0.6 percent. Accordingly the growth of urban population due to immigration was only 0.4 percent. But in the latter decades about 50 percent of the growth of population in the urban settlements has been due to immigration.

TABLE—4

Annual Growth rate of total and Urban Population
(Figures in Percent)

Year	Total Population	Urban Population	Migration into Urban settlements
1901—31	0.6	1.0	0.4
1931—51	1.5	4.3	2.8
1951—71	2.6	3.7	1.1
1971—91	2.7	4.9	2.2

Source : Compiled from Census figures.

Causes of Migration

There are several factors which are responsible for the urbanisation of a country; but the demographers have identified to important factors :

the 'pull factor' and 'push factor'. When there is unemployment in the rural sector, people migrate to the towns in search of employment which is in the main Push factor. On the other hand when people migrate to the towns for more enjoyment of facilities or for better employment, it represents a Pull factor. A push : pull ratio can be calculated for the urban settlements. It has been found that the push : pull ratio is high in the big metropolitan cities to the extent of 100 : 470.[5] The towns and the cities have been serving as reception centres for the rural poor who seek employment opportunities in the urban areas. Most of the demographers have concluded that in India it is the null factor that is mainly responsible for the urbanisation.[6]

Nature of Employment :

Employment opportunities available in an urban area can be divided into three categories :

(1) Basic Industries; in which materials are manufactured mainly for the consumers outside the city or country for exports eventhough a small fraction of the volume of production is distributed within the city. This can be termed as basic employment : E(B) for the labour force in the cities.

(2) Non-basic Industries : The commodity produced in these industries are mainly consumed within the city. The employment in these industries can be termed as non-basic employment or E (NB). Magnitude of employment in these industries depends on the size of population of the city. Higher the size of the city, higher would be the employment opportunity in this sector.

(3) Service sector : Service for the urban people is an important sector for employment which is directly related to the size of population. Most of the unskilled labourers who migrate to the cities get the jobs mostly of self-employment nature. Employment in this sector can be denoted E (N), which is a function of the size of population i. e. $N=f(P)$[7] In the linear regression system, employment in these three sectors can be stated as under :

$$E(B) = a + b\,Q$$

Where Q is the quantity of output produced in the basic industries.

$$E(NB) = a + b\,E(B) \text{ and}$$

$$N = a + b\,P$$

Accordingly employment opportunities in a city are the sum total of the three factors, hence total employment E can be stated as :

$$E = E(B) + E(NB) + E(N)$$

Most of the employment opportunities in the cities are available in the second and third categories of employment. But specific informa-

tion of these types of employment are not available because they are in the un-organised sector which is in the nature of self employment or called "street Economy"[8]. These self-employed people sell their products to the city dwellers on the foot-paths or street corners. They produce small household commodities with or without hired labour and they are outside the organised sector.

The structure of employment is also dependent on the size of the city. It has been observed that in the smaller cities with less than one lakh of population, the structure of employment is relatively balanced and higher proportion of people is employed in the manufacturing industries eventhough the rate of growth of employment in these cities is low.[9] In the cities with a population of 2.5 lakhs to 5 lakhs the high growth of employment is mainly due to high rate of growth of the tertiary sector employment. In recent years as a result of rapid automation the employment in manufacturing industries has been gradually reduced in favour of service industries; particularly the 'information based industries' are developing fast in the big cities all over the world and create large scale of employment opportunities which was not there a decade ago.[10]

Urbanisation in Orissa :

There has been slow growth of urbanisation in Orissa. At the beginning of the century there were only 2.55 lakh of people in the urban settlements which was only 2.47 percent of total population of the state. Over the century another 40 lakh of people are concentrated in the urban settlements, and according to 1991 census about 14 per'cent of people of the state live in the towns. The annual growth rate of urban population increased from 1931 and reached highest growth rate .in 1961 with 8.68 percent but again showed declining trend.

In 1951 there were 39 towns in Orissa of which only one town had a population with one lakh and by 1991 there are now 8 towns with a population of more than one lakh with a total population of 13.80 lakhs. The maximum number of towns in Orissa are class-IV towns with a population range of 10,000 to 20,000 as can be seen from Table-5. Of course the growth of urbanisation in Orissa far exceeded the projection of the demographers. In 1971 projection was made for four cities of Orissa, Rourkela, Cuttack, Bhubaneswar and Berhampur. that the urban population in these four cities will reach 11.82 lakhs by the years 2001, but it is now found that by 1991 the population of these four cities has reached 14.59 lakhs.[11]

TABLE—5

Growth of towns in Orissa.

Class of towns	1951	1961	1971	1981	1991
I	1 (1.02)	1 (1.59)	5 (7.31)	6 (12.94)	8 (18.80)
II	1	3	1	7	10
III	5	8	19	29	29
IV	8	22	21	40	52
V	23	25	30	23	22
VI	1	3	2	3	3
Total	39	62	78	108	124

Note : Figures in parentheses indicate population in lakhs.

Philosophy of Urbanisation :

In the urban economy of India three specific economic factors emerge with regard to literacy, poverty and employment which are closely interlinked. As it can be verified from Table-6, that the rate of literacy is high, percent of population below poverty line is less and working-force participation rate is low in the urban sector in comparison to the rural sector. Eventhough the work-force participation ratio is low in the Urban sector, the per capita income earnings are higher to the rural sector. It is believed that urban unemployment can be tackled by developing the rural areas and by creating employment opportunities in the rural sector.[19]

TABLE—6

Comparison of Urban and Rural Sectors

	Rural Sector	Urban Sector
Rate of Literacy : Male	42	69
Female	19	51
Percent of People below poverty line*	33.4	20.1
Working-force Participation rate : Workers as percent of total population**		
Male	53.5	48.8
Female	13.1	6.6

* Statistical Abstract (Orissa) 1991, p. 252 f, figures for 1987-88.

** India's Urbanisation 1901—2001 : Ashis Bose, p. 397; figures for 1971

The East India Company and the British Administration developed the urban areas as imperial cities for administration and the port cities to handle cargo. After independence the urban economists devoted their energy in creating urban developmental models but they are mainly confined to the problems of housing, water supply, sanitation, transport and communication, of course which are of vital importance for urban life, but not developed a philosophy for urbanisation. To-day urbanisation is a necsessity. It is essential for generating economic growth of a country. Without developing the city economy, planning to change the social and cultural aspect of the society will not be successful.[18] Urbanisation should be approached as a strategy for economic growth.

Conclusion :

Urbanisation is very low in India and about 50 percent less in percentage of urbanisation in Orissa in comparison to national figure. For the growing labour force in the country to create more opportunities for employment and to accelerate the economic growth of India, urbanisation has to be encouraged. And for Orissa it is an urgent need to uplift the backward economy.

References :

1. Hope Tisdale Eldridge, "The Process of Urbanisation" in J. J. Spengler and O. D. Duncan, Eds. *Demographi Analysis*, Free Press, 1956, p. 338.
2. J. P. Gibbs, Ed. *Urban Research Methods*, Von Nostn & Co., New York, 1861, p. 14.
3. R. M. Dubey, *Population Dynamics in India*, Chugh Publications, Allahabad, 1981.
4. L. S. Bourne, R. Sinclair, & K. Dziewonski, Eds. *Urbanisation and Settlement Systems, International Perspective*, Oxford University Press, 1984.
5. Ashis Bose, *India's Ubarnisation, 1901-2001*, Tata Mcgraw Hill Publishing Co, New Delhi, 1980, p. 224.
6. N. V. Sovani, "The Urban Social Situation in India", *Artha Vijnana*, Vol. 3, June, 1961, pp. 85-106.
7. M. J. Webber, *Information Theory and Urban Spatial Structure*, Croom Helm, London, 1979, p. 157.

8. John Friedman & Flora Sullivan, "The Absorption of Labour in the Urban Economy," "The case of Developing Countries" *Economic Development and Cultural Change*, Vol. 22, April 1974.

9. K. V. Sundaram, *Urban and Regional Planning, in India*, Vikash Publishing House, New Delhi, 1977, p. 220.

10. John Brotchie, et al, Eds. *Cities of the 21st Century*, Longman Cheshire, Melbourn, 1991.

11. Ashis Bose, *op. cit.* p. 545-548.

12. Jitendra Dholakia, *Unemployment and Employment Policy in India*, Sterling Publishers, New Delhi, 1977, p. 24.

13. P. B. Desai, "Economy of Indian Cities", *The Journal of Public Administration*, Vol. 14, No. 3, July—Sept. 1968.

The Trend of Urbanisation in India and the Problem of Urban Housing

Dr. K. K. Sen
P.G. Deptt. of Economics
M.P C. College, Baripada

Urbanisation is both a cause and consequence of economic development. Urbanisation is a symbol of commercialisation, industrialisation and modernisation of an economy. In India the urban sector has increasingly contributed to the national income. The contribution of the urban sector to India's G. D. P. was 29 percent in 1950-51, which is expected to go up to 60 percent by the turn of the century.

There is an increasing trend towards urbanisation in India, since the beginning of the present century. The size of total urban population in India has gone up consistently from 26 million in 1901 to 217 million in 1991—a rise of more than eight times in nine decades. By 2000 A.D. it is expected to grow to 300-320 million.

The proportion of urban population to total population was about 11 percent in 1901. It rose to 17.6 percent in 1951 and to 25.7 percent in 1991. This percentage is expected to go up to 33 by 2000 A.D.

The decadal growth rate of urban population went on rising from 1911 onward till 1951. In 1951 a liberal definition of urban area was adopted. Consequently the decadal growth rate suddenly increased to 41 percent. Of course during the Second World War and post-partition years there was large scale migration towards the cities. This also led to increased urbanisation. In 1971, a new definition of an urban area was adopted. The same definition continued during 1981 and 1991 censuses. Thus the data on rural-urban distribution during the last four censuses are comparable. The pace of urbanisation accelerated during the decades of 1961-71 and 1971-81. In fact the rate of growth of urban population was the highest during 1971-81, being 46 percent. During 1981-91, there was a slow down in urbanisation, the growth rate being 36 percent, possibly due to reduced addition of new towns and reduced rural migration.

Another important feature of urbanisation in India is a trend towards concentration of population in bigger cities. The share of Class-I cities in the total urban population has been consistently rising since the beginning of this century. This percentage increased from 26 percent in 1901 to 65 percent in 1991. On the other hand the proportion of population living in Class-II & III citites has remained almost the same. The share of other types of towns as a percentage to total urban population has consistentlv declined over the decades.

The larger cities again have a tendency to grow bigger. A further break up of the population of cities indicates that a majority (50 5 percent) of the population of urban agglomerations/cities lives in 23 metropolitan 'million-plus' cities.

It may be observed that in 1901 there was only one city with a population of more than one million. In 1951 there were 5 such cities. By 1991, the number of such cities rose to 23. More than 8 percent of India's total population and onethird of her urban population live in these 23 'million-plus' cities. According to the U. N. estimates, by 2000 A.D. about 35 cities in India would have a population of more than a million each. Among them 7 would have a population of more than 5 million each.

It is also noticed that most of these cities witnessed a spectacular growth in population. Thus during 1981-91 the urban population of the city of Kalyan in Maharastra went up by 646 percent. Certain other metropolitan cities, with very high decennial rates of growth of population are Vishakhapatnam (67%), Surat (64%), Lucknow (63%), etc. In Orissa, the population of Bhubaneswar increased by 87.7 percent during the last decade.

In India there are four mega cities, namely, Bombay, Calcutta, Delhi and Madras. More than onefourth of the population living in Class-I cities live in these four mega cities.

The urban population is not growing through addition of new settlements, rather through the enlargement of the existing cities. It is seen that the annual rate of growth of urban population has varied from 2.5% to 7.5% in larger cities.

The explosive rate of growing of the larger cities is due to natural growth as well as immigration. Availability of infrastructure, employment potential, better educational, medical and recreational facilities, trade and commercial opportunities often are responsible for this gravitation of population towards the mega cities.

Apparently, with a level of urbanisation of 25.7 percent, India is not a highly urbanised country. In fact, in percentage term, India is lagging far behind the developed countries in urbanisation. Level of urbanisation was as high as 92 percent in U. K., 86 percent in Australia and 74 percent in the U. S. A. in 1985. In 1990, the world average of percentage of urban population was 42.7. For Latin America and Africa, this percentage was 72.3 and 34.5 respectively. But the absolute size of India's urban population at 217.2 million is quite gigantic. In fact the size of India's urban population was larger than the total population of any country of the world, except China, Russia and the U. S.

The Urban Housing Problem :

Shelter is the third basic human need after food and clothing. It is closely linked with Socio-economic development. As per the National Housing Policy Document of 1988 there has been some improvement in the housing sector as the residential housing stock increased from 14.1 million in 1961 to 28.5 million in 1981. Despite this quantitative growth of residential houses, the urban housing shortage had been growing at an alarming rate. Housing shortage implies the difference between the total number of households and the existing stock of housing units. The problem arises because there is a growing gap between average annual housing demand and the supply of dwelling units. This housing demand arises due to backlog, population increase as well as replacement of existing units. Thus in the case of the mega cities it is estimated that they need about 50,000 to 1,25,000 dwelling units per year whereas the supply ranges between 10,000 to 25,000 units.

According to an estimate of National Building organisation, in 1981, the total urban housing shortage was 5 million units. By 1990 it rose to 6.9 million units. This figure seems to be an underestimate. According to non-governmental estimates made by the Indian Institute of Management, Ahmedabad or the Birla Institute of Scientific Research, New Delhi, the actual housing shortage was 2 to 3 times greater than the official estimates.

According to the estimates made by the Sub-Group on the "Magnitude of Housing Problem", 1.75 million units need upgradation in the urban areas and 9.55 million new units are needed. The total backlog in 1991 has been estimated at 10.4 million units in urban areas by the National Building Organisation. It was estimated that 48.8 million persons were living in slums in 1990, 40 percent of which was in 'million-plus cities'.

Qualitative Aspect :

The housing problem has a qualitative aspect as well, which further aggravates the housing shortage. The poor quality in housing is reflected in poor construction, congestion, lack of various amenities such as water, electricity, sanitation and other civic facilities. The houses also suffer from severe congestion and overcrowding. According to the National Commission on Urbanisation (NCU), as many as 50 percent in urban areas are living in just single room houses, nearly 5 persons in a room. Hardly 78 percent of the urban population have access to water supply and 27 percent enjoy sanitation facility. According to the NCU about 37 percent are without electricity and about 66 percent were without toilets.

Thus, unabated grow of urban population, and the accumulated backlog in urban housing have aggravated the problem further. The NCU in Vol. I of its report says "the urban centres have generated the most brutal and inhuman living conditions with large sections of citizens (almost half in Bombay and Delhi) living in squatter settlements The overcrowding in the slums and the desperate lack of water and sanitation lead to the abject degradation of human life. "The huge concentration of people in urban areas creates problems in terms of basic amenities and social infrastructure. It leads to diversion of investment from more productive activities to high cost infrastructure. It leads to environmental pollution, widens the gap between the "haves" and the "have-nots" and aggravates social tension. Acute congestion, slums and squatter settlements constitute the major problems of urban housing.

The Urban Housing problem can be tackled only through a multi-pronged strategy. It should include a re-orientation of all policies relating to housing and housing finance.

At present there is a disproportionate increase in urban population. During 1981-91 when rural population growth was 1.80% per annum the urban population grew at more than 3%. It is mainly due to mass migration of people from rural areas. In the absence of any alternative gainful opportunities, rural people make a beeline for the metropolitan cities, in search of a living. During the last decade the annual growth rate of employment in the urban areas averaged around 3.3 percent while in the rural areas it dropped to 1.6 percent. Such uncontrolled rush towards the urban areas puts a tremendous strain on the already fragile urban housing infrastructure. Such migration has to be stopped or controlled. Constitutionally it is not possible to introduce

a system of entry permits for cities. In China, such a system had been implemented successfully. In India also, experimentally such permits could be introduced for mega-cities, in the beginning. The new Maharashtra government is already considering such a measure to introduce entry permits for Bombay.

But the best method to control rural-urban migration and urban-urban migration would be to diversify economic activities to smaller and medium towns. They would serve as an important link between the village and large cities. This will lead to a more balanced distribution of urban growth both in terms of its distribution over space and also by size class of urban areas. Unfortunately, under the present economic reforms the NRIs and foreign investors are rushing towards the metropolitan cities to set up new industrial units. Instead, these industries could be set up in smaller towns. In the long run, such settlements could serve as the nucleus of a modern town. Emergence of such new towns is highly essential In our country historically, while urban population has increased by 500 percent, the number of settlements has grown only by 77 percent. These new urban settlements should be duly planned by town planners and architects, with scope for further expansion. The government has already initiated the Scheme of Integrated Development of Small and Medium Towns (IDSMT), since 1979-80. During the 8th plan, it is proposed to cover 200 additional towns under IDSMT.

As land is scarce and land-man ratio is dwindling, land resources must be properly and optimally utilised. The price of land in many cities has gone beyond the reach of even the very rich. Bombay, for example, has become one of the hottest real estate market in the world. The value of prime residential land is selling at $ 990 per Sq. foot., compared to $ 300 in New York or $ 560 even in Singapore. A luxury apartment building is fetching as much as Rs. 9.60 crores. For a sustained growth of housing activity, a purposeful land policy should be formulated, to ensure an increased supply of serviced land. The public agencies should play a greater role in this direction. The existing legal and administrative machinery has impeded the supply and development of serviced land. The overall housing promotion strategy should also aim at development of infrastructural facilities like transport and communication, drinking water and energy supply etc.

The existing legal procedures are often not conducive to housing. The various laws relating to land tenure, land acquisition, land ceiling as

well as municipal regulation relating to housebuilding, apartment ownership and other related laws should be amended and if necessary even scrapped. The Urban (ceiling and Regulation) Act of 1976, did not achieve its social purpose. It is necessary to suitably amend this Act. Procedures should be devised for speedy acquisition of land on payment of adequate compensation. A special law should be enacted for acquisition of land for housing.

Repairs and renewals of the old housing stock should be encouraged. Upgradation, expansion, and renewal of existing housing stock could be achieved through the provision of institutional finance at cheaper rates.

In keeping with the prevailing socio-economic conditions and life styles of the people, certain minimum housing norms should be laid down. These housing norms should vary from place to place.

In India, the emerging pattern is not on the lines of the U. K. and other welfare States, where more stress is given on rental housing. But as in the U. S. A., in India also, the thrust is on ownership housing. In a poor country like India, there should be expansion of rental housing, particularly for low and middle income groups. Public housing agencies however have not undertaken construction of housing tenements for renting. The various laws controlling rents and letting of dwelling units also affect the interest of the people who go for rental housing.

In the development of any sector, science and technology play a crucial role. The housing sector is no exception. Science and technology could help us in the development of new materials, or the use of locally available materials for different types of activity such as flooring and roofing etc. Construction costs have to be kept under control. Dissemination of low cost technology and alternative materials is being done through the Central Scheme for Building Centres.

India has an extra ordinary diversity of eco-systems. While framing a housing policy for the urban areas this diversity in eco-system could not be ignored.

The role of private sector in housing has to be expanded. Private developers can contribute to urban renewal and squatter settlements in metropolitan regions. A scheme to encourage NRI investment in housing and real estate development has already been formulated.

It is also advisable to formulate a special Metropolitan Housing Policy.

"Right to Shelter" might be declared as a fundamental right. Although it might at best be having a symbolic value, yet it will reflect the sincerity of the government and the urgent necessity of the public.

To eradicate the problem of housing, India has to invest a huge amount. This reveals the importance of housing finance. In the western countries housing finance plays a crucial role. India has yet to develop a strong and effective system of housing finance. The L. I. C., the G. I. C., the Housing and Urban Development Corporation (HUDCO), Housing Development Finance Corporation (HDFC) etc. are acting as general as well as specialised housing financing institutions. In recent years several specialised agencies, known as Housing Finance Companies have emerged. They provide housing loans but most suffer from inadequacy of financial resources. They should be provided with adequate fiscal and other incentives to protect their viability. It is also urgently necessary to develop a secondary market in house mortgages and Mortgaged Backed Financial Instruments. With the establishment of the National Housing Bank, some coordination has been achieved among the existing institutions.

The woman can play a very effective and useful role in housing. According to Indian traditions the house belongs to the housewife. The "house" can be converted into a "home" only under the inspiring guidance of the woman who has first hand knowledge of what constitutes home. So she should be given an effective role in the actual execution of the housing schemes.

Solution of the housing problem in India is a serious challenge before the government. The problem is likely to continue for some time. But under the New Economic Reforms, with growing prosperity, let us hope that "houselessness" will be effectively tackled by the turn of the century.

Bibliography :

1. Eco. Survey, 1993-94, GOL.
2. Eighth Five Year Plan 1992-97, Vol. II.
3. Statistical Outline of India 1992-93 (Tata Services Ltd.)
4. Southern Economist July 1, 1994.
5. Yojana Aug. 15, 1989, June 30, 1991 and Jan. 15, 1994.
6. Facts for You, Dec. 1993, Aug. 1994 and Sept. 1994.
7. Environmental consciousness and Urban Planning, by M. N. Buch.

Urbanisation and Assault on Health Care—Indian Experience

Dr. R. N. Mohapatra
Reader in Economics,
Municipal College, Rourkela

I

In India, the poor have finally taken their revenge in the only way they know, by dying. The outbreak of plague has brought into sharp focus the abysmal state of sanitation and fifth in the country's urban areas. It tells the sad story of the neglected health service in the country. Plague seems to be more than a biological disease. It is rather a symptom of a more cruel social disease—poverty. India's unchecked haphazard urbanisation breeds poverty. An urban crisis of major proportion is on us, and characterised by the proliferation of slums, unplanned urbanisation. It seems that the task of ensuring health and well being for the citizens of the world is becoming even more difficult and expensive and complicated.

In many developing countries health policies are inefficient and inequitable. Too large a proportion of public expenditure on health is allocated to impressive, but expensive modern hospital facilities and sophisticated medical manpower The allocations has resulted in a bias towards curative care. A number of health risks derive from high fertility rates in developing countries. When large number of people live in poor households located in crowded unsanitary surroundings, communicable diseases spread easily and high mortality and morbidity rates result, particularly in case of children. According to UNICEF, nearly 3 lakh urban children die annually of diarrhoea mainly in slum areas. National Institute of Urban Affairs (NIUA) recorded infant mortality at 123 per 1000 live births The major causes were diarrhoea, diptheria, tetanus & measles. Most of them are results of poor sanitary condition. According to Voluntary Health Association of India, 2.5 million children are not able to celebrate their first birth day every year. Other diseases like gastro-enteritis, jaundice, cerebral malaria, malaria are common ailments accross the country. The global protectionist economic policies pursued

by affluent countries and the harsh structural adjustment imposed on poor countries by international lending agencies have tended to aggravate prevailing gross inequalities between the countries. Unfortunately one of the important factors of the on going structural adjustment programme is the compression of public expenditure. The impact of compression will no doubt fall on social sector spending and the consequence will be borne disproportionately more by the poor (corina GAR Jolly, F. Stewart 1987). During the adjustment period outlay on health sector is an important component of "Safety Net".

The Urbanisation is a direct assault on health care and the present paper intends to assess the impact of urbanisation on the health system in India, the changing profile of ill health of the poor, World Bank prescription for disaster, a future health policy.

II

Urbanisation or the concentration of population and economic activity in cities and large urban agglomeration are a recent phenomenon in the history of man. Urbanisation accompanies industrialisation, commercialisation, multiplicity of social contact, diversity of social code and predominance of secondary relationship. Urbanisation denudes the household of economic function and throws the individual into associational relations determined by specific interest of work and temperament (R. C. Maciver, C. H. Page 1988). Urbanisation arises and grows by choice and chance. In fact many problems of urbanisation such as environmental degradation, transport congestion, poor sewarage system, contaminated water supply, uncleared garbage, mindless growth of slums and providing public goods and services to urban dwellers are both micro and macro level problem. It is demonstrated that poorer sections of urban population because of their location, physical living conditions, socio-psychological attitudes become much more vulnerable to different diseases. An appreciable increase in urban population has not only led to the proliferation of slums but also conveys a grim warning of what is in store for our cities if they continue to grow unchecked without an accompanying expansion of essential civic services The rich in urban areas influence the political process and they are more concerned about macro environment in the city.

The poor is indifferent about macro environment and perceive the danger from their micro environment. For example the system of service which is provided by the municipality does not meet the standard of

health and hygiene. (Amitabh Kundu : 1991). The health hazards due to urbanisation include garbage and sewerage. Rotting organic refuse attracts vectors—mosquitoes, cockroaches, rats, house flies, human lice, fleas, bugs ticks, mites and carried by these vectors, bacteria, thriling in warm, moist, rotting garbage, spread malaria, filaria, viral fevers (such as dengue) etc. Rat fleas can also cause bubonic plague.

There is little or no garbage collection, few sanitary toilets and open drains which serve as sewers in slums. The slum dwellers, many of whom work as domestic servants in regular colonies, contact diseases because of the unhygienic conditions and pass them to others who work. The workers are migrated and they do not have a sense of belonging to the city. The sewage passes directly to the river beds and the water is contaminated. There is no maintenance of sewage as a result of which stagnant water is accumulated in the slums and help in spreading cholera. In most of the cities sewage and water pipes are lined next to each other. When leakages occur, the water is often contaminated. Conversely contaminated water, when it comes in contact with organic waste, brings new germ larva to breed there.

III

The profiles of diseases have undergone a striking change in recent times. As there is better immunisation coverage and improved environmental sanitation, acute infectious diseases will further decline. Chronic degenerative diseases, due to increased longivity and ageing, will be more expensive and poor can not afford it. There is perpetual growth of non-communicable diseases, diseases caused by large amount of toxic and radioactive chemicals polluting the environment. There is definitely a higher incidence of infectious diseases among the economically weaker sections of the society.

IV

The prescription of the World Bank for health care seems to be a disaster. The Bank is eager to limit govt. activity to essential clinical package. The package includes family planning, perinatal care, treatment of the sick child, treatment of tuberculosis & sexually transmitted diseases of minor infection and trauma. This "essential package" will cost a sum of $ 60 billion annually for the entire developing world, just a little more than the amount $ 50 billion spent on cigarettes annually in the developed world. It goes without saying that health care facilities in government institutions are shoddy. The poor people use them.

A country like India spends a miserable 2 percent of its budget on health care and 17 percent on defence. There is expenditure compression in health sector under the structural adjustment programme. But investing in the health of the poor is an economically efficient and politically acceptable strategy.

WHO is to monitor the health care programme of the third world countries. A short-sighted approach to public health has been made by India. The medical research community has completely dissociated from public health issues. The new scheme of health care has been negotiated with WHO; & there is a growing fear that the picture of ill health will scare away potential buyers of Indian goods abroad. World Bank's observation is, sanitation has been identified by the urban poor as the most unsatisfactory public service. There is speed money payments (corruption) in the transaction between slum dwellers and public agencies. The public agencies work under monopoly conditions. Some time the clandestine monetary transaction between the slum dwellers and public service agencies creates an embarrassing situation.

V

Due to multidimensional nature of the concept of health it is hard to define and measure the health status of a given population. The survival morbidity and mortality rates are the common indicators. Due to non-availability of reliable morbidity statistics, infant mortality rate (IMR) and life expectancy at birth (LEB) have been used to measure the health status (R. V. I. Adibhai, S T. Bagalkoti, 1994). The Urban Infant mortality rate (IMR) fell by 31%. The high incidence of poverty, has compelled the government to spend less on health. Though the per capita government expenditure on health (PCHE) has increased in all states, but in differing degrees. The values of co-efficient of correlation between PCHE and health status indicators though negative were non-significant. The health infrastructure in terms of hospitals, PHCs and sub-centers are the critical factors in health development. Certain states have neglected the infrastructural aspect. The health status necessarily depends on knowledge of health risk. Female literacy has a greater impact on health status. The polic conclusion or the major findings are as follows :—

(1) Public investment need not be circumscribed by imperfection of cost-price signals.

(2) It is necessary to control specific diseases on a nationwide basis.

(3) The government health programme should be designed on the basis of cost-effectiveness.

(4) The Government should go for "Pyramid of health care" starting from the grassroot level i.e. PHCs, to state level.

(5) Overhauling policies on the pricing of health services should be taken up.

(6) The promotion of health from within the community on a continuing basis should continue.

(7) Foster an enabling environment for households to improve health; through immunization programme.

(8) Promotion of diversity and competition in promotion of health service.

(9) Control of environmental degradation.

(10) Arrangement for providing support and incentives to joint families.

To all intents and purposes when we move to the next century, we face the cruel paradox that despite growing prosperity and spectacular technological advances, the task of ensuring health of the citizens will be more difficult and expensive. So we should believe the dictum— 'An effective health care system is necessary to improve social capital which is indispensable for all round development.'

Trends of Urbanisation : A Study with Reference to Mega Cities in India

S. N. Tripathy
&
P. K. Patnaik

This paper examines the dimensions of urbanisation specifically manifested in mega cities—the urban agglomerations of Bombay, Calcutta, Delhi and Madras.

The census report 1991 reveals that India with about 84.4 crores of population next to China, is the second largest populated country in the world. So far as urban population is concerned, India has 25.7 per cent of urban population constituting 217 million as per 1991 census. The magnitude and absolute size of urban population, however, is much larger than the total population of any country in the world except China, Russia and the U. S. A. The 1981-91 decadal increase of 57.7 million in the urban population itself is much greater than the total population of most countries of Africa, Latin America, Europe and even in Asia. It has increased from 11 per cent to 20 per cent during 1901 to 1971. During 1971 to 1991, the urban population has again picked up from 20 per cent to 25.2 per cent. As a result the number of cities has increased from 216 during the 1981 to 296 in 1991. The number of big cities having a population of more than 20 lakhs have doubled from 11 to 23 during 1981 to 1991.

The thickly populated cities termed as mega cities with a population over 5 million (as per 1991 census) present one-third (217 million) of the total urban population. The census data for 1991 clearly demonstrate the maga cities' population of Bombay, Calcutta, Delhi and Madras which stands at 12.77 million, 10.86 millon, 8.57 million and 5.36 million respectively. Table—1 reveals the growth of urban population of these four mega cities which has been sharply increasing over the decades.

TABLE—1

Population of mega cities in the population of 5 million and above
(Population in Lakhs)

Mega cities	1971	1981	1991
Greater Bombay	59.7	82.3	125.7
Calcutta	70.3	91.6	108.6
Delhi	36.5	67.1	85.8
Madras	31.7	42.8	53.6

Source : Census of India, 1991.

It is interesting to note that during 1981 census Calcutta with 91.6 million had the highest urban population in India. But in 1991 Greater Bombay occupied the top position in the list of highly urbanised populated mega cities with 125.7 million of urban population.

According to the provisional figures of the 1991 census, the population of Greater Bombay's urban agglomeration is 125.7 lakhs. This steep increase in the population accounted for mainly due to addition of urban areas to Greater Bombay.

Greater Bombay was treated as an urban agglomeration for the first time only in 1991 census. It comprises Bombay, Thane, and Kalyan Municipal Corporation, Ulhasnagar and Mira Bhayander Municipal Councils and New Bombay with the recent linking by rail, the population of New Bombay can be expected to rise further in the coming years. Perhaps this may result in easing the congestion in Greater Bombay Municipal Corporation as people could be expected to move out of the city to settle in New Bombay.

Calcutta was the political Capital of the country till 1911 when Delhi became the Capital. Yet Calcutta continues to be an important urban centre due to its strategic location which enables it to have close social and economic interaction with the vast hinterland. Spread over Eastern India, Calcutta's urban agglomeration consists of 129 units. During the decade 1931-41, the highest growth rate of 69.34 per cent in population was recorded by Calcutta urban agglomeration. It is also interesting to note that the population of Calcutta Municipal Corporation has increased only by 6.33 per cent during 1981-91 as against 11.04 per cent during 1971-81. Presumably the population of the city has moved out to the sub-urban areas to settle in new colonies.

Delhi, which had served as the capital of many empires earlier has grown into an administrative town through the ages and is, therefore, different from other metropolies in the country. Like Calcutta, Bombay and Madras which are mainly industrial and trade centres, Delhi has been rapidly growing in population since Independence due to large scale movement into the city. In the wake of partition of the country, the population increased by 106.58 percent during the record 1941-51. The population growth rate came to 61.17 per cent during 1951-61 and 54.57 per cent during 1961-71 and remained almost at the same level during 1971-81. The population of the city according to the 1991 census is 83.8 lakhs, thus registering, a growth rate of 46.18% during 1981-91. Delhi urban agglomeration has three statutory towns, the New Delhi Municipal Corporation and Delhi cantonment, besides 23 census towns. During 1981-91 as many as eight new census towns have been added to the Delhi urban agglomeration In order to reduce the congestion in Delhi and to control the rapid population growth, several schemes have been drawn up to which the National Capital Region Concept is the most important. The main idea behind this scheme is to develop the region around Delhi which forms part of the States of Haryana, Rajasthan and U. P., apart from the Union Territory of Delhi.

Madras became an important city during the British period due to its trade and commerce activities and strategic location. The city had a population of only 4.2 lakhs in 1872 which almost doubled by 1931. Between 1931 and 1951, the popolation was again doubled. The Madras urban agglomeration comprises 57 units. According to the provisional figures of the 1991 census it has a population of 5.4 million.

The various reports brought to light the following interesting points :

(i) Increasing concentration of the urban population in larger cities is due mainly to progressive increase in the numbers of both the cities and the million plus cities.

(ii) The number of cities increased from 216 in 1981 to 300 in 1991 while the number of million plus cities almost doubled from 11 to 23 during the decade.

(iii) The numbers will increase further during the 1990s, that of the million plus cities could reach (or exceed) 36 by 2,000 as estimated by the National Commission on urbanisation in 1988, because a significant number of the 30 cities which had a population of 5,00,000—1 million in 1991 would become million plus cities.

The mega cities and other big urban agglomerations have been beset with serious problems of shelter, slum, drinking water, sanitation, drainage or sewage system and environmental hazards.

Policy Thrust :

(i) In view of these issues the future policy should address mainly to tackling these problems on the basis of long or medium term plan developments.

(ii) The municipalities have to restructure their policy keeping in view the problems encountered in mega cities, especially, as we notice in Calcutta, about 20 lakhs of people are dwelling in slum areas. By the turn of this century, the problem of mega cities is likely to be more deplorable.

In mega cities, while HUDCO, State Housing Board and Municipal Board may be able to supply upto 30,000 to 40,000 dwelling units per year, the requirement may be more than 50,000 to 1,25,000 units per year for the coming 20 years. Assuming an average Annual Housing Demand (AHD) of 50,000 units for each mega city, the total AHD in all the 23 mega cities could be upto 1.25 million dwelling units from 1991 to 2011.

The urban plans specifically projected in mega cities should aim at implementing the projects and programmes included in the plans and enforcing measures ranging from control over land use to reducing pollution of water, aid, etc.

In this connection it may be suggested that there is need for redefining and reformulating the strategy and encouraging growth of large number of small towns for integrated rural-urban development and acceleration of economic growth in backward states.

Growth of Urbanisation in India

Dr. R. C. Mishra
Deptt. of Economics,
S. C. S. College, Puri

This paper tries to identify the causes relating to growth of urban population by taking five issues, (a) share of urban population to total population, (b) changes in the urban-rural growth rates, (c) growth rate of urban population itself, (d) the pattern of urbanisation and (e) migration.

The results of the discussions are presented below.

(a) Fast Growth in Urban Population :

The urban population since 1901 has increased by 2.4 times, from 2.5 crores to more than 6 crores in 1951. It has further increased to 21.7 crores in 1991 which is more than 3.6 times than that of 1951. During the period 1901 to 1991 the urban population has increased about 8.68 times, from 2.5 crores in 1901 to 21.7 crores in 1991. It is estimated that the urban population in 2001 will be 32.6 crores.

As a proportion of total population urban population has increased from 17.3 per cent in 1951 to 25.7 per cent in 1991. It is likely to be about 33.06 per cent in 2001.

(b) Large increase in big towns :

The pattern of urbanisation is titled towards the big towns. This is evident both from the rapid increase in the physical number of big urban areas and also the percentage increase of the population of big towns. Beginning with 1901 and till 1981, the total number of towns increased by less than 2 times (from more than 1800 to more than 3200) excluding Assam and Jammu and Kashmir). During 1951 to 1981 this increase has become more than two times. During 1901 to 1981 the Class-I towns (with population 1,00,000 and above) have increased by nine times (from 24 to 216). As against this the increase in Class-II towns (with 50 thousand to 99,999 population) has been more than 6 times (from 42 to 270). The Class-III towns (with 20 thousand to 49,999 population) and the Class-IV towns (with 10 thousand to 19,999) population have grown

by a still lower figure. In the former case the increase was about 5.5 times (from 135 to 739) where as in the later case it was about 2.7 times (from 393 to 1048). In the case of Class-V towns (less than 5 thousand population) and the Class-VI towns (less than 5 thousand population) there was actually a fall from 750 to 742 in the former case and from 490 to 230 in the latter case.

The much larger increase in the Class-I towns and in the Class-II towns and a smaller increase/even decrease in the smaller towns, have been largely due to the fast population growth of the big towns and vertical movement of towns to higher classes. In fact the increase in the higher class is due to the movement from the lower class towns to the higher class towns and increase in population during the last decade. This trend towards bigger towns has been particularly marked after Independence with the concentration of larger population in big towns/ cities.

Another feature is that there is still heavier concentration of population in big cities. In 1951 there were 5 cities (Calcutta, Bombay, Delhi, Madras, Hyderabad) having more than ten lakhs of population. But in 1981 the number has increased to 12 and in 1991 this number has become 20. The annual rate of growth of population is also higher in big cities in comparison to all India growth rate during 1971-1981. Although Calcutta was the No. 1 city in India from 1951 to 1981, in relation to population, in 1991 Bombay has taken the first place.

It is estimated that population in twelve big cities is expected to increase to nearly 112 million by the year 2001. In other words while urban population would account for nearly 32 per cent of the total by 2001, nearly 35 per cent of this urban population would be living in these big cities. Further more, it is also projected that the number of cities with a population of one million or more would increase to 36 by the year 2001 against 12 in 1980 and 20 in 1991.[1]

(c) Regional disparity in Urbanisation:

It is interesting to note that the shift from Rural to Urban is pronounced in backward states in sharp contrast to the situation in most urbanised and industrially developed states. As between comparatively richer states (Punjab, Haryana, Gujarat and Maharastra), the middle income states (Karnataka, Rajasthan, Tamil Nadu and West Bengal) and the poor states (Andhra Pradesh, Bihar, Madhya Pradesh, Orissa and Uttar Pradesh) the rate of urbanisation since 1951 has varied and to

some extent narrowed down. But overall richer states continue to be more urbanised than others with 31.84 per cent of urban population in 1991 as against 28.85 per cent in case of middle income states and 19.28 per cent in poor states. However, the startling fact is that during 1971-81, the rate of growth of urban population in poor states has accelerated. The growth of urban population in these states was rapid indeed in the three decades since 1951 with the growth rate at 4.57, in 1971-81 as against 3.5 in rich states, and lowest at 3.23 in the middle income states.[2]

It is also estimated that between 1996 to 2001 the rate of growth of urban population in poorer states will be more pronounced in sharp contrast with the situation in the most urbanised and industrially developed states. What this suggests is that in the more backward states as the total population increases, economic stagnation in rural areas will force people to move to non-agricultural jobs. As these are to be found mainly in urban areas, the result would be an inflow of rural people into towns and cities.[3]

But in highly developed states like Haryana and Punjab which have made considerable agricultural progress, it is seen that in 1981 the urban population of these two states accounted for 21.96 and 27.72 per cent respectively of the total population. In 1991 this has become 24.63, 29.55 per cent respectively of the toal population. Although in these two states there is a growth of urban population, it is the mandi towns which have grown fastest, whereas the large cities such as Amritsar, Jullundur and Patiala in Punjab and Faridabad, Rohtak, Karnal and Ambala in Haryana have not shown the growth characteristics of the larger cities such as Patna and Ranchi in Bihar. The agricultural prosperity of the Punjab and Haryana has given momentum to the growth of service and market towns, which are closely linked with the agricultural hinterland through the marketing of agricultural surplus. This is urban growth of a type in which there are close hierarchical linkage between village and mandi town, intermediate town and city.[4]

The lack of job opportunities in rural areas may be more evenly spread over large territory, but the lack of urban job opportunities would be highly concentrated in the towns and would lead to enormous problems of poverty, tension and social unrest.

Problems of Urbanisation :

(a) Urban Unemployment :

Another basic reason of rapid increase in urban population is the increase in migration from rural areas to the cities. Approximately half

of the increase in urban population comes from migration from rural areas or from small towns and large villages. Most of these migrants are illiterate and unskilled or semiskilled and hence they are intermittently in the urban labour force by mixing casual employment with periods of unemployment. This category of casual workers is most vulnerable than permanent wage workers in urban areas because they are not covered either by labour legislation nor by collective bargain through trade unions. Hence these workers are paid lower wages than those in regular wage employment for both men and women, irrespective of the level of formal schooling. As a result, casual workers are found in the poorest strata of income or consumer expenditure. It is observed that for the urban areas at the all India level, there is a strong positive correlation between person days of unemployment and the percentage of casual workers in the labour force in respect of urban male workers.[5]

(b) Increasing Number of slum dwellers :

As stated earlier the migration to urban areas from rural areas also added to the problem of creation of slums in the urban centres. Slums are spread in towns and cities all over the world but more acute in the third world countries. The concept of slum is applicable to a residential part of an urban area inhabited by economically very poor section of the society. In such areas, huts are created in a haphazard manner without proper access. Minimum basic facilities are lacking in these areas.

It is estimated that there were 27.9 million of slum dwellers in India which constituted 17.43 of urban population in 1980-81. This has become almost double (51.2 millions) in 1991-92 constituting 22.48 per cent of urban population. This shows that the enormous migration of rural population to urban areas in search of jobs where they have been forced to stay in slums without any proper opportunity.

(7) Environmental pollution :

Environmental pollution is a matter of serious concern both for the rich and affluent and the developing countries. Environmental deterioration is caused by higher rates of population growth, increased industrialisation, poverty and lack of development while the rich countries may look upon development as the cause of environmental destruction, the poor countries cannot but look upon development as the cure, as the means of remedying basic environmental problems.

The pollution of human environment is a function of density of population (DP) and density of Gross national product (DGNP). The Index of Pollution Potential (IPP) can be calculated by using the formula.[6]

$$IPP = \frac{DP^2 \times PI}{K}$$

where IPP = Index of Pollution Potential
DP = Density of Population
PI = Per Capita Income
K = Constant = 100

Taking the per capita income of developed states more or less same, environmental pollution depends on the density of population in different cities. It can be observed that the city which is densely populated will be more polluted in comparison to other cities which is not that densely populated. Hence it can be concluded that cities like Bombay, Calcutta, Delhi, Madras will be more polluted than the towns with less amount of population.

(d) Supply of Basic amenities :

The concentration of such large population in big cities raises very severe problems in terms of providing basic amenities like social infrastructure. They tend to bias investment among from directly productive activities into high cost infrastructure. The widening gap between urban areas and the backward rural areas affects adversely the development of capital resources. This is also likely to produce numerous forms of social tension.[7]

R. K. Puri in his article on "Housing Conditions : Metropolitan cities"[8] has analysed the 1981 Census data and has brought out ceriain revealing facts. Puri's analysis shows that 67 per cent of the households and 65 per cent of married couples in Bombay City lived in one room accommodation. Between 20 to 30 per cent of the population living in the 12 metropolitan cities did not have the facility of electricity, the highest percentage being in Calcutta City with 32.45 per cent. Nearly 30 to 35 per cent of the population in these cities did not have independent toilet facilities. Only 35 to 65 per cent of households in these cities had access to tap water within their premises.

The rapid enlargement of these cities is also posing acute problems relating to transport and commuting for the millions who reside in these cities. Available land in these cities are competing for multiple uses such as housing, commercial establishments, etc. The road network in these cities

cannot be expanded in a big way due to lack of space. This has led to several congestions of roads in the peak hours. It is estimated that the speed of travel for a commuted in the metropolitan cities has come down to a very low figure of six to seven kilometres per hour in cities like Bombay, Calcutta and Madras.[9] Moreover the road transport uses mostly petrol and diesel oil as fuel and this has led to a very high degree of environmental pullution.

In these cities the provision of basic facilities is lacking because the various agencies in charge of provision of basic amenities are facing acute financial problems due to prevalence of an outmoded tariff system for the supply of these services. A study carried out by the National Institute for Urban Affairs for the Eighth Finance Commission has pointed out that the per capita expenditure on the provision of water supply was as low as Rs. 9/- as compared to the standard norm of Rs. 24/- while the average per capita receipt was still lower at Rs. 5/-.[10]

It would be clear from the above analysis that the trends in the pattern of urbanisation taking place in our country are leading to social problems, which if unchecked may lead to very unfortunate consequences.

Hence the solution to the problems posed by rapid urbanisation needs a multi pronged strategy.

First of all, our development strategy should generate more employment opportunities within the rural areas both in farm and off farm activities. This strategy would prevent the migration of adult workers from the rural areas to the cities.

Secondly, the emphasis should be given on functional education instead of general type of education in future so that productivity of labour could be improved. The vocational training would enable the youth to pursue a specitic career as soon as they complete their vocational studies. This will also stop them from running to cities in search for a job.

Thirdly, greater emphasis is to be given for development of rural industries especially the traditional crafts along with necessary modernisation so that opportunities for self employment are sufficiently expanded in the rural areas.

Fourthly, urban local bodies have to mobilise more resources for expanding basic amenities and social infrastructure for urban population.

Finally we should evolve a coherent and well co-ordinated urbanisation policy. For that there is an urgent need for an in-depth

study of the urban problems especially in relation to the urban settlement pattern and growth in different regions, identification of factors behind this pattern of growth, institutional frame work for the management of urban affairs, the sources of revenue and the pattern of expenditure of the urban local bodies. In particular, we have to pay greater attention to the financial implications of urban development programme which are becoming increasingly unmanageable for the local bodies. We have to evolve a sound perspective of urban development involving all the specialities like architects, town planners, engineers, economists, bureaucrats, transport, health and medical specialists as well as sociologists. Otherwise, the urban situation will deteriorate further in the coming years.[11]

References :

1. Chakravarty, S., Urban Growth in India, Yojana, Aug. 15, 1989.
2. Mohan, Rakesh and Pant, Chandra Sekhar : "Morphology of Urbanisation in India", EPW 25 Sept. 1982, the demographic data documented in this paper cover 13 states mentioned here.
3. Buch, M. N "Population Growth and Urban Development", Jan 26, 1990, P. 28.
4. Buch, Ibid., Pp. 29.
5. Chakravorty, Yojana, August, 1989, Op. Cit.
6. Population and duality of life, Deptt. of Population Edn , SCERT, Orissa, Bhubaneswar, 1984, (Fig. 17).
7. Chakravarty, S., Yojana, Aug. 1989, Op. Cit.
8. Economic Times, 15 May, 1989.
9. Chakravarty, Op Cit.
10. Ibid., P. 19.
11. Ibid, P. 21.

Impact of Urbanisation on Rural Land

Mrs. Sujata Pati
Lecturer in Economics,
Government College, Angul

As a result of urbanisation, slow but noticeable changes are taking place in India—more in some areas and less in others. Existing urban centres are expanding, and new ones are coming up. Existing ones are heading towards a higher level of urbanisation—the amount and variety of central services are increasing and becoming more complex, processing and manufacturing activities are being added and expanded. Urban forms of governments are appearing. In the social and cultural fields also noticeable changes are taking place. All thesee changs are not confined to cities only and the impulses which these changes generate are not restricted to the city limit alone. They are carried into the countryside.

In order to study the changes taking place in the countryside in India and in order to study the impact of urbanisation the author will define all those things as urban which the typical Indian countryside did not witness before the impact of urbanisation.

The impact is clear in many aspects while in others the feeble urban impulses have given rise to changes which are only slight but significant. Urban impact on rural land is of three kinds :

1. Where rural uses of land are changed into urban uses, e.g. development of factory sites etc.
2. Where rural land uses are turned into non-agricultural uses and oriented to urban needs, e.g. development of brick kilns.
3. Where rural land is used for agricultural purposes but differently e.g. change in crop pattern, diary, poultry, etc.

Many villages around the Angul-NALCO township area has been completely swallowed by the process of urbanisation. Those villages are Turang, Kandasar and Kulada in the east, Baniabahal, Lingarajodi in the west, Kumanda and Jarasingha in the north and Susuda and Khalari in the south. Most of the agricultural fields of the past are converted to residential areas or commercial sites. Major developments took place in east west direction along the N.H. 42 (the Cuttack Sambalpur Road). However the MDR Hindol Angul road side in the south and Angul Debagarh road side in the north are no exception.

The major cause of tranformation of rural habit to urban appearance is the upcoming of the Aluminium factory (NALCO) and other allied industries. To cater to the needs of the immigrants in the form of work force large marketing establishments, transport companies, consultancy houses, rail network emerged by using rural land in the sub-urban areas.

Out of the total rural land grabbed by the process of urbanisation in this area 67% were agricultural land, 26% were cultivable waste land and the rest were either fallow or forest land.

In the newly formed district of Angul two C.D. blocks, such as, Angul sadar and Banarpal are affected most in the process of urbanisation (say industrialisation) during the last decade, i.e. 1981-91. The fate of rural land in those two blocks in the affected villages can be well understood from Table—1.

TABLE—1

Tranformation of Rural Land to Urban use.

Block	Affected Villages	% of Rural land in 1981	% of Rural land in 1991
Angul	Turang	82	23
	Khalari	87	43
	Susuda	42	06
	Baniabahal	34	02
	Lingarajodi	58	12
	Kumanda	87	61
	Jarasingha	100	78
Banarpal	Kandasar	100	17
	Kulada	100	07

Source : N.A.C. office records, Angul.
Block office records of Banarpal block.

It is interesting to note that the rate of shift towards urbanisation is maximum in case of the villages like Kulada, Kandasar, Jarasingha and Kumanda. The cause behind such peculiarity is the rapid inflow of work force and their demand of urban amenities in the form of infrastructure for residential structure, marketing, road development, industrial requirements etc. The total conversion of Kulada and Kandasar villages from rural to urban is due to the establishment of the National Aluminium Co. and Captive Power Plant. But the case of Jarasingha is a reflection of social transformation. In that village the standard of living of the inhabitants improved a lot invoking them to avail of all possible urban amenities. They also impressed upon the local politicians to declare their locality urban and included it within the municipal area during 1981-91.

The pace of urbanisation also grabbed the rural land from the villages of Baniabahal, Lingarajodi, Susuda and Turang. Before this decade

those villages were partly included within the municipal boundary. With the increasing demand of accomodation for the industrial workers new residential plots were developed by utilising the rural farm land. There were examples of overnight constructions during the construction period of NALCO plant. Finally those areas were included within the municipality.

Besides the inclusion of rural areas within urban limits certain other hazards crept into the rural areas adjoining the towns. The brick kilns developed in large numbers by consuming the rural land. The cropping pattern has been changed in the perspective of changing urban needs. The conventional cereal or rabi crops are replaced by vegetable farming, orchards, nurseries etc. Cash crops increased substantially in the accessible villages with all weather roads.

The above findings suggest the changes brought about in the countryside as a result of urbanisation. Some of the urban impulses originate locally and regionally and some others extra-regionally. The development in the region under study are in response to the regional and national needs, by which the local people and the locality benefited much. But the benefits will be short sighted and the loss will be long standing in the rural sector and regional environment.

The study in the present context reveals some unpleasant experiences of the inhabitants regarding the environmental degradation and the calousness of the industrial establishments through violation of population norms. The periphery development provision is under-financed. Within these sorry state of affairs it is interesting to note that the standard of living, purchasing power, literacy, financial viability and employment opportunity have increased in the Angul-NALCO nagar Towmship.

To conclude, it may be stated that whether the impact of urbanisation is leading towards a better situation or that it will jeopardies the agricultural interest of the country is yet to be seen.

The primary data are collected through personal interviews and field observation. The study is based on field work along N.H. 42 in Angul district.

Secondary Data Source :

1. The District Statistical Handbook of Dhenkanal.
2. N.A.C. Library of Angul.
3. Bulletins of NALCO Administration.
4. District Census Handbook of Dhenkanal, 1981 and 1991.

STRUCTURE & PROMOTION
OF
SMALL SCALE INDUSTRIES IN ORISSA
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Capital Structure and Industrial Sickness in Small Scale Industries

Dr. (Mrs.) Bedabati Mohanty

In the process of industrial development, certain amount of sickness is inevitable and some inefficient firms are bound to be eliminated by competition from more efficient ones. It is not industrial sickness as such but its alarming proportion that has posed a serious concern to the Government, financial institutions and societies at large. Sickness is associated with non-performing assets in which financial institutions have invested. Sickness in industries, it is, therefore apprehended, may ultimately result in sickness in banking sector. As per the current definition, a small scale industry is considered sick when any of its borrowal accounts has become a doubtful asset, i.e. principal or interest in respect of any of its borrowal accounts has remained overdue for a period exceeding two and half years.

Industrial sickness can not be attributed to a single factor. In fact it is the cumulative effect of many factors which may be closely interrelated or even independent of each other. Inadequacy of working capital is often cited as a major factor responsible for sickness in various studies in the field, conducted at official and individual research level. A peculiar feature of small industries is that working capital generally constitutes a larger part of total productive capital unlike the large industries where fixed capital constitutes the major portion of total productive capital. The ratio of working capital to fixed capital in small scale industries of the state vis-a-vis large industries is shown in table I. The table reveals that the ratio of working capital to fixed capital is invariably higher in small industries compared to large industries, though a gradual decline in the ratio of working capital to fixed capital is seen in both the sectors over the period 1983-84 to 1989-90. Working capital is the capital required for day to day functioning of the industries. For optimum utilisation of the plants and equipments it is essential that the supply of raw materials, labour, fuel, transportation etc. must be ensured. Shortage of working capital therefore results in less than optimum utilisation of capacity which lowers down the repaying capacity of the firm. Working capital to

small scale industries is generally supplied by commercial banks and the flow of credit to the sector is considered to be inadequate. There is great imbalance in meeting the working capital needs of the small scale sector. During 1993-94, for example while small scale sector received only 8.2 p.c. of its output as working capital, the large units managed to get nearly 19 p.c. of their output as working capital.

In view of the crucial role of working capital, in the successful operation of small scale industries, the R. B I. appointed a committee headed by P. R. Nayak to review the arrangement for meeting the working capital requirement of S. S. I.s, the rehabilitation of sick S S. I.s, and other related aspects. In view of the increase in the cost of raw materials and locking up of available resources due to delay in realisation of sale proceeds, the committee was to examine the adequacy of institutional credit for working capital to S. S. I. sector. The committee's recommendation that working capital requirement of all small scale industries be computed on the basis of minimum 20 % of the projected turn-over and S. S. I.s would be required to bring in 5 per cent of annual turnover as margin money, has been accepted in principle.

An attempt is made in this paper to find out

(i) how far the recommendation of the committee is followed in fixation of working capital limit by the banks.

(ii) how far the working capital requirements of small industries are met.

(iii) the extent to which inadequacy of working capital has been responsible for sickness in small scale industries with resultant over dues.

Five industries with borrowal account of doubtful nature, producing different kinds of goods are studied in depth to find out the working capital problem of small scale industries. The industries are located in industrial estates of Bhubaneswar, Cuttack and Jagatpur and belong to three important eategories of disciplines i.e. engineering, chemical and printing & stationery.

The capital structure of the industries is shown in table II. It is observed that contrary to general picture of small scale industries sector, working capital component is lower than fixed capital in two cases and equal to F. C. in one case. In course of interview with entrepreneurs except the Basanti Industries, all other entrepreneurs have stated working capital shortage as a major factor responsible for low utilisation of capacity with consequent over dues.

Relation of the value of output to working capital limit in different industries (Table-III) reveals that working capital constitutes varying proportions of total turnover ranging from 11% in Tekon Services to 90% in Garnet Paints and Chemicals.

In case of ICC., the W. C. limit of Rs 2,33,000/- in 1981 constituted 50 per cent of the total turnover during the year. With this liberal credit however the unit has not been able to achieve optimum utilisation of capacity and was just operating at break even point reached with 40 per cent capacity utilisation, mainly due to mismanagement like heavy expenditure on establishment & continuance of overdues to the Banks. In view of the over dues probably the working capital limit was lowered down to Rs. 1,98,000 in 1991 which constitute about 16 per cent of total turnover during the year. With lowering down of working capital limit, capacity utilisation has further declined and in 1994 the unit was operating at 21 per cent capacity utilisation level This suggests though initially mismanagement resulted in low level of capacity utilisation, with consequent overdues, the present problem of the unit is more a problem of working capital shortage than that of internal mismanagement.

Konark International started in 1979 with a working capital limit of Rs. 75,000/- which constituted 75% of the total turnover. Hardly a year after its operation it went into partnership problems and was on the verge of closure with consequent over dues to the bank. After rehabilitation, it obtained a fresh working capital limit of Rs. 18,62,000/- in 1981 which was again 75 per cent of total turnover in 1991. After the change in form of organisation to Individual Proprietorship, the unit is steadily expanding and has reached the level of turnover worth Rs. 60,00,000/- in 1994. But it is observed that after five years of operation it has reached only 50 per cent capacity utilisation level. This is attributed to blockage of large amount of money with Government departments, which creates working capital shortage for the unit.

Working capital inadequacy is in fact closely related to delay in payment to small industries. The Government circular that payment to small industries should be made within 7 days never materialises. The delay in payment extends on an average from 4 months to one year when goods are supplied to Government Departments. Due to large number of bills pending with Government, Small industries find it difficult to operate their units at full capacity, which lowers down their repaying capacity.

The case of Tekon Services, a unit producing Computer related services, is different. The traditional practice of advancing working capital loan against security of stock has created problems for the unit. Brain work so to say is the raw material for the unit which probably cannot be hypothecated and therefore working capital limit has been kept low and it constituted hardly 11 per cent of the turnover in 1992. This has forced the unit to divert funds, which would have been used for repayment of loan, for reinvesting in production with consequent over-dues. It is observed that inspite of constant increase in level of production, the working capital limit of the unit has not been raised, because of default in repayment.

The Proprietor of Garnet Paints and Chemicals also attributes its sickness and overdues to working capital shortage. But however an in-depth study of the unit reveals that originally it was not the working capital inadequacy that resulted in excess capacity in the industry. In fact working capital limit for the unit was fixed at 5 lakhs in 1986 which constituted 90 per cent of total turnover for the year. The problem of sickness with resultant over dues is rather related to the question of securing Government order and disposing off the output already produced. The unsold stock in 1988 created losses for the units with consequent overdues. Due to non-payment of dues, the working capital limit has been discontinued and this was created further difficulties for the unit. The present problem of the unit is no longer shortage of order but shortage of funds to carry on production and the unit has come to a level of less than 5 percent capacity utilisation.

Working Capital limit in case of Basanti Industries constituted 27 p.c. of the turnover in 1983 and the unit is found to be operating at break even point with 30 per cent capacity utilisation. Excess capacity in the industry is due to shortage in the availability of skilled labourer. The overdues of the unit is due to closure of the unit from '85 to '94 following the damage done to the shed by cyclone of 1985.

Analysis of working capital position of the industries reveals that inadequacy of working capital has contributed to some extent towards operating below optimum capacity in four out of five cases, and because of operating below full capacity, they are not able to repay the loan. P. R. Nayak Committee's report about fixation of working capital limit is not yet strictly followed and while in some cases working capital limit has been fixed at a much higher level, in other cases it is much below 20 per cent. But even fixing the working capital limit at 20 per cent of turnover may not be of much help to small industries if the delay in

payment to S. S. I. units is not reduced at Government level. In fixing the working capital limit at 20 per cent, it is probably assumed that the working capital will rotate at least 4 times in a year. But in actual practice they are at best able to rotate the money three times in a year. In such cases strict adherance to this norm may imply lowering down of working capital limit in subsequent years.

A more liberal and dynamic attitude of the Banker in granting working capital loan may help in reducing the extent of sickness in small scale sector. In case of industries operating efficiently but faced with a financial constraints due to some external factors, Banks are to take a more liberal attitude and sanction a fresh woring capital limit even if the units have been defaulters, instead of putting the industries in Protest Bill Account. The Banks need more operational freedom to such decision. Genuiness of the problem can be ascertained before taking any decision by regular visits to the industry As a matter of fact, frequent visit by bankers and holding periodical discussion with the entrepreneurs about their problems will help checking the movement of the unit in wrong direction.

The present rate of interest of 18 per cent on the working capital loan appears to be too high for the small industries. Some concession in interest rate for the gestation period, especially when there is unavoidable delay in starting of commercial production, is essential to help the units to start with a clean record of repayment. The feeling of sickness, as is injected to the unit from very inception is a serious concern. The entrepreneur who is psychologically conditioned to be sick, increases the probability of the industry ultimately becoming sick. It is the responsibility of both the banker as well as the entrepreneur to see that such a feeling is not in-built into the system. Once this is taken care of in the beginning, the seed of sickness will not be allowed to germinate.

DIC which was originally conceived as an organisation to provide all facilities to the entrepreneur in a single window has failed to cater to the needs of the entrepreneur. It is essential that DIC acts as an Information Bank and is able to motivate the entrepreneur in the right choice of industries. A closer co-ordination and understanding among DIC., OSFC and Commercial banks may help in detecting sickness at an early stage and in taking a quick decision about rehabilitation or liquidation before the net worth of the unit is completely eroded.

TABLE—I

Ratio of Working Capital to Fixed Capital in S.I. vis-a-vis L. I.s.

Type of Industry	1983-84		1984-85		1985-86	
	F.C.	W.C.	F.C.	W.C.	F.C.	W.C.
L. I.	117804	46395 (39.3)	136459	50871 (37.2)	151762	55114 (36.3)
S. I.	3763	6180 (164)	2803	4898 (174.7)	4531	7756 (171)

Type of Industry	1986-87		1987-88		1988-89		1989-90	
	F.C.	W.C.	F.C.	W.C.	F.C.	W.C.	F.C.	W.C.
L. I.	192437	73332 (38.1)	364757	82108 (22.5)	459750	83059 (18)	513570	84159 (16.3)
S. I.	4537	4404 (97)	6047	7596 (125.6)	6340	3853 (60.7)	8569	5763 (67.7)

Source : A.S.I. in Orissa.

F.C.—Fixed Capital

W.C.—Working Capital.

L.I.—Large Industries.

S.I.—Small Industries.

TABLE—II

Capital Structure of the Sample Industries.

Sl. No.	Name of the Industry & Location	Type of Product	Year	Fixed Capital (In Rs.)	Working Capital (In Rs.)
1.	Indian Containers & Cans. I.E., Cuttack	Metal Containers	1976	71,500-00	77,000-00
			1981	2,66,000-00	2,33,000-00
			1991		1,98,000-00
2.	Konark International I.E., Bhubaneswar	Binding & Printing	1979	1,50,000-00	75,000-00
			1988	7,68,000-00	18,62,000-00
3.	Tekon Services I.E., Bhubaneswar	Computer related services	1991	5,39,000-00	
			1992	6,20,000-00	55,000-00
			1993	6,70,000-00	55,000-00
			1994	10,00,000-00	55,000-00
4.	Garnet Paints & Chemicals	Paints & Chemicals	1983	5,00,000-00	1,50,000-00
			1986		5,00,000-00
5.	Basanti Industries I.E., Cuttack	Buckets	1981	1,53,000-00	
			1982	97,000-00	96,000-00
			1983		2,56,000-00
			1984		5,91,000-00

TABLE–III

Working Capital and Total Turnover of the Sample Industries.

Sl. No.	Name of the Unit	Year	Total Turnover in Rs	W.C. Limit in Rs.	% of W.C to total turnover
1.	Indian Containers & Cans	1981	4,67,461-00	2,33,000-00	49.8
		1991	11,75,261-00	1,98,000-00	16.8
		1994	5,52,493-00	1,98,000-00	35.8
2.	Konark International	1979	1,00,000-00	75,000-00	75
		1990	25,00,000-00	18,62,000-00	74.4
		1992	35,00,000-00	18,62,000-00	53.2
		1994	60,00,000-00	18,62,000-00	31
3.	Tekon Services	1992	5,00,000-00	55,000-00	11
		1993	9,00,000-00	55,000-00	6.1
		1994	20,00,000-00	55,000-00	2.7
4.	Garnet Paints & Chemicals	1984	4,00,000-00	1,50,000-00	37.5
		1986	5,50,000-00	5,00,000-00	90.9
		1990	2,00,000-00	5,00,000-00	250
		1992	1,50,000-00	W.C. Limit	
		1994	1,00,000-00	withdrawn	
5.	Basanti Industries	1982	2,60,000-00	96,000-00	36.9
		1983	9,12,000-00	2,50,000-00	27.4
		1984	9,12,000-00	2,50,000-00	27.4
		1985 (4 months)	3,04,000-00	3,35,000-00	110
		1995 (revived)		5,91,000-03	

Informal Manufacturing Sector : Study of Micro-business, Petty Producer and Small Capitalist Producer at Two Points of Time

Kishor C. Samal
NKC Centre for Development Studies, Bhubaneswar

In Orissa, upto 1980, there was no industrial policy of Government of Orissa. The State Government adopted an industrial policy in August, 1980 which provided a large number of incentives mainly in the form of subsidies for factory shed, capital investment, power and so on. Similar measures were initiated for small-scale industries through District Industries Centre. Since there was no visible change in the industrial climate of the state, there were further changes in the industrial policy of the state announced in 1986, 1989 and again in 1992 with a few incentives for SSIs.

I

METHODOLOGY

On the background of more and more incentives announced in the industrial policies of both the centre and state Governments, the paper tries to analyse the growth and problems of very small units among the small-scale sector, viz., informal manufacturing sector in Sambalpur town at two points of time, 1985 & 1994. The paper relies on the data collected for our ICSSR project.[1] In this study, we have revisited the existing units of some sample informal manufacturing sector (IMS) of 1985[2]. The 58 sample units of our benchmark study of 1985 and 35 existing units out of these 58 units in 1994 follow-on study have been classified into three categories on the basis of labour composition. The three categories are :

(i) **micro-business** : which is managed by an active participant only.

(ii) **Petty producer** : who works along with paid / unpaid family labourers only, the total number of participants being 10 or less than 10; and

(iii) **small capitalist producer** : who employs hired workers, with or without paid or unpaid family labourers, total employees being 10 or less than 10.

We have collected information from IMS entrepreneurs through structured questionnaire as well as our personal interview with various Government officials, industrialists and others. The survey of the follow-on study was conducted during the first part of 1994.

II

MOBILITY AND GRADUATION

Out of 58 sample units of informal manufacturing sector (IMS) which were surveyed during our 1985 benchmark study, no one among the existing 35 IMS units in 1994 graduated to formal sector-manufacturing or other activities. We also enquired personally from their colleagues and the establishments neighbouring the units (which were existing in 1985 but non-existant in 1994), whether these units who are non-existent in 1994 have gone somewhere to establish a bigger formal sector firm employing more than ten workers. The answers to the best of their knowledge were in negative. On the other hand, 23 units (40 per cent of the 1985 sample IMS units) are non-existent during 1994 follow-on study (Table-1). The various reasons are cited for the high mortality rate of these IMS units particularly in Sambalpur town by the leading industrialists, Asst. Labour Commissioner, Sambalpur, Manager (Small-scale), DIC, Sambalpur and others. The IMS units are not able to market their goods due to lower quality and higher cost. In most of the cases, the choice of the project by IMS entrepreneur is not right for which they are not able to be viable. They are not getting proper institutional help. The role of District Industries Centre (DIC) in helping them is also not satisfactory.

The mortality rate is higher in micro-business (54 55 per cent) and lower in small capitalist production (34.48 per cent). Thus higher the status, lower the mortality rate (Table-1). On the other hand, lower the status, higher the mobility to upper status.

III

HORIZONTAL AND VERTICAL CONTRACTION

In general, there is a vertical contraction of informal manufacturing sector (IMS) units in Sambalpur during 9-year period from 1985 to 1994. That is, the average size of employment of IMS as a whole has decreased from 3.93 in 1985 to 3.31 in 1994 (Table-2). Among the different categories, only the size of small capitalist production has decreased by 27.39 per cent. But there is horizontal expansion of IMS since the number of commercial establishments as registered under Shops and Commercial Establishment Act in the office of Assistant Labour Commissioner, Sambalpur has increased from 184 in 1985 to 397 in 1994.

This trend is also confirmed by the Asst. Labour Commissioner. The average size of employment has decreased because the units are not employing the required number of labourers due to rise in consciousness of the workers and the hike in minimum wages of labourers by Govt. of Orissa. However, majority of the IMS units are not paying minimum wage since there is no trade union of workers of shops and commercial establishments in Sambalpur town. Moreover, bigger establishments are reducing the strength of employees and are interested to recruit multi-skill workers.

IV

PERFORMANCE AND PROBLEMS

Fixed capital and assets (after depreciation) at constant price per unit of the IMS as a whole have decreased by 28.03 per cent from Rs. 42.31 thousand in 1985 to Rs. 30.45 thousand in 1994. They have also decreased in all the categories of IMS, viz., micro-business, petty production and small capitalist production (Table-2). Annual sales turnover per unit at constant price of IMS as a whole has also decreased from Rs. 154.31 to Rs. 119.59 thousand during the 9-year period (Table-2). While it has declined in petty production, it has increased in micro-business and small capitalist production. Gross revenue per unit of small capitalist producers has increased by 111.70 per cent while it has declined in both micro business and petty production (Table-2).

Only about one-fifth of small capitalist producers have taken steps for expansion by investing on fixed capital and assets during the 9-year period. In spite of this the fixed capital and assets per unit of the IMS as a whole have declined due to smallness of investment by few. The

problem of finance for both working capital and fixed capital is the major problem for the IMS.

None of the micro-business entrepreneurs and petty producers is aware of the industrial policies of Government of Orissa announced in 1980, 1986, 1989 and 1992 or has got any assistance from Government and public institutional system. Only around 16 per cent (3 out of 19) of the small capitalist producers are aware of these policies and one of these three entrepreneurs has got subsidy for capital investment, power and factory shed, supply of scarce raw marerials, arrangement of working capital from commercial banks and financial institutions, protected environment in Industrial Estate and purchase orders from Government agencies. The gross revenue, annual turnover (Rs. 2100 thousand) and fixed capital and assets (Rs. 169.64 thousand) of this lone small capitalist producer who got all these assistance are far higher than that of the other small capitalist producers and the average of IMS as a whole (Table-2). Moreover, the assistance was available with the political backing and bureaucratic support for establishment of this unit. One of the initial two partners of the obove mentioned small capitalist producer was the Secretary of the town unit of a leading political party and the other was a relative of a higher official of Sambalpur DIC.

V

CONCLUSION AND POLICY IMPLICATION

Various assistances are provided to small-scale units, without bringing any distinction among them, by the public institutional system with the implicit assumption of employment creation by them. It is observed by our study that, inspite of various industrial policies of the state, very small manufacturing units—micro-business and petty producers —are unable to get any assistance during the 9-year period (1985-1994), though their average size of employment is increasing. On the other hand, small capitalist producers (comparatively bigger) are able to get various assistance, though their average size of employment is declining.

Thus, assistance to SSI units in the name of employment generation, without bringing any differentiation among them, is irrelevant. No assistance from public instituional system be given to an individual to start a new unit. Rather assistance may be provided to the 'existing and operating' units. Priority may be given in reverse order. That is, lower the status, higher and earlier should be the assistance. While helping the 'exiting and operating' small capitalist producers, the payment of

minimum wage and observance of labour laws should be taken into consideration.

Thus, instead of creating a new 'parasite middle class' through political and bureaucratic support [3], it is better to assist the 'existing and operating' IMS units for their credit requirement, market and others. The problem of finance for both working and fixed capital is their major problem. They need credit in adequate amount but not necessarily in concessional rate of interest. The IMS units are even ready to pay higher than the normal market rate of interest since they procure their requirement at a far higher rate from informal credit market

Thus, the supply of credit and other assistance may be in such order that the assistance is given first to microbusiness, then to petty producers and in the last to small capitalist producers and other small-scale units which are 'existing and operating.'

For this, there is need for 'institutional radicalisation'[4] for (i) credit, (ii) access to land and other assets, (iii) improved technology and (iv) others; & also for reexamination of the role of IMS. The Industrial policy for SSI and IMS must seek to discourage the 'rent-seeking entrepreneurs' from parasite middle class while promoting productive entrepreneurs.

NOTES :

1. *Dynamics of Informal Manufacturing Sector : Case Study of Sambalpur At Two Points of Time*, NCDS, Bhubaneswar, 1994.
2. The benchmark study of 1985 was conducted for my doctoral dissertation from Giri Institute of Development Studies, Lucknow, 1986.
3. For greater exposition on this point, Sec. Nasir Tyabji, 'Nature of Small-scale enterprise development : Political aims and socio-economic reality', *Economic and Political Weekly*, Vol. XVI, No. 44, 45 and 46. Annual Number, 1981.
4. See Akin L. Mabogunje, "A new paradigm for urban development" *Proceedings of the World Bank Annual Conference on Development Economics*, 1991.

TABLE—1

Graduation of Informal Manufacturing Sector Units
(1985-1994)

Sl. No.	Group	1985	1994				
		Existing units	Non-existing	Micro-business	Petty producer	Small capitalist producer	Formal
1	2	3	4	5	6	7	8
1.	Micro-business	11	6 (54.55)	2 (18.18)	2 (18.18)	1 (9.09)	Nil
2	Petty Producer	18	7 (38.89)	3 (16.67)	7 (38.89)	1 (5.56)	Nil
3.	Small Capitalist producers	29	10 (34.48)	1 (3.45)	1 (3.45)	17 (58.62)	Nil
	Informal Manufacturing sector as a whole	58	23	6	10	19	Nil

Note : Figures in brackets show percentage to the total number in 1985 shown in the same row.

TABLE—2

Structure of Informal Manufacturing Sector in Sambalpur
(1985 and 1994)

Sl. No.	Group of IMS	Average size of employment		Annual turnover per unit at constant price (Rs. '000)		Fixed Capital and asset (after depreciation) per unit at constant price (Rs. '000)		Gross Revenue per unit at constant price (Rs. '000)	
		1985	1994	1985	1994	1985	1994	1985	1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Micro-business	1.64	1.83 (11.59)	15.48	16.82 (8.66)	1.98	1.33 (−32.83)	10 37	10.14 (−2.22)
2.	Petty producer	2.56	2.70 (5.47)	49.92	16.87 (−66.21)	4.10	0.73 (−82.20)	15.12	7.32 (−51.59)
3.	Small Capitalist producer	5.66	4.11 (−27.39)	271.77	206.11 (24.16)	81.33	55.28 (−32.03)	33.84	71.64 (111.70)
	Informal Manufacturing sector as a whole	3.93	3.31 (−15.78)	154.31	119.59 (−22.50)	42.31	30.45 (−28.03)	23.58	42.72 (81.17)

Notes : (i) The 1985 benchmark study covers 58 sample IMS units and the 1994 follow-on study includes the existing 35 IMS units.

(ii) Figures in brackets show percentage change in 1994 over 1985.

(iii) Constant price means 1994 may price.

Capital Investment Subsidy : Some Issues

N. K. Sahu
Dy. Director, SISI, Cuttack

India is a capital scarce nation. The situation has not changed much even after four decades of planning. Non-availability of skilled manpower in the early stage of its development combined with prevalence of disguised unemployment in a large scale compels the policy planner to advocate small scale industrial growth in private sector and large-scale heavy and core industrial growth in public sector. This type of industrialisation is undertaken through government direct investment in core industries and financial, fiscal and promotional help given to small scale industries in the private sector. The union government as well as state governments have extended a number of incentives to small scale industrial sector (SSI) from time to time. Capital Investment Subsidy (CIS) is probably the most popular financial incentive scheme amongst many others. Under this scheme, the beneficiary receives back a part of the fixed capital investment in financial terms. The objective in this paper is to critically analyse the operation of CIS scheme in general, but the particular objectives are, (i) to find out to what extent the objectives of this scheme are achieved, (ii) to find out the role or justifications if any of the CIS in the present liberalised economic environment and (iii) to put forward some suggestions for increasing the effectiveness of such policy interventions. Even though inferences will be drawn from experiences of different states, we will heavily rely on information relating to the state of Orissa.

Features of Capital Investment Subsidy :

Capital investment subsidy is given to the owners of industries to cover a part of their fixed investment expenses. The Orissa government as well as almost all the states and union territories extend this facility to the entrepreneurs who set up industrial units in their respective states. In Annexure-I, the general features of the CIS schemes that are in operation in some representative states are given in order to judge the main objectives of such an incentive scheme. We have taken into account developed states namely Tamilnadu, Karnataka and Delhi and

under-developed states like Madhya Pradesh, Orissa and developing states namely Andhra Pradesh, Uttar Pradesh and Kerala for this study. The main features of CIS are (i) Subsidy is given to new industries, for expansion/modernisation and diversification activities. Only in Andhra Pradesh and Madhya Pradesh this is applicable to new industries. (ii) All the states in our study have an ineligible industry list to which the CIS is not given. These are mostly traditional conventional industries and industries which are energy intensive and most polluting in nature, (iii) the definition of capital investment is all type of fixed capital assets like land, building, plant-machinery and equipments, etc. And this is the definition invariably for all the sectors, (iv) The subsidy amount is usually a percentage to fixed capital which veries from regions to to regions depending on the levels of industrial development, but there is a ceiling to this subsidy amount, (v) The CIS is applicable to small, medium and large industrial units irrespective of scale of operation (excepting in Andhra Pradesh). As there is a ceiling on the total amount of CIS, larger size units are automatically out of perview of this scheme. (vi) Special Investment subsidy is given to some special type of entrepreneurs, viz. technical entrepreneurs, pioneer units, pollution control and non-conventional energy use, etc. (vii) There are some locations where, CIS is not applicable as these are mostly industrially developed.

From the above discussions, three main objectives of this scheme can be visualised. They are, (i) as capital is scarce and costly, the government wants to shoulder a part of the total burden, (ii) to discourage certain types of industries to come up as either they are plenty in number putting pressure on scarce resources or there is excess capacity already in existence, and (iii) to reduce regional disparity in industrialisation The purpose of this study is to find out whether or not the above objectives are achieved with the help of CIS. In the following sections we propose to do so.

Regional Disparity :

One of the main objectives of CIS scheme is to reduce regional disparity in economic development in general and industrialisation in particular. Regions are identified according to levels of development and on the basis of administrative convenience. The units of geographical regions might be districts, sub-divisions, tehasils, etc. In Orissa till 1992, the regions were formed combinding more than one district. The objective here is to study the impact of CIS in reducing inter-regional disparity in the growth of SSI sector in the last decade. For this, we compare the

relative position of SSI sector, regionwise, in the year 1984-85 and 1987-88. The data are collected from the 2nd All India Census of SSI units in the late eighties and sample survey in early eighties. The comparative picture is given in Table-I.

TABLE—I

Inter-regional disparity in Growth of SSI sector in Orissa.
(percentage to Total)

Regions	Investment in Fixed Assets		Investment in Plants and machinery		Employment	
	1984-85	1987-88	1984-85	1987-88	1984-85	1987-88
1	2	3	4	5	6	7
A	9.58	7.80	8.44	8 32	12.51	8.56
B	31.28	29.30	29.97	28.47	33.21	29.27
A+B	40.86	37.10	38.41	36.79	45.72	37.83
C	59.14	62.90	61.59	63 21	54.28	62.17
All	100.00	100.00	100 00	100.00	100·00	100.00

Note : A. Balangir, Kalahandi, Phulbani

B. Balasore, Dhenkanal, Ganjam, Keonjhar, Koraput, Mayurbhanj.

C. Cuttack, Puri, Sambalpur, Sundargarh.

A+B : Districts declared backward by Union Government.

An analysis of Table-I reveals that, inspite of higher rates of CIS to A & B regions, they fail in attracting more industrial units. Region-C, on the other hand, consolidates its position by increasing its share in investment as well as employment in SSI sector. This is the picture in spite of capital investment subsidy given by the Union Government for the regions A and B Thus, we find that CIS has not achieved the objective of regional disparity reduction in Orissa.

Disadvantaged infrastuctrural facilities in A and B regions combined with lower demand resulted in such an outcome. Thus improvement of infrastructural facilities like transport and communication and power are more important than subsidising capital. Keeping this in view, the Union Government withdrew the Central CIS growth centre development.

We can conclude that in order to reduce inter-regional disparity in economic dovelopment, CIS is ineffective, rather direct investment in infrastructure and agriculture would be an efficient proposition.

Discrimination between Industries :

In the previous sections we have observed that there is a policy to discourage certain types of industrial activities vis-a-vis others. With the help of CIS, the planners want to direct or divert investible surplus to the desired industries. This list is drawn-by the planners on the basis of experience and by studying the performances of existing units. But the solution is not always optimal. One objective in this sector is to find out whether the above mentioned objective is achieved by CIS in the state of Orissa. We rely on sample survey and census data for this purpose. As it is difficult to segregate the industries placed in ineligible list from the survey or/and census data we take into account only two broad groups of industries—the food products and wood products which are mostly in the ineligible list of industries in Orissa.

We study the impact of CIS on these industries group in SSI Sector.

TABLE—II

Growth of Ineligible SSI Sector vis-a-vis Others in the State of Orissa

Industry type	Investment in fixed assets		Investment in plant and machinery.		Employment	
	1984-85	1987-88	1984-85	1987-88	1984-85	1987-88
1	2	3	4	5	6	7
Food Products	24.57	22.93	24.17	24.29	21.56	19.49
Wood products	5.98	4.77	3.72	3.33	8.41	8.13
Others	69.45	72.30	72.11	72.38	70.03	72.38
All	100	100	100	100	100	100

From Table-II it is found that the proportion of investment as well as employment has diminished for the food and wood product industries in Orissa. Industries eligible for CIS improved their position with more investment and employment in comparison to ineligible industries. Thus CIS has contributed towards diverting investible surplus to the

desired industries. But one should be clear about the limited scope of this study as we fail to compare the eligible industries with ineligible ones due to imperfect data system.

Subsidising Capital :

As capital is scarce and costly, the policy is to subsidise the industries in their capital expenditure. The objective in this section is to critically analyse the justification of subsidising capital. Before we draw any conclusion let us identify the factors which determine the investment expenditure by industrial firms and industries.

The optimal capital stock and investment expenditure are influenced by the demand factor like capacity utilisation in existing line of products and the rate of growth of output. Relative prices like implicit price of capital services, product prices and wage rates are another set of independent variables to intluence the investment behavior. Internal funds such as retained earnings, depreciation, tax liability and liquid assets are another set of variables so also external funds related factors such as interest rate, rate of return, value of company store, store prices etc. also determine the investment pattern (Hoy and Morris, 1984). Thus investment decision is influenced by multiple of factors in a complex interactive process. Till now all the empirical studies combinedly lead us nowhere. Demand factors and cost factors adjust in a lagged process and government intervention has not resulted in any observable outcome. But small scale industries face a different set of investment influencing factors in comparison to large industries. Retained earnings, depreciations, tax liability and value of company share are some factors which are mostly specific to large scale industries. As small entrepreneurs can not mobilise resources through share or debenture issue, the cost of capital is higher for them vis-a-vis large farms. Thus there is some justification to subsidise capital for SSI units. But it is observed from Annexure—I that the application of CIS is mostly scale neutral.

A number of empirical studies shows that the SSI units are not really labour intensive and capital savings in India. The larger sized SSI units are found to be investing higher capital per unit of labour. One can agree that the above characteristic of SSI units is due to CIS as the latter brings distortion in capital market Even some scholars have argued that it is the imperfection in capital market which leads to higher cost of capital services in an under developed country like India resulting in non-optimal factor intensity and productivity. Thus instead of giving subsidy, the objective should be to build a perfect or near-perfect capital market.

Imperfection in information regarding the agents of capital market, viz, the enormous small borrowers and few institutional lenders is the cause of imperfection in capital market. SSI sector also relies on informal sources of credit, even though it is costly. According to the Nayak Committee it is probable that the investment supported by institutional credit accounted for about 75% of the incremental investment (term finance) in the sector (SSI), the remaining 25% coming from non-institutional sources (RBI, 1992). Therefore, provision of capital is more important than subsidising capital.

The CIS not only distorts the investment pattern but also facilitates malpractice in diverting financial resources to non-target areas. Probably that is the reason as found by the 2nd All India Census of SSI units, the ratio of investment in land and building compared to palnt and machinery is so high. In the absence of CIS, invested in land and building might have been low. A study is conducted in SISI, Cuttack to examine the scope of saving in fixed Asset investment by SSI units in Orissa. Ten per cent sample of the CIS receiving SSI units in the year 1991-92 is drawn for the study and the approved project reports are scructinised by the technical staffs. The results are given in Table—III.

TABLE-III

SCOPE IN SAVINGS IN FIXED ASSET INVESTMENT

Description	Amount (in '000)	Percentage to total savings
1. Investment in Fixed Assets	312.72	—
2. Subsidy	57.94	—
3. Scope of savings	25.13	100.00
A—Land & Building	7.86	31.30
B—Plant & Machinery	2.50	9.90
C—Auxilary & Lab	5.48	21.80
D—P.O.E/Contingencies	9.29	37.00
4. Scope of savings as percentage to Fixed Assets	8.04	

Table—III reveals that 8.04 percentage of total fixed assets could have been avoided without losing production and quality. But the scope of savings is higher in pre-operative expenses, contingencies and investment in land and building. One can argue that such investment pattern might be due to CIS facilities. Thus the policy planners should formulate

the CIS Scheme in such a way that it should be applicable to only important investment categories like plant and machineries. By this method, the scope of misutilisation of scarce resources can be prevented and malpractice in manipulation of investment pattern can be controlled.

Summary and Policy Conclusion

India has adopted a liberal economic policy in recent years. Market friendly measures are advocated and the economy is opened to world economic forces. In this context, the functioning of CIS Scheme is evaluated with the help of secondary as well as primary data. The result of this study is mixed, but a few policy conclusions can be drawn for improving the effectiveness of this subsidy.

A. Longrun Policy :

On the basis of Dunkel agreement, all the member countries are advised to withdraw all types of subsidy within a time frame. Even food subsidy is not spared. Thus continuation of CIS for a longer duration under the present circumstances is not possible. However, as discussed above, CIS is not justifiable due to its limited power to influence investment expenditure. Even some times the impact is sub-optimal. The aim of the Government is to work towards bringing perfection in capital market. The method is to improve the information system and institutionalisation of the whole credit/fund management system.

B. Shortrun Policy :

In the shortrun to improve the efficienency of CIS and to avoid financial burden on the State exchequer the following steps are to be taken : (i) Instead of achieving regional parity the objective would be to promote targeted industries through CIS. But before drawing the list of eligible or ineligible industrial groups scientific study is a must. (ii) CIS should be applicable to only investment in plants and machineries with higher rate of subsidy. Investment in Land and building and such other investments should not get CIS at all (iii) to maximise the benefit of CIS to the entrepreneurs and to achieve better result the administration of such scheme should be simple but effective. For example, a fund is to be created by the Government in the term loan lending institutions like State Financial Institutions to meet the CIS requirements in time. This will help in completion of the project in time and avoidance of cost escalation due to time overrun.

[The author likes to acknowledge the statistical assistance of Sri R. N. Kar, S I P O (E I), S I S I, Cuttack].

ANNEXURE–I

General Features of Capital Investment Subsidy in Different States and India

State/ Reference Year	Purpose of capital Investment	Ineligible Industries List	Scale of Industry	Definition of capital Investment	Region classification	Range of subsidy (%)	Ceiling on subsidy	Remarks
1	2	3	4	5	6	7	8	9
Andhra Pradesh/1987	New Industry	Exist	SSI	Fixed capital	Districts	15 to 20	Exist	Ineligible locations exist
Madhya Pradesh/ 1989	New Industry	Exist	SSI Medium Large	Fixed capital	Districts Growth Centres	6 to 15	Exist	Subsidy on employment of SC/ST & ST/SC entrepreneurs. Pioneer industries.
Orissa/1992	New, Expansion, Modernisation, Diversification	Exist	SSI Medium Large	Fixed capital	Sub-Division	10 to 30	Exist	Special class entrepreneur Pioneer unit will get extra subsidy.
Tamilnadu/ 1992	New, Expansion Diversification Modernisation	Exist	SSI Medium Large	Fixed capital	Talukas	20	Exist	Pioneer units. Special subsidy for some industries & effluent treatment plants

State/ Reference Year	Purpose of capital Investment	Ineligible Industries List	Scale of Inndustry	Definition of capital Investment	Region classification	Range of subsidy (%)	Ceiling on subsidy	Remarks
1	2	3	4	5	6	7	8	9
Uttar Pradesh 1991	New, Expansion Diversification Modernisation	Exist	SSI Medium Upto Rs. 5 Crores)	Fixed capital	District & parts of districts	10 to 35	Exist	Ineligible locations exist
Delhi (U. T.)	—	—	—	—	—	—	—	No capital investment subsidy
Karnataka/ 1990	New, Expansion, Diversification Modernisation	Exist	SSI Medium Large	Fixed capital	Talukas	15 to 25	Exist	Pioneer unit. Ineligible locations exist. Special categories of entrepreneurs. Pollution control and non-conventional energy sources.
Kerala	New, Expansion, diversification Modernisation	—	SSI Medium Large	Fixed capital	Whole State	15	Exist	Thrust Industry Research & Development Investment.
India/Till Sept. 1988	—	ExistS	SI Medium Large	Fixed capital	District	10 to 25	Exist	The Scheme is discontinued from 1st Oct., 1988.

References

Hay, D. A. and Morris, D. J. (1984) *Industrial Economics Theory and Evidence.* Oxford University Press

Little, I. M., Majumdar. D. and Page, J. M. (1987) *Small Manufacturing Enterprises. A comparative Analysis of India and other Economies.* Oxford University Press.

Reserve Bank of India (1992). *Report of the Committee to examine the Adequacy of Institutional credit to SSI sector and related aspect : 1992.*

Growth, Structure and Working of Small Scale Industries (SSIs) in Orissa

Dr. Shibalal Meher
N.K.C. Centre For
Development Studies, Bhubaneswar

1. Concept of Small Scale Industry :

The definition of small industry is an important aspect of Government policy since it identifies the specific groups for which the programme is intended. Any definition to be effective must be conceptually simple, easily understood by the entrepreneurs and officials, precise, acceptable to all departments and institutions and easily administered.

In India, initially small industry was defined with the inclusion of both total investment and labour employed, but latter on, it was given up in favour of investment on plant and machinery alone. However, the definition has undergone changes periodically with the ceilings raised to take into account the rising cost of machinery as well as the falling value of rupee. From Rs. 5 lakhs in the late sixties, it was increased to Rs.7.5 lakhs, Rs.10 lakhs, Rs.25 lakhs, Rs.35 lakhs and currently stands at Rs. 50 lakhs. It was also considered necessary to define the ancillary small units separately with a higher ceiling to cater to the increased precision equipment necessary in such units to make parts acceptable to the present units. There has also been a definition for the small units—called 'tiny'—located in the rural areas as well as for 'service industries' that provide services to the industry and the community.

2. Various Industrial Policies of Orissa :

Various industrial policies have been announced in Orissa in order to encourage the small scale units. Before 1980, there was no industrial policy of Government of Orissa. The first Industrial Policy of the Government of Orissa was announced in August 1980, which provided large number of incentives mainly in the form of subsidies. Besides these incentives, administrative measures were initiated for small scale industries through District Industries Centres

The Industrial Policy of 1986 provided a few more benefits to the entrepreneurs such as special concessions to the women entrepreneurs and technically qualified SC and ST entrepreneurs, exemption of sales tax to the products of khadi, village and cottage industries and new electronic units, and five year sales tax exemption to the products of new SSI units. The other major feature of the Industrial Policy is the classification of districts into three zones in order to give special importance to the industrial development of underdeveloped and backward areas.

In 1989, the Industrial Policy provided more concessional facilities to bring out rapid industrialisation in the State. Under this policy, the fixed capital investment subsidy was allowed at different rates in different industrial zones created in 1986 Industrial Policy. Electricity duty was exempted and subsidy was being granted to create their own power generation sets. Subsidy was raised from Rs. 1 lakh to Rs. 2 lakhs for bringing about improvement in technology and for introduction of imported technology subsidy upto Rs. 5 lakhs was being allowed. Exemption or deferment of sales tax and octroi, provision of industrial land and sheds at subsidised rates, higher incentives for manufacturing import-substituting products or export-oriented products were some other major concessions provided under this liberalised policy. Besides, special incentives were also being given to agro-industries, food processing units, electronics and bio-technology units to expand these activities at faster growth.

The Industrial Policy, 1992 was intended to encourage the flow of investment and development of entrepreneurship in the State of Orissa. While financial assistance to potential entrepreneurs in the form of subsidies and post-production benefits was envisaged, the main thrust of the policy was on creating an environment conducive to the smooth setting up and successful functioning of industries. Beginning with identification of suitable investment proposal, all steps were to be taken to provide expeditious clearances for setting up industries through a single window.

In spite of care taken in various industrial policies of Orissa to encourage small-scale units, small entrepreneurs are facing the problem of working capital and marketing of their products. These problems were not taken into consideration by the various industrial policies of government of Orissa. Moreover, the very small units—the tiny and unorganised ones in the unsheltered informal sector—were totally ignored, though their conditions were deteriorating because of various restrictions and regulations of the State government.

3. Ancillarisation and Linkages of SSI with Big Industries :

(a) Ancillarisation :

Since early 1970s, Union government launched ancillarisation of small scale units through its public sector undertakings. However, the success of ancillarisation programme in any state depends upon the establishment of public sector undertakings and large and medium scale industries in the State. In Orissa, besides more than 12 public sector undertakings, there are about 150 large and medium scale industries creating a good scope of ancillarisation But the ancillary development in Orissa was not satisfactory till early 80s. However, in the late 80s, there was some visible ancillary development programme. Some steps have been taken up by some of the mother plants towards off-loading of their requirements to small scale units. But it is not quite encouraging. Around 303 SSI units within Orissa have been registered with Rourkela Steel Plant (RSP) and regulary participating in their purchase programme. On the other hand, NALCO (Angul sector) has given ancillary status to only 18 SSI units and HAL (Sunabeda) has 3 SSI units at Sunabeda. About 19 SSI units in Dhenkanal, Sambalpur and Sundargarh districts are registered as ancillaries.

(b) Linkages :

Linkages of SSI units with giant industries in Orissa have been discussed here by citing the case studies of Samal (1994). From his study of linkages of informal manufacturing units with the RSP and manufacturing sector (including medium scale, small scale and informal units) in Orissa with NALCO, Angul Sector, it is apparent that compared to the linkages of RSP, the linkages of NALCO in Orissa is very negligible. While about 2.26 percent of the total sales turnover of the sample manufacturing units spread all over Orissa goes to NALCO, around 42 per cent of the total sales turnover of the informal manufacturing sector in Rourkela is destined to RSP. Particularly, while sales to RSP as a per cent of total sales are 73 per cent in the case of mechanical/spare units and 85 percent in the case of repairing/garage units in the informal manufacturing sector of Rourkela, the sales to NALCO as a percentage to total sales of ancillary items and spare units in Orissa in the sample are around 11 per cent. Hence, the belief that the establishment of a giant industrial unit will have a tremendous impact on industrial development of a State where it is located seems to be unfounded as the linkages of NALCO with the manufacturing sector in Orissa are insignificant.

4. Problems of SSIs in Orissa :

For the problems of small scale industries in Orissa, the case studies by Panda and Meher (1992) at Jagatpur Industrial Estate, Cuttack and by Samal (1994(b)) at Sambalpur commercial town have been cited here. Jagatpur Industrial Estate, which is one of the largest and oldest industrial estates of Orissa, besides its strategic location, suifers from the problems of sickness, low capacity utilisation, insurmountable loss, poor marketability of goods and vacillating nature of employment due to the lack of entrepreneurial spirit, improper planning and infrastructural deficiencies.

If the SSI units of Jagatpur Estate are functioning in such a poor state despite the distinct advantage of best possible intrastructural facilities such as supply of developed plots or sheds, water, electricity connections, better transport and communication facilities, and above all good financial, technical and marketing support, one can well imagine the state functioning of SSI units in the State as a whole.

Samal has studied the informal manufacturing sector of Sambalpur at two points of time (1985 and 1994). The findings of his study show a dismal performance of the same units after a gap of 9 years. There is decline in the average size of employment, per unit annual turnover, fixed capital and assets, borrowing, productive capital and gross value added in the year 1994 compared to that in the year 1985. Besides, the units face the problem of competition from modern technology due to liberalisation, and the problem of working capital and fixed capital.

5. Growth, Structure and Present Working of SSIs in Orissa :

There has been rapid expansion of number of SSIs in the State, particularly after the Industrial Policy announced in 1980. In the year 1979-80, there were only 9119 SSI units with a total capital investment of Rs 68.94 crore and employment generation of 75798 persons in Orissa. However, in the year 1992-93, the total number of SSI units has increased to 42,444 (by 365.45 per cent) with cumulative investment of Rs. 603.60 crore and employment generation of 3,09,832 persons.

Though there is growth of SSI units in the State, there exists large scale regional imbalance in the growth of industries. Table-1 shows that in the coastal districts of Cuttack, Ganjam and Puri the share of number of SSI units in the State was higher during 1992-93. On the other hand, Phulbani, Kalahandi and Keonjhar districts had the lower share compared to all other districts in the same period. This is also true in

respect of capital investment and employment generation, except that in case of Sundargarh which is comparable with the coastal districts. The State also shows a dismal picture in respect of sickness of SSI units. The number of sick units was 1331 as 18-2-90 as on estimated by OSFC. Interestingly, it is observed that the coastal districts (Cuttack, Ganjam and Puri) which have higher share in the SSI units showed higher percentage of sick units (see Table-1). Cuttack district had the highest percentage of sick units (38.32 per cent) in the State, followed by Puri district with 18.41 per cent. On the other hand, Kalahandi and Keonjhar districts had the lowest percentage of sick units (1.5 per cent).

The structure of different groups of SSI units has changed after the announcement of different Industrial Policies since 1980. Within a period of 13 years (between 1979-80 and 1992-93) various groups of SSI units in the State registered an increase of more than 200 per cent, except in the case of Chemicals and Allied. The percentage increase in respect of units, capital investment and employment generation is being higher in the case of Textile and Allied, and Miscellaneous manufacturing groups. However this is not a mean achievement for an industrially backward State like Orissa.

6. Conclusion :

Various Industrial Policies in Orissa gave emphasis to the development of SSIs in the State. But due to the faulty planning and weak implementation much headway could not be reached. Regional imbalance in the share of SSI units has emerged, while the industrial sickness in the State is found to be rampant. Small industries are still facing the problem of working capital and marketing of their products. The linkages and ancillarisation of SSI units with giant industries, like NALCO, are not found to be satisfactory. However, the most devastating fact is that, the performance of Jagatpur Industrial Estate, the largest and the oldest industrial estate in the State, which has a distinct advantage of best possible infrastructural facilities, shows a dismal performance. From this we can imagine the state of functioning of SSI units in the State as a whole. All these need a step for careful planning and implementation of various policies, so that there would be an environment conducive for industrial growth in the State without having any leakages and corruption.

References :

1. Government of Orissa, *Economic Survey 1993-94*, Planning and Co-ordination Department, Bhubaneswar.

2. Meher, R. K., Industrialisation Drive and the Functioning of Small Scale Industries in Orissa, *Occasional Paper No. 1*, N. K. Choudhury Centre for Development Studies, Bhubaneswar, 1993.

3. Panda, R. K. and R. K. Meher, *Industrial Sickness : A Study of Small Scale Industries*, Ashish Publishing House, New Delhi, 1992.

4. Samal, K. C., Inter-Sectoral and Inter-Unit Linkages in Orissa, *Occasional Paper No. 9*, N. K. Choudhury Centre for Development Studies, Bhubaneswar, 1994 (a).

5. —— , *Dynamics of Informal Manufacturing Sector : Case Study of Sambalpur at Two Points of Time*, (ICSSR Finance Project Report), N. K. Choudhury Centre for Development Studies, Bhubaneswar, 1994(b).

6. Vepa, R. K., *Modern Small Industry in India : Problems and Prospects*, Saga Publications, New Delhi, 1988.

TABLE—1

Districtwise (undivided) Number of Units, Total Capital Investment, Employment in the SSI Sector by 1992-93 and Number of Sick Units as on 18-2-90.

Sl. No.	District	No. of Units	Investment (Rs. in lakhs)	Employment	No of Sick Units
1	2	3	4	5	6
1.	Balasore	3209	6163 86	20903	70
		(7.56)	(10.21)	(6.75)	(5.26)
2.	Bolangir	1995	3303.92	17154	35
		(4.70)	(5.47)	(5.54)	(2.63)
3.	Cuttack	8237	10627.43	56413	510
		(19.41)	(17.61)	(18.21)	(38.32)
4.	Dhenkanal	2813	3002.70	19888	57
		(6.63)	(4.97)	(6.42)	(4.28)
5.	Ganjam	4411	4578.14	27585	103
		(10.39)	(7.58)	(8.90)	(7.74)
6.	Kalahandi	1860	1695.15	12779	19
		(4.38)	(2.81)	(4.12)	(1.50)
7.	Keonjhar	1865	1135.80	10006	20
		(4.40)	(1.88)	(3.23)	(1.50)
8.	Koraput	2804	2830.90	17660	49
		(6.61)	(4.69)	(5.70)	(3.68)
9.	Mayurbhanj	2960	2053.13	16454	71
		(6.97)	(3.40)	(5.31)	(5.33)
10.	Phulbani	1142	567.56	6344	29
		(2.69)	(0 94)	(2.05)	(2.18)
11.	Puri	3988	11299.93	36422	245
		(9.40)	(18.72)	(11.76)	(18.41)
12.	Sambalpur	3292	4205.37	26419	55
		(7.76)	(6.97)	(8.53)	(4.13)
13.	Sundargarh	3866	8896.22	41805	68
		(9.10)	(14.74)	(13.49)	(5.11)
	Orissa	42444	60360.11	309832	1331
		(100.00)	(100.00)	(100.00)	(100.00)

Note : The Figures in the brackets indicate percentage of total.

Source : Directorate of Industries, Orissa, Cuttack (Col. 3, 4 & 5); and Orissa State Financial Corporation, Reconstruction Division, Cuttack (Col. 6).

Structure and Prospect of Organised Small Scale Industries in Orissa

Shri B. K. Tripathy
Director, Economics and
Statistics, Orissa

Introduction :

The Industrial Sector occupies an important position in the economy and plays a vital role in rapid and balanced economic development. It is in factories that material inputs are processed and converted to marketable outputs. The organised sector has been defined as one that includes all establishments in public sector and non-agricultural establishments, employing 10 or more workers in the private sector. The Annual Survey of Industries provides data on various vital aspects of the registered factories.

The A. S. I section of Directorate of Economics and Statistics is collecting the ASI returns annually in a regular basis on the basis of frame and smple list prepared by NSSO, Government of India.

The factories employing 10 or more workers working with power and with 20 or more workers without power are under ASI. All industrial establishments registered under Secton 2 M (I) and 2 M (II) of the Indian Factories Act of 1948 are brought within the scope of this survey. Viewed in the context, the collection and dissemination of ASI data on a regular basis are of great importance.

Objectives :

A study of the industrial activity involves both inputs and outputs. Efficiency in production is difficult to measure. Economists have used ratios of capital and output, capital and labour and input-output etc. to reflect some aspect of efficiency. For convenience the conversion process may be analytically separated in various categories. The organised factories can be categorised under three groups i.e. large scale, medium scale and small scale on the basis of their investment level in plant and machinery. Factories having investment in plant and machinery of Rs. one crore

and above are grouped as large scale industries while factories having investment of Rs 35 lakhsbut not exceeding Rs. one crore are termed as medium scale industries. Factories with investment in plant & machinery up to Rs. 10 lakhs were considered as small scale industrial units. Buts from August, 1980 the range of investment level was enhanced to Rs. 20 lakhs and further this limit has been enhanced to Rs. 35 lakhs for small scale units since August, 1985.

The paper seeks to examine the pattern of factors of production as well as Products and bye-products and value added etc. of Small Scale Organised Industries in Orissa for the period from 1980-81 to 1989-90. This paper also highlights the size and structure of small scale industry with a comparative picture of some aspects of large and medium scale industries over the period under reference. As the A. S. I. is the principal source of industrial statistics and provides information to assess and evaluate objectively and realistically the changes in the growth, composition and structure in registered manufacturing sector, the data on different aspects of industrial characteristics have been utilised from ASI data as available in the Directorate of Economics and Statistics, Orissa for the period from 1980-81 to 1989-90.

Coverage :

On the basis of investment in plant and machinery the registered factories can be grouped in to large scale, medium scale and small scale. And we also notice that the number of large scale units has been increasing faster than the Medium and Small Scale Factories over the decade.

From 1980-81 to 1989-90 the increase in large scale industries is about 118.3 percent whereas in case of medium and small scale it is merely about 31.3 percent and 10.9 percent respectively. This is also evident that the number of large scale industries has increased from 71 in 1980-81 to 155 in 1989-90 which is more than double. On the contrary, during the same period the medium scale and small scale units have risen from 51 to 67 and 1007 to 1117 respectively. However, the share of small scale units during the period is higher than any other categories of factories. Its percentage in the total number of units varies from 83.4 percent to 90.3 percent throughout the decade.

Capital Structure :

In regard to capital structure, it is found that large scale industrial units own a major share in the total productive capital throughout the decade followed by the share of small scale units, and the share of medium

scale units is the least. At the beginning of the Sixth Five Year Plan, the share of the large scale units was 94.5 percent whereas the share of Medium and Small Scale units was 2.5 percent and 3 percent respectively. Although there was a fall in the share of large scale units in latter years, yet it occupies the major portion. However, this fall was due to rise in small scale sector whose share rose to 5.6 percent from 3.0 at the beginning. Obviously in case of fixed and working capital the large scale category also holds major share. However one common feature among the large scale and medium scale categories is that the proportion of fixed capital in both is greater than their respective working capital On the contrary, in small scale units the share of working capital is usually higher than the fixed capital. During 1980-81 it was 60.0 percent in comparison to the fixed capital of 40.0 percent of the total productive capital. During 1985-86 it was 64.0 percent and 36.0 percent respectively. This depicts that the small sector is less dependent on plant and machinery which are the major items in the fixed capital. This trend continues upto 1988-89 but in the last year of the decade the scenario is totally reversed. In small sector also fixed capital has started acquiring the major portion of its productive capital and eame at par with other two categories.

Employment and Wage Structure :

Regarding employment and wage structure it is observed that the number of employees per unit is the highest in case of large scale industries whereas it is the lowest in case of small scale category. During 1980-81 it was 155 on an average in large scale industry as against only 27 in case of small scale industry. Further per unit emolument is highest in case of large scale factories having a rising trend from Rupees 10,079 in 1980-81 to Rupees 19,290 in 1985-86 and to Rs. 29,250 in the last year of the decade i.e. 1989-90. In case of medium and small scale units although there is a fluctuation in per unit emoluments throughout the decade, at the end of the period a rise is marked

Value of Input :

The Input consumption in large and small scale industries has increased from Rs. 587 crores to Rs. 2801 crores and from Rs. 120 crores to Rs. 400 crores from 1980-81 to 1989-90 respectively but during Sixth Five Year Plan, the increase was 115 percent and 93 percent as against Seventh Plan increase of 150 percent and 72.3 percent in large and small scale industries respectively.

Value of Output :

The total output in large scale industry has increased in the decade giving an increase of 103.8 percent in 1985-86 and 447.6 percent in 1989-90

over 1980-81. The total output in Small Scale Sector is rising at the rate of 75.59 percent from 1980-81 to 1985-86 and 167.85 percent in 1989-90 over 1980-81, The total output in Small Scale Units were Rs. 168 crores in 1980-81 which increased to Rs. 450 crores in 1989-90

Value Added :

The net value added in the large scale industry has increased from Rs. 154 crores in 1980-81 to Rs. 1067 crores in 1989-90. The medium scale industries have shown a fluctuating trend in the amount of net value added during the same period. In Small Scale Sector at the beginning of the decade the net value added was of a tune of Rs. 46 crores which was reduced in the subsequent years up to 1985-86 and latter on increased to some extent, though it was less than the year of 1980-81.

Industrial Ratio:

The structure of those can be better examined in the context of planned development from the relative role of capital, labour and productivity. The need for assessing the relative productivity of different factors of production arises from the necessity to channel such factors of production into most profitable uses and to maximise output with least cost combination of factors. The relative productivity is determined by derived industrial ratios which measure the relative efficiency of capital and labour in the production function. Normally four types of such ratios are hlepful for planning purposes. These are (a) Capital output ratio, (b) Capital labour ratio, (c) Input output ratio, (d) Ratio of output to wages paid. These ratios are based either on the gross value of output or the net value added by manufacturers in particular factories.

The above ratios are calculated for the period from 1980-81 to 1989-90 and placed in Table-I. The capital output ratio showing maximum output per unit of capital in case of small scale industry shows that the small scale industry requires less capital per unit of output. Similarly the lowest capital labour ratio per investment per employee is observed in small scale factories whereas the highest ratios are observed in large scale industries. The lower is the unit cost of production, the greater would be the profitability and efficiency in a factory. This can be observed from the input output ratio as derived in case of three categories of factories. The ratio marginally varies from 1.0 to 1.5. The ratios of output per unit of input are not impressive in case of all categories of factories irrespective of their sizes. The trend can not be considered as progressive so far as the efficiency is considered. The ratio of output to the wages

paid gives correct measure of labour productivity or labour efficiency. Among registered factories, the productivity per unit of wages and salary paid was highest (18.3) in small scale in 1982-83 followed by medium scale (15.3) in 1980-81 and (13.4) in large scale during 1988-89. On the whole in the context of annual analysis of industrial ratios the performance of small scale is quite impressive which may provide great scope for development in future.

Conclusion :

In summing up the secondary data from ASI schedules for the period from 1980-81 to 1989-90, it is found that the role of Small Scale Industries has considerable impact on the economy in the context of small capital investment and better efficiency. It is also clear from the study that the working capital of large scale industry is growing less whereas there is increase in fixed capital. The study also shows that large and medium scale Industrial Sectors are more capital intensive than Small Scale Industries.

Therefore promotion of Small Scale Industries is essential for future development process of Orissa.

TABLE–I

Industrial Ratios

Years	Capital output Ratio			Capital Labour Ratio			Input-Output Ratio			Ratio Output to wages paid		
	Large	Medium	Small	Large	Medium	Small	Large	Medium	Small	Large	Medium	Small
01	02	03	04	05	06	07	08	09	10	11	12	13
1980–81	0.7	1.9	4.8	116.9	29.6	12.8	1.0	1.3	1.4	8.3	15.3	8.0
1981–82	0.7	1.5	3.1	136.7	41.7	19.2	1.3	1.3	1.2	8.0	10.8	17.0
1982–83	0.7	0.9	3.0	157.2	68.3	20.1	1.3	1.3	1.2	7.0	8 9	18.3
1983–84	0.6	1.4	2.0	164.9	47.1	25.8	1.3	1.3	1.2	6.7	8.5	8.5
1984–85	0.8	1.4	2.6	184.9	56.6	27.8	1.3	1.3	1.2	8.1	9.4	14.1
1985–86	0.8	1.2	2.4	197.6	61.8	38.2	1.3	1.3	1.3	8.1	8.4	14.0
1986–87	0.8	1.6	3.2	259.3	45 8	31.4	1.3	1.3	1.2	8.7	7.3	12.8
1987–88	0.5	2.1	3.1	395.1	61.5	40.1	1.3	1.0	1.3	8.9	11.0	13 8
1988–89	0.8	2.4	3.9	473.6	70.3	30.8	1.4	1.2	1.1	13.4	9.4	12.8
1989–90	0.7	2.0	3.1	525.0	72.6	42.5	1.5	1.3	1.1	12.7	9.1	14.1

Entrepreneurship Drive—The only way out for Sustenance of Small Industries in Orissa

Dr. A. K. Mahapatra
Reader In Economics,
Ravenshaw College, Cuttack-753 003

Introduction :

Orissa, by far, remains as one of the most backward States of the country in spite of its richness in vital economic resources. It is a matter of shame that the per capita income in Orissa is one of the lowest in the entire country. The agrarian economy of the State is still at its nadir having a very low productivity level. Taking into consideration, any indicator of development like, income, education, technology, health care, welfare status, economic infrastructure and the like, Orissa occupies the lowest rung of the ladder.

The process of industrialisation is yet to effect its prominence in the State. Agriculture still continues to be the dominant sector contributing about 45 percent to the Net State Domestic Product against a less than 34 percent for the country. Barring a few large and medium industries established here and there, particularly in some urban pockets, the rest of the State actually goes without industries, worth the name. The markets of Orissa are mostly dominated by industrial products produced outside the State. Beginning from needle, pen, ink, and rubber eraser to tooth paste, medicine, television, auto-mobiles and refrigerator, every consumer product is produced elsewhere and sold in our markets. Even the essential agricultural items like varieties of fruits and eggs come from neighbouring States Thus, both in agricultural and industrial fronts, our achievements are negligible. Consequently poverty, squalor and degradation grip the entire State. The proportion of population remaining below the poverty line in Orissa is the highest in the country, which is about 44 percent according to 1986-87 data.

The reasons for such a situation are not very difficult to explore. The vast amount of natural resources have not been tapped and utilised effectively. Also there is lack of political will on the part of the politi-

cians who could have expedited the process of economic development at a rapid stride Above all, the people in general lack an entrepreneurship drive to carry on economic activities for furtherance of economic development in the State.

Advantages of Small Scale Units :

There is ample scope in the State to establish small scale units in view of the latter's employment potential, low gestation period, low investment of capital and utilising local raw materials and skill and catering to local needs. Besides, the export earning potential of these industries is an added advantage. It is a matter of regret that these advantages of SSI units have not yet been realised seriously by the government and others.

Industrial Scenario :

The Economic Survey of Orissa gives the following details of information about Small Scale Industries of the State.

TABLE—1

Position of Small Scale Industries in the State,

Period	S.S.I. Units		
	Number	Investment (Rs. in Crores)	Employment
By the end of 7th Plan	35,867	437.26	265332
1990-91	2249	61.00	15657
1991-92	2233	52.03	15545
1992-93 (Upto Sept.'92)	552	13.14	3478

The table reveals a disappointing rate of growth of small scale industries over time. In fact number of units established is too scanty taking into account the vast size of the State. The investment made and employment generated also show a declining trend.

Orissa compares adversely with other major States in regard to the per capita income generated in registered manufacturing units. The C.S.O. (1989) Etimates of State Domestic Product from 1970-71 to 1987-88 show that in 1970-71, the per capita income in manufacturing units of the

State was only Rs. 25.8 as compared to Rs. 137.6 in Maharastra, Rs. 98.5 in Gujarat, Rs. 91.6 in West Bengal and Rs. 63.9 in Tamilnadu, Orissa's rank in that year was 11 among 17 major States. In 1986-87, the per capita income in manufacturing sector increased marginally to Rs. 30.2 in Orissa, whereas it increased to Rs. 277.0 in Maharastra, Rs. 191.9 in Gujarat, Rs. 118.3 in Tamilnadu and Rs. 81.5 in West Bengal. So far as the rank of Orissa is concerned, it declined to 14 among 17 States. The C.S.O. data are based on 1970-71 prices. The C. S. O. data also put forth that the fastest growth in industrial output was experienced by Andhra Pradesh, Haryana, Jammu and Kashmir, Karnataka, Punjab and Uttar Pradesh during the entire period of study viz. 1970-71 to 1986-87. All the States experienced growth rate above 7%. Whereas Assam, Orissa and West Bengal yielded less than 4 per cent rate of industrial output during the same period.

Responsibility of the State :

The interstate comparison of the above figures reveals a lopsided development of industries in this country. Industrially backward States like Orissa should rise to the occasion and take steps to develop the manufacturing sector as fast as possible. To achieve this objective, special concerted efforts at all levels are needed on an urgent basis. Since the role of the private sector is insignificant in the State, it is the Government which can take the leadership and behave like a wise entrepreneur in taking up steadily a large number of industrial programmes. Especially, the basic infrastructure for industries which forms a fundamental part of the Government sector, should be strengthened with a missionary zeal. This will go a long way in attracting the entrepreneurs in the Private sector. A modest beginning would have its cumulative effect in expanding the small scale sector and ultimately in terms of income and employment generation.

Factors of Production :

Accepting the traditional four-fold division of factors of production which are needed for any field of production, it is realised that in Orissa there is no dearth of the first three, namely land, labour and capital both quantitatively and qualitatively.

Land :

Beginning from the first factor land which includes all natural productive agents, one can very comfortably recognise their vastness looking at the physical features of the State. Resources like cultivable land, forests (in spite of declining forest coverage in recent years),

minerals, water and above all a long coast line are benevolent gifts of nature to the State. The Economic Survey of Orissa 1992-93 indicates that Orissa possesses 63,04,000 hectares of Net Area sown besides vast areas of cultivable wastes (5,97,000 ha), fallows (3,33,000 ha) & pastures (7,26,000 ha). The share of forest area is 54 76,000 hectares which is 36.5% of the total geographical area of the State. So far as the mineral reserves are concerned, Orissa possesses 26.05% of iron ore of the entire country, 98.39% of chromite, 69.70% of bauxite, 23.81% of coal and 95.24% of nickel ore. Therefore, there is no dearth of land in economic sense which is vital for industrial growth of the State.

Labour :

The size of population in the State and the content of work force in it would reveal that availability of labour is not at all a problem in the State. According to 1991 census total workers constitute 37.53% of the total population of the State, which is almost equal to that of All India level of 37.64%. The availability of skilled labour is not a far cry now. Their number is growing fast with the opening up of a number of technical institutions in recent years. The data from Directorate of Employment, Govt. of Orissa show that there are as many as 5573 technical graduates and 507 post graduates in the Live Register. This skilled group is waiting for jobs which are not available in the State. Hence, availability of qualitative manpower for small scale industries would not pose any problem at all. Any shortage of skilled labour in future could be overcome by a gradual process in a phased manner.

Capital :

Capital, the third factor of production which grows out of saving is instrumental to any field of production. In spite of low saving capacity of the people due to poverty, capital is not a scarce factor today With the rapid growth of banking institutions and government's liberalised policy for the priority sector, capital would be plentily available for investment in SSI sector.

Entrepreneurship :

But the real task is that of organisation of all the above factors in an appropriate way for the success of programme of industrialisation. Obviously, this task of organisation lies with a wise and prudent class of entrepreneurs. Unfortunately in Orissa, this vital class has not yet come up perceptibly. The reasons for this may be ascribed to the persistent natural calamities facing the state bruising the spirit & zeal of the people to enter into the risky arena of entrepreneurship. Moreover, entre-

preneourship requires a host of facilities like transport and communication, cheap and regular supply of credit and energy, markets and the like. Uptill now, these facilities in Orissa are few and far between. With the abundance of the first three factors of production as described earlier perhaps it is not difficult to make good these deficiencies.

Challenging Role of the Entrepreneur :

The task of an entrepreneur is never easy and comfortable. An entrepreneur is not simply a manager as to look after the day to day affairs or do some clerical jobs in a business organisation In reality he is the central part of the industrial system. He is the person who decides policies, coordinates other factors of production and keeps a proper proportion among them adopting an appropriate technology. Besides, he is the person who is capable of bearing risk in business; therefore, he jumps into the darkness without knowing the consequence. Above all, in the Schumpeterian sense, he is the person who innovates i.e. he utilises something new in the field of production and thereby rationalises his cost of production in order to withstand the competition from his fellow entrepreneurs.

Non-availability of such a group of individuals poses serious threats in the way of furtherance of industrialisation in Orissa. It may be admitted that entrepreneurship drive is something internal and spontaneous in an individual. But experience in India and other countries indicates that it is possible to develop entrepreneurship through sustained efforts. Accordingly, Entrepreneurship Development Programme (E. D. P.) has been launched by the Government during the last two decades to tap up the entrepreneural talent in the country. Motivation and training are imparted to selected entrepreneurs for this purpose.

The data published by the Directorate of Industries, Orissa, show a discouraging picture in regard to the progress of EDP in Orissa.

Neither the number of programmes conducted nor the number of trained entrepreneurs is very much encouraging. And what is more disappointing is the ratio of the number of trained entrepreneurs to the total number of enterprises started by them. The ratio is nearly 10% in initial years. Data in this regard for subsequent years are not available.

Conclusion :

Against this deplorable and adverse situation, new and more viable programmes should be devised in order to develop entrepreneurship. The people have to rise up from the long slumber of ignorance, laziness and indifference. The conscious middle-class of the state could be persuaded and inspired to take up the challenging job of entrepreneurship.

TABLE–2

Progress of EDP in Orissa

Period	No. of Programmes Conducted	No. of Entrepreneurs Selected	No. of Units Started by Trained Entrepreneurs
1979 - 80	13	744	72
1980 - 81	13	597	63
1981 - 82	13	192	38
1982 - 83	4	92	NA
1983 - 84	12	233	NA
1984 - 85	12	234	NA
1985 - 86	16	401	NA
1986 - 87	19	482	NA
1987 - 88	18	565	NA
1988 - 89	06	173	NA
TOTAL ...	126	3,713	

Source : Directorate of Industries, Cuttack (Orissa)

The economic reforms proposals of the Government of India alongwith the liberalisation and privatisation approach in recent times are going to provide a lot of opportunities to the prospective entrepreneurs. Let the entrepreneur class reap these opportunities in full sway. A number of small scale units could be established with sincere efforts not only for their own gains but for the entire State. Unless a wise, efficient, visionary and sincere class of entrepreneurs rise up to the occasion, the future of industrialisation of this poor State would be dark and bleak.

References :

1. Economic Survey – Govt. of Orissa, 1992 - 93.
2. Eighth Plan, 1992 - 97 and Annual Plan, 1992 - 93 Orissa Vol. I.
3. C. S. O. (1989) Estimates of State Domestic Product, 1970 - 71 to 1987 - 88.
4. Yojana, July 15, 1992.
5. Yojana, Jan 1 - 15, 1991.

Development of Small-Scale, Cottage and Village Industries and Their Prospects : A Case Study of Undivided Koraput District

Dr. K. Nana Buchi,
Reader in Economics,
Vikram Dev College, Jeypore
and
Sri Surendra Swain,
Senior Lecturer in Economics,
Vikram Dev College, Jeypore

The district of Koraput (undivided) is a backward and tribal concentrated district. The majority of population are tribals of whom many are primitive tribes. The district is rich in forest resources; yet there is no appreciable development in respect of small-scale, cottage and village industries.

The authors have made an attempt at studying the existing small-scale industrial units, cottage and village industries which come under the operation of the District Industries Centre, Koraput. Due to the reorganisation of districts, Koraput district has been divided into four districts, viz., Koraput, Nawarangpur, Malkangiri and Rayagada. But only the three districts come under the jurisdiction of D.I.C., Koraput.

There are 8 major and medium industries which are under D.I.C., Koraput, of which 7 are in the district of Koraput and only one in Nawarangpur. The district of Malkangiri has no such industries. They provide employment opportunity to 7464 persons (Table-I).

The existing S.S.I. units as on 31-3-94 are 1918 under D.I.C., Koraput (Table-II). These provide employment opportunities to 11.4 thousand persons with a total capital investment of 2325 lakhs of rupees.

From the Table-II, it is revealed that the S.S.I. units are more in number in Koraput district than in Nawarangpur and Malkangiri districts. Similarly, the employment opportunities provided by the SSI units are greater in Koraput than in the other two districts.

TABLE–I

Major and Medium Industries under the jurisdiction of D.I.C., Koraput (as on 31-3-93).

Sl. No.	Name of the Industry	Type of Industry	Employment generated
(1)	(2)	(3)	(4)
1.	NALCO	Alumina	1670
2.	H.A.L.	Aero-Engine	4226
3.	Balarpur Industries	Writing and Printing Paper	750
4.	Utkal Oils Ltd.	Refined Salseeds oil	80
5.	O. T. E. Co. Ltd.	Cutting tool	155
6.	B.T.W. Industries	Granite slabs	137
7.	Snehadhara Industries	Portland Cement	250
8.	M/s. Mangalam Timber Products	Fibre Board	196

Source : Action Plan for the year 1994-95, D.I.C., Koraput, P.-7.

TABLE–II

No. of S.S.I. Units Under D.I.C., Koraput.

Sl. No.	Name of the district	No. of units	S.S.I. investment (Rs in lakhs)	Employment ('000 persons)
(1)	(2)	(3)	(4)	(5)
1.	Koraput	1460	2056.8	9.3
2.	Nawarangpur	319	231.1	1.4
3.	Malkangiri	139	57.1	0.7
	Total	1918	2345.0	11.4

Source : Action Plan for the year 1994-95, D.I.C., Koraput, PP. 10-12 (Figures compiled).

Table-III depicts the category-wise existing industries. It reveals that the number of SSI units are more in food and allied, engineering and metallurgy, textiles and repair and servicing. Further these industries are mostly located in urban areas.

TABLE–III

Category-wise No. of existint S.S.I. units
Capital Investment and Employment Generated.

Sl. No.	Category of Industry	No. of Units	Investment (Rs. in lakhs)	Employment generated
(1)	(2)	(3)	(4)	(5)
1.	Food and Allied	799	1044.3	5585
2.	Chemicals and allied	49	71.3	259
3.	Electrical and Electronics	48	21.6	228
4.	Engineering & Metallurgy	253	521.2	763
5.	Wood and Forest	74	40.6	270
6.	Glass and Ceramics	75	72.7	1442
7.	Livestock and Leather	16	8.1	107
8.	Paper & Paper products	41	108.3	372
9.	Rubber and Plastic	15	41.5	99
10.	Textiles	151	76.3	889
11.	Miscellaneous	135	198.8	700
12.	Repair & Servicing	262	142.3	734
	Total	1918	2345.0	11448

Source : Action Plan for the year 1994-95, D.I.C., Koraput, PP. 10-12 (Figures compiled).

The number of S. S. I. units gone into production between 1980-81 and 1993-94 is shown in Table—IV. It shows that there is a rise and fall in the number of S. S. I. units. The number was 156 in 1980-81, 214 in 1984-85 and after that there was a fall, and it fell to only 62 units during 1990-91. The number of units in 1993-94 were 118.

TABLE—IV

S. S. I. Units gone into Production during 1980-81 to 1993-94

Sl. No.	Year	No. of SSI Units.	Capital investment (Rs. in lakhs)	Employment generated
(1)	(2)	(3)	(4)	(5)
1.	1980 - 81	156	60.66	899
2.	1981 - 82	147	58.53	705
3.	1982 - 83	204	119.48	2124
4.	1983 - 84	205	146.75	1037
5.	1984 - 85	214	102.69	1394
6.	1985 - 86	206	220.34	1120
7.	1986 - 87	149	155.87	806
8.	1987 - 88	134	236.27	712
9.	1988 - 89	148	286.16	969
10.	1989 - 90	233	232.00	647
11.	1990 - 91	62	144.03	277
12.	1991 - 92	67	220.46	353
13.	1992 - 93	67	161.09	310
14.	1993 - 94	118	141.10	719

Source : Office of the D. I. C. ,Koraput, Jeypore.

The target and achievement in respect of number of units, capital investment and employment generation from 1988-89 to 1994-95 (as on 31-12-94) of D. I. C., Koraput are shown in Table—V.

TABLE—V

Target and Achievement of D. I. C., Koraput from 1988-89 to 1994-95 (Rs. in lakhs)

Sl. No.	Year	No. of S. S. I. Units		Capital invested		Employment Generation.	
		Target	Achievement	Target	Achievement	Target	Achievement
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	1988 - 89	120	148	216.0	286.16	960	969
2.	1989 - 90	120	133	240.0	231.79	960	647
3.	1990 - 91	60	62	136.0	144.03	480	277
4.	1991 - 92	65	67	130.0	225.55	520	351
5.	1992 - 93	66	67	157.0	159.79	500	309
6.	1993 - 94	80	118	178.0	241.10	550	719
7.	1994 - 95	110	92	256.0	230.97	750	608

Source : Office of the D. I. C., Koraput, Jeypore (Figures compiled).

The D. I. C. has achieved the target fixed in respect of number of S. S. I. units and capital investment. But in no year has it reached the targets in respect of employment generation except in the years 1988-89 and 1993-94.

The cottage sector has played an important role in creating opportunities and providing income mostly to the tribal population of the three newly created districts (Koraput, Nawrangpur and Malkangiri). Table—VI indicates the growth of the cottage sector between 1989-90 and 1992-93.

TABLE—VI

Indicators of Growth of Cottage Industries
Between 1989-90 and 1992-93

Sl. No.	Indicators		During 1989-90	1990-91	1991-92	1992-93*
(1)	(2)		(3)	(4)	(5)	(6)
1.	Artisans identified		8036	5186	3100	46
2.	Artisans sanctioned with finance		8019	4915	2898	46
3.	Artisan units started production.		7802	4613	2898	46
	Of the Artisans :	O. C.	1259	1200	767	5
		S. C.	1584	789	637	21
		S. T.	4959	2624	1494	20
4.	Women artisans		2027	2032	1369	—
5.	Investment made (Rs. in lakhs)		163.67	119.72	93.47	0.76
6.	Employment		15531	7295	5688	47
7.	Artisans trained.		990	1706	3376	—

Source : Office of the D. I. C., Koraput, Jeypore.
* 1992-93 (As on 30-11-93)

There are 31 A. M. C. S.s (Artisans Multipurpose Co-operative Societies) under the D. I. C., Koraput. They are located one each in every Block of the districts. The A. M. C.s played greater role in the development of Khadi and Village industries. The "Village industry" now includes any industry located in a rural area (population of which does not exceed ten thousand or such other figures) which produces any goods or renders any services with or without the use of power and in which the fixed capital investment (on plant and machinery and land and building) per head of an artisan or a worker does not exceed fifteen thousand rupees. [1]

The A.M.C.S.s have provided loans and other requirements to its member-artisans for the development of Khadi and Village industries.

1. A Hand Book on Khadi & Village Industries, O. K. and V. I. Board, Bhubaneswar, 1993, pp. 24-25.

(II)

The districts under study are rich in forest resources. Tamarind, oil-seeds (sal seeds), hillbrooms, sikakaya, fire-wood, timber, mahua flower, kendu leaves, lac, arrow root, siali leaves, rosen are plentily available in the districts. Of all the resources, tamarind, siali leaves, sal seeds and hill-brooms are the most important. In addition to the forest resources, the districts are also endowed with agricultural resources like oil-seeds (til, niger, soyabin, mesta, mustard, ground-nut, vegetable and spices.

So it is evident that these resources will help by and large in the future development of small scale, cottage and village industries.

(III)

During the study the authors contacted some of the tribal artisans, small entrepreneurs and voluntary organisations in order to know their problems. They are :

(1) All are of the view that finance is the main constraint in the development of industries.

(2) Cottage and village industries like siali-leaf, processing of cereals and pulses industries and oil-ghani industries are not functioning due to lack of finance, though these resources are plentily available in tribal areas.

(3) The tribal weavers complain that they are not getting yarn regularly from the co-operative societies to run the Khadi industries throughout the year. One of the Voluntary Organisations has revealed that they are to purchase yarn from out-side the State to run the Khadi industries. Therefore, the charkhas and spinning wheels remain idle for months on end.

(4) The tribal potters have expressed the difficulties faced by them in procuring the requisite soil to run their potteries. They collect the material from agricultural fields owned by others. But, more often than not, the owners object to such encroachments. Further, the industries are not functioning during rainy season.

(5) In tribal societies, it is usually the females who collect forest resources like siali leaves, sal seeds, kendu leaves etc. It is they who sell them in local markets at throw-away prices. Thus, for the obvious reason, they need cash immediately and cannot afford to wait even tor a day. For example, women engaged in the collection of siali leaves sell away

bundless of 80 to 100 'khalis' at Rs. 3/- per bundle. The middlemen sell them, in turn, at as high a price as Rs 16/- to Rs 20/- per a bundle, thus getting huge profits in the process. Be it noted further, that the tribals sell 'khalis' of a smaller size because of their urgency to earn money and the middlemen simply stich two such kholis into one and they market them at Rs. 16/- to Rs. 20/- per bundle.

Over-viewing the industrial scenario of the districts under study, we feel that though large number of S.S.I. units exist, they are basically 'engineering' oriented (Table-III). These industries are not tapping the local resources and they are mostly situated in urban areas. Therefore, there is no appreciable development of the tribal areas of the three districts.

The study also further revealed that the tribes of the districts live in remote areas surrounded by hills and forests. The only way to provide employment on a large scale and to have a regional balanced development, what is needed is the development of small industries like cottage and village industries based on the availability of local resources.

No doubt the development of the small-scale industries can generate more employment. But it is felt by the authors that as the districts are mostly tribal concentrated, the poor tribal artisans / entrepreneurs cannot afford to invest large capital in small scale units. It may be noted here that the Malkangiri district is having two types of primitive tribals, viz. Bonda Tribes and Didayee Kondh Tribes who are extremely poor. It is not possible on their part to invest capital on small scale units. If more and more cottage and village industries like Khali making, bee-keeping, preparation of broom-sticks, etc. are established, on one side it would be possible on their part to invest less capital and on the other, the available local forest resources would be properly utilised. Hence it is suggested that not small scale industries but small industrial units like cottage and village industries are warranted at this moment to cater to the needs of the tribes and for the future development of the industrial scenario of the three tribal districts.

For the development of cottage and village industries, the following are the suggestions :

(1) The tribal artisans must be provided with finance or alternatively the authorities should purchase the required raw-materials and supply them to the artisans in time throughout the year. Because it is seen that at present the middlemen procure these resources (both forest and agricultural) from the tribals at lower prices, and again supply them at

higher prices. For example, the artisans who are engaged in making jute-ropes in the Kotpad area, purchase 1 Kg. of jute at the rate of Rs. 7/- from the middlemen, though the actual price is only Rs. 3/- per Kg.

(2) To put an end, once for all, open exploitation of the innocent tribals, more and more 'khali' industries should be opened in the tribal areas so that they can reap for themselves the fruits of their hard labour.

(3) For the development of Khadi industries and to provide employment opportunity to the tribal weavers, the Govt. should supply the required yarn and charkhas to individual artisans in time.

(4) The availability of charkhas with Co-operative Societies and Voluntary Organisations, however, though sound in principle, is not of much avail to the supposed beneficiaries in practice, for the simple reason that the tribals can hardly make time available in their toil-some daily routine to go to the said establishments for the spinning of the yarn. It is, therefore, suggested that in the interest of optimum utilisation of time by the tribals, they should be provided with charkhas right at their homes, so that they can take to spinning according to their convenience.

(5) As pottery industries are in a moribund stage at present, steps should be taken to revive them by giving barren lands to the artisans.

(6) The A. M. C. S.s should be strengthened so that they can participate actively in the industrial development of the tribal areas,

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Structure and Promotion of Small Scale Industries in Orissa—Lessons for Future Development

Sri R. N. Kar
Asst. Director-in-Charge,
Br. Small Industries Service Institute,
Govt. of India
Silchar, Assam

I

Introduction :

Industrialisation in Orissa took its philip with the pronouncement of Industrial Policy Resolution (IPR) of Govt. of India as well as of the State Govt. during 1956, 1980 and 1991. In pre-independence days, there were only a few industrial establishments in the state which were engaged in industrial activities. Even now units in small scale sector are mostly tiny in nature. So reliable statistics on growth of these units and on their performance are not very much known. Development Commissioner (Small Scale Industries) of Ministry of Industry, Govt. of India conducted a survey on the registered Small Scale Industries in the State of Orissa as a part of All India Census of Registered small scale units referring 1987-88 as the base year.

This study is based on the Report on Second All India Census of Small Scale Industrial Units for Orissa State. Efforts are made here to analyse certain points on the structural development and promotion of industries that have taken place in Orissa. Lessons for future development have also been suggested.

II

Problem :

Growth of industries in small scale sector in quantitative terms has little meaning now-a-days since technology development and sophistication in global industrialisation have made many qualitative changes. Industries in small scale sector are still traditional in nature, capacity utilisation of these units is too low i. e. 28.70 percent during 1987-88 and per unit investment in plant and machinery is Rs. 1.12 lakh. So to impart

more vitality and growth impetus to this sector, industrial policy announced on 24th July '91 emphasized in one of its primary objectives for implementation of specical schemes for modernisation, technology upgradation, quality control, integrated infrastructural development and further promotion of internal marketing and exports.

The small scale industrial units are expected to be basically modern, non-traditional, equipped with minimum appropriate technology and produce inaccordance with the standard quality specifications But the statistics show that in the year 1987-88, 7607 nos. of SSI units comprising 91.8 percent of total units surveyed under Second All India Census in Orissa come under the fold of investment in plant and machinery which is less than Rs. 5 lakhs while 1.7 percent of units come under the group of Rs. 5 lakhs to Rs. 10 lakhs and 0.9 percent of units with more than Rs. 10 lakhs. This shows that most of the units in SSI sector are tiny units.

Other side of this sector shows that in the year 1972, out of 3169 nos. of SSI units registered in the state, 1006 were closed due to diffirent reasons which worked out to be 31.74 percent of the total units. This figure was further enhanced to 5564 nos. comprising of 40.05 percent during 1987-88. The reasons of closure are mostly financial, marketing, raw-material and/or combination of many. So, for a healthy growth of small scale industries further industrialisation in this sector will have to conform to the modernisation technology which includes up-gradation and quality consciousness to thrive in national and/or international market and will have to minimise sickness to uphold social security and financial stability.

Fact :

Entrepreneurship, able managerial efficiency and adequate finance are the main pillars on which industrialisation rests. Orissa is an under developed state. Most of the proprietors of SSI units are first generation entrepreneurs. Their financial background is not sound. It is, therefore, obvious that units set-up during these years are traditional in nature and tiny in structure.

Orissa is basically an agricultural state. State is endowed with vast natural resources like minerals, metals, forest resources and huge coastal line. It is but natural that the industrial activities have been concentrated mainly on these areas due to easy availability of raw-materials and local skills.

III

Structure :

About 200 items are produced in SSI sector in Orissa. The major product groups are food products, basic metal products, wood products, non-metallic mineral products, chemical & chemical products, paper products etc.

In this study major eight groups of industrial structures as per rank of investment in fixed assets are chosen vis-a-vis all other groups. Then the impact of those industrial groups on employment generation, production and contribution to exports is analysed from the background of unit of investment to arrive at certain conclusions about future development.

As per Second All India Census of small scale industrial units, highest investment is made in the state on food products followed by non-metallic mineral products, metal products, basic metal products, rubber and plastic products, chemical & chemical products, paper products and printing and wood products. The above major eight groups invest 79.93 percent while all other groups in total invest only 20.07 percent. Table—1 gives the statistics.

TABLE—1

Sl. No.	Industry group	No. of units	Fixed Invt. (Rs. lakhs)	% to total investment
1	2	3	4	5
1.	Food Products	2,835	3,588	22.93
2.	Non-metallic Mineral Products	685	1,742	11.13
3.	Metal Products	1,026	1,574	10.06
4.	Basic Metal Products	233	1,452	9.28
5.	Rubber & Plastic Products	400	1,187	7.58
6.	Chemical & Chemical Products	293	1,121	7.17
7.	Paper Products & Printing	556	1,099	7.00
8.	Wood Products	711	747	4.73
9.	All other groups	855	3,137	20.07
	Total	8,287	15,647	100

Source : Report on 2nd All India Census, Orissa. Table-6.9, P-38.

Highlights of Second All India Census of SSI units reveal that non-metallic mineral products groups dominate in employment sector. Providing 21.19 percent of total employment in small scale industries

sector while food products groups dominate in productivity and exports registering 47.49 percent of total production and 74.68 percent of total export during the reference year 1987-88.

Highest capital is invested in the units of food products group which provide 11.49 percent of employment in SSI sector. This group comes second in rank in providing employment after non-metallic mineral products groups of industries which provide 21.19 percent of total employment. Food products groups of industries have invested about double the amount than non-metallic mineral groups of industries but produce more than 9 times (949.8%) compared to the latter. Food products groups of industries are a major exporter of the state covering 74.68 percent of total exports in small scale sector during 1987-88.

TABLE—2

Share of major product groups in investment, employment, production and exports of SSI sector in Orissa.

Sl. No.	Product group	% to total fixed Invt.	% to total employ-ment	% to total produc-tions	% to total exports
1	2	3	4	5	6
1.	Food Products	22.93	11.49	47.49	74.68
2.	Non-metallic mineral products	11.13	21.19	5.02	0.00
3.	Metal products	10.06	11.46	6.27	0.00
4.	Basic metal products	9.28	7.52	14.29	23.45
5.	Rubber & Plastic	7.58	4.61	4.34	0.00
6.	Chemical & Chemical Products	7.17	4.08	5.65	0.00
7.	Paper products & Printing	7.00	4.84	2.25	0.00
8.	Wood products	4.78	8.13	4.41	0.13
9.	All other products	20.07	26.68	10 29	1.74

Source : Second All India Census of Small Scale Industrial units, Orissa, Table 6.9, 6.10, 6.11 & 6 12, PP. 33-36.

Basic metal products groups of industries share 14.29 percent of total production, 7.52 percent of total employment contributing 23.45 percent to total exports in SSI sector of the state. Chemical groups of industries in Orissa have not made any head way. In the state wood products groups of industries are traditional in nature. Investment of this

group is very low; but its productivity is as high as Rs. 3.88 lakhs per Rs. one lakh of investment in fixed assets. Wood products industries have a marginal export potential of 0.13 percent of the total export (vide Table—2).

TABLE—3

Important structural ratios for different industry groups.

Sl. No.	Product groups	Production/ Investment in fixed assets (Rs. lakh)	Employment/ Invt. in fixed assets (Nos)	Gross value added /fixed invt. (Rs.lakh)	Net value added/ employment (Rs. lakh)	Wage paid/ employment (Rs. lakh)	Capacity utilisation (%)
1	2	3	4	5	6	7	8
1.	Food products	8.70	3.76	2.96	0.76	0.05	38.5
2.	Non-metallic mineral products	1.89	8.43	0.52	0.05	0.04	31.2
3.	Metal products	2.62	5.05	0.75	0.13	0.06	35.6
4.	Basic metal products	6.46	3.58	1.95	0.46	0.06	15.9
5.	Rubber and Plastic products	2.40	2.69	0.67	0.58	0.05	34.3
6.	Chemical and Chemical products	3.31	2.52	1.68	0.64	0.06	17.4
7.	Paper products & Printing	1.34	3.05	0.41	0.11	0.06	42.5
8.	Wood products	3.88	7.54	1.28	0.16	0.04	45.2
9.	State average	4.20	4.29	1.36	0.29	0.04	28.7

Source : Computed from Table No. 9.3, P-81 and Table 048 in Vol-II of Second All India Census of Small Scale Industries, Orissa.

Important structural ratios of different industry groups are computed to ascertain the efficiency of factors of production like fixed investment and employment. Capital intensity of different industry groups is measured in terms of fixed capital investment per unit of employment and labour productivity and capital productivity are judged from net value added per unit of employment and gross value added per unit of fixed investment respectively. (Vide Table—3)

It is seen from Table-3 that the productivity per unit of investment is relatively higher in food products group and basic metal industries than the state average. Capital productivity is also higher than the state average in case of many of the industry groups such as food products (2.96), basic metal products (1.95), chemical and chemical products (1.68) while state average is 1.36.

It is also found from net value added/employment that the labour productivity is also higher in the industry groups of food products (0.76), basic metal products (0.46), rubber and plastic products (0.58), chemical and chemical products (0.64) than the state average which is Rs. 0.29 lakh. All the above groups of industries pay wages to their employees which are higher than or equal the rate with state average. Excluding chemical and basic metal products groups of industries, capital utilisation in other groups is higher than the state average.

Even with less capital investment, some of the product groups in which the state has a comparative advantage because of easy availability of raw-material and local skill are doing remarkably well in utilising their capacity, increasing productivity and generating employment potential.

IV

Recommendations :

Basing upon above facts, figures and analysis, certain conclusion are arrived at which may serve as guide lines for future development of industries in small scale sector in the state.

(1) Definitions of small scale industries have undergone a sea-change and to meet the global challange, their investment limits on fixed assets have been enhanced upto Rs. 60 lakhs. In the state of Orissa more than 90 percent of the industries are in the investment slab of upto Rs 5 lakhs. In real sense, those are industries in tiny sector and small scale industries in the true sense of the term are very few in our state. So, in future development some small scale industries in particular should be promoted in the state.

(2) To meet the cost competitiveness of the product in the market, units to be promoted in future should be well equipped with appropriate technology to increase productivity and to bring fineness in the product.

(3) Industries coming up under structural group of food products, basic metal products have a higher degree of capital and labour productivity and export potential. So, more units under these groups should be encouraged with standard machinery and equipments.

(4) Industries under the group of paper products, wood products, and transport equipments and parts are less capital intensive and capacity utilisation of these factories are higher. These products also have good access to market. So, units under these groups should be modernised.

(5) Factories under the group of (i) electrical machinery/apparatus (ii) machinery parts (iii) transport equipments and parts are less in number. Areas should be explored to promote these units.

(6) Backward districts of Orissa like Phulbani, Bolangir and Kalahandi have 11.6% of units and 8.6% of employment. For eradication of regional disparity more labour intensive units may be promoted in those areas.

(7) To boost exports, industries having export potetial and 100% export oriented units should be encouraged.

(8) As chemical units have potential for high labour productivity, those units may be diverted to backward regions.

(9) While promoting the projects, testing laboratory and testing equipments may be recommended to be incorporated in the projects. The units should be impressed upon to be registered under Bureau of Indian Standards, Aag mark, FPO or any of such institutions who are associated with promoting quality products of national and international standard.

(10) While promoting industries, techno-economic feasibility of the projects should be well studied before establishment to increase productivity, employment and to secure social justice.

Problems & Prospects of Sugar Industry in Orissa

– A Case study of Ponni Sugar Industry & Chemical Limited, Bargarh

Digambar Chand,
Lecturer in Economics,
Bamara Trust Fund College,
Bamra
and
Dr. Pragati Mohanty
Head, Deptt. of Economics
S. D. Women's College
Rajgangpur

1. 1.1. Introduction :

Sugar Industry was started during the thirties of the present century and thrived mainly under the protective umbrella. India by 1936-37 became self-sufficient in sugar. Even after liberalisation of the economy, Sugar Industry in India represents one of the worst faces of licensing quota permit raj. Virtually every aspect of the industry, from cane price fixation, licensing, supplied to PDS & the open market to export is controlled.

India is the largest producer & consumer of sugar in the world. The control on the industry is also most complex and vexed. The sugar mills are forced to sell 40% of their production to the ration shops under the PDS and the remaining part is sold in the open market. Sugar production is still under the license regime with zonal restrictions and the price of sugarcane is controlled. The 60% free sugar that can be sold by the mills in the free market is again controlled by the Govt. Even its byproduct— molasses are controlled partially and sold at prices decided by the state.

Sugar Industry plays an important role in the economy of backward regions like Orissa. The Sugar economy in Orissa in many ways constitutes a microcosm of the Orissa's economy. Sugarcane is grown in all the major areas where large & small irrigation projects are instituted. In Orissa large and medium peasants are taking interest in the cultivation of sugarcane. Sugar is manufactured by joint stock mills both in the public & private sectors and by purely state owned mills. In private sector sugar is

manufactured by big business houses like Ponni Sugar Company. Sugar Industry provides employment opportunities to labourers & enhances socio-economic condition of farmers.

1.2. Objectives :

The study intends to pursue the following specific objectives.

1. To examine the growth trend of sugarcane production in the district of Bargarh; and
2. To highlight the problems of the farmers and the company and analyse the prospects of Ponni Sugar Industry in Bargarh.

1.3 Data Source & Methodology :

The proposed study is confined to Ponni Sugar & Chemicals Ltd. of district Bargarh of Western Orissa only. Data relevant to study are collected from the source of Ponni Sugar & Chemicals Ltd. itself. Primary Data from the sugarcane farmers as well as Ponni Sugar Industry are collected by the help of a well-structured questionnaire by adopting an appropriate sampling technique for the selection of farmers producing sugar. The study is based on the basis of survey of 25 farmers in five villages. The villages under the command area of Ponni Sugar Industry are Chipilima, Tulandi, Kardola, Marangula and Barpali.

II. 1.1. Analysis :

Bargarh Co-operative Sugar Mills Limited, which was established on 25th July 1956 became a failure due to its chronic sickness and gradually was taken on lease from 31st August, 1991 by Ponni Sugar & Chemicals Ltd. for a period of 15 years.

Table—I shows the production figure of Ponni Sugar for last three years.

TABLE—I

Production figure of Ponni Sugar
from 1991-92 to 1993-94

Year	Sugar (Qnts.)	Molasses (Metric Tonnes)
1991 - 92	1,11,413	6,851
1992 - 93	68,709	27,39,637
1993 - 94	64,170	29,64,310

Source : (Ponni Sugar & Chemicals Ltd. Bargarh).

Ponni Sugar & Chemicals Ltd. has divided total command area into 11 divisions, out of which 7 divisions are in Orissa, and 4 divisions are in Raipur and Raigarh districts of M. P. It has 8 registered units at Bargarh district and 9 unregistered units at Bolangir.

1.2. Price Fixation :

Fixation of price for sugarcane plays an important role from the view point of farmers and the monopsonist firm of sugar. Generally Ponni Sugar Industry fixes the price of sugarcane on the basis of market price, and this price is of two types. One is Ex-factory and the other is Ex-field price. Ex-factory price is the price, which is received by the farmers, when he brings the sugarcane at the factory gate and Ex-field price is the price at which the monopsonist buys the sugarcane from the farmers at the field which is always lower than the farmer's price. This will be clear from Table—II.

TABLE—II

Price of Sugarcane

(Rs. per tonne)

Year	Ex-factory Price	Percentage rise	Exe-field price	Percentage rise	Diffe-rence
1991 - 92	420	—	370	—	50
1992 - 93	450	7.1	390	5.40	50
1993 - 94	500	11.1	425	8.97	75
1994 - 95	600	20	505	18.8	95

It is observed from Table - II that ex-factory price (farmers' price) has consistently increased over the period and similarly the ex-field price (monopsonistic price) has also increased consistently over the same period, but the difference between the ex-factory and ex-field price has always remained positive. The difference has increased from Rs. 50 to 95 from 1991-92 to 1994-95. The percentage increase in the ex-factory price is more (42.8%) than ex-field price that is 36.4%. Besides, the average cost of production of sugarcane per tonne in 1991-92 and 1992-93 was Rs. 9000/- which was increased to Rs. 9500/- in 1993-94 & 1994-95.

As the sugar is an essential commodity and covered under sugar control order, the levy sugar is lifted by F.C.I. (Food Corporation of India) and Govt. administration by the state. The free sale sugar is to be sold to a sugar dealer licensed to bill in sugar under the order relating to licensing

of sugar dealer. The free sale price is being fixed by the management from time to time depending upon the ruling market price of the goods in the open market. The free sale sugar is to be despatched minimum 20% to release quota in each week. For free sale sugar the total excise duty is Rs. 85.00 per quntl. which goes to Govt. account.

The molasses control order has been withdrawn on 10th June 1993 by Govt. of India. Generally molasses are being used by the manufacturer of spirit, liquor, gudakhu, cattle feeds, coal bricketing and other industrial purposes. For the time being, the excise commissioner & molasses controller, Orissa, Cuttack has issued a circular that the sugar facotries in the state should sell to the parties having a valid permission from the Excise Commissioner of the state. Sugar is a tax-free good whereas molasses earn 16% of sales tax. In total a sum of Rs. 52.00 is to be paid towards Central Excise Duty per quintal of levy sugar.

III. Problems :

India is perhaps the only country where cane is cultivated by independent farmers. We can broadly divide the problems into two phases : (1) General Problem and (2) Specific Problems.

1. General Problems :

Lack of availability of raw meterials is one of major problems for the sugar industry. The main issue is of ensuing the right scheduling of arrival of cane at the factory gate on a daily basis so as to match the crushing schedule of the factory. Cane is perishable in the sense that once harvested, its sucrose content rapidly declines if not crushed within 24 hrs. Without proper coordination, cane arrivals are likely to be higher than the peak crushing capacity during the middle of the crushing season and lower during the beginning & the end of the season.

(2) Sugarcane requires extensive working capital. It locks up land for at least two years each time it is planted. The gestation period is a lengthy one. So the poor farmers cannot manage their consumption need for such a long period even if the gain from sugarcane is more than paddy.

(3) Sugarcane has been increasingly prone to pest attacks. The major diseases that hit sugarcane are white-fly and root-wilt. Root-wilt has no known treatment and may halve the yield of a plantation crop.

(4) Another problem is lack of irrigation facilities. The farmers' primary responsibility is for ensuring timely irrigation. Though canal irrigation is available, several farmers have invested in their own tube-

wells & wells. The tube wells also offer the farmers greater control over the quantum & timing of irrigation. Due to increase in cost of production, the farmers hesitate to cultivate sugarcane.

5. Harvesting, transport & marketing are critical operations for cane-farmers everywhere.

2. Specific Problems :

The technology of sugar manufacture perishability and seasonality of cane production constrain the company to restrict cane supplies of its members along with enforcement of rigorous time schedule. The relationship is very similar to contract farming. The farmers of Orissa are not habituated with contract farming. They feel it as a burden.

(1) One of the major peoblems is that, after signing the agreement paper, the farmers cannot leaseout land failing which they would be deprived of production and consumption loan. They are compelled to abide by the rules and regulations made by the Ponni Sugar & Chemicals Ltd.

(2) In the agreement paper, it has been clearly enumerated that, the company will raise loans from banks on the basis of land contracted for growing sugar.

(3) Another problem is that, if the ryot fails to supply sugarcane from the said plot as per the agreement within the stipulated period of time, he'll bear full responsibility and will be liable for damages for breach of this agreement in addition to pay compensation for losses occured to the mills owing to the failure of the Ryot to supply sugarcane to the mills. So the farmers do not want to cultivate .sugarcane under this agreement as they can not deviate it knowingly.

(4) Further the farmers remain uncertain as to the price they would get from sugarcane.

(5) Another condition is that if the quality of sugarcane is found to be poor in the said plot before harvest or during supply, even after issue of cutting order, the mills reserve the option to reject the sugarcane.This also leads to uncertainty in the sale of sugarcane.

However, Ponni Sugar Industry provides proper guidance to the farmers from time to time for cultivating more and more sugarcane. It encourages the farmers for increasing the volume of sugarcane cultivation by providing following facilities :

1. The industry is providing Rs. 1500/- as subsidy per acre for October & November Plantation and Rs. 1000/- for December Plantation. The farmers have to supply 30 tonnes/acre sugarcane to get full subsidy.

2. The industry provides pesticides, insecticides etc. on 50% subsidy basis.

3. The industry also helps farmers for free soil test etc.

4. The industry provides from 500 grm. to 100 kg. of sugar to those farmers who are supplying sugarcane to Ponni Sugar Industry.

5. The farmers are getting loans from state co-operative societies or nationalised banks for cultivation of sugarcane.

6. Developed irrigation facilities such as hydro-geological survey, deep well, inwell boring, and lift irrigation etc. are being provided by Ponni Sugar Industry.

7. Ponni Sugar Industry also helps farmers simultaneously to minimise yield risks with the help of centralised activities guch as varietal selection, seed treatment, aerial spraying of pesticides, co-ordinated harvesting and transport.

IV. Conclusion :

No doubt, the future prospect of sugar industry in very bright in Orissa. Although the farmers are illiterate, and believe in traditional practice in the production of paddy due to lack of social awareness and technical know-how they are gradually making some changes in their production pattern.

So far as Ponni Sugar & Chemicals Ltd. is concerned, it has treated Bargarh Sugar Mill as an adopted child as it has taken it on a lease basis for a period of 15 years.

Bibliography :

1. Baru Sanjaya : The Political Economy of Indian Sugar. State intervention and structural change. Oxford University Press, Delhi, 1990.

2. Ravishankar A. & Srinivasa Gawda : 'The sugar muddle and the way out' Southern Economist, Vol. 33, No. 9, Sept.-1, 1994, P. 15.

3. Sugar Industry : Sweet prospects Business India, Jan. 3-16, 1994, P. 210-217.

4. Source : Ponni Sugar & Chemicals Ltd., Bargarh.

5. Rajagopalan E. & Saah Tushar: Roll of Design and Informal share market in Success of Sugar Co-operatives, E.P.W. 27, Aug, 1994.

Study of Perfume Industry with Special Reference to Perspectives of Keora Industry in Ganjam District (Orissa)

Purushottam Sahu
Lecturer in Economics,
Gopalpur College,
Gopalpur-on.Sea, Ganjam

Keora occurs wild in several parts of our country along the coast and by the river and canal side. However, luxuriant and gregarious growth is concentrated along the coastal belt of Ganjam district. Though its widespread occurrence is observed in Puri, Cuttack and Balasore districts, there is no commercial exploitation in these parts. Keluapalli and Agraram regions in Ganjam district of South Orissa are famous for Keora Industry in India, which contributes more than 90% of Keora production in the country. Keora essence traded in the country with an annual turn over of about Rs. 40-50 crores generates direct and indirect employment opportunities for nearly 50,000 people in the district. Unfortunately this industry, although a century old, has remained untouched by technological progress and modernisation made in other plantation and distillation industries.

National Bank of Agriculture and Rural Development (NABARD) took up the District Rural Industrialization Programme (DRIP) in Ganjam district which is an integrated programme for rural industrialization during 1993, with support from the Swiss Development Co-operation (SDC). Keora industry was identified as one of the important sectors for integrated development in Ganjam. Since then, elaborate discussions have been held with representatives from the Keora industry, state Government, Bankers, Research Institutions and thus development of Keora Industry has been receiving attention from the various development and research institutions in the country. An Interactire meet on Keora was jointly organised by RRL, Bhubaneswar, NABARD, Andhra Bank, DRDA, Ganjam, ORMAS, Bhubaneswar, Keora Distillary Association (KDA), Tulu at Keluapalli High School, to formulate a development strategy for Keora cultivation & Industry in Ganjam.

Strategy of Keora Industry in Ganjam :

Keora growing in coastal areas of Ganjam district in Orissa is famous for the essence extracted from flowers, as absolute oil (Rooh), 'Attar' (observed in sandal wood oil/Dioctyl Pthalate) or Keora water.

Keoras planted on the farm boundaries in Chatrapur, Chikiti and Rangailunda blocks are the major sources for the industry. Nearly 100 Keora distillation units are concentrated in 10-15 villages, prominent being Keluapalli, Tulu, Indrakhi, Markandi, Panapalli, Chandanbada, Biswanathpur in Rangailunda block and Agraram in Chatrapur block of the Ganjam District.

Keora perfume is widely used in pan masala, chewing tobacco, sherbets, some high value perfumes, soaps, incest sticks and in medicines. Although this industry is century old, it came into prominence in the last decade since 1980 with a sudden spurt in the consumption of pan masala and chewing tobacco which led to rapid increase in price of Keora flowers since 85.

Size of Keora Industry :

It it gathered from Kannauj that 80% of the perfume trade is linked with Pan Masala and chewing tobacco industry. Keora is the most important of the perfumes (75% of the perfumes by value used in this industry). Hence it becomes amply clear how important is the Keora in the perfume industry of the country.

The volume of the business in Pan Masala and chewing tobacco trade is to the tune of Rs. 500 to 700 crores of which the share of pan masala is about 50%; other 50% is shared by brands like Baba Jarda, Prabhat Jarda, Gopal Jarda, Rajnigandha, Radha, Ashique and Kesar etc. Sri Vikram Kothari, Director, M/s Pan Parag Industries, Kanpur, says that the cost of one kg. of Pan Parag is about Rs. 350/- of which a sum of Rs. 100/- is spent towards perfumes. Of these perfumes, Keora is the major one which accounts for about Rs. 75/-.

Assuming the cost of production of pan masala is 35% of its sale price and the contribution of Keora is Rs. 75/- out of Rs. 350/- per kg of production cost, the turn over of Keora is of the order of Rs. 50-55 crores, which is contributed by the Ganjam district. The Pan masala and chewing tobacco industry growing at the annual rate of 15-20%, the demand for Keora is expected to grow at a minimum level of 15-20% per year. In case of Keora oil natural sources are entirely utilised, whereas in rose, a

mixture of synthetic and natural perfumes are used. Hence the demand for the Keora has a great scope for development of Keora Industry in Ganjam district.

Changing Trends in Keora Industry :

In earlier years Keora was not traded in its absolute oil form, instead Keora essence was used to be absorbed into sandal wood oil and Keora water. There is no quantifiable method of assessing the quality of attars. In the trade of 'Attar' the quality of 'Attar' is measured on the basis of flowers distilled and absorbed into a unit volume of sandal wood oil. But there is no method to assess actual number of flowers distilled and absorbed and consequently the trade was going on in good faith. This system is also common with other perfumes like Rose, Mogra, Genda etc. With the rise in prices and demand for these oils, malpractices have become rampant in this industry. Hence now there is a clear trend in shifting of demand from 'Attars' to absolutes. The quality of absolutes can be assessed with Gas Liquid Cromotography (GLC), hence the industry both domestic and foreign prefers to buy absolutes for good quality. The absolute is diluted by mixing waith sandal wood oil by the user industries themselves. Technological up-gradation of this industry is essential in view of the changing trends in products.

Cultivation :

Keora needs tropical climate with heavy rainfall for favourable growth and does not require any special care in its cultivation. In the coastal areas of Ganjam district Keora plants grow wild and some farmers plant them around their fields as fencing. Keora is propagated by leaves, branches and aerial roots. It grows to the height of 4 to 6 mtrs. The shrub starts flowering after 4 to 5 years of planting. Length of flower is generally 20-25 cm and on an average 20 to 30 flowers are obtained in the initial year but the number increases upto 50-60 flowers per plant after 10 years of its maturity. The average life of the plant is about 40 years and only properly matured flowers are used to obtain good quality of Keora water, attar and absolute oil. About 3 crores of flowers are available in a year in the coastal villages of Ganjam district.

Distillation Technology :

There are two main seasons for distillation of Keora flowers in a year. The first season begins in the month of June and lasts upto September. About 70 to 80% of flowers are produced and distilled during this period which is known as the peak season and about 20 to 30% of flowers are processed during the remaining part of the year.

The distillation equipment consists of a Deg (Steel), Chowanga (connecting bamboo tube) and Bhabka (Receiver). After charging the steel with the requisite number of flowers with the required percentage of water depending upon the quality of flowers and the degree of concentration required in the water, 'Attar' and absolute oil, the mouth is closed by keeping an inverted earthen or copper vessel on it and sealed with mud paste. Chowanga is fixed in one side of the earthen pot and connected with the Bhabka which is kept immersed in water pond for cooling. The absolute oil of Keora is being prepared from the good quality of flowers plucked in the early morning in the peak season and in the winter days. The entrepreneurs are adopting the crude distillary method for processing the Keora flower in Ganjam.

Introduction of a condenser in the existing distillation system by a few entrepreneurs at Kannauj has resulted in improvement of yeild and quality of perfume. In addition, there was a reduction in processing time and in cost of distillation resulting in about 10-15% extra profits to the industry. Adoption of CIMAP technology for rose, with suitable modification by the local industry at Kannauj, has significantly improved the efficiency of the industry and improved profit margins. If the Keora industry in Ganjam does not adopt new technologies, it will be left behind and become uncompetitive in future.

Product Range :

Although the supply of scented flowers is seasonal, the distillation units in Kannauj are operational almost around the year, as against the seasonal nature of operation of the Keora industry in Ganjam. This is made possible by resorting to distillation of a large number of fragrant flowers like Rose, Gendu, Mehendi, Champa etc. thus maintaining the competitive edge against seasonal perfume industries in other parts of the country. All year-round production of a perfume not only increases production, but meets the entire range of demand of user industries. It is more desirable to have diversification of products for sustainable development of the industry.

Quality Standards/Control :

Quality in perfumes has always been associated with a high price tag, but unfortunately, in the absence of quality standards, the malpractice has reached threatening proportions. Having realised the inevitability of maintaining quality standards, the perfume industry is slowly adopting to the BIS standards quality testing with GLC (Gas Liquid Chromato-

graphy), and other methods have become a common feature at Kannauj with the development of quality testing facilities at the Process and Product Development Centre (PPDC), Kannauj, Ganjam is lacking behind in this regard. In the absence of these, it becomes almost difficult to expand export trade in these commodities. Fixation of quality standards for Keora perfumes is of immediate significance for better exposure in the international trade of perfumes and we hope RRL, Bhubaneswar and other research organizations would take a lead in this direction to maintain the quality standards of Keora products in Ganjam district for its sustainable development.

Market Channels and Market Systems in Keora Industry :

The market channels for perfume industry constitute various tiers like producers of raw materials (flowers), agents for procurement of raw materials, distillers and traders operating in domestic and international markets and user industry. The market channels are very well developed in perfume industry because the money flows from top to bottom. Money is paid as advance which ensures regular supply of the product at a predetermined price. In this industry the raw material (flower) producer are small farmers having limited financial means besides being scattered over a large area. Because of limited means of producers, the system of advance has developed. Collection agents are playing a decisive role and charge handsomely for the services they render. The marketing system followed in Keora trade is similar to the ones operating in other perfumery crops.

Trade Practices :

The procurement procedure with M/s Pan Parag Industries, Kanpur is to call for tenders and the competitive bidder is awarded the contract for the year. The price of the Keora oil is fixed based on the prevailing price of the flower in Ganjam i.e. in Keluapalli mandi, and supply is made on monthly basis. The payment is made 60-90 days after the delivery of the consignment.

Small quantities of Keora attar and absolutes are also being exported abroad through the exporters of Kannauj, Bombay and Delhi. Big traders with their own distillation units pool the perfumes from small distillers and directly contact the importers abroad and execute the export orders.

Price Trend of Keora Flowers in Ganjam :

In 1960, the price of the flowers was Rs. 30/- per thousand flowers but it has risen to Rs. 4,150/- per thousand in 1994.

Now the Keora cultivation is undertaken in a massive scale by the farmers of this locality converting their paddy land and other cropping lands into Keora cultivation considering the higher benefit. Nearly 100 acres of land are being converted by farmers of this locality in last two years i.e. 93-94 due to rapid increase in price of Keora flowers in the makret.

International Scenario of Natural Flavours :

The total West European market for flavours and fragrances is estimated to be 1 lakh tonnes in 1991 of which flavours account for 40%. This sector is growing at an annual rate of 3% Similarly the food flavouring industry in USA is growing at a rate of 7% per annum. The rapid growth for natural flavours in the years to come is being projected.

Potential Importers :

Middle east continues to be the big buyers of our traditional perfumes. Keora flavour which is used in pan masala, flavoured tobacco is a familar commodity in middle east and this part of the world can be targeted for export of Keora oil. Keora essence being one of the few food flavouring oils, it has good scope for export to other developed countries, where the food flavouring industry is well developed

Strategies for Development :

(1) Supportive action of the Government is essential to facilitate the bank assistance to the beneficiaries under Keora sector. This relates the implementations of developmental programmes like IRDP, TRYSEM, Self Employment Programmes, PMRY, and Women Development Programmes for elimination of poverty and creation of employment generation in Ganjam.

(2) Need for irrigation facilities for increasing the Keora flower production.

(3) Technology upgradation of existing Deg method of distillation needs to improve the yeild and quality of Keora essence by NABARD, RRL & CSIR and to assist the R & D efforts by NABARD.

(4) Over dependence on Pan masala and chewing tobacco is fraught with dangers and thus the industry should diversify to the export market with alternative end uses.

(5) Some local entrepreneurs in Ganjam should be promoted to acquire export licence and efforts should be made to enhance export from Ganjam District.

NABARD has accorded top priority for providing credit support for development of Keora cultivation, processing industry and R & D efforts in Ganjam district under District Rural Industrialization Programme (DRIP) with help of Swiss Development Corporation (SDC).

Conclusion :

A integrated approach of developmental agencies, financial institutions, NABARD and Government is necessary to eliminate poverty, create employment opportunities, preserve environment and improve rural industrialization for the sustainable development of Keora Industry, which has the potential to turn into a gold mine for the agricultural economy of the Ganjam District in Orissa.

Small Scale Industries in Undivided Balasore District and On-Going Economic Reforms

Jagannath Lenka,
Lecturer in Economics,
B.J.B. College, Bhubaneswar

Importance of small-scale industries as an effective instrument of Economic Development has been realised the world over and this has led various States of both developed and developing countries to concentrate on this vital sector by provision of a coherent and inspiring policy framework. In case of India, growth of small scale industries (SSIs) has been one of the major planks of development strategy since independence. The employment generation capacity of this sector within a short gestation period coupled with relatively less capital intensity has made it an ideal instrument for reducing unemployment and regional disparity in development. Small Scale Industries are not only appropriate but also suitable for a labour abundant & capital dearth country like India.

To nurture this sector the govt. of India has adopted a dual approach such as developmental and protective. While the developmental approach aims to create a favourable growth environment covering institutions to deal with technology, marketing, raw-materials, finance and entrepreneurship, the protective approach covers incentive schemes such as fiscal concessions, financial assistance, price preference, reservations of items both for exclusive purchasing and exclusive manufacturing etc.

Because of the above reasons, industrial activities took their momentum in the Balasore district particularly during 1980-1990. Before the establishment of District Industries Centre in 1978 there was only 603 small scale industries with the capital investment of Rs. 474.12 lakhs and employment to 5,173 persons. But by the end of 1992-93 the number of SSIs reached 5,173 with total capital investment of Rs. 6133.85 lakhs and employment to 20,791 persons. It has also been proposed to accelerate the activities in the district to promote 1125 numbers of SSI units with capital investment of Rs. 1904/- lakhs and employment opportunities for 10,100 persons during the 8th plan period. The growth of small scale industries in the district with breakups is given below for ready reference.

Growth of SSIs in Balasore District From 1977-78 to 1992-93.

Plan Period	Year	No. of Units	Investment (Rs. in lakhs)	Employment (Nos.)
i) Upto 6th Till Plan Period	1977-78	603	475.22	5,173
	1978-79	97	23.96	302
	1979-80	134	55.16	653
	Total	834	554.34	6,128
ii) During 6th Plan Period	1980-81	122	47.58	689
	1981-82	179	80.98	1,115
	1982-83	222	144.16	1,505
	1983-84	249	173.51	1,506
	1984-85	154	233.92	989
	Total	926	680.05	5,805
iii) During 7th Plan Period	1985-86	231	284.73	1,302
	1986-87	144	572.90	1,156
	1987-88	180	497.72	933
	1988-89	157	740.40	1,031
	1989-90	157	972.14	1.012
	Total	869	3,066.89	5,434
iv) During 8th Plan Period	1990-91	176	987.68	1,082
	1991-92	204	587 17	1,365
	1992-93	212	260 32	977
	Grand Total	3,221	6,133.85	20,791

The growth of SSI units in 1980s shows that there has been no significant change in performance. The growth of the sector whether in terms of the number of industries, or investment or employment has been more or less consistent. Therefore it may be argued that the structural reforms introduced as a part of New-Economic Policy have not affected this sector to a remarkable degree inspite of the fact that most of the manufacturing industries reeled under recession from 1991 onwards due to reforms.

The above situation may be explained due to either of the two reasons : (1) It is strong enough in terms of productivity and quality to withstand competition, (2) It still operates under the protective umbrella of the government. But empirical evidence does not support the first view. Evidence rather suggests that most goo is produced by them are of

poor quality and design. Their productivity is lower as compared to large scale industries because they have failed to exploit the economies of scale. Therefore it is evident that the consistent performance of the SSIs may be attributed to the protective policy measures.

While consistent growth of this sector is welcome, the policy measures under which they operate seem to be unsatisfactory because they tend to provide a motive for small enterprises to stay small. Even if they increase their operations they do so by establishing more small units.

The question now arises whether with the New-Economic Policy the objectives being liberalisation and globalisation of industries, will such protective Policy measures be tenable ? Is it desirable that the Govt. will go on protecting this sector for all time to come.

Considering the pace at which global changes take place and the need for urgency to integrate industry with others along with improvement of quality and productivity, an altogether new policy orientation for SSIs seems essential. The thrust of the Policy should be ancillarisation and gradual growth and this shift should precede the dismantling of protective barriers.

Indeed the New-Industrial Policy for small scale industries announced in 1991 marked a relative shift from the earlier policy statements. The 1991 Policy concentrated on (1) ensuring infrastructure development, timely availability of credit, technology development and modernisation, and (2) promoting complementarity between large and small industrial sectors through sub-contracting exchanges and equity participation in SSIs upto 24% by foreign/domestic large concerns.

This implies that the traditional concept of protection and exclusive treatment for SSIs has to some extent give way to development and complementarity. But the measures that we have taken so far seem to be inadequate to the present need. We have miles to go before we enjoy the fruits of our labour and translate our dreams into action.

The new policy which is essential to boost up the activities in the SSI sector must include the following suggestions.

1. A unit which is progressing should be given preference in the allotment of credit. Particularly the Nayak Committee recommendations which have already been accepted by RBI may be implemented. Some of these recommendations are :

(i) SSI units should be allowed to have Bank finance from more than one Bank.

(ii) The commercial banks are to assess the working capital needs of borrowers on the basis of 20% of the projected turn over with working capital limit upto Rs. 50/- lakhs.

(iii) Rejected applications be referred to higher authorities before they are conveyed to SSI applicants.

2. The investment limit should be raised for small industries which grow consistently over a period of five years. A recent workshop organised by NSIC, CSIR and APCTT has also made similar recommendations to increase the investment in plants and machinery from existing 60 lakhs to 2 crores of rupees.

3. Small Scale entrepreneurs should also be given growth incentives by way of income tax rebates when they are growing.

4. Independent growth of SSI sector should be promoted, in rural areas mainly through non-durable consumer goods industries and the emphasis should be on gradual growth.

5. The Govt. must encourage complementarity between small and large industry, specially through consumer goods and capital goods industries.

6. Ancillarising the SSIs with a view to reducing cost and improving productivity.

7. Preparing comprehensive study reports on successful stories of the SSI units of developed countries and discussing them with small industry Associations.

8. The SSI units should be set up on the basis of economic decisions rather than on political decisions, which make them sick and defunct.

It may be concluded that to exploit full potentialities of the SSI Sector, it must be encouraged to grow the natural way in the new economic environment. Protection may not help in the long-run. Steps should be taken to provide free air to increase the competitive strength of SSIs so that they can live on their own. The sooner the better. Because small is not only beautiful but also provides benefit to the smaller ones.

Bell-Metal Industry of Remuna : A Side-View

Narottam Nanda,
Reader in Economics,
F. M. Evening College,
Balasore

Introduction :

It is not exactly known about the point of time from which bell-metal goods came to be first produced and used. But one thing is sure that with the progress of human civilisation people must have come to know about the uses of individual metallic goods and thereafter about the uses of the mixed metallic goods. The bell-metal manufacturing work started purely as a household cottage industry and continues to remain in that form even to-day since the industry has not adopted the large sclale industry mechanism and we do not find to-day any large scale industry to be producing the goods of this metal. At first the metal was used to make kitchen goods and utensils needed for the purpose of eating food/foods. Thereafter it was used to make idols, big beating and warning bells. Bells with pendulum and beating bells were made to be used in temples and in places of pujas or worshipping of gods and godesses for sanctity in the observance of religious rites. Big pots made of this metal for cooking foods of different varieties needed at the time of making feasts also came to be produced for use. The household goods made of this metal is now being used by both rural and urban families.

One advantage of this metal is that its serapmetals and worn-out goods made of this metal can be easily melted and various types of final saleable goods can be reproduced or produced afresh. This re-making facility helps the people in re-newing their worn-out goods at a lower cost (since the producers take only the making charge.)

Economic importance of the metal :

As from worn-out goods of bell-metal, renewed goods can be made cheaply, theretore the worn-out goods are not thrown away. The metal has also resale value. But this facility is not there in the case of modern-fashioned stainless steel goods. Secondly because its goods have resale

value, these goods can be given as security in times of need for getting loan either in terms of money or in terms of paddy (rice) from the rich neighbours. This was the practice in olden days and is also there at the present time. Naturally goods made of this metal were/are kept secretly or handled personally lest they would be stolen away. Hence both in rich and poor families bell-metal goods constitute a valuable physical asset/ property.

Contents of Bell-metal :

It has been stated that in making bell-metal usually 96% copper and 4% tin are used. In some places bell-metal producing households use 88% copper, 10% tin and 2% zinc. For making bells usually 6% tin, a very small percent of lead and for the rest copper is used (percentages of lead and copper have not been mentioned). For making statues (big and small) sculptors use 80% copper and 20% tin[1]. In the same source it has been stated that at times bell-metal is named as bronze. It mentions that only in Balakati and Kantillo of Puri district and at Remuna of Balasore district bell-metal making industry is found, though to some extent, this work is undertaken at Bhuban of Dhenkanal district and at Belaguntha of Ganjam district.

Findings of field survey made in Remuna :

A field study was made at Remuna on 26-2-95 with the help of three local students in accordance with a questionnaire. In order to get exact answer to the questions, households were directly contacted and names of the family heads were not mentioned and the households surveyed were only serialised. Remuna is situated at a distance of about 8kms to the West of Balasore town and the Village surveyed has only twenty-one households/families doing bell-metal making work. Hence there was no need of using 'sample technique'. Each household was contacted and relevant information was elicited.

General Observations :

All the households are getting the raw-materials (copper and tin) individually from Calcutta. They have not formed co-operatives either for the purchase of raw-materials (in which case, due to bulk purchase, they must have got raw-materials at reasonable rate) or for marketing their goods (in which case, they could have got better prices from distant markets and they would have been relieved of individual sale effort, dependence on the local market and nearby fairs or melas). Had there been co-operative marketing society, their total output could have been sold more and they would not have faced the problem of holding unsold stock.

From the survey it is seen that the value of unsold stock during 1994-95 (Feb. end) of the 21 producing families ranged from Rs. 30,000/- to as high as Rs. 1.8 lakhs leading to unnecessary blocking of capital. Previously these families were producing various types of goods required for the kitchen use and utensils But now they are concentrating on the production of two types of utensils only like goblets (or vessels with medium depth and wider mouth called Kansa for taking soaked rice) and small metal cups with smaller depth and reasonable wide mouth (called tatia for taking curry). This contraction of bell-metal making work has been (it seems to be) primarily due to the availability of similar types of cheap pots and utensils made of aluminium on account of the growth of aluminium industry in recent times. All the families reported to be doing the work with traditional skill for the last so many generations. They have not undergone any training to introduce cheaper production techniques or for producing goods of improved design so that there will be greater attractiveness for the consumers leading to better price and more profit. No household making bell-metal good has used electric furnace to melt the composing metals, not even the household having annual sales turnover of Rs. 5.4 lakhs. All are using the traditional furnace (called Bhati) operated by hand labour (or muscle power) and, for melting metals, use charcoal as the source of power or energy. All the households employ wage-labour except two which means that in these two families bell-metal work is done purely by family labour. None of the households has reported to be engaged in any other side business or trade or agriculture This means that all the households remain engaged in bell-metal work throughout the year and have taken it as the whole time occupation.

Economic Observations :

The total number of 21 households surveyed have been divided on the basis of the range of annual sales turnovers and then the different economic informations have been derived from the answers elicited from the households as have been represented in Tables I and II.

TABLE—I

Numbers of Households	Range of Annual sales Turnover (in lakh Rs.)	Range of per kg production cost (Rs.)	Range of sale price per kg of finished good (Rs.)	Range of profit as % of per kg production cost of finished goods.
1	2	3	4	5
3	4 to 5.4	232 to 240	240 to 250	2.1 to 4.1
6	3 to 3.6	230 to 250	240 to 260	2 to 4.3
8	2 to 2.9	233 to 254	240 to 260	2 to 3
4	0.9 to 1.8	235 to 252	240 to 260	2.1 to 4

TABLE—II

No. of house-holds	Range of proportion of use of copper & tin.	Range of households daily require-ment of copper & tin (Rs.)	Range of daily emp-loyment of hired labourers.	Daily Wage paid to hired labou-rers (Rs.)
1	2	3	4	5
3	72.5% & 27.5% to 78.4% & 21.6%	430 to 460	8 to 30	40
6	72.5% & 27.5% to 78.4% & 21.6%	435 to 470	0 to 20	0 to 40
8	72% & 28% to 78.4% & 21.6%	440 to 500	3 to 15	40
4	71% & 29% to 78.4% & 21.6%	440 to 480	0 to 4	0 to 40

Column 2 in Table-II shows that bell-metals used for making household goods do not adopt a uniform percentage of mixing the two component metals as has been shown in the source quoted above. Naturally the bell-metal goods produced by the families are not of a uniform standard. Most of the families, of course, adopt copper and tin mixure or a combination ratio of 78.4% and 11.6%. Those who adopt lower ratio of mixing the two metals do so for keeping down the production cost in order to survive in the competition with others and deviate from the

standard pattern of mixture or combination of the two composing metals. But this action reduces fineness or polished conditions of the goods, reduces resale value and depreciates the worth as a physical asset. In colmn number 5 of Table-II we find that the employed labourers are paid a uniform rate of wage i.e. Rs. 40/- per day. In Table-I, colmn No. 3 & 4, we find that per kg production cost range and per kg sale price range are almost similar in different categories of families producing bell-metal goods The range of the rate of profit as percentage of production cost as mentioned in colmn No. 5 of Table-I is not uniform partly because the proportion of mixture of composing metals is different and partly because sale price per kg of Kansa and Tatia is some-what different and may have been also partly due to non-inclusion of the value of family labour in the production cost. The reasonable rate of profit ought to have been at least 10% of the production cost. It, therefore, seems that the families have not reported correct sale price and production cost to show that they are just keeping up the industry despite low level of profit.

As figures relating to total capital invested by the total number of families during the year and total Kgs of output of finished goods during the year as well as a rough figure of total number of hired labourers employed by the families during the year (though, of course, per day employment figures are available and from this total employment figure for the year cannot be worked out since for some days in the year production work would have been stopped for one reason or another) have not been collected, it has not been possible to give information about capital-output ratio and capital-employment ratio (to know capital intensive or labour intensive nature of the bell-metal producing work) which may be considered as the important lacunae of this field study.

The prospect of continuance of this industry is there since there is existence of people's taste for bell-metal goods and these goods have asset value. Entertainment of guests by using bell-metal utensils gives more prestige than aluminium utensils in rural areas. Bell-metal goods are considered to be pure to make offerings in them to deities. In Hindu religion, at the dying moment of a person, husked rice is given in bell-metal plates to a Brahmin. Similarly at the time of performing the religious rite of making a gift or Dan, bell-metal goods are given as gift. Hence there is still good prospect of the industry. What is needed is the production of the bell-metal goods in better designs and in a better polished manner.

Reference :

1. Oriya Gyanakosh, Utkal University, 1963, Part Ka to Tha; P.-4.

Technology Transfer in Agro Business for Promoting Small Enterprises : Some Considerations in Indian Context

S. B. Mishra
Director, Institute of
Entrepreneurship Development, Orissa

Technology is an endowment of innovative knowledge. Technology, to be assimilative to the industrial use requires a transformation from theoretical laboratory concepts to adaptable, productive, cost-effective and implantable skills. Indian industries require stabilisation in technology affiliation / use and make ways to adopt to the sophistications. Small and Medium Enterprises (SMEs) of India are family owned, usually, 'closed' type and get quickly infected by obsolescence. Entrepreneurs often oversee the important influences of technology on industry : the product, manufacturing and marketing strategies.

They require to restructure themselves strategically to fruitfully adjust and accommodate the technology leap. Technology creation, generation, acquisition and transfer require a close liasioning with the research laboratories, prototype centres; more so with large industries associated with the product/services rendered through these industries. Technology empowers the business set-up and corporate challenges. SMEs are to indentify the in-built scope to manage the change and timely diversify to perpetuate change. They face the absence of the advantages of economies of scale, vulnerability to growth, remoteness, policy dependence and inaccessibility to capital market. Methods of technology use for these units require to be appropriate, qualitative and profitable. Investments for technology built-up in Indian SMEs are exogenous and do not become effective some-times.

Agriculture is the important industry in India. SMEs can flourish in contributing profusely to Agro-Business sector, Transfers of food production technology through SMEs are to be brought up within the changing social-economic dimensions and the cultural ingredients.

The proposition noted above are put to verification in the empirical studies conducted in three SMEs in different parts of Orissa, manufacturing/propose to manufacture/food items through processing of fruits and vegetables.

I. A B C Corporation : Requires Integrated Technology.

A resource based manufacturing organisation situated in coastal Orissa, about 12 kilometres away from Puri town was conceived in 1988 to process the complete coconut into non-food items : coir products and coconut shell powder; and edible portion : desiccated coconut powder with the collaborative and funding support from National/State level funding/promoting organisation. The unit commenced production in 1989. The process of manufacturing operates in a simple method of shelling coconut and segregation of non-edible from the edible part and processing both the ingredients separately. The unit reflects the following in concern to the technology affiliation and use :

(1) The unit is deficient in assimilating the processing techniques for developing usable food/non-food material from coconut. Manufacturing method precludes processing of coconut water, without any facilities to make this testier portion of the fruit value-added and preservable for use. Further, no devices are incorporated for economic use of the outer kernel of the nut.

(2) Raw coconut being plentily available, local market endowment is absent for purchase of coconut powder. An innovative technology for manufacturing allied food materials using coconut powder is a welcome technology mission for the unit since such food products have a readily available near-by market.

(3) The unit experiences impact of several non-technology parameters reguarly influencing technical feasibility of the project. These are overlooked since the inception. Although this is a resource based unit, established to utilise the locally available raw materials, purchase of raw materials from local market is not encouraged because of the nature of the deals. Payments to the primary farmers are delayed as the payments are made from Head Office, 80 kilometres away, while farmers require immediate payment. Consequently, comparatively lower grade nuts are available for processing, diteriorating the quality of finished products. Tagging arrangements with the primary producers for supplying standard nuts requires strong encouragement from promotors. Whereas, the purchasers are available locally, the non-edible finished products are sold

outside the State, for reasons otherwise at times building an inventory costing the unit heavily.

(4) The Industry does not enjoy process-supervision and quality-audit due to want of required attention of technical personnel. Retention of quality and edible properties of desiccated coconut powder demand an in-situ testing facility incorporated to the manufacturing system.

(5) Techniques used for processing different parts of the nut in segregation make some usable parts redundant. The unit can better benefit from the search, experimentation and the use of an integrated technology concept for processing the whole coconut, possibly making every portion of the nut for economic use.

The unit has capabilities to be developed as an integrated coconut processing complex creating more of employment and market potential. The future is all exciting with an intensive drive for search, identification and induction of an upgraded technical skill to the productive system.

II. Bisheswar : Finding the Technology Niche.

Bisheswar an alumnus of Institute of Entrepreneurship Development, Bhubaneswar started his manufacturing unit a little away from Bhubaneswar to process mushroom, fruits and vegetables. Leaving AMIE course he decided to start a food processing industry keeping in view the marketability of fast-food products. During the course of putting up his unit, he experienced the following start-up encounters :

(1) His perception for starting a unit of spices powded could not be taken up due to want of funding support, as spices powder is treated to be a traditional item.

(2) Then, he changed mind to manufacture pickles, sauce and ketchup and spent Rs. 20,000/- payable to a national level research and consultancy organisation.

(3) Not being satisfied, he went round for further information and visited International Food Festival in 1989. Being encouraged with the interaction and the exhibits in the festival, he finally decided to manufacture dehydrated fruit/vegetable products.

(4) In search of an adoptable technology, at the first instance he identified 'Tray Dryer' technology Subsequently, to his good luck, he found that, the 'Tray Dryer' methodology has not been put to commercial use and in want of user feedback. He further started the search for

alternate techniques adopted in similar industries elsewhere. In phases, he visited Andhra Pradesh, Gujarat, Maharashtra and Kerala to have interface with industries processing fruits and vegetables. On the mission he found one unit in Andhra Pradesh manufacturing dried onion using Bulgaria "Cross flow of hot Air" technology. Later, he found that processing industries in Gujarat, are using, 'Continuous Dryer' technology based on German know-how and mostly drying peas. In addition, knowledge acquired from another Fera company in Western India, Bisheswar took up the decision for dehydrating fruit and vegetable through Blanching and sulphitation in "Hot Air Drying" method.

(5) An intermediate technology basing on Bulgarian know-how was finally chosen by him without opting for a much costly Bulgarian/ German technology.

To depict the present status, the unit has already obtained the machines. Of course, apprehensive as he is, the use of unexperimented/ uncommercialised technology runs the risk of stress on the machinery and the quality of the product.

III. Suryaprasad : Augury of Technology Use.

Suryaprasad, a post graduate in political science, being unqualified in the national level job search, proposed to a cashew processing unit near Berhampur, a coastal town of Southern Orissa.The experiences encountered by him in transforming the technology to his industry are —

(1) Initially, the entrepreneur made a technology search and obtained counselling support from a national level organisation. The financial institutions did not evince interest for funding fully automated processing technology suggested for the processing of cashewnut, even with good export potential.

(2) While making the search on, he visited several places to find a semi-mechanised technology, since fully automatic processing method is costly and the labour availability was very good in the location of the unit. He decided to use semi-mechanised intermediary technology learning from his visit to many units in Andhra Pradesh and Kerala, processing cashewnut.

(3) Using intermediary semi-mechanised technology, he has already started the pilot production. Roasting of nuts is done mechanically, but cutting is semi-mechanised. Standardisation and grading are done fu ly manually taking a good deal of running time.

(4) Packaging, levelling and branding are done manually. There is no possibility of technology assimilation in the present system for the use of upper kernel and producing nut-shell oil.

Although the product is yet to sustain market-shock, Suryaprasad has been successful in technology search and use, even though the time taken is as high as more than three years. Now, the unit is running successfully and has already explored a definite future market.

Above empirical expositions on technology availability,. search, induction and use in industries, may not generalise the environment of technology transfer in Indian SMEs. But, this study is deliberate to elicit the contextual clarity and capability of the minds of the first generation Indian entrepreneurs/executives on the way they cope up, adjust and become relevantly successful in adopting technology to manufacturing actions in food industry.

OSFC Financing Small Scale Industries : A Case Study of Puri District

Sarbeswar Sahoo
D. B. College, Bahadajhola

Introduction :

So far as generation of employment and capital mobilisation are concerned small scale industries in Orissa contribute a lot to the economic development of the state by utilising its natural resources. "By the end of 1990-91, 38116 small scale industries were active in the state with a total investment of Rs. 498.26 crores and employment potential of 2.81 lakh persons.[1]

But the growth and development of small scale industries (SSI) in Orissa have been prevented due to operation of certain internal and external factors such as (i) want of satisfactory marketing of products, (ii) faulty site selection, (iii) paucity of equity capital, (iv) obsolescent machinery and other equipments, (v) non-availability of cheap raw materials and power, and (vi) burden of excise & import duty etc.

On the numerous problems faced by SSI units, finance constitutes the main ingredient in the entire gamut of the growth and expansion of SSI units. Here comes the role and importance of financing institutions like Orissa State Financial Corporation to meet the financial requirements for small scale industries.

The Orissa State Financial Corporation (OSFC) was established on 20 March, 1956 within the framework of SFCs Act, but it started functioning from 1957-58. It is now the pioneer financial institution for industrial financing whose main objective is to provide medium and long term credit for small and medium scale industries. It extends term loan upto a maximum of Rs. 60.00 lakhs for acquiring fixed assets in small scale sector.

Objectives :

The present paper makes an attempt to highlight the following two issues : (i) To assess the financing of the small scale sector by OSFC

in undivided Puri district and (ii) To evaluate the operation, organisation and performance of SSI units assisted by OSFC.

Hypotheses :

Based on the above objectives two hypotheses are to be tested in evaluating the effects of OSFC in financing SSI units. First, to analyse whether the success of a unit is related to volume of finance and second, to consider whether the units financed are deserving cases.

Period of Study :

The study is related to a limited period of five years i.e. from 1988-89 to 1992-93.

Methodology :

In order to evaluate the performance of OSFC in the district, its Bhubaneswar-II branch has been chosen for field study. Forty (40) SSI units of this branch have been selected at random. The data base includes the data collected from Annual Reports of OSFC from 1988-89 to 1992-93.

TABLE—1

Sanction, Disbursement & Recovery of Term loans. (Rs. in Lakhs)

Year	Sanction		Disbursement		Recovery
	No. of units	Amt.	No. of units	Amt.	
1988-89	321	1858.76	156	1381.53	1042.08
	(17.89)	(27.90)	(24.37)	(23.53)	(22.43)
1989-90	419	1601.01	134	1255.29	900.59
	(27.43)	(27.42)	(21.23)	(22.36)	(22 86)
1990-91	180	860.53	96	1087.90	1066.43
	(15.42)	(17.31)	(13.24)	(21.89)	(25·65)
1991-92	117	774.18	105	917.63	1151.02
	(11.22)	(15.66)	(10.78)	(18.06)	(21.31)
1992-93	135	1081.11	114	1291.98	1627.95
	(15.71)	(19.60)	(14.32)	(26.21)	(25.24)
Since	5271	12393.91	3858	11951.80	—
Inception	(13.49)	(20.32)	(18.72)	(21.25)	—

Figures in the Parenthesis indicate perentage sanctioned, disbursed to total.

Source : Annual Report of OSFC.

Financing the small scale sector by OSFC :

The Corporation has three branches in the undivided Puri district out of which, in Bhubaneswar there are two branches viz. Bhubaneswar-I and Bhubaneswar-II at IDCO tower and the other one is at Puri. Besides there is a Regional office at IDCO tower to control and supervise the branch offices and a Zonal office at Nayagarh to act as recovery cell for Nayagarh subdivision. Table-1 depicts the sanction, disbursement and recovery of term loans made to SSI sector in the district by OSFC.

The table shows that there has been great deal of variation in sanction, disbursement and recovery of loans in different years. Since inception, 5271 units have been sanctioned loans to the extent of more than Rs. 12,000 lakhs whereas disbursement has been made to 3858 units amounting to less than Rs. 12,000 lakhs only.

II

Findings :

Nature of Production :

The assisted units are primarily engaged in the production of goods of diverse nature. The products mainly centre round the manufacturing, transport and service sector. The units selected for our sample come to 40.

Time Schedule for OSFC Finance :

The OSFC, through Bhubaneswar-II branch has financed the SSI units at different periods. It is found that the entrepreneurs take time to comply with necessary documents for loan sanction, hence it is felt that, the year in which loan was sanctioned, denotes the year of establishments. It is found that out of 40, 31 units were sanctioned loans between 1981 to 90. Only 6 units were sanctioned loans between 1970 to 1980 and only 3 between 1991-92 and 92-93.

Quantum of Finance :

The Corporation provides finance of varying amounts depending upon the nature of projects and financial integrity of entrepreneurs. It is seen that 27 units ie. 67.5 per cent availed a very meagre amount of loans ranging from Rs. 45,000 to Rs. 5.00 lakhs. This indicates that the Corporation is not prepared to provide adequate finance to entrepreneurs. Hence, the Corporation's finance appears to be inadequate for growth and expansion of SSI units.

Working Capital :

Since Working Capital is one of the important items of any project, Commercial Banks are expected to play a vital role in this field. Out of 40 cases in the study, 4 cases belonging to SRTO sector were not in need of any working capital and 12 cases were deprived of any loan. Only 24 cases availed of a meagre amount. Details of loans show that only 11 units availed of working capital ranging from Rs. 20,000 to Rs. 60,000 and 7 units received working capital to the extent of Rs. 1 lakh to Rs. 5 lakhs. This shows that commercial banks did not provide adequate working capital to SSI units.

Equity Capital :

The entrepreneurs of Orissa are generally poor. They are not in a position to initiate big projects because they subscribe a meagre amount of equity capital. Of the 40 units, 21 entrepreneurs could contribute equity capital amounting to Rs. 10,000 to Rs. 1 lakh and 13 units contributed between Rs. 1 lakh to 5 lakhs.

Performance :

The success of units financed by OSFC can be determined from two angles(i)Profit and (ii) Repayment of loan.

It appears that only 13 units are in a position to earn profit. One in press sector and another in oil industry sector are making no profit or loss. About 75 per cent of units under SRTO are making profit due to increasing demand for passenger and goods carrier. Again small units with less capital investment like Rice ane Chuda Mill, Tyre Resoling Service are in a comparatively better position. The rest 25 units were incurring losses. Noted among them are Power Loom sector, Oil industries, Engineering sector, Hotels, Electronics and Rubber industries.

Repayment of Loan :

In regard to repayment of loan, it is found that only 14 units are regularly repaying loan as well as interest component. SRTO units are regularly repaying the loan. An Oil industry which is gaining marginal profit makes token payment to the Corporation. The Rainbow Offset Private Ltd. was awarded the ODYSSEY AWARD—92 as the Organisation made a satisfactory repayment. Hence it is found that units which are making profits regularly repay the loans. Another 22 units pay only interest components.

It is true that the success of a unit is not always correlated with quantum of capital invetment, rather a large number of factors govern it like managerial ability, skill, technical knowledge, market and infrastructure. But inadequacy of finance curtails the business of a unit.

Suggestions :

1. The Corporation should provide adequate finance in proper time for development of SSI sector.
2. There should be provision of adequate and timely working capital through Single Window scheme by OSFC.
3. The Corporation should not be liberal for the delinquent and defaulting entrepreneurs. But for the genuine and weak entrepreneurs having necessary skill and zeal, the Corporation should develop a friendly and sympathetic approach.
4. The Corporation should develop tie-up arrangement with Govt., semi govt. Organisations and other institutions for marketing of their products.
5. The Corporation should guide, supervise the assisted units for their progress.

Notes :

1. 35th Annual Reports of OSFC p–8
2. 33rd Annual Reports of OSFC p–5

References :

Annual Reports of OSFC from 1988-89 to 1992-93.

Acknowledgement :

I am grateful to Sri B. P. Das, Reader in Economics, Ravenshaw College, Cuttack for his guidance in preparing this paper.

Small Scale Industries on the Ladder of Orissa's Economy

Dhananjaya Pattanaik
Reader in Economics

In view of colossal poverty and wide spread unemployment, it is necessary to emphasise the development of small scale industries in Orissa. Since 1979-80 to 1991-92, there has been a lot of improvement in small scale industries like increase in number, size of investment and employment generation. However these improvements have not reduced regional imbalance nor sectoral concentration. There is concentration of small scale industries in Puri, Cuttack, Sundargarh, Dhenkanal and Sambalpur. Other districts do not have such privileges. The Small Scale Industries Corporation of course provides some assistance in respect of supply of raw materials and provision of market facilities. However, this has not changed the over-all scenario. Large number of small industries are sick in the state. Therefore, there is need for a more realistic policy to improve the rural economy through the development of agriculture and small scale Industry with appropriate technology. This requires improvement in organisation and effective implementation of Govt. policy to make small scale industries more viable in all parts of Orissa.

Public Policies and Development of Small Scale Industries in Orissa—A Case Study

Saroja K. Kanungo
Deptt. of Economics,
Dhenkanal College

Introduction :

Planning in India aims at development which emphasises industrialisation as it increases faster growth compared to agriculture due to greater scope for internal and external economies in industries. It is also learnt from the economic history that most of the advanced countries of the world have given greater importance to industrialisation for increasing the pace of development. Hence, in India, promotion and growth of industries have been accepted as a strategy to bring about radical transformation in the economic structure of the country. Industrialisation depends upon the growth of both large and small scale industries.

In a capital scarce and labour abundant country like ours, wedded to the twin objectives of growth and social justice, small industry naturally plays a vital role in resolving the chronic problems of poverty, inequality, unemployment and underemployment. It provides scope for achieving the advantages of modern technology and at the same time preserving the merits of traditional technology in a judicious manner so that the prospect of dualistic development is avoided during the period of transition.[1] If properly encouraged and developed it can make even a greater contribution to the net national income of the country. Great emphasis has been given in nineties to the production by masses at it helps decentralisation and is compatible to the laws of ecology. Hence, the call is, "Small is beautiful". As regards investment and employment, the net contribution of a rupee of fixed capital in small scale industry comes to Rs. 0.96 as against only Rs. 0.41 in large scale industries.[2] A project in S S.I. with an investment of Rs. 10 lakhs provides employment to 173 persons, while the same amount of employment in large scale sector requires an investment of Rs. 53.1 lakhs.[3]

The small scale industries occupy a position of unique importance in our economy. In 1980-81, the estimated value of production of small scale industries was Rs. 28,060 crores which were about 49 per cent of the

1. Erish, Kalchetty, "Management of Finance in Small Scale Industries," Vorah Publishers and Distributors, Allahabad, 1989, p-5.
2. Naniudan, S. et al; "Economic Research for Small Industry Development," Asia Publishing House, Bombay, 1962, p-9.
3. The Economic Times, 16th July, 1986.

total industrial production. This has increased to an estimated value of Rs. 1,31,400 crores in 1992. The number of S.S.I. units from 16000 in 1950 has gone up to 17 million in 1992. They now employ about 14.3 million workers as against 8.26 millions in large scale industries and S.S.I. units are responsible for 30% of our export earnings.

In view of the above facts, the Government of India have been providing sufficient incentives to S.S.I. units and making provisions to strengthen them. Incentives are being provided in respect of allocation of raw materials, credit finance, technical assistance, industrial estates and tax exemptions.

Hence, the efficiency of the public policies to make the S.S.I. units viable needs detailed examination.

Here, the objectives of this paper is to study the following aspects.

(i) What are the provisions made by Government of Orissa to strengthen the small scale industries within the broad outline of Government of India.

(ii) How far have they made the S.S.I. units Viable.

(iii) What is the extent of contribution of public policies for the growth of S.S.I. units in Orissa.

Industrial Policy of Govt. of Orissa :

Government of Orissa since 1980 have been formulating Industrial Policy Resolutions to improve industrialisation in the state of Orissa. The Government of Orissa have been providing incentives to the entrepreneurs to set up the industrial units. Different organisations like DIC, IPICOL, IDC, IDCOL, ORITCO and OSFC are working in the state to provide industrial, technical and financial assistance to the small scale industries and make provision of industrial sheds. Subsidies on investment, technical assistance, pollution control, interest for special class entrepreneurs are given by the state to S.S.I. units. Exemption of sales tax, octroi tax, electricity duty and stamp duty on registration is allowed. Single window service, preparation of project and feasible reports are provided and nodal committees and special committees are constituted to review the projects and give suggestions.

Impact of Industrial Promotion in Orissa :

The industrial promotion policies adopted in Orissa since 1980 with amendments in 1986, 1989 and 1992 have influenced the expansion of industries in terms of numbers and output to a great extent. The announcement of the Chief Minister to establish 1000 industries in 1000 days with 1000 crores of rupees investment has initiated the process of industrialisation. This can be observed from Table No. 1.

Table—1

Year	No. of S.S.I. units established	Total Capital invested in lakhs	Employment generated in Thousands
1984-85	3202	3,572.27	24,003
1985-86	3482	4,540.10	23,424
1986-87	2513	4,506.81	16,977
1987-88	2292	4,266.79	14,828
1988-89	2096	4,909.28	13,917
1989-90	2047	5,155.56	14,095
1990-91	2249	6,099.85	15,657

(Compiled from Economic Survey of Orissa from 1988-89 to 1991-92.)

Table-1 reflects the number of industries established (registered) with capital investment in lakhs of rupees and employment generated in thousands. On analysis of the table, it is found that the compound rate of growth of industries is at the rate of 27.8 percent while the rate of growth of capital investment and employment are at the rate of 9 per cent and 3 per cent respectively.

For the sake of comparison, the compound growth rate of industries reported (in operation) are examined. The results indicate that the compound growth rate of small scale industries is 37.3% and value added increases by 11.6% with capital growth rate of 1.6% while employment decreased by 3%.

Capital deficiency stands as a hindrance for employment generation as growth rate of capital is not commensurate with growth rate of S. S. I. Units.

In order to examine the impact of subsidies on the viability of the S. S. I. units, the researcher has taken up a case study of "Paradeep Oxygen", a profit making organisation in Jagatpur Industrial Estate. The data pertaining to subsidy received, employment generated, income and profit earned are collected from primary sources. (Informations are given in the Table-2).

The impact of subsidy on production, employment and profit has been estimated by resorting to a simple regression analysis taking the subsidy as the independent variable (represented by x) and the employment, production measured through income and profit (represented by Y_1, Y_2 and Y_3 respectively) as the dependent variables. Three regression equations have been fitted (One for each component). The results of the regression analysis are presented here.

$Y = a + bx.$

Where a is the constant b = regression co-efficient (b_{yx})

Equation – (i) $Y_1 = 7.0820 + (-) 7.5544.x$

('t' = – 0.65)

$R^2 = 0.0446$

Equation – (ii) $Y_2 = 8.5897 + (-) 6.3074\ x$

('t' = – 1.72)

$R^2 = 0.2476$

Equation – (iii) $Y_3 = 6.2409 + (-) 2.4174\ x$

('t' = – 2.76)

$R^2 = 0.4590.$

The analysis of the regression co-efficient reveals that the subsidy has an insignificant impact on employment, production (income) and profit. Hence, it may be assumed that some other factors not within the purview of the study operate along with the subsidy to make the firm viable.

Of course, the study has the limitation that the joint impact could not be calculated by following the multiple regression model as all the S. S. I. units in Jagatpur Industrial Estate could not be studied due to time and finance constraints.

Table–2 representing subsidy, employment, income, and profit of 'Paradeep Oxygen'. (In Lakh Rupees)

Year	Subsidy	Employment	Income	Profit
1983–84	16.16	24	13.11	(–) 16.23
1984–85	1.18	29	54.38	7.00
1985–86	1.90	26	55.93	6.36
1986–87	1.47	31	67.20	13.83
1987–88	1.59	36	66.86	8.17
1988–89	2.87	39	50.54	1.92
1989–90	4.36	48	67.31	2.78
1990–91	4.72	55	69.26	7.64
1991–92	4.04	53	98.65	18.37
1992–93	4.11	53	120.87	22.17
1993–94	1 96	50	130.62	28.47

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1981	O.U.A T., Bhubaneswar	Prof. D. Mohapatra
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1986	Banki College, Banki	Prof. B. C. Parida
1987	Kendrapara College, Kendrapara	Dr. Benudhar Bhuyan
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