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ORISSA ECONOMICS
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Editor :

Prof. Baidyanath Misra

17, Saheed Nagar
Bhubaneswar



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ASSOCIATION**

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AN OBITUARY OF RETROSPECTIVE DEVELOPMENT

The last 50 years can be called the age of development with the changes in connotation of the meaning of development. In the beginning development consisted simply of growth in the income per person in economically underdeveloped countries. W. Arthur Lewis proposed this concept in the year 1944 which was embodied in the United Nations Charter in 1947. Paul Baron who was a leftist economist also corroborated Lewis' analysis in 1957 by pointing out that development is the increase in the per capita production of material goods. Walter Rostow in his 'non-communist manifesto' (1960) more or less assumed the same concept even though both Paul Baron & Rostow dealt with a lot more of other things in their analysis of the subject.

But in the sixties along with quantitative change in the rate of growth of percapita income, qualitative aspects of change assumed a new dimension. The Economic and Social Council of the United Nations (ECOSOC) in 1962 emphasised that development is growth plus change, change implies social and cultural as well as economic, both qualitative as well as quantitative, including improvement in quality of people's life. Another ECOSOC resolution, in 1966, recognised the interdependence of economic and social factors and the need for harmonising economic and social planning. Thus while the first decade (i. e., 50s) considered the social & economic aspects of development separately, the second decade (i.e. 60s) involved merging the two. The seventies again widened the connotation of development. In 1974 the Declaration of Cocoyoc emphasised that the purpose of development 'should not be to develop things, but to develop man'. 'Any process of growth', it added, 'that does not lead to the fulfilment of basic needs—or, even worse, disrupts them—is a travesty of the idea of development'. The Declaration also emphasised the need for diversity and 'for pursuing many different roads to development', as well as the goal of self-reliance and the requirement of 'fundamental economic, social and political changes'.

Then comes Human Development Report which emphasises human resource development in the process of expanding education, health care and other conditions of human life which includes 'improvement in the purchasing power of money'. W.

developing countries which can illustrate the importance of human capital facilitating economic development. One is the case of Japan and East Asian countries. Japan's economic development was clearly much helped by the human resource development related to social opportunities that were generated. East Asian miracle was, to a great extent, based on similar causal connections. On the other hand, the social backwardness of India, with its elitist concentration on higher education and massive negligence of school education, and its substantial neglect of basic health care, left India poorly prepared for a widely shared economic expansion.

Now Amartya Sen in his book, 'Development As Freedom' has widened the concept of human development by including 'freedom' as the primary end and as the principal means of development. According to him development consists of the removal of various types of unfreedoms that leave people with little choice and little opportunity of exercising their reasoned agency. The removal of substantial unfreedoms is, according to him, constitutive of development. Because empirical evidence strongly suggests that economic growth is more a matter of a friendlier economic climate than of a harsher political system. And the instrumental freedoms that he analyses are (1) political freedoms, (2) economic facilities, (3) social opportunities, (4) transparency guarantees, and (5) protective security. These instrumental freedoms not only increase the capability of human being to increase the pace of development, but also improve the quality of life.

In the context of the pattern of development which we have analysed above, the evaporation of some of its attributes is so great that we are tempted to think that the time is ripe to write its obituary. What has happened to the development of the economy from the point of view of improvement in the standard of living of the people? In spite of the fact that the developed countries are threatening the very existence of the planet by increasing the production of different commodities through extensive use of resources, they have not eliminated islands of poverty. Even in the U.S.A., the richest country of the world about 30 millions of its citizens live below the poverty line. In Brazil which has made tremendous improvement in recent years, five out of its 15 million inhabitants live in extreme poverty, earning less than 65 dollars a month. And the economic conditions of developing countries are still more deplorable. India which has made huge investment in economic development for more than fifty years has not been able to

rural areas or in slums of urban areas. Nearly half of the people in India live on less than a dollar per day. Illiteracy, malnutrition, infant mortality, misery and desperation are too familiar in developing countries. The fact that development either leaves behind, or in some ways even creates, large areas of poverty, stagnation, marginality and actual exclusion from social and economic progress is too obvious and too urgent to be overlooked (United Nations). Development promises improvement of economic opportunities for the distant future, but what it does now, after more than 50 years, is devastating inequity, marginalisation of vast majority of people in poor countries.

When we come to the difference between developed & developing countries, it is found that the gap is widening. In 1960, the northern countries were 20 times richer than the southern countries. In 1980, the gap increased to forty six times. And the gap is bound to increase mainly for three reasons. First, it is not correct to say that the world is a collection of separate national economies, as depicted by World Bank, but a single economic system in which wealth is transferred from poor to rich countries. In fact, the wealth of the rich countries to a great extent is maintained by poor countries. The world economic system generates inequality and it runs on inequality. Second, as Ruskin has said, the art of making yourself rich is equally and necessarily the art of keeping your neighbour poor. Therefore the question of catching up with the rich through economic activity is a notion that goes against common sense and economic science. Third, it follows from the second that in the race for development, the rich countries will always move faster than the rest, for they have greater facility to apply advanced technology which may result in continuous degradation of the only planet which is so far habitable. Because they are the world champions in competitive obsolescence.

Another danger which looms large in the horizon is ecological disaster. With the fruits of economic development remaining considerably uneven, we now consume in one year what it took the earth a million years to store up. Some of the developed countries may feel elated that they are running ahead of other countries, but their progress in industrialisation and economic development is leading towards an abyss. A challenge which has emerged in the western industrial development model (which is generally called fossil-fuel based, automobile-centred throw-away economy), though increased income, material consumption, level of living and physical mobility to an unprecedented level, cannot sustain for long this kind of development. The environment

system. Take the case of increased consumption. Industrial development through technological change has increased consumption of several renewable and non-renewable resources destroying environmental support system and carrying capacity of the earth. For example, in 1900, only a few thousand barrels of oil were used daily. By 1997, that figure had reached 72 million barrels per day. There is also a vast increase in the use of materials, including growth in the use of metals from 20 million tons annually to 1.2 billion tons. Production of plastics largely unheard of in 1990 reached 131 million tons in 1995. The human economy now draws on all 92 naturally occurring elements in periodic chart, compared with just 20 in 1990. If the developing countries follow the western model, five or six planets would be needed to serve as mines and waste dumps. How can one believe in such development when future holds more threats rather than promises?

Again, globalisation which has taken a new orientation in the process of economic change has created greater distress for the common man. The World Investment Report, 1999 admits that because of its technology intensity and competitive behaviour, it cannot generate larger number of jobs and thus would create insecurity and aggravate poverty for bulk of the labour force. In fact, according to the World Employment Report 1998-99, ILO, nearly one billion people, one-third of the world's labour force remain unemployed or underemployed. The actual number of jobless people reached 150 million in 1998. In addition 25-30% of the world's workers—between 750-900 million—were underemployed, working substantially less than full time or earning less than living wage. The World Labour Report, 2000 candidly admits, benefits are not reaching enough people. In many countries increased global competition has led to loss of jobs or flexible employment arrangement that are often less secure and provide fewer social benefits than regular jobs.

The World Economic Outlook, May 2000 (released by IMF), while reflecting on poverty and globalisation comes to a sordid conclusion. It says, "Per capita incomes have been regressing in absolute terms in a large number of countries during the past 20-30 years. As a result, the world is entering the 21st century with the largest divergence ever recorded between the rich and the poor. The widening income gaps within many countries and the gulf between the most affluent and most impoverished nations are, in the words of the then Managing Director of the IMF, "Morally outrageous, economically wasteful and potentially

(2000) has mentioned that "Our three-way fast lane of liberalisation, privatisation and globalisation must provide safe pedestrian crossing for the unempowered India, so that it too can move towards equality of status and opportunity".

Thus we see that the rush towards industrialisation not only causes ecological stress—degradation of soil, water regimes, atmosphere and forests, and as the Brundtland Report concludes, upon our economic prospects, but endangers global ecosystem. Infinite growth is based on self-delusion, because the world is a closed space, finite and of limited carrying capacity. The UN Conference on the Human Environment held at Stockholm in June 1972 has shown that no country is a self-contained unit, but contingent on actions taken by others. Pollution caused by industrial development in one country casts its shadow on other countries. Industrial wastes escape national sovereignty, they don't show up at customs posts or travel with passports. Further the competitive spirit to imitate the western model on the part of others has created new islands of poverty. The old system has been smashed, the new system has not become viable. The campaign to turn traditional man into modern man has failed (Sachs). In most developing countries, neither the production of economic resources and commodities, nor the extension of social services have ultimately served the poor. More often than not, they have resulted in further diminishing their capacity to meet their real needs which they used to do in the context of their livelihood which is a way of life under constant erosion by the forces of modern economy (Majid Rahnema).

We cannot overlook the fact that indiscriminate & unbalanced development very often either leaves behind, or in some ways even creates large areas of poverty, stagnation, marginality and actual exclusion from social and economic progress of a vast majority of people. We therefore suggest for the establishment of a unified approach to development and planning, which would fully integrate the economic and social components in the formulation of policies and programmes. As suggested by United Nations Research Institute for Social Development (UNRISD) 1980, this would have the following components :

- (i) To have no sector of the population outside the scope of change and development;
- (ii) To effect structural change which favours national development and to activate all sectors of the population to participate in the development process;

- (iii) To aim at social equality, including the achievement of an equitable distribution of income and wealth in the nation;
- (iv) To give high priority to the development of human potentials ... the provision of employment opportunities and meeting the needs of children.

All these may not create terrible affluence, but surely ensure sustainable development and improved quality of people's life. As Aristotle says, the greatest crimes are committed not for the sake of necessities, but for the sake of superfluities. We have come to a stage when we can think of a society based on the joys of 'more being' rather than the obsession of 'more having'.

Baidyanath Misra

The 32nd Annual Conference, 2000

Secretary's Report

Dr. Rabi N. Patra

Secretary,
Orissa Economics Association

Mr. President Professor Das, Esteemed Chief Guest of the function and Vice-Chancellor of Sambalpur University Prof. Nayak, Revered Guest of Honour Prof. Misra, Respected Former Presidents of the Orissa Economics Association, Chairperson Local Organising Committee and Principal of the College Professor Gope, Chairman Reception Committee and R.D.C., Northern Division Mr. Padhy, Local Secretary Mr. Mishra, Office Bearers of the Local Organising Committee of the Conference, Distinguished Guests, Invitees, Members of the Press and Media, Fellow Delegates, Ladies and Gentlemen.

As the Secretary, Orissa Economics Association I feel privileged in welcoming you to the 32nd Annual Conference of the Orissa Economics Association.

The Orissa Economics Association was formed in 1968 with late lamented Professor Sadasiv Misra, one-time President of the Indian Economic Association (1971) as its President and Professor Baidyanath Misra, as the Secretary. The Association was established with the objectives of discussing contemporary economic issues relating to the country in general and the State of Orissa in particular through organising Annual Conferences and arranging Seminars and Symposia; taking steps to improve upon the methods and the standard of teaching in Economics in different Colleges and Universities of the State and promoting an ethos for research in the subject. The Association has the unique distinction of being one of the oldest registered regional academic associations in the country with a total membership of 288 of which 3 are Institutional Life Members, 253 are Individual Life Members and 32 are Annual Members.

The Orissa Economics Association is the only forum in the State in which economists, administrators, planners and statesmen debate and deliberate upon important economic problems of contemporary interest. Since its inception, it has been a platform for the exchange of views and

Annual Conference regularly. It sustains the healthy convention of discussing two categories of topics in the Conference—one in the national perspective and the other with reference to the State of Orissa. Delegates in the ensuing Conference will deliberate on :

1. Child Labour in India.
- and 2. Financing Development in Orissa : Problem & Prospects.

Besides these two topics, the participants will also focus in the deliberations on "Teaching of Economics in Orissa : Issues & Solutions." Since 1987, the Association has been organising an endowment lecture in the Annual Conference in the memory of Bhubaneswar Mangaraj, an illustrious teacher of Banki. Each year, the lecture is delivered by one of the former Presidents of the Association at the venue of the Conference. This year's Mangaraj Memorial Lecture session is devoted to a symposium on "Long Term Planning for Disaster Management". The topic has special relevance for the State of Orissa in view of the high frequency of natural calamities and the rehabilitation problem it faces in the aftermath of the last year's Super-Cyclone.

The Orissa Economics Association has been publishing its mouth piece—The Orissa Economic Journal—regularly right from the year of its inception. The original research papers of the members containing expert views and measures of recommendations to overcome the intricate economic problems, as discussed in the Conference, are published in this Journal. Till 1982-83 each volume of the Journal was brought out in two separate numbers. It has not been possible to sustain the endeavour due to paucity of funds. From 1983-84 onwards, two numbers are combined into one and published once a year. The Journal finds its place of pride in reputed libraries in the country and has been a great source of information to researchers.

The Orissa Economics Association is facing serious financial constraints. High prices, diversified activities and rising printing cost of the Journal have contributed to the soaring operational expenses. The expenditure in organising Annual Conferences has escalated very fast. Fund raising from different sources is gradually becoming difficult. Since all the expenses in organising the Annual Conference are borne by the host institution, invitation for hosting the Conference has virtually ceased. This Conference has literally been thrust upon the Government Women's College, Sambalpur. In view of financial stringency, the Association finds it very difficult to organise Seminars, Symposia and

Government should provide for some huge lump sum corpus grants so that the Association can get involved more deeply in the State economy, suggest remedial measures to alleviate the economic ills and show appropriate routes to the successful implementation of public policies.

I take this opportunity to express our deep sense of gratitude to our Chief Guest for having kindly accepted our invitation despite his busy schedule to inaugurate the Conference. Our special thanks are due to our revered teacher on the dias Professor Baidyanath Mishra for his coming over here to grace the occasion as the Honoured Guest and for his timely guidance in managing different activities of the association. We are greatly indebted to the Principal, Members of the staff and Employees of the Women's College, Sambalpur and more particularly to all Office Bearers of the Local Organising Committee for the great pain they have taken to host the Conference at a short notice & ensure its grand success. We are very much grateful to the R. D. C., Northern Division and Chairman, Reception Committee for his efforts in organising this Conference. I am extremely grateful to all the former Presidents & Secretaries of the Association, the Members of the Executive Body and specially to the Conference President Professor Das for their co-operation and help. The student volunteers of the College deserve all words of commendation for their deep seated involvement in looking to the various arrangements of the conference as well as to the comfort of the delegates & Guests. No thanks are adequate for my teacher Prof. B. P. Dash & B. K. Mohanty for their precious guidance and brotherly supervision in the activities of the association.

My thanks are due to M/S Das & Associates, Chartered Accountants, Cuttack for having audited the Accounts of the Association for 1998-99 free of cost. I am thankful to the proprietor & Staff of Nabajivan Press, Cuttack for having completed the printing of the journal in time. I really owe a great deal to the dignitaries, academicians, invitees, guests, delegates, paper writers and funding agencies for their help in making this conference a grand success & to you all ladies & gentlemen & members of the Press Media for having given me a patient hearing.

With fraternal regards,

**The 32nd Annual Conference, 2000
Presidential Address**

WTO and India

Satya P. Das

Indian Statistical Institute—
Delhi Centre

I take this opportunity to thank my colleagues here for electing me as the President of the Orissa Economics Association for the current year. I consider it a great privilege and I was very happy to share some of the responsibilities that have come with it. In return I have received a lot—in particular, a paper without having to go through the grinding process of being referred, which typically faces the prospect of 90% rejection rate, needs revising, re-revising and so on. This does not mean that I am taking it lightly. What it means is that I am taking the liberty of presenting a policy paper—as opposed to a research paper. The topic is : World Trade Organization and India. I have worked on the theory of international trade for most part of my academic career so far. Hence it is only natural that I have chosen a trade-related topic and an issue that is close to my heart as an Indian. The potential audience that I target is not just the distinguished group of economics professionals here but also students, policy makers and general public—because the hands of WTO are reaching us and would continue to reach us in major ways for decades to come. Better we understand it, better off we are.

Let us begin by noting that WTO is not a brother or cousin of WHO (World Health Organization). It is not even related to the United Nations in *any* way. And what many people also don't know is that it is going to affect our lives much more than UN has or will. It is however a world body like UN in the sense that there is a formal membership. To be a new member requires approval by the general body of WTO with at least two-third majority and membership also requires WTO ratification by the main legislative body of the country (e.g. Indian Parliament, US Congress and Senate). China is not a member yet but close to becoming one. The most important difference in comparison to the UN internal structure is that there is no security-council counterpart in it with veto power. One country has just one vote. This does not mean that all countries have equal "power", as smaller countries are likely to

be influenced by larger trading and political partners. But it is less autocratic in terms of veto power than the security-council in the UN.

WTO was born on January 1, 1995 and is a fast-growing organism. It has a six-fold objectives : implement agreements reached, act as a forum for future negotiations, monitor trade policies of member countries, cooperate with other related international bodies, settle disputes and lastly provide technical assistance to less developing countries so as to help them make WTO-compliant and effectively take part in the dispute settlement process.

It had an 8-year 'pregnancy period' so-to-speak, from 1986 to 1994, which was called the Uruguay Round negotiations. And this was under the auspices of GATT—General Agreement of Tariffs and Trade. It is of interest to trace the history of GATT. It came into existence in 1948 with the objective of formulating a set of codes of conduct with respect to international trade and fostering freer trade in general. India and China among many others were signatories. Soon after in 1949, China, under the leadership of Mao Tse Tung, pulled out of GATT. But India and most other countries stayed with it. It was called an "Agreement" because it wasn't a "legal" body, in that the agreement was not ratified by national legislative bodies (mainly because US Senate failed to ratify it). The MFN principle was the central code of conduct : if a given country charges an exporting country 20% duty for importing some products, it cannot charge some other exporting country a duty rate higher than 20% for the same product; there may be exceptions however. With regard to freer international trade, prior to the Uruguay Round, there were altogether seven rounds of talks :

1st Round : Geneva, Switzerland, 1947

2nd Round : Annecy, France, 1949

3rd Round : Torquay, England, 1951

4th Round : Geneva, Switzerland, 1956

5th Round : The Dillon Round, 1960-61

6th Round : The Kennedy Round, 1964-67

7th Round : The Tokyo Round, 1973-79.

The two most prominent and comprehensive ones are the Kennedy Round and the Tokyo Round. In all these rounds, only the developed countries were the active participants. Developing countries were passive and often viewed these negotiations with suspicion. The

first six rounds concentrated almost entirely on tariff reductions and on industrial goods. It is also noteworthy that in the Kennedy Round an anti-dumping agreement was signed. By the end of the Tokyo Round implementation period, industrial tariffs in developed countries had come down to an average of 4.7%. During this round, non-tariff barriers (NTBs)—such as quantity restrictions, government customs, valuation and technical barriers to trade (TBT)—were vigorously discussed, but no agreement was signed. Indeed, as tariffs were coming down in the early 80s because of GATT commitments there was increasing use of NTBs.¹

1. GATT-WTO Agreements :

Uruguay Round talks, most ambitious of all, after considerable effort to converge on agenda items, began at Punta del Este, Uruguay in 1986. It was originally scheduled for 4 years but took 7½ years to conclude. To me it is a 9th or 10th wonder of the world—how so many countries, large and small, could converge on so many agreements !

1.1. Original Agenda and the List of agreements :

There were 15 subjects in the original Uruguay Round agenda :

1. Tariffs
2. NTBs
3. GATT articles
4. The GATT system
5. Tokyo Round Codes
6. Anti-dumping
7. Subsidies
8. Intellectual Property
9. Dispute Settlement
10. Services
11. Investment Measures
12. Agriculture
13. Textiles and Clothing
14. Tropical products
15. Natural resource products.

In the end, 16 agreements were signed, an impressive achievement. Three more have been signed since. So we have 19 in total.

¹ This led John Chipman, a well-known trade theorist to speculate a law conservation of trade barriers.

1. Agreement on quota, tariff bounds and tariff cuts
(no name of it per se)
2. "The Agreement on Agricultural Commitments"
3. "The Agreement on Application of Sanitary & Phytosanitary Measure"
4. "The Agreement on Textiles and Clothing" (ATC)
5. "General Agreement on Trade in Services" (GATS)
6. "The Agreement on the Implementation of Article VI of GATT 1994"
7. "Agreement on Subsidies and Countervailing Measures"
8. "The Agreement on Safeguards"
9. "The Agreement on Import Licensing Procedures"
10. "The Agreement on Technical Barriers to Trade" (TBT)
11. "The Agreement on Pre-shipment Inspection"
12. "The Agreement on Rules of Origin"
13. "The Agreement on Trade-Related Investment Measures" (TRIMs)
14. "Trade Policy Review Mechanism"
15. "Understanding on Rules and Procedures Governing the Settlement of Disputes".
16. "The Agreement on Trade-Related Intellectual Property Rights".
17. "Information Technology Agreement" (ITA) (1998)
18. "Basic Telecommunication Service Agreement" (1998)
19. "The Financial Services Agreement" (1998).

Four Categories :

Surely it is the most ambitious multilateral "treaty" ever signed in world history. All these agreements can be broadly divided into four categories : those covering (a) goods, (b) services, (c) intellectual property and (d) disputes. Respectively, these are called GATT, GATS, TRIPS and Dispute settlement. GATT and GATS are not entirely new; but liberalizations obtained were much deeper than ever before. Compared to earlier round talks, many more goods, especially many more services, have come under the jurisdiction of WTO. GATT and GATS agreements also included *market access commitments* by each country; the list of these commitments runs over 22,500 pages. The basic underlying principle underlying GATT and GATS is MFN or nondiscrimination, except when countries from regional treaties (e.g. free trade areas or FTAs and customs unions). These exceptions are obviously an anomaly in the system and create inconsistency.

More Agreements :

Apart from the four categories, there were two other categories of "pluralist" agreements in that they were signed by a subset of members : namely, on government procurement and civil aircraft.

In what follows, I attempt to capture some highlights of various agreements and in particular, India's obligations to comply with them.

1.2. GATT

Quantity Restrictions :

Previously import quotas were being used extensively by developing countries following import substitution policies for protective purpose and on the ground of balance of payments difficulties. Developed countries (DCs) were using VERs (voluntary export restraints) and OMAs (orderly market arrangements). All these are illegal now, even in the agricultural sectors. DCs had four years to phase them out (i.e. by the end of 1998). LDCs (less developed countries) and LTDCs (least developed countries) were granted a longer adjustment period.

Tariffs :

Countries have made commitments to cut and bind tariff rates. Table-1 shows the % of product lines under bound tariffs before and (immediately) after WTO. Tariff rates were committed to be zero by developed countries by the end of 1997 for certain goods like the information technology products.

TABLE-1 : % of Product lines with bound tariff rates.

	Before WTO	After WTO
DCs	78	99
LDCs	28	73

Agriculture Goods :

These goods which used to be highly protected by tariffs and NTBs are now all "tarifficated", i.e., there are no quantity restrictions any more. Furthermore, the tariffs are "bound". Also, domestic support programs are now heavily curtailed. DCs would reduce these by 20% by the end of 2000. LDCs would reduce it by 13% by the end of 2004. LTDCs are exempted. (This should serve a lesson to some of us that there is no more anything called a "purely domestic policy"). Those support programs that have minimal direct effect like R & D subsidies, disease control and food security can be used freely however; these are called *green box* measures.

Direct export subsidies are prohibited unless these subsidies are mentioned in the country's list of commitments. When they are listed, there are also restrictions on the magnitude of subsidy that can be given.

There is a separate agreement on food safety and animal and plant health standards. Countries can set their own standards but they have to base on widely-recognised scientific procedures.

Textiles

From 1974 to 1994, trade in textiles in the world economy was guided by the infamous MFA (Multifibre Arrangement). This had provided options for consuming countries to erect and maintain quality restrictions. It was particularly unfavorable to LDCs as these countries had—and still have—comparative advantage in textiles. MFA is dissolved by now through the Agreement on Textiles and Clothing—the only agreement in WTO that spells self-destruction.

There is of course a transition period, which is 10 years. There are four stages. Every stage some categories of textile and clothing products are brought under GATT. Once they are under GATT, QRs cannot be applied.

Anti-Dumping (AD)

While binding tariffs are the norm, WTO provides that countries can levy higher tariffs under certain conditions, & if so, only temporarily. One of the situations is where some exporting country may be dumping its products. Dumping may result because an exporting firm may be charging 'too low' a price to get rid of its excess output or just to exercise price discrimination, or because it is being subsidized by its government. Antidumping measures relate to the former situation, while countervailing duties (to be discussed) may apply in the later situation. The anti-dumping provisions in the WTO follow the practice in the U. S.

There are 3 alternative ways to establish that dumping has taken place. (a) The price charged in the importing country is less than in the exporting country. (b) If price data in the exporting country are not available, then prices charged in other markets may also be taken as the reference price. If dumping is proven to have occurred via either (a) or (b), it is called *price dumping*. Alternatively, (c) it would suffice to show that price charged in the domestic market is less than some reasonable estimate of marginal cost of production. This is called *marginal-cost dumping*.

Just the evidence that an exporting country is dumping its product cannot 'buy' antidumping duties. It has to be shown additionally that (a)

material injury (in terms of employment, profits, market share etc.) to the industry during dumping period has taken place and (b) the injury is partly due to dumping, not just because of some other extraneous factors or own mistakes by the industry itself.

Subsidies & Countervailing Duties (CVD)

As said earlier, these duties may apply if the exporting country is subsidizing its exports. WTO categorizes subsidies into three types :

- (a) *Prohibited subsidies* : those subsidies that directly increase the volume exported (e. g. to meet some export targets) or reduce imports (e. g. subsidies to buy import-competing domestic products as component or raw materials) are banned. Just by serving notice to WTO (and confirmation by experts that such subsidies are present) would compel the exporting countries to withdraw them. Of course, if injury has taken place, an importing country can levy CVD. LTDCs with less than \$ 1000 per capita income are exempt. Other LDCs are given up to 2003.
- (b) *Actionable subsidies* : These refer to other forms of subsidy that adversely affect competing firms. The competing firms may be from the importing country or other exporting countries operating in a given importing country or other exporting countries operating in the domestic market of the subsidizing country. Unlike in prohibited-subsidies case, material injury has to be demonstrated.
- (c) *Non-actionable subsidies*: There are 3 types: Those for industrial research, subsidies to export units located in underdeveloped, disadvantaged regions and those needed to comply with stricter environmental laws*. Normally these cannot be challenged in WTO, but there are strict codes of conduct for granting such subsidies.

Safeguards

Through AD-CVD, a country may impose tariffs or increase tariffs dependent on "unfair" pricing policy by exporting firms or subsidies by exporting countries. 'Safeguard' defines another set of circumstances in which temporary protection can be granted. This is when the importing country acknowledges that its domestic industry has

* Attempting to comply with new environmental law would allow subsidies up to 20% of production costs.

suffered because of stiffer competition and there is no foul or unfair play involved and it needs some time for the domestic industry to revamp its technology, management etc. so as to 'get on its feet.'

There is a strict time limit for this, which is called the *sunset clause*. There is some 'reverseprotection' for a developing country: if it is supplying no more than 3% of a DC's imports, the latter cannot initiate safeguard protection from the LDC.

Technical Barriers to Trade (TBT)

The most sensitive part here is that countries can set their own standards with respect to protection of environment and health of humans and animal. TBT stipulates however (though somewhat vaguely) that the norms should be fair and nondiscriminatory and shouldn't bestow unfair advantages to domestic producers. Setting of labour and environmental standards falls into this category, but there are no—at least not yet—any separate agreement on trade and labour standards or trade and environment.

But there are separate agreements on the following.

Import Licensing

The objective is to make the licensing procedure transparent and predictable. The agreement stipulates that the countries publish sufficient information to traders as to how licenses are granted. If there are changes in rules, WTO should be notified immediately.

Pre-shipment Inspection :

This can be a source of harassment by importing countries to exporters and potentially an instrument of protection. WTO has guidelines to streamline these procedures. The aim is to avoid discrimination and disclosure of sensitive business information and to ensure transparency.

Rules of origin :

It stipulates uniform rules of origin for customs valuation. But there are special rules (rather anomalies) with respect to countries that have formed ITAs.

Foreign Direct Investment (FDI)

This comes under TRIMs agreement (Trade-Related Investment Measures). TRIMs attempt to abolish list of FDI policies that directly hampers trade in goods, e. g.,

- * Local content requirements (in terms of labour and/or intermediates)
- * Trading balancing requirements (imports be a certain % of exports)
- * Foreign exchange balancing requirement (availability of foreign exchange for imports be a certain percentage of foreign exchange generated by the firm)
- * Manufacturing requirements (certain % products be manufactured locally)
- * Export performance requirement (a given % of production be exported)

Developed countries had two years (the end of 1996) to eliminate these. Developing countries (including India) have had five years (the end of 1999) and the least developed countries have seven years (the end of 2001). (The incidence of TRIMs is believed to be high in India, besides Brazil and Indonesia.)

The next set of policy initiatives on FDI came during the second Ministerial Meeting of WTO held in Singapore in 1996. It decided to establish three working groups mandated to undertake on "educative work" on three areas, one of which is the relationship between trade and investment.[†] The report of the working group was submitted in December 1998.

1.3. GATS

Four modes of supply of service are defined :

- * Cross-border supply (e. g. import of a building plan from a foreign supplier by fax)
- * Consumption abroad (e. g. tourism)
- * Commercial presence (e. g. banking) Here FDI figures in
- * Movement of natural persons (e. g. temporary international movement of software professionals)

MFN is the guiding principle. That means an importer (of a service) cannot discriminate between different exporting countries. National treatment, meaning whether foreign companies get the same

[†]The other two are trade and competition policy and trade and government procurement policy.

treatment as do domestic companies, is another issue. Under GATS, national treatment is accorded to foreign companies if the importing country has made a specific commitment. In this sense trade in-services is not yet as free as trading in goods under GATT.

However, irrespective of whether any commitment is made, all countries have to follow rules ensuring transparency. For example, by the end of 1997, all countries must have set up inquiry points and the information must be supplied to WTO, so that other countries can use them to find out regulations within any particular sector. If there are changes, the concerned country has to notify WTO as soon as possible. It is in the built-in WTO agenda that further negotiations on GATS will resume in 2000.

In addition to the commitment that a comprehensive negotiation on service would commence in 2000, it was agreed in the Uruguay Round talks that in three areas in services, further negotiation would be continued, namely, in telecommunications, financial services, maritime transport and movement of natural persons.

Telecommunications and financial-services talks ended in 1997 and new national commitments took effect from 1998 (see below). Talks on maritime failed and it was decided that this be tabled till the 2000 talks.*

The Financial Services Agreement (FSA)

The negotiations on financial services concluded successfully, after 70 WTO Members reached an agreement to open their financial services sectors. In a comprehensive manner, it brings trade in this sector—worth trillions of dollars—under WTO's umbrella. The agreement covers more than 95% of trade in banking, insurance, securities and financial information.

In all, 56 governments, counting the European Communities as one and including India, made fresh commitments on market access. Altogether now, there are 102 signatories GATS.

Basic Telecommunications Services Agreement :

It was signed by 69 countries, who made market-opening commitments. The telecommunications activity is viewed in two ways:

*Movement of natural persons meant temporary stay of persons till the service is over, not permanent employment or residence. Talks petered out yielding very minor gains.

as a mode of providing service and as a sector in the overall economy of a country. The agreement recognises that the private sector—not public sector—will be the principal provider of this service. This is significant because in many countries the government has been the main provider and for a long time there was general reluctance even among many developed countries to permit foreign companies to operate in this sector. For the developing countries, it reflects a realisation of how important this sector is in their growth process. Commitments are phased differently for different countries. There was understandably some tension between countries that had already liberalised, who would demand for more liberalisation by others than they were willing to provide. Besides using WTO's general dispute settlement procedures, there is an optimal protocol for this sector in a very limited way.

A "reference paper" was designed, which the countries committed to adopt in general. It lay down rules on safeguards, licensing, use of radio spectrum and accounting methods for rate settlements in international tele-communicating.

1.5. TRIPs

It covered agreements on intellectual property rights issues like copyright, trade marks, product and process patents, layout designs (altogether 7).

Previously there were two existing international agreements covering intellectual property rights in limited areas. One is Paris convention of protection of industrial property (patents, designs etc). The other is Berne convention for protection of literary and artistic works. The TRIPs agreement is much more comprehensive. It stipulates, for example, that computer programs will have protection as literary works as per Berne Convention.

More particularly, patent life should be at least 20 years. In order to prevent a patent owner to abuse power, the government can issue "compulsory license" to other competitors if the inventors fail to give licenses. TRIPs agreement also mentions about enforcement. It states that penalties should be imposed quickly and be tough. Developed countries had one year to modify/introduce laws so as to comply with TRIPs. Developing countries had five years (till December 31, 1999) and LTDCs 11 years. Developing countries have up to 10 years in some product areas to introduce product patents. But pharmaceutical and agricultural chemical products are exceptions.

First, they have to provide a "mail box" facility; secondly, during the transition period the firms must be given exclusive market rights.

1.6 Pluralist Agreements

There were four agreements in the areas of government procurement policies, trade in civil aircraft, dairy products and bovine meat. The last two became null and void in 1997 after the signatories agreed that the products were adequately covered under Agriculture and Sanitary and Phytosanitary agreements. The Agreement on civil aircraft has been signed by 24 countries. It calls for exemption on import duties on different components on civilian aircraft. The most prominent one is government procurement. Although there are 25 countries who are signatories, it is receiving increasing importance by WTO. The second ministerial meeting in Singapore in 1996 mandated the constitution of a study group on this. It is likely that a multilateral agreement of some sort on this will be reached in the near future.

Government procurement policies have two components: government purchases and float of tenders including construction services. The underlying principle is national treatment—foreign suppliers or contractors should enjoy the same privileges as do domestic parties.

1.6 Electronic Commerce

A declaration was adopted at the Second Ministerial Conference of the WTO in Geneva in May 1998 in recognition of the fact that global electronic commerce is growing and creating new opportunities for trade. It launched a work program on the subject in the WTO for making recommendations to the next ministerial conference of the WTO due in late 1999. The Declaration clearly stated that the work program would take into account the development needs of developing countries.

The declaration provides for a stand-still on customs duties imposed on electron transmissions so that the benefits of growth in this new area are equitably distributed, thus strengthening trade flows of all member countries.

1.7 Dispute Settlement

This is undoubtedly the single most important individual accomplishment of the Uruguay Round talks. There were dispute settlement procedures in the GATT system, but no fixed timetables. Under WTO there are fixed time tables.

In the event a country lodges a formal complaint against another member country, there is a Dispute Settlement Body of WTO which appoints a panel. Panelists are chosen in consultation with the countries in dispute. (Only if the sides cannot agree, WTO director general appoints them. This is a rare event) Usually there are three members in the panel, occasionally five. Panelists are chosen from a permanent list or from elsewhere. They serve in their *individual capacity*, they cannot receive instructions from any government.

As said earlier, the dispute settlement process is time-bound. Table 2 lists of time sequence of events.

Table 2i: Time Table of the Dispute Settlement Process

60 days	Consultation, mediation after a country raises a complaint
Next 45 days	Panels set up and Panelists appointed
Next 6 months (3 if urgent)	Final panel report to parties
3 weeks	Panel report to WTO members
60 days	DSP adopts the report if there is no appeal
Total=1 yr	Without appeal
60-90 days	Appeals report
30 days	DSP adopts appeals report
Total=1 yr. 3 months	

Note that there may request for consultations before filing a complaint.

After a verdict is reached, there is a "reasonable period" in which the "guilty" party would have to correct its policy and/or pay compensation. The length of the period is determined in one of three ways: (a) some member of the DSP proposes and DSB agrees, (b) parties in dispute agree or (c) it is set by an arbiter. If corrective action is not taken within the stipulated period, DSP within 30 days after the reasonable period can move for imposition of sanctions. This is where some weaknesses of the system show up. The sanctions granted okay by WTO so far have been bilateral in nature. If country *x* is the guilty party vis-a-vis country *y* and country *x* does not comply with the verdict, then country *y* can impose bilateral trade restrictions against country *x*. This is obviously biased against small countries.

Dispute Settlement Activity :

Here are the particulars as of December 31, 1999.

Number of Total Complaints/Consulation requests under DSU : 144/182

- * From Developed Countries : 105/135 (moreover, in the 105 complaints, the number of developed countries as respondent is 110 and that of developing countries is 55)
- * From Less Developed Countries : 32/36
- * From DC/LDC countries (joint) : 4/10

Status of Complaints

- * Appellate and Panel Reports Adopted : 27
- * Settled or inactive : 31
- * Pending Consultation : 64
- * Active Panels : 21

Thus we see that the more than half of the litigations are among developed countries themselves, not between developed and developing countries.

Bias Against Developing Countries :

There are still a number of disputes between DCs and LDCs. One of the major concerns of LDCs about dispute settlement at WTO is that there is probably an in-built bias against them and the process will be only an instrument in the hands of DCs to 'legalise' unfair judgments against the former. Existing evidence however does not support this hypothesis (rather suspicion). Out of 27 cases in which panel reports have been adopted, 14 involved disputes between developed and developing countries : 6 in favor of DCs, 7 in favor of LDCs and 1 draw. These cases are outlined in Table-3. There is one implementation problem dragging till now: Ecuador, Guatamala, Honduras, Mexico (and U.S.) against EC—EC is creating problem.

Table 3 : Developed Versus Developing Countries in the Dispute Settlement Process

<i>In favor of Developed countries</i>	<i>In favor of Developing Countries</i>
1. US against India on QRs	1. Brazil against Canada on export subsidy
2. Canada against Brazil on export financing	2. S. Korea against U.S. on DRAMS
3. EC against S. Korea on alcoholic beverages	3. India, Malaysia, Pakistan and Thailand against U.S. on shrimp*
4. EC and US against India on patent protection	4. Ecuador, Guatemala, Honduras, Mexico & US against EC on banana
5. Japan, EC and US against Indonesia on its new auto policy	5. India against US on woolen products
6. US against Argentina on footwear, textiles etc.	6. Costa Rica against U.S. on cotton, fibres etc.
	7. Brazil and Venezuela against U.S. on conventional gasoline.

Barzil's complaint against EC on poultry products : they decided to agree mutually.

Besides completed cases, there are a number of cases that were "settled" or have been "inactive". In this category, there are 10 'DCs versus LDCs' cases (by not counting complaints by other countries than EC and US against India and Pakistan on patent protection and by counting cases by Thailand and Uruguay against EC as one). Out of this pool, 6 (respectively 4) are in favour of developed (respectively developing) countries. Hence the overall picture should be heartening to developing countries. Of course, there are costs of litigation, which would be more taxing to a developing country than to a developed country; but in terms of verdicts, there does not seem to be any bias in either way.

2. Fulfillment of India's WTO Commitments

2.1. Quantity Restrictions

The Article 11 calls for general elimination of quantitative restrictions (QRs) on imports, and imports may be controlled only through tariffs. There can be exceptions however on grounds of safe-

* US had contended that catching shrimps in nets without turtle excluder devices breaches international fair trade rules and environmental concerns and had banned in 1996 shrimp imports from these countries.

guarding external financial position. Any country—developed or developing—can avail of QRs for this purpose. In addition, developing countries, can also be entitled to use QRs for balance of payment problems. Article 13 : B says that countries in an earlier stage of development may “apply quantitative restrictions for *Balance of Payments Position*...(and)...shall be free to deviate *temporarily*”. More specifically they can be erected to stop the decline in reserves and can be kept until a reasonable increase in reserves is achieved. A member wishing to use QRs on balance of payments grounds must publicly announce a timetable for removal of QRs and periodically consult with the Committee on Balance of Payments. India has invoked this option.

Initially, India presented a case for 9 interim years before all QRs be removed (starting from 1997). It was subsequently reduced to 7 years. Even a 7- year phase-out period was not acceptable to developed countries. The US, EC, Canada, Australia, New Zealand and Switzerland (with Japan seeking third party status in the dispute) initiated disputed settlement proceedings against India. Since then India has reached an agreement with all countries except the US, and accordingly, India has entered into a phase-out program of 6 years starting from 1997.

So far, India has moved over 8,000 items (at the 8 or 10 digit level) from the Restricted List to the OGL (Open General Licence) list. This leaves only 667 items in the restricted list.*

2.2. Tariffs

The WTO report on India states that the country's average tariff rates dropped to 35% in 1997-98 from 71% in 1993-94. But tariff escalation remains high in industries like paper and paper products, printing and publishing, wood and wood products, food, beverages and tobacco.

2.3. Agriculture

Under the Uruguay Round, India did not make any commitments regarding market access or reduction of subsidies and tariffs (under the pretext of balance of payments difficulties). It committed only to bind tariffs which it has done at 100% for primary products, 150% for processed products and 300% for edible oils. However, over time, there may be pressures to provide some market access as well as lower tariff bindings.

* See the website of Ministry of Commerce, EXIM Policy, for the entire list of items.

India has expressed concerns regarding Food Security and safeguarding rural employment, for which we need some flexibility under the provisions for domestic support. We are also questioning the extremely high subsidies and tariff walls even now being maintained by the developed countries, although they are committed to reduction of both under the Uruguay Round. India is seeking better market access for agricultural products in the developed countries. Broadly, India's approach to the Agreement on Agriculture is that the needs of developing countries should be spelt out more clearly and definitively.

2.4. GATS

Preparatory work in this regard has already been initiated. Movement of natural persons (for supply of manpower services to industrialised countries) is of special importance to us as India enjoys comparative advantage in this area covering a whole range of services from computer and related services to hotel, health, engineering, construction and other professional services. India's position has been that the opening up of capital intensive services such as banking, telecommunications etc., must be matched by increased access for the temporary movement of our skilled and professional people in services of export interest to us. However, no significant commitment has been made by developed countries on the issue of movement of natural persons.

2.5. Export Subsidies and Incentives

The reforms in tariff and NTBs have not been accompanied by similar reforms to export subsidies and incentives. India continues to maintain a large number of incentive programs for exports, which, according to the authorities, are intended to compensate for import restrictions.

2.6. Implementation issues and India

For some time, India has been articulating the view that special and differential provision of WTO Agreement for developing countries should be more clearly defined and implemented fully by the developed countries, so that the full benefits of the multilateral trading system accrue to the developing countries. For creating a consensus, a symposium of G-15 Group was also held in New Delhi in December 1998. Specific examples have been cited by India to show that intentions of the negotiators have not been translated into practice: In respect to the Agreement on Textiles and Clothing (ATC), while the provisions have

been implemented in letter, meaningful market access has not accrued to the developing countries. Another example relates to the use of QRs by developing countries on balance of payments and foreign reserve considerations.

An important and very legitimate concern is with respect to the repeated use of anti-dumping measures by developed countries—which are being indiscriminate y against developing countries. In some cases, as soon as one anti-dumping is over, another is initiated. India has made a sensible proposal that this cannot be done and a one-year waiting period must be allowed unless 75% of the import-competing industry members sign that they support the move for a repeated investigation.

India also has concerns about the implementation of the Agreement on Technical Barriers to Trade for taking into account the special needs of developing countries. The most legitimate one seems to be regarding the choice of the environmental and labour standards. Academic research shows that as long as countries are heterogeneous in terms of technologies or endowments, global efficiency—taking into account the externality cost of environmental deterioration or poor labour standards—does imply diversity—not unity—in standards [e.g. Bhagwati and Srinivasan (1996), Brown, Deardorff and Stern (1996) and Das (1999)]. Thus the developing countries are justified in using lower standards until the technologies at their disposal improve.*

2.7. Information Technology Agreement

India was among the participants of the ITA-I and India's schedule of reduction in tariffs up to the year 2001 has been accepted by consensus by the other participants. In all, India bound 217 tariff lines at the six digit level : 95 tariff lines by 2003, 2 tariff lines by 2004 and the balance 116 lines in the year 2005. India also participated in the ITA-II talks during 1998. The proposals under ITA-II were examined with the concerned departments in consultation with the industry. India has reservations regarding coverage under ITA-II of certain

* Other implementation issues highlighted by India are discriminatory treatments for developing countries with regard to counter-vailing duty, food security and dispute settlement provisions, unilateral trade restrictions which are inconsistent with their WTO obligations (e.g. Super 301 by the U.S.), regional agreements, imbalances in the TRIPs agreement, rules of origin, technology transfer in trade and environment, electronic commerce etc.

products which are of strategic and defense importance and certain items which are of dual use or multi-use, as also regarding non-Information technology consumer products.

2.8 E-Commerce

India participated in the Special Session of the WTO General Council in September 1998 and is taking active part in the work program on E-Commerce which is going on in the TRIPs Council, the Committee on GATS and the Committee on Trade and Development of the WTO,

2.9 TRIPs and India

In 1996, US charged that India was not keeping up its commitment towards TRIP measures as in Articles 70.8 and 70.9 of the TRIPs agreement. More specifically, it claimed that India had failed to (a) establish a mechanism to preserve the novelty of applications for pharmaceutical and agricultural products during the TRIPs transition period, (b) comply with its transparency obligations for mechanisms to file patents and (c) establish a system that granted exclusive marketing rights. It requested the panel to suggest that India implement its obligations just like Pakistan had under bilateral agreements with the United States. Broadly, the US (and the EU also) wanted India to grant product and process patents and establish a "mailbox" where patent applications can be received while India changes its laws to bring them up to speed with the WTO's TRIPs. (Critics say the "mailbox" strikes at the ten-year period of transition granted to developing countries, as it imposes an immediacy on their commitments.)

A 3-member panel was appointed. It ruled that India had not complied with its obligations. On an appeal made by India, the matter was considered by the Appellate Body of the WTO which also recommended in 1997 that India take the necessary steps to comply with its obligations. It was subsequently determined that this be done by 19 April 1999.

In order to comply with these rulings, a Bill, namely, Patents (Amendment) Bill 1998 was passed by the Rajya Sabha in December 1998, but the Bill could not come up for consideration in the Lok Sabha. Meanwhile, in order to fulfil its obligations, the government promulgated an Ordinance—the Patents (Amendment) Ordinance, 1999—in January 1999. Finally, in March 1999 the Parliament approved a patent regime in compliance with WTO requirements.

The new regime establishes a mailbox system and exclusive marketing rights. More generally, the 1970 Patents Act is amended to include both product and process patents. Only process patents are available in food, pharmaceuticals and chemicals. There is not yet any provision on iterations of products—meaning that a company could replicate a product with minor manufacturing variations.

Out of 7 categories recognised in TRIPs, India provides for laws in four areas (copy rights, patents, trade marks and industrial designs) and is required to develop laws in the remaining categories (geographical indications, lay-out designs of integrated circuits and undisclosed information including trade secrets). The duration of patents in India is 14 years in all sectors except food and pharmaceuticals where it is only seven years. The Act also provides for compulsory licensing.

While granting many intellectual property rights, the government also retains its ability to intervene in the public interest. These safeguards relate to price fixation, compulsory licensing, security-related knowledge and the Indian systems of medicine. India, as a developing country, has a transition period of 5 years i.e. till January 2000 to apply the provisions of the TRIPs agreement. An additional transition period of 5 years i.e., till January 1, 2005 is also available for extending product patent protection to areas of technology not protected namely, food, pharmaceuticals and chemicals.

3. India's Stance Thus Far

There are some who, after the failure of the Seattle Ministerial Conference in December 1999, curiously believe that WTO is dead. Such a belief is only a day-dream. In fact, talks among developed countries have already resumed and apparently some understanding has already reached to the effect that their aim is to push for an "inclusive" agenda (as opposed to a comprehensive agenda). It probably means that some items that were scheduled for Seattle Meetings are now taken out but most of them stay and will only be pursued with more vigor and care. It is therefore of utmost importance to a particular country to chalk out a policy plan of its own. In order to discuss this for India, we should first know the existing official position.

Prior to the Seattle Ministerial, nearly 200 proposal papers were submitted by various countries on various issues to the General Council of WTO. Out of them, India has submitted about 16 papers (all are available at the internet sites of WTO and Commerce Ministry of India),

from which it is straightforward to summarize India's views. Unfortunately, barring a few, it is overwhelmingly negative in two ways.

First, there is an insistence to preserve quantitative and other restrictions for the sake of so-called "developmental needs" (in our long tradition of command and planning that only kept our economy crawling for nearly half a century). For example, there is an appeal to the General council that the transition period for keeping QRs be continued beyond 2003 for balance of payments reasons (in the overall scheme of development and growth). Such a proposal will only (and should) find deaf ears because the foreign reserves position of India has been good. Moreover, even if we had a problem, the least-cost policy would be an exchange rate manipulation rather than the maintenance of QRs which would either cost consumers a great deal (in case of final goods) or industry (in case of critical raw materials). Another example is India's appeal that TRIMs (expired on 31 December 1999), such as domestic content requirements, export requirements etc. by foreign firms in India, be permitted indefinitely—again for developmental needs. According to our official document "domestic content is an extremely useful and necessary tool from the point of view of developing countries". It is hard to understand the rationale behind it. Theoretical research shows that TRIMs can be welfare improving only under some distortionary situations, especially in the presence of trade distortions. But trade distortions themselves are in the process of being dismantled. Hence the economic basis for TRIMs is very weak (Rodrik, 1987) and (Yu and Chao, 1998).

Second, again as a continuation of the old-mindset, India appeals for discriminatory favors ("Special and Differential Treatment") as a developing country. For example, it is asking for a *de minimis* dumping margin waiver in AD and CVD litigations initiated by developed countries and "abolition of export subsidies except as a special and differential provision for developing countries". We boast ourselves as the 9th or 10th largest industrial economy in the world. India's basic problem has been that it hopes to become a DC. It is a LDC, but in fora like WTO it behaves like an LTDC. Needless to say, these differential treatments abroad and those at home (in terms of protective trade measures) have been the source of why Indian industry in general has lacked dynamism and product-quality improvements.

On the positive side, India has raised some legitimate concerns such as the indiscriminate and too frequent use of AD and CVD

measures by developed countries—which are clearly intended to harass exporters from developing countries. India has proposed for example that if one AD litigation is over, another one from the same industry should not be entertained with one year of time unless it is supported by 70% of domestic suppliers. India also rightly calls for regulation of unilateral measures (e. g. America's 301) so as not to conflict with WTO's multilateral laws

Moreover, at Seattle there was a concerted move by developed countries to introduce some "social clauses" linked to international trade such as child labour. There were also environmentalists clamoring for harmonization of standards across countries. India deserves laurel for strongly opposing and mobilizing developing countries to counter such pressures. The very principle of free trade in goods rides on the premises of global efficiency. However, the same principle, does not imply harmonization of labor standards or environmental standard across countries even if the social cost of child labor or pollution is duly taken into account [Brown, Deardorff and Stern (1996), Bhagwati and Srinivasan (1996) and Das (1999)].

Overall however, India's stance has been from passive to quite negative, even compared to our official proclamation of "minimal agenda" just prior to the Seattle Ministerial.

4. A More Active Liberalisation Policy Initiative is Needed

I am sure there are still die-hard protectionists in the country to whom national sovereignty—however misguided it may be—carries a weight of infinity and economic costs to the nation are almost always miniscule and who believe that being member of WTO is a mistake. Given their way, they wouldn't mind to drag the country backwards by another half century. We all should realize that withdrawing from WTO system is easy but getting back to it is extremely difficult. There are four steps in getting a membership: first introduce our economy and our policies to WTO (which is easy), second (the most difficult part) *work out individually with each member country what we have to offer*, third, prepare a draft of membership terms, and, fourth, manage to obtain 2/3rd support in the general WTO body. The Chinese experience should be a lesson for all those who even remotely entertain the idea that we should pull out. Unlike what many seem to believe, it is China who is running after WTO, not the vice versa. Although it is very close to obtaining the membership back, it has been working

hard at it for the last 13 years (since 1986). It is only in February 2000 that China and India signed the agreement in which India has no objection for China to join WTO.*

* The reason for such delay is that China is a major exporting and importing country whose membership would affect all major economies in the world, while its economy has a very complex mixture of market and command features. Many countries have been wary about transparency and predictability of China's policy. On the other hand, it took some time for China to understand that the WTO set-up is very different and it is not possible to bulldoze one's way as in the UN for example. Important concessions and liberalizations have been committed by China. Unlike in the past, its import and export rules have become transparent. In 1996 it allowed convertibility of currency for the current account transactions. Foreign companies are permitted to repatriate their profits with minimal restrictions. The role of state trading companies has been substantially reduced. Very importantly, it has agreed to honor intellectual property rights. (This means that pirated softwares like Windows 98, Office 2000 etc. would be less available in Palika bazar in New Delhi). Moreover, it has fully participated in the three agreements signed after the Uruguay Round and is willing to go along with them : namely ITA, BTSA and FSA.

China has already made some significant announcements regarding market-opening measures in the high-tech sector. *In the field of telecommunications*, the government announced plans to break up China Telecom, the mammoth state-owned carrier that controls around 95% of the domestic telecom market. The government also recently gave the green-light to a new telecom venture in Shanghai that gives AT&T Corp. an equity stake in a local operator—the first time any foreign company has been allowed to take an active stake in a local operator—and announced a back-track on plans to kill roll out of cellular networks, based on the US-developed CDMA (code division multiple access). *In the field of information property*, the government also signed an agreement to stamp out widespread software piracy within the Chinese government. China needs to make such concessions because its admission to the WTO is dependent on approval of current members, including the United States. The US government has said it will lift its objection on Chinese membership only when China agrees to open up key markets.

True, the WTO system has its own problems. Obviously, the balance in its internal power structure is tilted toward the developed countries. US, EU and Japan are the biggest three. China will be fourth largest, after it joins. In the dispute settlement process for example, if one of these countries decides not to abide by adverse decision towards it, the other party can at best take some retaliatory measure, but this may not mean much to a powerful economy. But such a situation has not occurred yet and if it does, it would be an exception rather than a rule. No system is perfect. In every multilateral system, the powerful will always work certain things out to their advantage. But it is the fairest and the most equitable system that the world has witnessed so far—far ahead of the internal structure and provisions of The United Nations. It is better to work with it than without.

Moreover, just staying in WTO is not enough. India should be more forthcoming and go far beyond its 'minimal agenda' toward WTO. It is still very much in our official mindset that if developed countries ask for x number of transition years to liberalise some sectors of the economy, we should ask for $x+y$ years. Seeking discretionary favours as a developing country—very much like asking for foreign aid—will only keep us as 'developing' without being able to graduate to the next plateau. Getting concessions from WTO should not be our end in itself (which seems to be the case now).

It is realised at the official level now that liberalisation is the way to go. This is good. But what is not good is that we still wish to do it with our own pace and with a lot of discretion. It is to our own benefit that we discard, to a large extent, the element of discretion in policy making and actively lend support to a regime of more international rules, because we have had long, half-century old history of misusing discretion.

The discretionary import protection measure, in the name of infant industry protection, 'national interest' etc. have yielded heavy welfare losses. There are no comprehensive numbers available for a wide range of sectors and for many different years. But elsewhere [Das (2000)], I have done it for a few sectors in the post liberalisation era. Some of the results are reported in Table 4.

Table 4: Welfare Loss from Tariff Protection in Crores of Rupees

Commodity	1993-94	1994-95	1995-96	1996-97	1997-98
Petroleum	2392	639	864	167	106
Machinery except electrical & electronic products	1670	1578	1498	4611	188
Pearls, precious and semiprecious stones	1100	172	239	50	41
Iron & steel	652	358	480	221	435

We see the pattern that welfare losses are decreasing with increasing liberalisation over recent years. But the figures even during early years of liberalisation are staggering. The underlying analysis assumes no other distortions than just tariffs. Protection-induced x -inefficiencies for example (which are hard to measure) are ignored.* Hence the figures probably underestimate the welfare losses. Hence our insistence of having a longer transitional period for quantity restrictions in the excuse of foreign reserve difficulties is detrimental to us. Tariffifications done so far are not deep enough; tariff rates and other impediments to trade have to be brought down at a greater pace.

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Environmental Economics : Issues, Policies, Strategies and Perspectives

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This is the second part of the presidential address of Dr. Binayak Rath delivered at the 31st Annual Conference of Orissa Economics Association held at Talcher in February 13-14, 1999. The first part covered :

- I. Introduction
- II. Mainstreaming the Environment for Economic Development
- III. Environmental Concerns of the World in the 1970s
- IV. Emergence of Environmental Economics :
Material Balance Approach
- V. Origin of Environmental Economics

The rest of the Presidential address is published below :

PART-II

VI. THE ISSUES INVOLVED

The various issues raised in the process of economic development and use of natural and man-made resources can be listed as follows :

- Can the market mechanism resolve the environmental conflicts ?
- Can the market mechanism redistribute wealth and income, so as to establish equity and social justice which are considered as pillars of social environment ?
- Can public goods having positive externalities be produced by market mechanism ?
- Can market mechanism take care of the various environmental effects ?

- How to value externalities ?
- How to quantify effects of pollution on socio-economic set up and cultural heritage ?
- Which rate of time discount is appropriate to evaluate the environmental Projects ?
- What normative values do the individuals use in indicating their references ?
- How to use the renewable resources in an optional manner ?
- How to determine the compensation rates ? and
- How to incorporate the preferences of the future generations ?

In addition to these above mentioned issues, J. E. Stiglitz (1979) in his paper "*A Neoclassical Analysis of Economics of Natural Resources*" had raised several distinct issues which still confuse many popular discussions of resource availability. The issues raised are :

- The Viability Issue : Is Sustained Growth Possible in the presence of exhaustible Natural Resources ?
- Forecasting Issues,
- The Efficiency Issue, and
- Inter temporal Equity.

Some of these broad issues are discussed below :

Environment : Conflict

The schematic representation of our development process, as indicated in Fig. 1 shows how environment plays a crucial role both in the demand as well as in the supply sides of project level activities. However, in spite of its integration in our planning, there are many unresolved conflicts, which need further attention of the planners and policy makers. The conflicts are :

- Environmental resources are often Common Property Resources.
- Environmental resources can provide Multiple Services.
- Certain services or roles of environmental resources may be Incompatible (use of one service may reduce the quality or quantity of other potential services).
- the pursuit of incompatible environmental services, often results in Conflict.

In order to resolve these conflicts a number of policy initiatives have been suggested by economists and policy planners. Even these policies have been reiterated in the international forums. One such policy initiative is to move towards achieving a 'sustainable development'.

Quest for Sustainability :

In the recent years the concept of 'sustainable development' is almost universally used in discussion of environment, technology, resources and economic development. It has become one of the catchwords of our economic policy. It is considered as a new paradigm of progress of an economy. One of the vital questions which is raised in the context of sustainable development is that whether humanity can converge to an infinitely sustainable economy in a way that is reasonably orderly, peaceful and safe or whether it is on a one way track of disaster.

The term "sustainability" first came into use in forestry during the 18th century and required that the amount of timber that might be felled in one year be approximately equal to annual growth, so that the stock could be maintained ad infinitum. However, the economic use of the term sustainability is built into the very concept of income. J. R. Hicks (1946) defined income as the maximum amount that a person or a nation could consume over some time period and still be as well off at the end of the period as at the beginning. But its use in the context of environmental economics became popular in 1970s. The Club of Rome's report 'Limits to Growth' was probably the corner stone that got the concept being popular in development. It focused the need of a balance between natural resources and its ecology and environment. It further established the complexity of interconnected problems of poverty, environmental degradation, industrialization and urbanization. The concept became more popular with the publication of the report of the 'World Commission on Environment and Development' popularly known as 'Brundtland Commission' entitled "Our Common Future". The Commission envisaged sustainability as 'meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. The same notion of 'sustainable development' was further endorsed by the 'U. N. Earth Summit' in Rio de Janeiro in 1992 and subsequently it was included in the 'U. N. Agenda 21'.

Optimal Depletion Path :

In the late 19th century, the problem of scarce depletion drew to the attention of economists in a somewhat different context than it

had to Malthus, as Britain, France, Germany and Russia competed ever more seriously to establish colonies and to expand their sphere of influence. The question then raised by economists was : Is there an optimal depletion path for an exhaustible resource ?

The answer to this question was reasonably examined by L. C. Grey (1914) in his widely known article on "*Economics of Exhaustible Resources*". By using the graphical methods characteristics of the time, he recognised that the resources are limited in terms of total quantity and are not producible. He focused that a unit of such a resource used today leaves a unit less of it to use tomorrow. In other words, using it today involves not only the cost of contemporary extraction but also an additional cost—that of not having it available for use in the future. This additional opportunity cost is most commonly known as a user cost.

The problem of optimal depletion was also addressed by Harold Hotelling (1931), in a classic article. The problem as examined by Hotelling is one of a class of optimisation problem in which the quest is not for a number (scalar) but for an optimal path through time or across space. But Hotelling's approach and results were relatively neglected until 1960s; when economists revived interest in the Optimal Depletion Theory and the same interest accelerated in the 1970s. Questions were raised how to use the renewable resources judiciously ?

How Judiciously to Use A Renewable Resource ?

Since all living natural resources experience a life cycle, one has to make an intelligent choice in using the renewable resources. In the classic example of when to cut a standing forest, the manager faces conflicting choices. The problem is, given that the forest tends to grow more slowly as it ages, when is the optimum time to cut if one wishes to maximise the present value (discounted future income) from managing the forest. In this respect the contributions of Martin Faustmann (1949), Gaffney (1957) and Samuelson (1979) are noteworthy. For example, in analysing the Faustmann solution vis-a-vis the maximum sustained yield criterion, Paul Samuelson defined maximum sustained yield as based on the assumption of an even flow of harvest aimed at producing the greatest average flow of value per year. He showed that such a policy results in the selection of longer rotation periods than the economically optimum policy and amounts to ignoring the interest rate.

Another dimension recently introduced to resource utilisation is the problem of multiple use of resources. Michel Bows and John Krutilla (1985) addressed the problem of multiple use and evolved a rather

advanced mathematical technique known as dynamic programming. To them the general multiple use harvesting policy of forest is a complex one. No simple rule of thumb is likely to describe the harvest.

Concept of Economic Welfare :

Another area which has drawn the attention of environmental economics is the concept of economic welfare because environmental destruction as well as preservation is very much linked with the welfare of the society. Thus, welfare economics is considered as one of the foundations of environmental economics. As we know that the traditional welfare economics is based on utilitarian moral philosophy as developed by Bentham and Mill and others in 18th and 19th century. In such conventional welfare economics, in which 'the invisible hand' and 'value judgement' played a lead role, it had been argued that the personal wants of the individuals should guide the use of society's resources. It was based on three basic premises, viz.

- All markets are competitive;
- Perfect knowledge exists in the exchange process; and
- All valuable assets are individually owned and managed without violating the competitive assumptions.

It was further argued in the modern welfare economics that market exchange under these circumstances will lead to a 'Pareto Optimum' (which was developed by Vilfred Pareto in his book "*Manual of Political Economy*" in 1906). But the concept of Pareto Optimum was challenged in 1930s and 40s on the ground that it says nothing about income distribution, equity and social justice and inter personal differences in utility. The value judgements involved in the utilitarian approach have been questioned by the critics of welfare economics. But in spite of these criticisms against welfare economics, a new awakening was generated in the 1960s and 1970s with the popularisation of the concept of Social Benefit-Cost Analysis (SBCA), which promises a good scope to examine the environmental issues and problems.

Frontier Issues Involved :

Some of the frontier issues in resource economics have their ethical foundations in the following development :

- Concept of discounting the future which has led to the economists and moral philosophers to raise the question of present generation's obligation to future generations in the face of resource depletion

and potential environmental degradation, the question, in other words, of how to establish intergenerational justice;

- Increasingly strained application of Benefit Cost Analysis to large environmentally susceptible projects owing to complexities involved in estimation of social benefits and social costs;
- A great upsurge of interest among moral philosophers in the ethical implications of man's impact on environment; and
- Emergence of a group of 'New Naturalistic Philosophers', who have chosen to address the difficult issues of ethics and policies by abandoning humanistic philosophy. This group raises questions regarding the nature and extent of man's obligation to non-human creatures.

In view of the significance of these emerging issues and rising environmental problems, the environmental policies have become very complex.

VII. ENVIRONMENTAL CHALLENGES & POLICIES

Since the beginning of the present century, the environmental policies have been instruments of decision making owing to recognition of the environmental problems. The first half of the present century, the policy response was dominated by **Local** environmental hazards like epidemics and bacterial contamination and subsequently it was extended to Regional problems like oxygen depletion, sewage problems and organic carbon problems. For abatement of those problems the policy response was sanitary engineering (a science response) and local sewerage and sanitation regulations. With the progress of industrialization the environmental problems emerged in the form of eutrophication, algae blooms, pollution of river and ocean, accidental spills. Further with the construction of large dams and canals the environmental problems instead of confining to local became regional issues. During the last quarter of the present century the problems emerged in the form of acid rain, wildlife deformities, Chernobyl disaster, organic toxic, population explosion, urban sprawl, water shortages, Ozone layer, global warming, genetic defects and loss of bio-diversity. Thereby the extent of impact of these problems became continental and global in character.

In addition to these general problems, in a recent study the World Bank has identified that **Poverty is the Worst Form of Pollution**, which in turn creates environmental problems. It also recognised that poverty does not allow people to husband their natural

resources. As regards the environmental challenges for the world as a whole the Annual Report (1992) identified the problems as follows :

- (a) only half of the world's population breathes healthy air;
- (b) one third population has inadequate sanitation,
- (c) one billion are without safe water,
- (d) 1.3 billion people are exposed to unsafe conditions caused by soot and smoke,
- (e) 300-700 million women and children suffer from severe indoor air pollution from cooking fire,
- (f) the annual increase in the world's food production is only half the world's population growth,
- (g) hundreds of millions of farmers, forest dwellers (the tribals) and indigenous people who rely on the land and whose whole livelihood depends on good environmental stewardship, are being handicapped,
- (h) soil erosion can cause annual economic losses ranging from 0.5% to 1.5% of the GNP,
- (i) one quarter of the all irrigated land suffers from salinization,
- (j) tropical forests—the primary source of livelihood for about 140 million people—are being lost at a rate of 0.9% annually,
- (k) about a hundred species of plant and animals are predicted to disappear every day.

In order to cope with these problems and challenges the World Bodies and Governments responded by formulating worldwide policies and programmes for environmental preservation and protection. In this regard, the contributions of the United Nations and its associated bodies as well as the World Bank are noteworthy. A new awareness has been generated at different levels and most governments responded to the policy prescriptions in a positive manner. The series of problems characterised as 'environmental' are being accorded a pride of place in political discussions and policy actions. But in formulating the policies the governments adhered to different approaches, such as :

- (a) The Traditional Approach of Command and Control Policies,
- (b) The Market Based Instruments (MBIs) Policy,
- (c) Industry Self-Regulated Solution to Environmental Problems,
- (d) Curbing the Externalities.

Environmental Policy Response of Government of India :

Being induced by the environment movements in the world and in view of the constitutional commitment to environmental protection and improvement (vide Article 48 A), the Government of India has adopted different environmental policies from time to time. It introduced the 42nd Amendment Act of the Constitution in 1977. Thereby it gave a new dimension to public responsibility by obliging the Central Government to protect and improve environment for the good of the society as a whole. It pledges that "the State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country". In order to fulfil its pledges the Government of India introduced a number of structural changes in its administrative set up between 1972-1984 and adopted different policies for preservation and regeneration of its environment.

In response to the Stockholm Declaration of the U. N. in 1972, the Government of India laid stress on environmental preservation and protection. In planning and execution of developmental and industrial projects, the environmental aspects were given due considerations by the Government. As mentioned above, a popular awareness regarding environmental issues were spelled out in clear terms. Specially with the creation of institutional arrangements, supported by legislative measures, a number of programmes for environmental management have been implemented in our country during the last few years.

No doubt, in shaping the environmental issues and objectives, one can observe that our environmental thinking took its cue from the industrially advanced countries of the West and accordingly we perceived our broad objectives as :

- Control of industrial pollution;
- Preservation of the threatened species of both flora and fauna
Subsequently, we added two more objectives, viz.
- Prevention of any further degradation and depletion of the country's basic natural resources and life-support systems of land, water and vegetation;
- Provision for all human settlement with at least clean drinking water and a minimum level of sanitation.

It is a matter of gratification that there is a growing realization in our country regarding the importance of these four-point core environ-

mental issues for our long-run economic development. They deserve even greater emphasis for preservation of our country's production base and to combat industrial pollution and insanitation in the interest of public health.

While undertaking the task of development, for the first time, the concern for preserving the quality of life and protecting the environment was stressed in the Fourth Five-Year Plan (1969-70 to 1973-74). The Fourth Plan document recognized the need to introduce environmental protection concern into national planning and development. But by the Sixth Five-Year Plan (1980-1985), the concern was turned into concrete action by launching several programmes relating to enhancement of the quality of life by incorporating elements in various development projects. Adopting these norms, the Government focused on Environmental Impact Assessment (EIA), which has become a statutory requirement for all the projects in India and many EIA studies were commissioned by the Government to understand the various linkages. To add to it, the hue and cry raised by the NGOs and other voluntary organisations in the Narmada and Tehri dam projects, Silent Valley Project, Balliapal Test Range Project and the subsequent intervention by the World Bank on the resettlement and rehabilitation policies of a number of projects, as they are funded by the Bank and its associates, has brought a new awareness to our system of environmental management. In recent years rehabilitation and resettlement (R & R) issues have become a major concern for the large projects where it involves involuntary displacement of inhabitants from their ancestral hearth and homes. To overcome the losses to the physical as well as the socio-economic environment of the project affected area and project affected persons, the funding agencies and the government are insisting on EIA studies prior to the commencement of the project.

In view of these developments, it has been realized by the Government as well as by industry/project authorities that by undertaking the EIA studies the decision making domain improves in terms of :

- better quality of decision making in terms of immediate execution or revision or postponement of the decision;
- forecasting/predicting possible scenarios of a project;
- selecting appropriate sites for project;
- optimum choice of resource utilisation patterns; and

—drawing of Remedial Action Plan (RAP) for project affected areas and project affected persons (PAPs).

In tune with these policy perspectives the Ministry of Forestry and Environment now-a-days enforces that any new project needs environmental clearance in terms of three different environmental dimensions, viz., namely forestry, pollution and socio-economic. The socio-economic dimension implies that the impact of the project on the socio-economic and on cultural set up has to be assessed beforehand with the help of EIA studies and to work out Remedial Action Plans (RAPs).

VIII STRATEGIES TOWARDS ENVIRONMENTAL MANAGEMENT

The managerial strategies towards the environmental issues are very much dependent on the basic philosophies of the policy makers, on economic rationality, as well as on the policies, social commitments, and goals of the Government. As regards the basic philosophies, there is a controversy between the 'Environmentalists' and the 'Cornucopians'. While at one extreme pole, the 'Environmentalists' with their pervasive pessimistic attitude argue the philosophy of confines and peril and paint a dismal picture of the world; on the other extreme, the "Cornucopians" advocate a refreshing change in the world due to more and more application of science and technology. To them technology, economic growth, and market forces are the saviors of the system rather than being the villain. In their optimistic view, mankind can look forward to limitless economic growth and rising living standards with ingenuity to cope up with the environmental problems. Hence, they advocate a "Technology Induced Growth Strategy".

The Environmentalists have expressed their anguish over the present development patterns. They envisage that the human activities threaten to disrupt the intricate web of natural ecosystems and unintended consequences threaten to overwhelm human ingenuity. They forewarn that unless the mankind is vigilant about its activities, the nature will take its revenge in various ways. Such a radical view is well expressed by a distinguished Harvard biologist, E. O. Wilson (1993) in his article "*Is Humanity Suicidal*". In order to overcome such a disaster, they advocate a 'Sustainable Growth Strategy'.

Generally, the economists tend to lie between the environmental and cornucopian extremes. They rely on the market forces, on government intervention, or on a combination of both. Thus, the strategies

advocated by them are either "Market Economy Based Strategy" or "Structuralist Tradition Based Strategy". These strategies of the economists can alternatively be presented as "Remedial Strategies" because they are aimed at controlling any further degradation of environment and also promoting environment. But in drawing the remedial strategies they have taken into account the close link between the various components of the environment as well as of the project, which is indicated in Figure 3.

An examination of the figure shows that in drawing a viable strategy the economists and the policy makers should consider the impact of any polity on the natural-physical environment, socio-economic environment and the political environment. This calls for a comprehensive strategy. Besides, in managing the environment the policy makers should investigate the causes of environmental degradation and examine the state of environment (which calls for preparing SOE report at the national level).

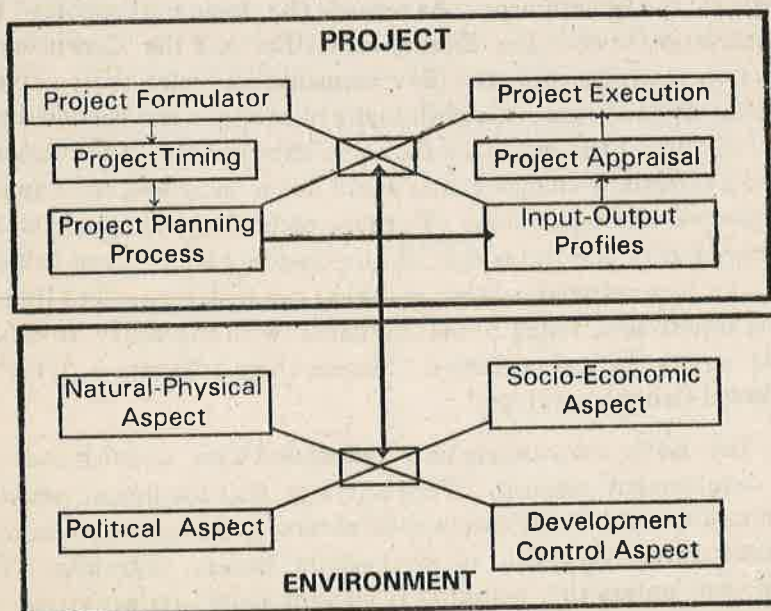


Figure-3 : Schematic Representation of Project Environment Interaction.

The remedial strategy suggested by economists can be broadly divided into :

The Rural Approach—where impact of agriculture and forestry policies on environment is examined and further attempts are made to avoid the possible conflicts.

The Urban Approach—where preventive environmental strategies are evolved in respect of controlling air and water pollution from industrial and municipal facilities, noise abatement, control of urban storm water pollution, management of traffic and communication and waste handling;

The Energy Approach—where focus is given on institutional and political changes necessary to achieve a sustainable energy supply;

The Transportation Approach—where the harmful impact of transportation on the environment as well as the possible alternative modes of transportation are being examined; and

The Industrial Approach—where the urgent need is emphasised as not only to safeguard the environment, but also to find out the strategies to solve the environmental problems associated with the industries.

In recent years it is argued that the process of environmental management must begin with identification and quantification of impacts of any project/economic activity and this establishes the need for Environmental Impact Assessment (EIA) studies at the project level.

IX ENVIRONMENTAL IMPACT ASSESSMENT

The concept "Environmental Impact Assessment" (EIA) has developed very rapidly over the past few years. According to World Bank (1995) "Over the past one decade, EIA has moved from the fringes of development planning to become a widely recognised tool for sound project decision making".

A historical analysis of growth of EIA reveals that in its first phase of development during pre-industrial period, it was developed as a practical response to various societal problems associated with terraced agriculture, contour cultivation, irrigation network development and storm water sewers. In the post-industrial period, EIA became a tool to overcome the pollution from the "dark Satanic Mills", which were burning coal to get energy. During the mid-Nineteenth century EIA was used for 'Sanitary Reforms'. In its recent use since 1950s, its scope has been widened significantly. Now-a-days, it not only applies to the prevention of environmental problems associated with agriculture, industry, and urbanisation, but also covers the environmental protection encompassing all environmental resources including economic development and citizen's quality of life. Thus, one can see that over

the years EIA has moved away from being a defensive tool to a potentially exciting environmental and social betterment technique. Thereby, it has become a part of the feasibility considerations of most new projects in almost all the countries of the world.

EIA has been well recognised as a tool for incorporating environmental considerations in developmental activities. The tool basically embodies the steps of prediction, scaling and significant interpretation of the environmental effects of any project/developmental activities. By definition "Environmental Impact" implies 'any alteration of environmental conditions or creation of new sets of environmental conditions'. The term EIA is very often used interchangeably in "Environmental Assessment", "Environmental Appraisal", "Environmental Impact Evaluation" and "Environmental Impact Statement". John G. Rau (1890) in his article on "Basic Concepts of Environmental Impact Analysis" has provided the comprehensive analysis of various facets of EIA. Further, Nick Harvey and Megan McCarthy (1997) "Environmental Impact Assessment for the 21st Century" have provided a very good account of the scope and perspectives of EIA.

An analysis of the comprehensive framework for environmental assessment & the sequential actions involved reveals that EIA needs a host of data (bio-physical & socio-economic) information of emerging issues and state of environment and the decision making process through legislation and action plan. Further, it needs a decentralised national network involving planning or environment agencies and tools of expert systems. It also calls for consideration of alternatives, consultation and participation, monitoring actions and mitigation measures. Besides it calls for integrated environmental assessment by way of examining the bio-physical impacts, economic impacts, social impacts, cultural impacts and the aesthetic dimensions of the environment.

The process of environmental impact assessment envisages that first of all alternative sites and alternative designs of the project be considered on the basis of screening, then it should be assessed whether a detailed EIA is required or not on the basis of preliminary investigations by the technical team. Once it is decided to undertake a detailed EIA, the coverage and scope has to be decided and a suitable consulting team be drawn to carry out the exercise. With the help of a host of field data the EIA team prepares an EIA report which should contain the description of action required, the present and future environmental

status, the impact prediction along with mitigation measures suggested. On the basis of review of the EIA report finally a decision is taken regarding implementation & monitoring of project activities for future.

The socio-economic environmental impact as well as retrofit studies undertaken by us for a few NTPC project sites (both new and old) has established that environmental impact assessment plays a significant role in the process of decision making. Through these studies, we have hypothesized that for any comprehensive analysis of the impact of a project or development activity, the project evaluator should be very critical in his approach of data collection, quantification of the impact, more particularly, in quantifying the externalities. In measuring the possible impact a framework of social benefit cost analysis (SBCA) be adopted rather than confining to the presently used approach of commercial benefit cost analysis (CBCA). This movement also involves selection of a proper investment criterion and also a suitable methodology of appraisal/evaluation such as, the OECD method, UNIDO Guidelines Method, Effects Method or the World Bank Method.

X PERSPECTIVES OF ENVIRONMENTAL ECONOMICS

The significance of environmental issues and problems, as highlighted above have emanated from the global official expression of environmental concerns at different forums of the world, e.g., 24th General Assembly of the United Nations (1972), the UN Stockholm Conference on Human Environment (1974), North-South Commission/Brandt Commission (1981), the Commission on Disarmament and Development/Palme Commission (1982), UN World Charter of Nature (1982), World Commission on Environmental Development / Brundtland Commission (1984), Independent Commission of the World Bank (1990), the Second UN Conference on Environmental Development (1992), the Earth Summit (1992) and the Social Summit at Helsinki (1994), the Second UN Earth Summit (1997).

Through these international forums the world bodies has discussed the environment and pollution effects of industrialisation & their impact on quality of life. It is well recognised that environment is a common responsibility of nations which needs global governance. Since humanity is a part of nature and it needs continuous supply of energy and nutrients for its sustenance, the world body has also focused on human rights and environment. In the Social Summit a greater role is envisaged to peoples' participation and role of NGOs.

Furthermore, the UNDP by way of fostering the UN General Assembly Declaration of Right to Development (1986), has focussed that

"poverty is a brutal denial of human rights". By adhering to this approach it has placed people at the centre of all development activities. The UNDP as well as UNEP have launched country-wide and region-wide environmental programmes in the world. For instance, to assist the Government of India in removal of poverty, the UNDP has launched the "Country Cooperation Framework for India 1997-2001", under which it has sponsored various inter-related and mutually reinforcing programmes.

It is also well established that there is a close interrelation between humanity and environment and they are inter-twined. Therefore, environmental economics stresses to investigate the close inter-relationship among various socio-economic aspects like legislation, technology, trade, economy and ecology. Such a relationship also involves many choices. The economists view the environment as a composite asset, supplying a variety of services to humanity. The intensity and composition of those services not only depend on the action of the human beings as constrained by the first physical law of thermodynamics, but also by another physical law i.e., the second law of thermodynamics (popularly known as Entropy Law).

The view that environment should be managed by man is rather controversial, particularly, among ecologists. They take the extreme view that since nature knows the best, man should not interfere with the ecosystem. But on the other hand, economists suggest different strategies and policies to establish harmony between nature and economic development. In order to estimate the relationship economists advocate either a positive approach or a normative approach. While the positive approach is useful in describing the actions of the people and the impact of those aspects on environment, the normative approach provides the guidance on optimal service flows with the help of efficiency and sustainability. For instance, the Common Property Resources (CPR), which can not enter the market exchange, are progressively degraded because the individuals and industries use them as dumps at no costs to themselves. The valuation of such resources has to take into account the present value of net benefits to society by taking into account the inter-temporal allocations. To adhere to the same principle the valuation has to be based on sustainability criterion.

Recognising the crucial role of environment in establishing peace and stability in world development, the World Bank has come forward to play as an active partner of the RIO Summit imperatives.

Accordingly, it has encouraged Brown Agenda (i. e., pollution management), Green Agenda (i.e., Natural resource management). It is also helping the national institutions building activities, which will promote environment. Under the Montreal Protocol Bank also supports Global Environmental Facility (GEF). To add to it, it has also introduced the Green Accounting system. The recent over-riding emphasis of the Bank has been on-the-ground implementation of projects for environmental improvement. In this regard, its major effort has been to move upstream from project specific concerns to sectoral and national concerns. In addition to these international responses, the rich countries of the world have also come forward to help the poor countries in managing their environment by way of granting assistance to them.

In spite of these developments in the environmental front, there are few basic questions, which are still being addressed. These questions are :

- How is the problem correctly **conceptualised** ?
- Can our economic and political institutions **respond** in a timely and democratic fashion to the challenges of environment ?
- Can the needs of the present generation be met without compromising the **ability of future generations** to meet their own needs ?
- Can short-term and long-term goals be **harmonised** ?
- How to draw one **fundamental index** of world social welfare ?
- Whether resources are becoming **scarce** or not ?

In order to get suitable answer to these questions, a multi-dimensional approach should be adhered to by the policy makers. Such a model envisages proper knowledge, remedial action and management tool based on simpler information, wider concepts, priorities and involvement of all social sectors. The environmental problem and policy cycle has envisaged that all the economic activity is constrained by the natural conditions, human conditions, nature of environmental problems and social as well as political processes. Then a policy framework has to be drawn at local, regional, national and international levels along with the policy instruments.

XI CONCLUDING REMARKS

In conjunction with the theme of the conference, i. e., to assess the impact of liberalised new economic policy on SSIs and tenancy

reform measures in a backward state like ours, which will play an important role in promoting the economic lot of the poor and the agrarian system, it is worth noting that India will enter the next millenium with the largest mass of deeply impoverished people of any country. It is estimated that the number of people below the poverty line will swell to approximately 350-500 million. This will be an extraordinary human tragedy that will intensify the life-long suffering of the poor. It is predicted that even after half a century of planning, India will still remain a land of mass-poverty and hunger. Since poverty breeds poverty and poverty is recognised to be the worst form of pollution, if poverty is not mitigated, the environmental degradation will be further aggravated during the next century. Owing to the damage of the environment and ecology, the national income is expected to fall. As a result, poverty and environmental degradation will be further accentuated, leading to misery for the downtrodden and the underprivileged class of our society. Hence, we must fight to eradicate poverty to improve our social environment.

The poverty dimension of development is also widely discussed in the recent writings of Prof. Amartya Sen. He is deeply concerned with the welfare of the poor who are generally deprived of most of the opportunities of development in our country. In tune with Prof. Sen's concern towards the well-being of deprived ones who are victims of the social environment and who are also responsible for the declining environment.

I would like to conclude that our primary concern should be on the improvement of our environment. Any viable strategy and appropriate policy to improve our environment needs proper investigation, appraisal/evaluation, and monitoring of the impact of the projects and policies on the common man. In these efforts to improve the environment, the economists have to perform a lead role as researchers, teachers, planners, advisors, policy makers and above all, as enlightened citizens. The economists should understand the fact that in spite of rapid technological progress even today the world has heralded the Malthusian pessimism, which is the resultant of the problem of 3Ps-i.e. Population, Poverty and Pollution. According to some studies a two-fold increase in population causes four-fold increase in poverty and an eight-fold increase in pollution. Owing to these changes the environment and the ecosystem are in peril. It is also envisaged that the problems of 3 Ps cited above can be resolved by the solution of the other 3Ps, i.e., Proper

Planning, Political Will and People's Participation. In my judgement the application of these solutions needs a multi-disciplinary approach. Adhering to the same approach let me urge the policy makers, administrators, politicians, economists, sociologists, technologists, scientists, NGOs, and above all, the people to join a common platform to Save our Environment for a Bright and Prosperous Future. This suggested path may be strewn with obstacles and our social institutions may deal with those obstacles with less grace and less artifice than we might hope for, but I am confident that we will make progress provided we all join hands in this great endeavour of establishing a harmonious relationship with our Environment.

With this optimistic note, let me pray the Almighty to bring a harmony between Humanity and Environment.

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Mangaraj Memorial Lecture

'Disaster and its Management

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Consecutively it is for the second year that I have been asked to play the role of a "Crisis Manager". Even if it has been quite a strain on my physical and mental capabilities—nothing short of a disaster—I thank my esteemed teachers, particularly Prof. Baidyanath Misra, and friends for bestowing such great faith on my capabilities as a 'stand-by'. In the next 15 to 20 minutes I will try to dwell on the subject to the best of my abilities, more as a common man trying to understand the subject rather than as an expert deliberating on the intricacies of the subject with great scholastic profoundness.

What is disaster ?

'Disaster' as a term is difficult to define. It is probably easy to describe and explain disaster. It is a sudden disruption to normal life. It involves loss of life or damage to property, or, both and, brings miseries to those who survive. An individual or a single family may face disaster (say the sudden death of the earning member—or say a few houses were burnt due to fire). When it involves a few people, one does not term the occurrence as disaster. Disaster involves more people and covers more area. The occurrence leads not only to losses to individuals, but also to the community and the state.

Disaster occurs everywhere. It has been occurring since time immemorial in every part of the globe and with every community. People have witnessed it and lived with it. We invariably consider these events as 'Wrath of God'. When 'evil' takes over 'good', God brings in the process of annihilation—the 'Kalki' in Hindu philosophy. Even Malthus, the celebrated population theorist, went a step further to rationalise it as nature's own forces to reduce unabated growth of population. Of course, what he wrote a century ago still holds good in a different sense. For most disasters are man made, caused or abated by expanding population victimising ultimately them only.

The Concern

There is now a global concern to mitigate disaster. On 11th December 1987, the UN General Assembly passed a resolution which was

adopted on 22nd December 1989 to observe the decade beginning 1990 as Natural Disaster Reduction Decade and observe second Wednesday of October as World Disaster Reduction Day throughout the world. The idea behind the resolution was to give exclusive attention to programmes and activities designed to reduce loss of life, damage to property and reduce or minimise the disruption caused to economic and social life.

The concern to tackle disaster has been also the subject of research for both physical and social scientists (also for moral scientists who have been speaking on the subject through sermons, scriptures and discourses). The physical scientists are engaged in identifying the cause by examining various components associated with the event as also locating its strength and place of occurrence. The social scientists have been researching on the consequences of disaster. In the domain of social sciences the first attempt probably was made by Samuel Prince when he investigated the munition ship's explosion in Halifax harbour (Novascotia) in 1917. In this work he discussed at length the social effects of the disaster and provided a few stimulating ideas. Since then a number of social and behavioural scientists throughout the world have been contributing to the social and behavioural aspects of disaster. However since the Second World War, collective and state-support research on disaster gathered great momentum. A noted state supported study was U.S. sample survey of Japanese and German cities subjected to bombing during the 2nd World War. This study is known as U.S. > Strategic Bombing Survey 1947. Some of the major studies conducted with empirical evidence were those of Tyhurst of Canada in 1951, Mark and Fritz of USA in 1954, Logan and Killar in 1952, University of Oklahoma and Maryland University Psychiatry Institute Study conducted under the leadership of Powel in 1954, University of Texas study (Moore) in 1958, Disaster Research Group of National Academy of Sciences Studies (Disaster Study Service) between 1956 and 1963.

These studies led to the significant contribution of creation of a planned programme of disaster management in almost every country. Creation of ministries and departments to combat disaster appeared everywhere. In India too we have a Disaster Management Fund and in every state a Special Relief Commissioner (SRC) headed by a senior bureaucrat.

A Few Natural Disasters

When we speak of natural disaster we mean disaster caused by Celestial or physical forces of nature. Some of these, although appear *prima facie* as nature's fury, no doubt have been aided and abated by

human action. Unrestricted felling of trees, deforestation, soil erosion, over exploitation of material resources and, above all, uncontrolled population growth, etc. may increase the intensity of natural disaster many folds. Purely man made disasters are caused by insensible action of men and women. Stampade in stadia and other places of congregation, arson, looting, and rumours as also faulty or sub-standard construction of dams, reservoirs, buildings etc. leading to their collapse are some of the examples of man made disasters. But when we speak of natural disaster, we generally mean flood, cyclone (including tornado), drought, earthquake, volcanic eruption, land slide, etc.) and to certain extent also forest fire. The occurrence of these have become features of normal life. Some of the major natural disasters that are fresh in our minds are the floods in China between 1960 and 1989 that killed as many as 7.28 million people and injured more than 4.25 million. Tangshan earthquake killed 24,200 people. Cyclone in Bangladesh in 1970, 1977 and 1991 killed as many as 3 million people. In Iran 40,000 people died in 1990 due to earthquake. The recent cyclone (October 1999) in Orissa affecting 14 districts of Orissa killed many thousand people and left a million shelter-less.

Some countries become victims of several kinds of natural disaster appearing together. Malawi, for example, faced five different kinds of disasters—Cyclone, Flood, Earthquake, Drought and Bug infection that destroyed crops of 2 lakh farmers inflicting on them unsurmountable miseries.

The World Health Organisation (WHO) report of April 1991 mentioned that between 1960 and 1989 (29 years) natural disasters in India have killed 1,50,000 people and affected one billion people. As many as 60,857 were killed due to fire, 31,000 due to cyclone, 25,000 due to flood, 595 due to earthquake and 2150 due to avalanche. Asset losses due to natural disaster every year is around 40 billion US dollar as per World Bank estimates.

Disaster Management

Managing disaster has been a concern of everyone, be it Government, voluntary organisation, world body or individual. When one speaks of disaster management, reference is made to two aspects: namely (1) How to reduce the occurrences of disaster and (2) If disaster strikes how to face it so that the loss of life and property and the consequent dislocation of social and economic life is minimal. The first aspect aims at the reduction of the incidence of disaster while the second aims at minimising its impact.

In a timeframe work, disaster management calls for 'short term' and 'long term' management. The short term including immediate or emergency management reduces loss of life and damage of property (or in other words impact of the disaster). The long term management aims at handling, over time, all aspects of a particular type of disaster in order to prevent its occurrence. In between the two periods, there is a period which is a mere extension of the short term period in which the disaster victims are rehabilitated and settled.

Short-period Management

In short period (including immediate short period) the most important step is 'preparedness'. The degree of 'Preparedness' depends on 'warning devices' and 'logistic support' to face the challenge. Thanks to the expansion of knowledge, the boom in information technology and increasing use of computer and satellite imagery, the 'warning device' has achieved a greater degree of accuracy. Now with a high degree of confidence, natural disaster can be predicted and, therefore, fore-warning to the would-be-affected people and the area could be given well in advance. The administrators and the disaster management team could prepare in advance their action programme through its various governmental and non-governmental wings. This kind of preparedness calls for regular practice. In the language of armed forces this is called the 'action station drill'—meaning thereby 'ever preparedness' and 'mock action'. This also calls for setting up of units and sub-units in every part of the territory—in a village—in a para (or ward)—in panchayats and their effective linkage to each other and higher units of the disaster management authorities. The linkage mechanism should be all-pervasive having contingent arrangements. It may be through telephones, or wireless and, if that is not working, through satellite telephones (called Iridium telephone) or, if the latter is not affordable, through a much cheaper Ham Radio system operating with batteries. It must be clearly understood that passage of accurate information regarding disaster helps disaster management better and effective.

Preparedness calls for another type of preparedness too. These arrangements call for construction of safe rescue places and storage places for relief materials (food, medicines, etc.). The arrangements are long term measures built over years to combat effectively in times of emergencies arising from natural disaster.

Thus, disaster management is a continuous process. It is a drill that should be regularly undertaken. A single village or a cluster of villages should have a cadre of volunteers who should be trained in the

management of various types of disaster. Regular practice will keep them in a state of fitness. They should also be provided with emergency equipment such as radio communication system, etc. In a locality, there should be a central rescue place where temporary shelter could be provided, where also relief materials could be stored. Such places should be so built up to withstand flood, cyclone or such other natural calamities. Further, each of the location should be linked with other locations and with the operational centre both at the Block, Sub-division and district levels. Similarly, districts should be linked with state headquarters where all operations could be monitored. A networking mechanism in different areas & districts becomes all the more necessary particularly when disaster strikes a number of districts (or for that matter a large area involving a few districts as the Orissa Super Cyclone) simultaneously. In a disaster neighbours come forward first to provide immediate assistance. But when the location of disaster becomes quite large involving large geographical area, the 'neighbourhood' concept shifts to the periphery district and as such, most relief operations take place in periphery, which probably, in a comparative sense, is much less affected than the interior areas. This probably is one major realisation of the 1999 Orissa Super Cyclone which simultaneously affected 13 districts in a continuum. The relief operation to start with mostly got absorbed in the more easily approachable periphery districts. It took quite some time to penetrate to deeper areas, may be for logistic reasons, as also, for other pressures from the periphery districts (somewhat less affected in a comparative sense).

The other realisation of the Orissa Super Cyclone is that disaster can play havoc in a much larger area and hence the administration-in-charge of disaster management must have alternative sources of communication and when 'warning' is received, all possible resources should be deployed in a manner known in defence forces' jargon as 'action station'.

Management of disaster requires detailed planning, effective communication, contingent alternative plans, stock and storage of essential goods, temporary shelter building and above all continuous drill to measure the state of fitness of the ingredients in the management system. No government machinery can manage disaster effectively. It requires the whole-hearted support and involvement of individuals, voluntary and non-governmental organisations. Their co-ordination, of course, has to be undertaken by a central authority.

The Long Term Plan

While planning long term action plan to combat disaster one should clearly know (1) the immediate causes of the disaster, and (2) the cumulative causes of the disaster. Systematic and scientific probe into any disaster invariably brings to forefront the role of man in causing the disaster. Most natural disasters are more man made than natural. They are more 'unnatural' or 'non-natural' than natural. The potential of the disaster has invariably been accentuated by human action, whose greed and selfishness have solely aided the nature to react in a violent form leading to loss of life, property and miseries for those who survived.

Global warming, deforestation, loss of mangrove, etc. are the major contributors to cyclone and drought. Large population expansion with its consequent occupation of vulnerable areas, such as, river embankments and foot hills have caused large number of deaths in the event of flood or land slide. Individuals live in a narrow spectrum where 'self' rules over everything else. He hardly understands how the pursuit of individuals' self interest, in the long run, spells disaster for the community of which he is a part. In short, he seldom understands how his individual action is suicidal.

Environment education is a prime need of every society. The process must start at every level and that too very early. Men and women from very childhood must know and understand nature. They must be made to understand the eco-system and the balance played by each and every living and non-living object. They must know the role of forest, flora, fauna and above all water in the eco-system. It is probably time to think of living with nature rather than conquering nature.

Most natural calamities can be prevented. If not totally prevented, its fury can be substantially reduced causing less miseries in its place of occurrence. Preparedness coupled with long term preventive measures can achieve miracles.

Together we can and, must prevent disaster. Let us preserve nature, make good the damage already done and finally reaffirm our faith in the vedic dictum:

Aapah Santih, Prithvi Santih,
Vanaspatayah Santih, Ousadhayah Santih.

Let us preserve the medicinal plants, the flora and fauna, and the water; peace will rule over the earth.

I thank you all very much for giving me a patient hearing.

CHILD LABOUR IN INDIA

An Exposition of the Child Labour Problem

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1. Introduction

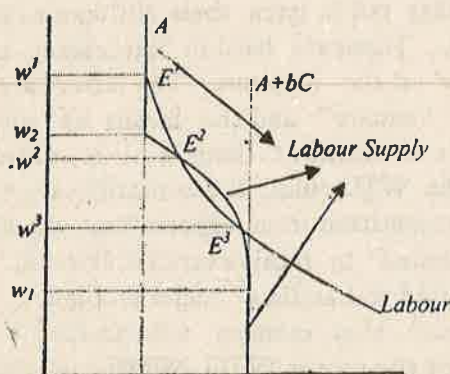
The issue of child labour has received considerable attention lately in the global arena—thanks to the information technology revolution and global awareness. Moralists, especially in the West, clamour for a ban on or at least a strict and uniform code of conduct across countries for employment of child labour. Their motives are honest—they do not involve self-interest in any direct way. There are others, namely, the trade-protectionists in the West, who also sing the same song but for selfish reasons. Being a member of the World Trade Organization (WTO), countries, both large and small, are now constrained in their use of protectionist instruments like quantity restrictions and tariffs. So they have been searching for protection in other ways. They are the “Northern” producers whose goods compete with “Southern” exports that use child labour intensively. In general there are two ways to mitigate the problem of child labour—carrot and stick policies. The former refers to incentive schemes that would induce parents not to force their children to work and / or firms not to employ them. These are hard to implement, although efficient and most effective in the long run. The latter are the punishment schemes which are “catchy” and the means by which the Northern protectionists want to achieve their goal is through the so-called “social clause” in the WTO rules. It essentially says that if an industry is hurt by import competition from exports that use child labour, then the industry is “entitled” to receive tariff protection. In other words, trade policy can be used to handle a “social problem”. It is ‘understandable’ but unfortunate that common folks in the West are taken by these arguments. At the recent WTO Ministerial Meetings in Seattle, India has firmly opposed it, rightly so, and have been able to ward off the inclusion of “social clause” in WTO rules by garnering support from a large cross section of developing countries.

The purpose of this short paper is two-fold. Section 2 depicts the child labour phenomenon as multiple equilibria in the labour market—with the implication that such phenomenon should be less

prevalent as a country grows richer. It illustrates the model of Basu and Van (1998). Section 3 extends this model to a trade context and demonstrates that a trade restriction against an exporting industry using child labour will only make matters *worse*—induce the industry to employ *more* child labour.*

2. Equilibria in the Labour Market

Consider an industry in isolation. There are 'A' number of adult workers and 'C' number of potential children workers, whose skills are specific to the industry. Families are identical in size and the ratio of adults to children is same across families. Abilities are same across the adult population and across the children, their labour services are perfect substitutes and each child is only $b \times 100\%$ ($b < 1$) as efficient as an adult. Hence the child wage rate is bw , where w is the adult wage. The potential aggregate labour supply in adult equivalent is $A + bC$. The vertical lines A and $A + bC$ are shown in Figure 1. The children's leisure (activities other than to work, e.g. receive education) is a normal good in the sense that if a family's income from sources other than children's work (that is adult work) exceeds a critical value, the family would not send its children to work. This critical wage rate would depend on general parameters like those of the credit market, parameters of primary education supply etc. as well as a particular family's preference for children's leisure.



[Figure-1]

* In terms of labour standards also, it follows that as long as countries are heterogeneous and some are sufficiently poor, world efficiency requires diversity of labour standards, not unity. The issue is quite similar to that of environmental standards [Bhagwati and Srinivasan (1996) and Das (1999)]

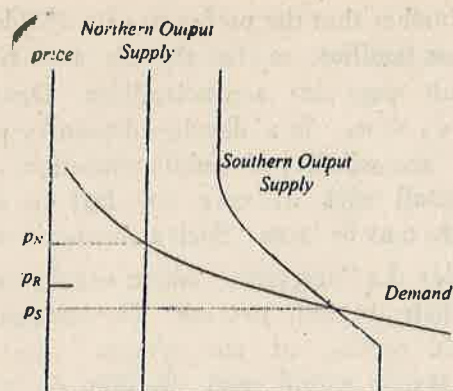
Assume further that the preference for children's leisure varies continuously across families, so that there is a continuous distribution of the critical adult wage rate across families. Denote its support by (w_1, w_2) , where $w_1 < w_2$. In a developed country with greater credit facilities and easy accessibility of public education, this range may be nonexistent, or small with w_2 very low. But in an underdeveloped economy, this range may be large. Such an economy will be our focus.

Now consider the "aggregate" labour supply function. If $w < w_1$, all families send their children to work. The aggregate labour supply is given by the solid portion of the vertical line $A + bC$. Likewise, if $w > w_2$, no family would send children to work and the total labour supply is the solid portion of the vertical line A . In between, as w increases from w_1 to w_2 , less & less families would send their children to work and labour supply will decline continuously from $A + bC$ to A ; the labour supply function is backward bending in this range. The aggregate labour supply function is then the solid linked line in Figure 1. (Note that if we had assumed that labour supplies of any particular family were wage-sensitive and positively related to the wage rate, we would have obtained, instead of the vertical portions, rising portions of the aggregate supply curve.)

In particular, the existence of the downward sloping portion of the labour supply function implies that as long as the labour demand function is downward sloping, multiple equilibria can very well arise. In Figure 1 there are three equilibria (at points E^1 , E^2 and E^3) and the possible equilibrium adult wages are respectively w^1 , w^2 and w^3 . Thus the first point is that an equilibrium with low adult wage and child labour can arise in the labour market given crucially that children's labour is a normal good and adult and child labour are substitutes. The second feature of this model is that if the labour demand curve is far in/out, there is a unique equilibrium with/without child labour. This implies that with economic development and growth in demand for adult labour, there will be less incidence of child labour.

3. Open Economy

The Basu-Van model also implies that if the price of the product increases, the labour demand curve shifts out, and, assuming that initially there is some employment of child labour, the industry will employ less child labour and produce less. In other words, the industry supply function is downward sloping. This lays the foundation to analyse the effect of trade policy.



[Figure-2]

Now suppose there are two countries, N (North) and S (South). Each country—especially the South—has an industry such as the one outlined earlier. Assume for simplicity that the demand function is the same across the two countries. Let there be two differences between N and S in the context of the industry in question. First, let A and C in S be greater than those in N, i.e., South has more adult and (potential) child workers than do North. Second, let the backward bending portion of the labour supply function be absent for reasons described earlier. This implies that (1) the industry supply function in the South lies to the right of that of the North and (2) the North's supply function is vertical at A with no child labour and South's is partly backward bending as in Section 2*. Assume that the demand function is flatter than the negative slope of the Southern supply function. These supply and demand functions are shown in Figure 2. In the absence of trade, p_N and p_S denote the respective (domestic market-clearing) autarky prices. South has comparative advantage. If the two countries open up free trade, the equilibrium world price (p_R) settles somewhere in between p_N and p_S . Note that child labour is less in use (and world output is less also) in free trade than in autarky.

Consider now a Northern tariff against Southern exports. Starting with free trade, it would cause a movement in the direction of autarky. The Northern demand for the good will go down, depressing the world demand for the product; this, in turn, will drive down the international price facing the Southern producers (p_R). More child labour is now used in the South.

* A backward bending section of the supply function in the North would not matter as long as it lies sufficiently close to the origin.

The unsatisfactory part of this story is that free trade causes less world output than autarky and a tariff leads to more. But it illustrates the point that a tariff by the North would reduce the price facing Southern producers. This will force lower adult wages and induce the families to send more children to work. These families are also worse off in terms of welfare.

The model is suggestive that the remedy lies elsewhere, not in trade protection.

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Child Domestic Servants in Orissa : A Case Study*

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Children are the future assets of an economy. They are supposed to be nurtured; not to offer themselves to earn their livelihood. But various studies reflect that a large number of children work in various organised and unorganised sectors primarily due to their low socio-economic conditions. They are mostly concentrated in the underdeveloped economy and used to migrate to urban centres/metropolies to earn their livelihood; and contribute a part of their saving to increase the income of their dependent parents. Further, a part of our export basket is the contribution of the childlabour for which the developed countries protest it and even threatened to ban export of certain commodities produced by them due to the violation of human rights. This is evident from the demand made by the developed countries in the Seattel and Davos WTO Ministerial level conference to include labour standards in the trade.

In fact, various studies reflect the magnitude and pattern of work done by them in different fields, yet their employment as domestic servants has hardly come to the limelight, especially in a backward economy like Orissa. The present study makes an attempt to examine the rationale to outmigration of the childlabour from rural to urban centres, types of work performed, extent of income earned and its share in the gross annual income of their families.

The study is based on the sample survey conducted in Bhubaneswar (Region I) and Rourkela (Region II). On the basis of the pilot survey conducted in both the cities regarding the percentage of households employing child labour, and the proportion of part-time and full time domestic servants in it; 128 (Region I : 85, Region II : 43) sample households were selected for our survey.

This paper is broadly classified into four parts. Section I is devoted to conceptualise the problem of childlabour, extent of their

* This is based on the project titled "Child Labour as Domestic Servants: A case study of Orissa", sponsored by V. V. Giri NLI, NOIDA, U.P.

employment in various sectors, districts and different types of work in Orissa. In section II, the rationale of outmigration of child labour is analysed by considering various supply side factors. The variation in income earned and its share in the gross annual income of their families are captured in section III. Section IV is devoted to examine the demand for labour. The summary and conclusion is mentioned in the following section.

SECTION I

Child labour has been variously defined according to varying social perception. Though there exists no generally accepted definitions, the most common and widely accepted connotation includes children below 15 years of age working voluntarily or under compulsion in organised or unorganised sectors to earn livelihood for themselves or for their family members.

According to the International Labour Organisation, "Child labour includes children permanently leading adult lives, working long hours for low wages under conditions damaging to their health to their physical and mental development, sometimes separated from their families, frequently deprived of meaningful educational and training opportunities that could open up for them a better future". 'Child Labour' is defined as having an element of economic compulsion associated with it and, involved a time and energy commitment which affects children's ability to participate in leisure, play and educational activities. Finally, Child Labour is "work" which impairs the health and development of children (Fyfe 1989, p. 4). The Operations Research group based in Baroda, defines child labour as "A child falling within the five to fifteen age bracket and who is at remunerative work, may be paid or unpaid, and busy in any hour of the day within or outside the family."

In the ancient period, the children were asked to assist other members of their family in the hereditary occupation and it has undergone a change with the development of the economy. Under the changed circumstances, the helpless children with poor bargaining power were subjected to exploitation. However, the cause of concern in the process of these beneficial aspects is : excessive work burden making health and welfare of the child at stake, undue exploitation of child as cheap substitute of adult, work undermining future development of child through education, training and overall development and thus retarding formation of human capital. Such factors need to be looked into and arrested while employing a child.

The recent ILO estimate shows that there are nearly 250 million child workers aged 5 to 14 in the world, without taking into account those who work with their families in domestic activities. The greatest numbers are in Asia (44.6 million) followed by Africa (23.6 million). The NSS (1983) estimates it at 17.36 million while Census (1991) data show that there are 126 million full time and 10.4 million marginal child workers in India. In fact, the magnitude of child labour can not be compared as the data refer to different time periods. Moreover, Census (1991) data show continuously declining proportion of child labour to child population (within 5-14 age group) the proportion declining from 12.7% in 1961 to 7.1%, 6.1% and 5.9% in the subsequent decades of 1971, 1981 and 1991 respectively.

Considering the issue state-wise, it is observed that Andhra Pradesh ranks first (19 lakh, 11.2% of total childlabour in the country) followed by Karnatak (8.7%). Orissa accounts for around 5% of the country's total child population while its share in the total child labour force of the country is around 6 percent. Again, among these child workers, the females are proportionately more than the males. While the State accounts for 9.13% of the country's female child labour the corresponding proportion for their male counterparts is only 5.36%.

Employment of children in the rural sector of Orissa is much more than that in the urban sector, the respective work participation rates being 6.3% and 2.8% of the total work force. Of the rural child workers, 75.4% are male and 24.6% are female while in the urban sector the corresponding proportions are 73% and 27% respectively (Census of India Series 16, Orissa Part-II (B)(1).

A spatial overview reveals greater child work participation rate in the tribal districts of the state. Kalahandi tops the list with 11.30% and it is closely followed by Koraput, Phulbani and Ganjam with respective percentages of 9.03, 8.14 and 7.22. Economically advanced districts like Cuttack is ranked lowest only with 2.61% of child work participation and Balasore and Puri rank above it having work participation rates at 3.23 and 3.74 per cent. In these relatively advanced districts greater facilities, higher literacy rates, larger amount of cultivable land etc. contribute to increased family income for which less children are employed.

As regards the sectoral distribution of the working children it could be observed that majority of them (88.16%) are employed in the primary sector while the secondary and tertiary sectors account for

4.25% and 7.59% respectively. With the restrictions imposed by various labour laws, employment of children has concentrated in the unorganised sectors.

However, the findings of The Labour Statistics of Orissa (1997) reveal that there are 2,15,222 (Male : 56.50%, Female : 43.50%) children engaged in 1,74,811 establishments / work-sites. Districtwise distribution of child workers in the state shows that economic and social backwardness is the major factor behind high child work participation as relatively larger proportion of child labour is found in the tribal dominated and backward districts of Nabarangpur (15.19%), Mayurbhanj (10.11%), Kalahandi (6.83%) and Koraput (6.30%). On the other hand, the incidence of child labour is very low in advanced districts like Jagatsinghpur (0.19%) and Sundargarh (0.40%).

Out of 23,761 (11.04%) child workers 10,294 (43.32%) are male and the remaining 13,467 (56.68%) female, are found to be engaged in hazardous operations like transport of passengers or goods in the railways, at construction sites, rice mills, brick making, beedi rolling, match box manufacturing, fire works etc., while the corresponding numbers in non-hazardous occupations such as agriculture, bakery and biscuit making, cycle repairing, tailoring and other establishments are 1,91,461 (88.96%), 1,11,232 (58.09%) and 80,229 (41.90%) respectively. Paradoxically, the girl child workers outnumber their boy counterparts in hazardous occupations, reverse being the case with non-hazardous work. The maximum proportion (21.93%) of child workers in hazardous work, mainly girls (71.35%) is employed in beedi making. Speaking region wise, Sambalpur district employing 4811 (20.25%) of the child workers in hazardous units comes on the top of the list while Rayagada at the bottom (0.008%). In the former, the proportion of girl child workers (74.06%) in hazardous work is also higher than that of the boys.

SECTION II

The issue of child labour has long been identified as an economic problem. While the socio-economic compulsions of the poor parents force the child to work, increasing thereby the supply of child labour, low wage of child labour and consequential cost reduction and easy profit induce employers to boost the demand for it.

The widespread prevalence of child employment can be explained in a supply demand framework. The economic backwardness of the region by ruling out adequate employment opportunities, poverty (Kulashrestha-1978, Kumar-1983, Shrikantan-1991), low literacy rate

and inadequate infrastructural facilities can be considered to be the prime cause of child labour though some organisational observations (ILO-1996a, 1997b, UNICEF, 1997) are unequivocal about poverty as a major determinant of child labour as the magnitude of its influence is yet to be assessed. Incidence of child labour diminishes with economic growth (Kruger-1997). Again, the influence of this factor being responsible for child labour is questioned as its universal validity is not yet established (ILO-1996a, UNICEF-1997). In fact, to supplement family income (Behera & Behera, 1991), pledging of the parents to work in the unorganised sector of the rural and urban India (Singh et al-1980, Juyal et al-1985, Sharma-1979, Gangrade and Joseph-1983), to meet the subsistence emergencies like medical treatment, marriage; parents force their children to work.

Considering the supply side factors it can be said that a majority of the full-timers are recruited from the rural areas and as such, are migrants. They generally hail from their employers' native places. It is obvious that when a child joins work, be it voluntarily or under compulsion, he/she either does not attend school or withdraws himself/herself from the school. The migrants are basically school drop-outs and hence, a number of them are literates. They have keen desire to go out to earn their livelihood. A number of factors contribute to this predicament of the child. It may be mentioned here that the respondents have come up with more than one explanation for the above. A majority (68.75%) of the sample children could not attend school or dropped out in the middle because their parents were not able to meet the expenses of their education. Nearly 38.28% were called upon to supplement the meagre family income by working elsewhere and 7.03% had to help their parents in household chores and work as domestic helps during spare time. These sample workers have not been able to pursue their studies because of familial compulsions. On the other hand, 37.50% of the respondents did not find schooling useful in improving their job prospects and in 33.59% of the cases, the children were taken out of the school because of other reasons, such as, they had no mind to read and caused nuisance in the village due to bad company.

In the case of full-timers, the relative importance of these factors standing on the way of their schooling is not different. However, the part-timers reported to have been deterred from going to the school mostly because of lack of finance (64.57%) and the necessity to supplement family income (45.71%).

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The school drop outs usually prefer to migrate to cities as they are more ambitious (observed during the time of survey) to work somewhere to earn their livelihood.

The recruitments were mostly facilitated through personal contact between the employer and the employee's parents. The latter feel secured to leave their children in the custody of somebody they know, may be, from very close quarters. The parents do not like to engage their children in other types of work in the urban centres as they consider the environment in such employment (in hotels, shops, garages etc.) harmful for the physical and mental growth of the child and the chances of a child falling in bad company in such employment is very high. They believe (as observed in the course of survey) that a child will be taken better care of in a family with personal touch and fellow feeling compared to an impersonalised commercial environment. The employment of the child as a domestic help has been deemed mutually advantageous by the employer and the parents of the employees.

Migration of Child Labour

The rationale of outmigration of child labour is the non-availability of employment in the neighbourhood (57 per cent) followed by higher income for same work in the urban centres in comparison to rural areas (37.5%) and expectation of regular job in future (34%). There are very few child workers in the sample (2.34%) who considered working as a servant is socially humiliating. There is a lone case where the father considered his child a nuisance and, therefore, sent him away from the village.

SECTION III

Patterns of Work and Income Earned

A child labour performs a series of odd and dirty jobs including cleaning floors, washing utensils and clothes, helping in the kitchen and taking care of the baby. An attempt is made in this section to enquire into the work conditions, income earned by them and its share to gross annual income of the families of the domestic servants.

It is observed that around 50 per cent of total samples have taken up work before they attained the age of 10 and the remaining

started working in the range of 10 to 14. Around 91 per cent of the sample workers clean floor, 77 per cent wash utensils, 72 per cent help in the kitchen and 59 per cent wash clothes. Between full timers and part timers, a relatively larger proportion of the latter are engaged in cleaning floor, washing utensils and clothes compared to the former. But a proportionately larger number of full timers (approx. 80%) render help in the kitchen compared to their part time counter part (51%). Around 43 per cent of the sample child domestic helps, mostly full timers, do baby sitting. A very small proportion of child domestic helps are employed for gardening and looking after domestic animals and the shares of full timers and part timers in this work do not differ much.

Full time workers do relatively more work than the part timers as they are required to undertake miscellaneous work like marketing, taking the home produce to the market and carrying meal to the school for the children etc.

Income

Considering the income earned by the child labour across various categories it is observed that income earned by them differs to a great extent as it varies from less than Rs. 100 per month to a maximum of Rs. 600. It is observed that out of the total sample domestic helps, 6 (4.99%) receive no direct financial benefit for their work. The employers provide them with basic subsistence and look after their comfort. This is observed generally in the case of orphans or when the families of the working children depend on the employers for some benefit or other.

A majority (nearly 62%) of the sample child domestic helps get less than Rs. 200 per month and for the rest 38%, the amount varies between Rs. 200 and Rs. 500 per month. There is a solitary case of a child worker getting a monthly wage of Rs. 600. This pattern of distribution is observed not only across regions but also work categories.

Expectedly, full time workers are relatively better paid than their part-time counterparts as 45% of the former and 20% of the latter receive an amount exceeding Rs. 200 and the remaining are getting less than Rs. 200. Moreover, nearly 13% of the full time workers receive a monthly wage more than Rs. 300 but none of the part timers earned above Rs. 300 per month.

Contribution to Family Income

The child is sent to work not only to earn his livelihood but also to supplement the meager family income. It is evident from study

that a child labour on an average contributes 18.5% of the family income. Of course, this proportion is a little higher (19.95%) in Region-I compared to that in Region-II (16.12%) but the difference is not much.

The average contribution (20.59%) of a full time child domestic worker to his family income is higher than that (13.57%) of his part-time counterpart. In other words, the full-timers compared to the part-timers appear to be shouldering greater financial burden and it is so because they are from relatively poorer families.

The contribution of the child labour to family income varies across different income groups, being more for families in lower income brackets and decreasing with increase in family income. While families with annual income of less than Rs. 11,000/- receive as much as 28.54% of their income from their child labour, the corresponding percentage for families with annual income of more than Rs. 15,000/- is only 13.55%. This trend is also observed in each of the regions as well as among the part-timers and full-timers. In the case of full-timers' families below the poverty line (with annual income of less than Rs. 11,000/-), a child domestic contributes 32.36% of family income but for families with annual income of more than Rs.15,000/-, his contribution is only 15.09%. The corresponding figures relating to child labour's contribution to family income for part-timers are 20.19% and 8.07% respectively.

None of the child workers was categorical as regards the receipt of other benefits like free time for entertainment, facilities for reading or other vocational training. It may be generalised that the child domestics were mostly denied of such benefits. In fact, the employment of child labour can not be eradicated from the grass-roots level of the economy as long as there is a demand for it.

SECTION IV

Preference for Child Labour

The problem of child labour is not only due to the rise in supply of it but also to some extent due to rise in demand for it. The growth of the service sector, the rapid increase in the supply of part time jobs and the search for more flexible work force have contributed to the expansion of the child labour market. The employers employ child labour either because of their preference for them or due to non-availability of alternative adult labour. Most of the employers cited more than one reason for recruiting child domestic helps.

The study also shows that out of the 128 households surveyed, 93 (72.67%) preferred child labour, while they are not preferred by the remaining 35 (27.33%) respondents. A probe into the reasons for this preference as given by the employers, shows that a majority considered the child domestic helps easy to manage (91.39%), non-protesting to do odd jobs (59.13%), and less demanding (40.86%). These factors are also found to be valid across regions and types of employees, namely, part-time and full-time. However, in respect of full-time workers in Region-I, easy accessibility of the family members to the child domestic help is an important factor for the preference as 35% of the employers reported so. In the case of only 15% of the child domestics, the employers considered that they were cheap and affordable. Speaking otherwise, substitution effect does not seem to be a prominent factor in the choice of children as domestic helps.

Of the sample households not preferring child domestic helps 82.85% reported to have engaged them because adult domestic servants are not available. This is the situation observed in both the regions and as regards both the full-time and part-time workers. However, of the total 93 full time child domestic helps surveyed, only in 18 (19.35%) cases employers preferred adults. But as regards the part-time workers, 48.57% (17 out of 35 surveyed) indicated their preference for adult servants. This speaks of the employers' preference for adult part-time domestic helps.

SECTION V :

Summary And Conclusion :

To sum up, there is wide spread employment of child labour in the underdeveloped economies, especially in India. They are employed in various organised and unorganised sectors though their concentration is more in the latter in comparison to the former. So far as Orissa is concerned, it is having around 5 per cent of the country's child population though its share in the total child labour force is around 6 per cent. Besides, it is having more proportion of female child workers in comparison to their male counter parts to their respective population. The child labour are mostly concentrated in the Primary Sector (88%) especially in the rural areas, having higher percentage of males (75%) than that of females (25%). They are mostly concentrated in the backward districts having child work participation rate at 7 to 11% though it is 2 to 4 per cent in the developed districts.

A majority (68.75%) of the sample children could not attend school or dropped out in the middle because their parents were not able to meet the expenses of their education. Nearly 38% were called upon to supplement the meagre family income by working elsewhere and they had to offer themselves as child workers. In the case of full-timers, the relative importance of these factors standing on the way of their schooling is not different. However, the part-timers reported to have been deterred from going to the school mostly because of lack of finance (64.57%) and the necessity to supplement family income (45.71%).

They are compelled to migrate to cities primarily due to non-availability of adequate employment opportunities (57%) in the under-developed rural economy, low wage rate for similar work (37.50) in the village and expectation of regular job (34%) in future.

Around 90 per cent of the child domestic helps started working before they have completed 12 years of age. As regards the type of work undertaken, it is observed that the child domestic helps mostly clean floor, wash utensils, help in the kitchen, wash clothes and relatively small proportion of them do baby sitting and gardening. It was also found that between part-timers and full-timers, a relatively larger proportion of the former are engaged for cleaning the floor, washing utensils and clothes. In the matter of extending help in the kitchen the proportion was, however, higher for full timers. The work of baby sitting is mostly done by full timers.

The domestic servants are being given very low wages as nearly two thirds of them were found to be receiving wages less than Rs.200 per month. It was found that full timers usually received higher wages than their part time counterparts.

On an average the extent of contribution of child domestic helps to the family income is 18.50 per cent. Between full timers and part timers, it is seen that the contribution of the former was higher than that of the latter. However, contribution of the child domestic servants to their family income was observed to be proportionately higher at relatively lower level of income, declining with increase in the latter. The variation in wage rate is very low.

The employers prefer (73%) to substitute child worker for adult ones as the former can be easily handled (91%), less demanding (41%) and do not protest (60%) to take up some odd jobs. Further, non-availa-

bility of adult workers motivate the employers to employ cheaply available (15%) child workers. However, 48.57% of the households employing part timers and only 19.35 of those with full timers revealed their preference for adult workers though they have employed child workers due to the non-availability of the latter. It seems households largely prefer adults as part time workers and child labour on full time basis.

This reflects that child labour can not be abolished as long as there is demand for and supply of it. Formal education may not be quite fruitful to eradicate the social evil from the grassroots level of the economy. There is a need for improvement of the working condition and quality of life of the child labour. Further, provision of improvement in the skill of child labour can make them marketable and hence, help them to become self dependent.

Towards Eliminating Child Labour : Some Developmental Aspects

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The concepts, like 'child', and 'labour' being too difficult to define, the issue of child labour has been the cause of concern almost in all the economies. At the initial stage of development, children used to work in the fields as well as in the household concerns under parental protection and guidance so as to contribute to the home product. Marked growth in child employment was observed during the early phases of the Industrial Revolution in the Western Europe and North America. Subsequently, increased industrial and allied activities and allurements for profit by curtailing cost initiated a process of exploitation of the working class. Children were substituted for adult workers. Simultaneously, change in the nature of employment, work conditions were much to the disadvantage of these vulnerable, submissive, never-complaining child workers. Imposed work load thus denied the child of the basic opportunities for development a right of each human being. And this has remained the crux in the problem of child labour since long.

Despite various labour laws and legislation which have outlawed employment of children and made strict provision of social security, compulsory education to prevent exploitation of children, the issue of child labour looms large even in the developed world. A survey conducted in UK during 1985 revealed that nearly 40% of children encompassed by it, were engaged in some form of economic activity, most of them employed illegally be it in terms of hours of work or the nature of work. In the US employment of children in farms, plantations, fast-food restaurants and garments factories has been on the increase, thus increasingly flouting the labour laws by 250% over 1983 to 1990 (ILO, 1992).

The developing world reflects much worse a situation as regards child employment. In Latin America nearly 26% of the children aged

10-14 years are working while in Brazil their proportion works out at 18%. Of the South Asian nations Bangladesh tops the list with child activity rate i.e. proportion of economically active children to total child population, of 33.3% while Sri Lanka is ranked last with 1.8%. In India above 11 million children, i.e., 5.4% of those in 5-14 age group are engaged in some economic activity (ILO, year book of Labour Statistics, 1997).

A sex wise distribution of these children reveals that the activity rate of male child population (5.7%) in India marginally exceeds that of the female (5.1%) which is the case in almost all the developing countries. This divergence is attributable to increasing role of the girl child in the household activities, a segment of employment which remains unremunerated and unenumerated.

The census reports reveal that at the All-India level, nearly 10.75 million children within the age group of 0-14 years were economically active during 1971. This number increased to 13.64 million during 1981 then declining marginally to 11.28% in 1991. Nearly 9.08 million of these workers are engaged as main workers while 2.20 million as marginal workers. The survey report also revealed a declining proportion of child workers to child population within 5-14 age group. This proportion declined from 12.7% in 1961 to 7.1%, 6.1 and 5.9% in subsequent decades of 1971, 1981 and 1991 respectively. But this declining trend, combined with an increasing proportion of marginal child workers, which escalated from 1.3% of the child population 1981 (5-14 age group) to 4.9% in 1991, has boosted the figure of total working children from 7.4% in 1981 to 10.9% in 1991. The census survey 1991, reporting 54.4% of the children as school going remains silent about the status of the balance 34.8%. These children, demarcated as nowhere children, are engaged in own farms, household industries or other informal sectors.

Spatial distribution of child workers reveals that Andhra Pradesh has the maximum number of working children since 1971. In that year it had 15.13% of the child workers which declined marginally to 14.30% in 1981 and subsequently increased to 14.73% in 1991. U. P. comes in the second position as 12.34%, 10.52% and 12.49% of total economically active child population during the above three decades are employed in this state. The case of Orissa is equally disheartening. In 1971 it had 4.58% of the total child workers which escalated to 5.15% during 1981, reducing marginally to 4.01% during 1991.

Why do Children Work

Almost all studies on child labour are unequivocal about lack of proper employment avenues and irregular income to be the major reasons behind wide prevalence of child labour. While the Labour Bureau, Ministry of Labour (1981) underlined poverty to be the major reason behind child employment on the basis of a macro level study in Indian industries, Nardinelli (1990) and Srikantan (1991) adduced the same by conducting micro studies. Other organisational observations (ILO, 1996a, 1997b; UNICEF, 1997) have also stressed the impact of poverty increasing the incidence of child labour but the exactness of this impact is yet to be assessed.

Existing literature has highlighted the role of educational support system in reducing the magnitude of child employment. Kanbargi and Kuikarni (1985) have revealed that with increased parental education children will attend to school and not work.

Another factor imposing work load on children at a tender age is economic backwardness of the region. Though incidence of child labour is observed to decline with economic growth (Kruger, 1997) universal validity of this factor is yet to be established (ILO, 1996a; UNICEF, 1997).

It is observed that children are mainly employed in the rural farm sector. Incidence of child labour is also largely prevalent among socially and economically backward population particularly those in SC, ST category. Hence, the role of demographic profile in explaining the incidence of child labour could not be minimised. While the extent of urbanisation, measured by the proportion of urban population, is observed to exert negative impact on the employment of children, increased proportion of SC/ST population in a region is believed to have positive impact.

Methodology

The present exercise is an attempt to assess the impact of the aforementioned developmental factors on the incidence of child labour in Orissa. As no time series data on child labour are available, the district wise cross section data as estimated by the Labour Commissioner of Orissa (1997) have been considered for the purpose. The intensity of child employment have been measured by the proportion of child workers to the total population in a district as child population could not be quantified in the absence of age group wise population figures.

In an attempt to assess the impact of economic, educational, demographic and developmental factors on the incidence of child labour some variables under each category are incorporated as explanatory factors. Per capita availability of food grains and per capita collection of small savings are considered as economic factors, literacy rate, female literacy rate and enrolment of children in primary schools as educational factors, proportion of urban population and SC, ST population as demographic factors. The study has incorporated the mandays of employment generated under a government sponsored employment generation scheme to assess the impact of adult employment on child work participation. Three indices assessing the extent of agricultural, industrial and infrastructural development of the districts are included as another set of explanatory variables. The first index includes per capita income from agriculture and animal husbandry, percentage of irrigated to gross cropped area, gross value of agricultural output per hectare, cropping intensity and fertiliser consumption per hectare of gross cropped area. The industrial index includes per capita net value added by the organised manufacturing sector and the proportion of workers employed in household as well as non-household industries. Infrastructural index incorporates the proportion of villages electrified, surface road and railway route length per 1000 sq. km, number of banks, post offices and hospital beds per 1000 population. Weighted standardised value of these variables (see Iyengar and Sudersan, 1982) are taken to represent the extent of development in the respective fields.

Data relating to all the explanatory variables are obtained from sources like State Level Statistical Abstracts, Economic Survey Reports, Annual Survey of Industries and from related offices. All these figures are for the year 1995-96. Causal relationship between these variables and child labour is examined by OLS method.

Observation and Conclusion

The regression results as presented in Table-1, reveal that per capita availability of food grains, literacy rate, female literacy, proportion of SC/ST population in a district and agricultural, industrial and infrastructural indices have statistically significant coefficients.

The results underline the significance of economic variables like per capita availability of food grains in reducing incidence of child labour. Other factors like per capita saving also has a negative, though statistically insignificant, coefficient. It could also be observed that the

government sponsored employment generation programmes are not of much significance in eliminating child employment.

Educational factors like literacy rate in general and female literacy rate in particular, are observed to have significant retarding impact on child employment. Explanatory powers of these two are much higher than those of economic factors, thus, highlighting the importance of parental education in reduction of child employment. Child enrolment in the primary school also has a negative impact. Insignificance of the coefficient may be attributable to over optimistic official records of child enrolment or because children devote their free time after school for earning.

Increased urbanisation also reduces the incidence of child labour, though the result is not very conclusive. Moreover, increased SC, ST population in a region speaks of greater incidence of child labour.

Economic development of a region as it increases employment avenues and income of the inhabitants, are expected to reduce the incidence of child labour. Regression coefficients of all the three developmental indices are negatively significant and quite expectedly industrial index has the highest explanatory power. Higher per capita value added by the manufacturing sector signifies higher labour productivity and hence less inclination towards substitution of child workers for adult ones. Though agriculture is the largest employer of child labour, an improved agricultural index reflects improved economic position and hence withdrawal of children from the labour force to schools. Infrastructural development reflecting overall development of a region also reduces child employment.

Considering the above observation it could be concluded that the incidence of child labour could be reduced if the literacy rate, particularly female literacy rate is improved, free and compulsory education is universalised, economic position of the people in general and SC, ST population in particular is uplifted and agricultural, industrial and infrastructural development are brought about.

Though such policy prescriptions are of long run nature, these could, in line with other developmental policies be translated into a series of short run measures aiming at the long term objective of elimination of child labour.

TABLE—1

IMPACT OF ECONOMIC, EDUCATIONAL, DEMOGRAPHIC AND
DEVELOPMENTAL FACTORS ON CHILD LABOUR IN
ORISSA, 1995-96

Variables	Coefficient	R ²
1. ECONOMIC		
a. Per capita availability of food grains	-0.05 (-2.38)*	0.14
b. Per capita collection of small savings	-1.45 (-1.77)	0.07
c. Employment in JRY	-0.05 (-0.27)	0.03
2. EDUCATION		
a. Literacy Rate	-0.44 (-5.25)*	0.47
b. Female Literacy Rate	-0.43 (-4.65)*	0.42
c. Enrolment	-133.41 (-1.51)	0.04
3. DEMOGRAPHIC		
a. Urban Population	-0.2538 (-1.3814)	0.0303
b. SC,ST Population	0.2820 (3.702)*	0.3046
DEVELOPMENTAL INDICES		
a. Agricultural Index	-0.1943 (-2.522)*	0.1559
b. Industrial Index	-0.1805 (-2.8979)*	0.2032
c. Infrastructural Index	-0.2232 (-2.1264)*	0.1083

(Figures in parentheses are 't' values.

* indicate significance at 1% level)

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Child Labour in India

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Child Labour persists in almost all the states of India, inspite of the various attempts made by the Govt. to remove it. This implies that a change in the attitude of the society is required towards the child labour alongwith population control and compulsory education to combat child labour from India.

Childhood is a lovable state and children are considered to be an extremely valuable asset for the society. "Every child is potentially the light of the world. From his infancy, the child must be nursed at the breast of God's love and nurtured in the embrace of His knowledge, that he may radiate light, grow in spirituality, be filled with wisdom and learning, and take on the characteristics of the angelic host." (A.K.Merchant : 1997). Children of today will be the manpower of the nation tomorrow. Hence the quality of children has to be taken care of. But in the underdeveloped countries like India, most of the children can hardly dream of childhood. Millions of children are found toiling in different nooks and corners of India, which is proclaimed to be a welfare state.

Depending on the definitions of work and perspectives of child labour, the estimates of child labour differ. According to the Government of India the number of working children was estimated at about 17 million in the national sample survey with a projected 20 million working children by the year 2000. Other studies indicate that these figures are a gross underestimation. Study sponsored by the Labour Ministry reports that 44 million children in the 5-14 age group are in the labour force. [Myron Weiner 1996]. The Census of India puts the number of child labour at 10 million in 1971, 13.5 million in 1981 and 17.3 million in 1991 based on its limited definition of work as carrying monetary wages. [K.Hanumantha Rao and M.Madusudhana Rao, 1998.] Due to the multiplicity of the concepts of child labour and the difficulties associated with the methods of estimation of data, it is difficult to

make a precise estimate of child labour. But it is a fact that child labour is a social and economic problem of a nation which stands on the way of all round development of a nation.

Though it is a global phenomenon and is found in many countries of the world, Pakistan, India and Bangladesh have the world's largest number of working children. Tragically, India has the largest number of child labour force in the world and a greater incidence of child labour than any of the countries outside this region. For instance in the state of Tamil Nadu, the number of children working in exploited situation is estimated by UNICEF to be 11,05,586. In the match and firework factories there are about 50,000 working children between the age of seven and fourteen years. In the lock factories of Alligarh, Uttar Pradesh about 10,000 children are daily working in terrible conditions. In Himachal Pradesh, as per 1981 Census, there are about 23,532 child workers working in and around polluted atmosphere caused by passing trucks, buses and boiling tar. In Rourkela, Orissa, as per M.K. Patra's study 300 children in between the ages of 8-15 years are working behind the Rourkela Steel Plant in the burning Sun and acrid smoke from the plant with no drinking water facilities and toilet nearby. About 6,17,351 children below fourteen years of age are working in exploited condition in Orissa as per UNICEF's estimate. (Francoise Remington, 1996)

In the state of Jammu and Kashmir, child labour increased from 15% in 1981 to 40% in 1991 (A. Gani and M. A. Shah, 1998). In Madhya Pradesh and Rajasthan there exists a shameful practice of child marriage and child prostitution (Manu N. Kulkarni, 1997 Rajeswari Chandrashekhar 1996). In West Bengal, Bihar and Eastern Uttar Pradesh the girl child workers are disguised labourers with inhuman exploitation (Shanker Singh, Nikhil Dey, Aruna Roy 1994).

In addition to these findings the data provided by the annual report 1996-97, Ministry of Labour, Govt. of India pointed out that child labour prevails in almost all the states of India, the number may be more in some states and less in others. But the concentration of child labour is maximum in the agricultural sector in comparison to the non-agricultural sector. Apart from these studies and official figures, one cannot deny the fact of seeing children working in the shops, fields, rearing cattles, rag picking in the garbage dumps, cleaning tables in tea stalls & restaurants, begging, sweeping, boot polishing, working as domestic servants at meagre wages.

Keeping in view of the ever increasing growth rate of child labour and their pitiable working conditions, the present paper is an attempt to analyse the causes of child labour and to throw light on the necessity of changing the attitude and sensibilities of the society towards child labour, and in realising the difficulties and inabilities of the legal measures to eradicate child labour.

The extent of child labour in certain industries and the social degradation and damage it leads to force us to acknowledge the social dimension of the problem and the moral and ethical question it raises. When society as a whole understands this sentiment, it will be possible to strike a blow on the strongly knitted vicious circle of child labour.

In the past, children of the poor could be seen working with their parents. But now the nature of work in which children are involved has undergone a change due to a change in the economic system and mode of production. With the coming of industrialisation and diversification of rural economic activities, children began to be largely employed in the industry, domestic and commercial establishments for long hours, with low wages and inhuman treatment.

The growth of urban and semi-urban sectors in general and the small and medium size factories along with ancillary units in slum areas in particular are contributing a lot to the deplorable conditions of these under aged poor labour force in India even after so many years of Independence.

Recognising the harm done to most of the poor children that are forced into the labour group at an early age, government has passed various legal measures to remove it. But the condition of the children remained as it is.

It is crystal clear from the discussions made in the foregoing paragraphs that the demand for child labour arises mainly from the industry, commercial establishments, agriculture and domestic sectors. It is not that the employers of these sectors are not aware of various legal measures and other related service conditions enacted by the state as well as central governments, rather the unscrupulous employers are cautious in hiding their non compliance from getting known to others. "This is because children are not conscious about status, ego and they are less affected by the feelings of shame and guilt. They can be removed from the jobs as and when desired without compensation of any sort. They are more active, quick and energetic in certain task. They are

disciplined and submissive. They almost do the same amount of work as their adult counterparts but they cost less in terms of wages and maintenance. Further they cannot form union or question the employer. They are a great source of profit as they generate large surplus values.

On the supply side the most commonly cited examples are rising population, poverty and lack of schooling. India being the second most populous country of the world had a population of 846 million (1991) and an estimated 950 million at the end of 1997. Though the fertility has declined throughout the country, albeit at 'a varying pace' (Leela Visaria 1999).

The poverty of the nation is also increasing not withstanding the various poverty alleviation programmes, swelling the ranks of the poor by a record 40 million within a decade according to the World Bank Report. According to the Planning Commission estimates the percentage of population below the poverty line in India has declined from 54.88% in 1973-74 to 35.97% in 1993-94. (Statistics on children in India 1997). Whereas Swaminathan S. Anklesaria Aiyar (1999) writes that today's data have so many flaws and differ so widely depending on which source you look at that the most basic facts are matters of statistical dispute. Whether or not our people are getting poorer, our statistics unquestionably are. So, instead of simply talking of structural adjustment of the economy, we need to embark on structural adjustment of our statistical systems. Only then will we know what is actually happening in the economy (Swaminathan S. Anklesaria Aiyar 1999). Whatever may be the studies of the authors and the official figures relating to poverty, it is believed and seen that the families of the child workers are very poor and unable to have two meals per day. That is why children work to clear off parents' old debts and to enable parents to spend more time on income generating activities.

As far as lack of schooling is concerned, it has been observed that as per 1993-94 report of the State Education Department, the drop-out rates in classes I to V are 47% and in classes I to VIII 62%. National Sample Survey conducted in September 1994 by the National Council of Applied Economic Research reports that the percentage of non-enrolled children is higher. According to official figures 90 million out of 179 million children in this age group do not go to school. These figures are eight million higher than what is reported in the 1981 Census.

However the causes responsible for the drop outs and/or non enrolment of the children in schools are solely due to abject poverty, lack of knowledge and awareness about the benefits of education and various difficulties associated with the present educational system, such as higher cost, inaccessible admission procedures, inhuman behaviour of the teachers in some of the government schools both in the villages and towns make the poor parents shy in approaching the education system.

The advocates of child labour believe that the work done by children are very much in the nature of learning skills and techniques which will be helpful to them in future (Myron Weiner 1996). The population problem is the Devil's philosophy; our children are our greatest wealth. They are engines of wealth creation and they must be given complete economic freedom to develop (Sauvik Chakravarti 1999). Another view is to accept child labour, and try instead to improve the conditions, in which children work and secure a fair return for their efforts. This can include shelter, health care and education and training to enable young people to secure permanent employment. This approach has worked in Bangalore and Nagpur and it is a cost effective and human way of enabling children abandoned by all to find a new life of self-respect and dignity (Nicholas Colloff 1993).

Observing the present way of functioning of our economic systems, one question arises in the mind, that how long India can hold on an ever increasing illiterate, low skilled workforce and what will be its impact on the economy. It is true that the earnings of the children are small in comparison to that of the adults. Their daily earnings vary between Rs. 5.00 to Rs. 13.00 (Geeta Lal 1997) and on an average Rs. 63.60 per month (T. Lakshmanaswamy 1991). In rural areas children largely work as unpaid labourers either in farm or in household activities. They also do marketing jobs on small wages. However the point is that even if children contribute a small amount to the family's income their contribution is significant and a positive valuation of it by parents and a positive effect of economic contributions of children on couple's fertility increase have been studied by various authors. It has been also found that some of the children are sent to work not out of poverty but to prevent them from idling as schools are not the alternatives and sometimes they work to learn the traditional arts and crafts of their forefathers. In most cases money earned by them is spent on conspicuous consumption of alcohol and gambling like playing cards.

Further the various advantages which the employers feel that they are enjoying by employing child labour is only a myth. The reality is that examination of seventeen processes in match manufacture showed that children are employed in simple tasks requiring a speed of movement and co-ordinations of action; but no special aptitude which children might possibly have and adults do not have. In fact, not only more adults employed in all these operations, but they outnumbered children in the surveyed units and most crucially their model rate of physical production was more than that of children and the cost of a product caused by replacing children with adults is only of the order of about 4% to 7% (Bulletin 96 and Delhi MID-DAY 1997). Therefore in future the employers will have to bear a heavy cost because qualitative and standardised production is possible only through training and higher efficiency. Besides the accidents and health problem that occurs in the hazardous occupation will make them unemployed and dependent in their youth life. The skills and the techniques which they learn in their childhood may not be of much use in their later life because it is low paying and monotonous and this makes their life difficult to live on in this competitive sophisticated and materialistic world.

Thus it can be said that child labour existing in India is the hard truth. Now the point that is of concern is why after such a lot of governmental regulations and prohibitions the problem still exists. The answer to this question can be discussed in two ways: one as a partial citizen and the other as an impartial citizen. The former one speaks favourably when the weather is good and unfavourably when the weather is bad.

As a partial citizen, one will always blame the government and its machineries for its inability in tackling the problem by using the words like misappropriation of funds, corruption tamashas when in power, carried away by big countries decisions and leakage in the policy measures. But little one thinks that we are the people who form the government and the government cannot achieve anything if we common people do not co-operate. As an impartial citizen, one would probe deep into the matter and realise that the problem is deeply rooted with our culture, socialistic and political attitude and standard of living. It cannot be solved within a short span of time and discarding the products produced by those little hands is surely not an humanistic approach to abolish child labour. Nor does banning of child

workers in various sectors of our economy will be a wishful attempt to fight child labour. The existence of child labour is justified for various reasons. Therefore it will not be unwise to suggest for a liberal and humanistic behaviour of the employer towards child labour in the form of lesser hours of work, lighter work, accident relief, a slightly higher wage and provision of education through evening schools. There is also a dire necessity to control the fertility rate among the rural couples and supply of family control measures at an affordable price both in the rural and urban areas. The benefits of education have to be convinced to the people and education has to be made compulsory with some modifications, so that it becomes interesting and encouraging one for the children of the poor to study and to go to school. Also the parents will be induced to send their children to school. But, above all these steps, a change in the attitude of the society towards child labour, whether it is a boy or a girl, is needed. Besides being an economist, scientist and socialist, we should spend a few minutes to think what we are "Man or Animal and accordingly what should be our behaviour towards the child labourers, who are not our children but somebody's in the Human Society."

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CHILD LABOUR IN INDIA

— Lessons From a Field Survey

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Every day in India, countless children fall victim to neglect, cruelty and exploitation. Yet we are a signatory to the "United Nations Convention on the Rights of the Child" (UNCRC), 1989 in which four basic rights of the child—Right to Survival, Right to Protection, Right to Development & Right to Participation—are clearly specified. And we have the largest written Constitution, which under Article 39 of the Directive Principles of State Policy provides for securing healthy child development and protecting children against exploitation. The sad truth is that a substantial proportion of children of the country are made to toil for their survival and are subject to servitude at a time when they should be playing, learning and growing. The spread of economic reforms and structural adjustment initiated during the early 1990s is likely to worsen the situation. With the intensification of reform measures involving attempts at minimising fiscal deficit, a cut in state expenditure on basic public goods like health, education, food subsidies and other social services has become imperative. The real incidence of adjustment would, therefore, fall on the poor and a further increase in child labour is apprehended.

Against this background an attempt has been made in this paper to make people conscious of the problems of child labour and their responsibilities for taking corrective action to check the menace. The paper is divided into three sections. Section I as the introductory one specifies the problem, the objectives and the methodology of the study. Analysis of field data and broad results of the survey are presented in section II. Section III highlights the suggestions for meeting the challenge.

I

The Problem :

Although neither the 'child' nor the nature of 'labour' in the context of child labour is well defined, participation of children in the age group 5-14 years in any economically productive activity detracting

them from play, education and similar opportunities is usually accepted as child labour. In the past, child labour was basically seen as unpaid work in house-based economic activities notably on family farms. But with the diversification of economic activities, spread of industrialisation, promotion of service sectors and proliferation of urban centres, Indian children have become active in all key sectors of the economy probably with the exception only of large factories. Despite various international labour laws, constitutional provisions and child labour acts prohibiting employment of children, the number of child workers is on an increase year after year. The 1991 Census put the figure of child workers at 11.28 million i. e., 5.9 per cent of those in the 5-14 years age group. The other estimates are 17.36 million (N.S.S. 38th Round, 1983) and 23.17 million (ILO, 1996). The UNICEF Report 1997 reveals that of the 250 million working children in the world over one third are in India. Spatial distribution of child workers in the country as per 1991 census shows that Andhra Pradesh has the largest number of child workers in the country (14.73 per cent) followed by Uttar Pradesh (12.5 per cent), Madhya Pradesh (11.99 per cent) and Maharashtra (9.47 per cent). With 4% of the total child workers of the country, Orissa's position is tenth in the scale.

The issue of child labour is not a mere number game. The conditions in which children work in India are highly deplorable and in many cases grossly hazardous. They are paid a little higher than subsistence wages and are subject to inhuman harassment, unimaginably shabby treatment and uncivilized exploitation.

The objectives :

The following objectives have been chosen for investigation in the study.

1. To examine the nexus between child labour and poverty, illiteracy and caste status.
2. To study the factors responsible for preference for child labour vis-a-vis adult labour.
3. To explore the working conditions and wage pattern in different occupations.
4. To suggest curative measures for checking the menace.

The Data and the Methods :

For a detailed investigation of these objectives 60 child workers of the age group 12-14 years have been selected from three occupations—

agriculture, domestic help and restaurant service—following stratified random sampling procedure in and around Cuttack City. Information has been collected through the use of a well structured schedule canvassed in person among these working children. Simple statistical tools like tables, averages and percentages have been used to analyse the data and derive results.

II

The Causative Factors :

The issue of child labour is basically an economic problem and can be explained in terms of a simple supply-demand approach. On the supply side child labour is viewed as essentially the consequence of what may be termed as the '**Poverty argument**' which in its elementary form states that children work because their parents are poor. The survival of the child and the family at large is a difficult proposition without the income on account of child labour. Low family income, large family size and a host of such other factors cause poverty and force children to work. This is shown in Tables 1 and 2 which explain the nexus between low income and large average family size on the one hand and the incidence and intensity of child labour on the other. The poverty argument is often reinforced by what may be broadly termed as the '**irrelevance of education**' argument. In its simplest form the argument is that the kind of education that is being imparted in most institutions of learning is of no use in earning a livelihood let alone meeting the complexity of challenges that lie ahead. School time is, therefore, considered wastage of economically productive time and expenses on education are construed as largely unproductive. The argument is clear from Table—3. It may be revealed from the table that nearly one-third of child workers are drop outs of schools or illiterate because for them contemporary education is sheer wastage, 60 per cent of them joined work to supplement family income in order to meet subsistence emergencies and 8.3 per cent of them could not go to school/dropped out as it was beyond their capacity to afford the expenses of education. Child work thus, is considered as the lynch-pin of family economy and a natural by-product of poverty and irrelevant educational system.

From the employer's point of view the inevitability of child labour is a consequence of what may be termed as the '**comparative advantage**' argument. In simple terms the argument is that employers

employ children because they accept lower wages compared to adult workers and are, therefore, a source of large surplus value and high easy profits. Further, child workers have a low economic base and status consciousness and are submissive and largely unorganised. They accept lower wages and sub-human treatment without resentment and can be punished and tackled easily. The comparative advantage argument is evident from Tables 4 and 5. It may be seen from Table 4 that a child's wage is only 53.3 per cent, 43.33 per cent and 40.0 per cent that of an adult in agriculture, domestic help and restaurant service occupations respectively and more so for approximately the same value added. A look at Table 5 reveals that approximately three-fourths of the employers of child workers investigated preferred child labour to adult labour because the former is less costly, 18.2 per cent considered the child workers easy to manage while 6 percent reported the preference for both the reasons.

Other causative factors for child labour are seen in terms of caste and educational status of the working children as indicated in Table 6. It may be seen from the Table that the child workers are either illiterate (18.3 per cent) or have received education upto class V (28.3 per cent) and class VII (53.4 per cent). Among the occupations, illiteracy is the highest (40.0 per cent) in the case of agricultural child workers, followed by children working as domestic help (10.0 per cent) and restaurant servants (5.0 per cent). Between the castes, the extent of illiteracy is expectedly higher among the SCs than the general castes.

Conditions of Work :

The problem of child labour is multilayered and the effects thereof have serious ramifications. Working children are subject to bad working conditions and sub-human treatment. Although the occupations under study appear safe, investigation show that the vulnerability of children has proved hazardous in some cases. While working children in agricultural activities are susceptible to sickle cuts, snake bites, cold and fever, those in household and restaurants have risks of fire and wrath of irate employers and visitors/customers. Restaurant boys have the special risk of drug or wine addiction and AIDS. Besides, the working hour for domestic help and restaurant boys is not fixed, it may stretch any longer and any odd hour; and their living conditions are grossly unhygienic and largely deplorable.

Wage Structure :

A glance at Table 4 shows that the wage rate is alarmingly low and there are sizable differences in wage rates among the occupations under investigation. In all the occupations wages have both cash and kind components. But while the kind component is very high in the case of domestic help and restaurant servants, the total wages are the highest in the case of agricultural child workers (Rs. 960) followed by those working as restaurant boys (Rs. 800) and domestic servants (Rs. 650). This is chiefly because domestic help and restaurant servants are 'outsiders' working under shade and are likely to remain employed round the year while those working in agriculture are 'insiders' and face high seasonal unemployment.

The major conclusion that emerges from the study is that the practice of child labour is economically unsound, physically harmful, psychologically disastrous, socially undesirable and morally degrading.

III

The issue of child labour in India thus involves a dilemma. While the practice of employing children has serious socio-economic implications warranting its elimination, the economic compulsions underlying the supply and demand forces are a clear pointer to the inevitable persistence of child labour as a harsh reality. Hence, prohibitive measures have remained Canute's orders with the message that child labour cannot be eliminated by the magic wand of a legal ban as long as there exists a demand for and supply of such labour. And if we cannot leave child labour let us live with child labour. The principal effort would, therefore, have to be directed towards amelioration of child labour. The following measures are suggested to meet the challenge.

An illiterate/half-read child worker becomes an unskilled adult destined to a life of deprivation and a vicious circle of illiteracy and child labour for the nation. Creation of awareness in people to achieve diversion of children to schools in leisure hours may be an effective measure. The present conviction that schooling involves loss of economically productive time need to be washed away from the minds of the people through following measures.

Re-orientation of the existing school system and curricula from the existing inappropriate and costly single point entry method to a low cost, flexible and practicable method of adjusting and conden-

sing school time and curricula relying on off-time instruction by locally recruited carpenters, tailors, mechanics and smiths etc. can be a suitable measure. The budget provisions for such non-conventional vocational educational need to be made even at the cost of free/subsidised higher education for India's middle classes. Regulation of working hours be enforced to allow time for the working children to go for such education, training and learning skills and improving their future marketability.

Universalisation of free and compulsory female education can also be a step in the right direction in this regard.

Necessary governmental and extra-governmental provisions in the form of **people's involvement** be made to enforce improvement of working condition and living environment of child workers and a fair return for their efforts.

Child labour laws be made flexible to facilitate the establishment and functioning of a **child labour commission** in line with the human rights commission.

Since child labour is firmly rooted in poverty enhancing income through provision of **gainful wage employment** to at least one member in each poor family can go a long way in liberating child labour.

Every child is a human being and has a dream. All possible care need to be taken to realise it rather than to turn it into a mid-summer night's dream.

TABLE—1

Family Income and Child Labour
(Income in Rupees per month)

Income	No. of Child Workers
Less than 500	22 (36.7)
500—600	18 (30.0)
600—700	15 (25.0)
700—800	05 (8.3)
Total	60 (100.0)

Figures in parantheses indicate percentage to total.

TABLE—2

Family Size and Child Labour

Average Family size	No. of Families	No. of Child Workers
3	1	01 (1.6)
4-3	7	10 (16.7)
6-4	12	19 (31.7)
8-7	18	30 (50.0)
Total	38	60 (100.0)

Figures in parantheses indicate percentage to total.

TABLE—3

Causes of School Drop out/Illiteracy and Joining the Work Force

Category Causes	Agricultural work	Domestic help	Restaurant Service	Total
1	2	3	4	5
Need to Supplement family Income	13 (65.0)	12 (60.0)	11 (55.0)	36 (60.0)
School Education is wastage	05 (25.0)	07 (35.0)	07 (35.0)	19 (31.7)
Could not meet School Expences	02 (10.0)	01 (5.0)	02 (10.0)	05 (8.3)
Total	20 (100.0)	20 (100.00)	20 (100.0)	60 (100.0)

Figures in Parantheses indicate percentage to total.

TABLE—4
Average Monthly Income

(In Rupees)

Monthly/ Income Category	Child Workers			Adult Workers
	Explicit	Implicit Maintenance Expenditure by Employer	Total	
1	2	3	4	5
Agricultural Work	900	60	960 (53.3)	1800
Domestic Help	200	450	650 (43.33)	1500
Restaurant Service	300	500	800 (40.0)	2000

Figures in parantheses in column 4 indicate percentage to respective figures in column 5.

TABLE—5

Reasons for Employing Children (Employers' point of view)

Category Reasons	Landlords	House Owners	Restaurant Owners	Total
1	2	3	4	5
Low wages	6 (100.0)	13 (72.2)	6 (66.7)	25 (75.8)
Easy to manage	—	4 (22.2)	2 (22.2)	6 (18.2)
Cheaper and Easy to manage	—	1 (5.6)	1 (11.1)	2 (6.0)
Total	6 (100.0)	18 (100.0)	9 (100.0)	33 (100.0)

Figures in parantheses indicate percentage to total.

TABLE-6

Caste and Educational Status of Child Workers

Caste and Educational Status Category	SC			General			Combined		
	Illiterate	Upto class V	Total	Illiterate	Upto class V	Total	Illiterate	Upto class V	Total
1	1	2	1	3	4	1	2	3	4
Agricultural Work	7 (35.0)	3 (15.0)	12 (60.0)	1 (5.0)	2 (10.0)	8 (40.0)	8 (40.0)	5 (25.0)	20 (100.0)
Domestic Help	—	2 (10.0)	2 (10.0)	2 (10.0)	5 (25.0)	18 (90.0)	2 (10.0)	7 (35.0)	20 (100.0)
Restaurant Service	1 (5.0)	1 (5.0)	4 (20.0)	—	4 (20.0)	16 (80.0)	1 (5.0)	5 (25.0)	20 (100.0)
Total	8 (13.3)	6 (10.0)	18 (30.0)	3 (5.0)	11 (18.3)	42 (70.0)	11 (18.3)	17 (28.3)	60 (100.0)

Figures in Parantheses indicate percentage to total.

Child Labour in Orissa : A Micro Level Study

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Introduction

In recent past, child labour became the subject matter of a debate in political and social circles after ILO highlighted the extent of exploitation of children joining the workforce. The problem seems to be alarming when referred to the developing countries like India in general and a backward state like Orissa in particular. The percentage of children forming the main workers comes to 6 percent in Orissa in spite of many legislations, constant vigilance and creation of awareness among the people. This conflicting situation stimulates many researchers to conduct in-depth studies of the problem to identify the reasons of children joining the workforce and their absorption. The producers prefer child labour for the easy adaptability to hazardous work, lack of trade unionism (Singh-1980), high rate of profit margin (Barra-1995) on account of low wage rate, and easy control of the producers. But many writers like Younus and Rashad, Pakistan-1997, Tripathy, S. K., Mishra, K.K. etc, have attributed poverty to be the main reason, forcing children to join the labour class. On the contrary, the studies of many writers like Weiner (1990), Tyabji (1990) have found that the contribution of the child labour to his/her family is marginal. Moreover, Narayan (1988) has found that the families lead their children to work to avoid idling as alternatives are not available (Schooling facilities). Hence, many reasons have been argued out in favour of a child to join the main workers. But very little effort has been made to identify the specific cause for sending a child to a specific job of his choice of preference of the respective family.

Hence, an attempt is made in this paper to highlight the specific reasons for involving children to specific jobs

Area of Study

Cuttack town has been selected as the study area out of which three professions have been chosen purposefully such as : (1) Apprenticeship, (2) Household Servants, and (3) Restaurant Boys. All the respondents chosen are below the age of 15. The census method has been adopted to solicit the information from the respondents through

canvassing a questionnaire. The data so collected have been tabulated group-wise.

Objectives of the Study

The study has the following objectives :

- (i) To identify the causes of a child becoming a labour.
- (ii) To evaluate the relative impact of each cause on the children in different jobs;
- (iii) To assess the magnitude of each variable in forming the mindset of child for a specific job; and
- (iv) To suggest remedial measures.

Hypotheses

The following hypotheses have been addressed to the study :

- (i) That the child goes for labour due to abject poverty,
- (ii) That the child has no choice of job but acts as per the will of the parents.

The Study

For the study, three groups of children have been selected from three types of jobs like household jobs, restaurant boys and apprentices. The apprentices are selected from auto garages, workshops of goldsmiths and carpentry. It has been assumed that children below 15 years and above 8 years have some choice of their own and have the capacity to evaluate their jobs. For the purpose, a Multiple Regression Analysis has been adopted taking the age of child labour and the dependent variable and the income of the child labour, educational status, family size, family income, conspicuous consumption (wine), family harmony and future prospect as the independent variables. Income has been calculated in money terms which also includes the lodging and boarding of the child. Educational status has been quantified by the class up to which he has read and family size takes the number of family members. Family income in money terms per month from all sources have been taken to reflect the economic efficiency of the family of the child labour. Conspicuous consumption has been caught through the amount of money approximately spent on narcotics. For family harmony, a dummy variable has been used where 1 is assigned, where the harmony prevails a zero. Future prospect has been quantified by taking the ratio of the current monthly income of an adult and current income of the child labour in the same profession.

The Regression Equation takes the form of.

$$Y = a + \beta x_1 + \gamma x_2 + \delta x_3 + \phi x_4 + \lambda x_5 + \mu x_6 + \theta x_7$$

for the data in all three groups.

The results so found are as such :

Group-A (Restaurant)

	Constant	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Coefficients	5.843	1.65	5.72	-1.241	1.7	-1.1	5.238	-6.314
St. Error	3.4472	5.3	1.872	3.118	2.0	4.8	9.450	5.742
't'-Value	0.17	3.09	3.06	0.4	0.84	-0.23	0.55	-1.1

Group-B (Apprentice)

	Constant	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Coefficients	13.219	-3.8	3.029	-3.128	1.9	4.2	2.1309	-7.334
St. Error	1.6773	1.9	1.444	1.791	2.0	2.6	6.618	2.118
't'-Value	7.88	-1.99	5.56	-1.75	0.81	1.60	3.23	-3.46

Group-C (Household Servants)

	Constant	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Coefficients	-8.2734	2.49	1.792	1.541	-1.0	9.2	3.2774	5.287
St. Error	2.5334	3.8	1.369	2.502	1.7	6.1	1.5563	3.062
't'-Value	-3.27	6.47	1.31	0.62	-0.10	1.51	2.11	1.73

Analysis

Analysis of the equation for Group-A reveals the following :

- (i) The children working in restaurants are significantly influenced by their own income and this tendency is strengthened by the positive and significant influence of their respective educational status.
- (ii) Family size, addition of the parents to wine or future prospect have no influence on the decision of the children to go for working as the restaurant boys.
- (iii) Family income and family harmony positively but significantly influence the child to go for a job in a restaurant.

Hence, the prospect of his own income as a restaurant boy provides the impetus to join as a child labour.

Group-B

In case of apprentice, the following results are found :

- (i) The income of the child, family size and future prospect have negative but significant impact on the decision making process. This can explain that the prospect of his income as an apprentice does not attract him to the job and smaller families opt to send their children more to learn the art rather than larger families. Future prospect being uncertain, they are apprehensive.

- (ii) The educational status of the child, conspicuous consumption of the father and family harmony are positively and significantly related to child labour as an apprentice. This can be explained by the fact that higher is the education, more the boy is conscious of his position in the society and likes to go for an available prestigious work. The people who are addicted to bad practices feel that their children should stabilise and it gets strengthened by the good understanding between the family members.
- (iii) Family income level positively influences the child to go for apprenticeship but insignificantly.

Group—C

In case of household servants, the findings are as follows :

- (i) Lower is family income, higher is the incidence of child labour in the household sector. But this variable has significant effect.
- (ii) The income of the child labour, the conspicuous consumption of the father, the family harmony and future prospect positively and significantly influence the child to go for working in the household sector.
- (iii) But the educational status and the family size though have positive influence on the child, influence significantly.

Hence, we can conclude that the children, joining the labour force are not only due to poverty though poverty has a bearing on their decision making. Rather, different trades have different prospects for the supply of the child labour.

Suggestions :

Effective provision for schooling and provision of food may reduce the incidence of child labour in Orissa. It can be taken as a common minimum programme to give a redressal to this colossal problem.

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APPENDIX :

Group-A (Restaurant)

	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Sl. No. of the Child Labour	Age of the Labour	Income per month (rupees)	Educational Status (class)	No. of Family Members	Family Income per month (rupees)	Conspicuous consumption in rupees	Family Har-mony	Future Prospect
1	8	500	1	9	1200	200	1	2
2	15	650	6	7	1250	300	0	3
3	13	620	4	8	1000	60	1	3
4	14	650	5	6	1100	100	1	4
5	12	550	3	6	1050	0	1	2
6	14	630	2	10	1500	60	1	2
7	11	700	1	5	1500	450	0	4
8	9	550	0	9	1200	300	0	2
9	9	550	0	7	1000	200	0	2
10	15	750	7	6	900	0	1	3
11	13	600	7	6	1000	0	1	4
12	13	580	4	8	1350	100	1	2
13	14	630	8	7	1400	250	0	4
14	10	550	2	10	1500	90	1	2
15	13	550	4	8	1100	0	1	2
16	11	530	5	7	1200	100	0	2
17	14	600	5	6	1000	100	1	3
18	10	480	2	8	1300	200	0	2
19	10	520	1	9	1500	350	0	2
20	12	580	3	6	1000	100	1	2

Group-B (Apprentice)

	y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Sl. No. of the Child Labour	Age of the Labour	Income per month (rupees)	Educational Status (class)	No. of Family Members	Family Income per month (rupees)	Conspicuous consumption in rupees	Family Har-mony	Future Prospect
1	12	200	6	6	2500	200	0	5
2	12	400	6	5	3000	300	0	6
3	14	550	8	5	4000	300	1	8
4	15	650	9	7	3600	200	1	6
5	13	600	6	7	4500	450	0	4
6	11	500	4	4	3000	0	1	5
7	12	500	2	4	3000	0	1	3
8	10	450	0	6	3600	100	1	4
9	14	530	5	6	3000	60	1	5
10	14	530	6	5	5000	300	0	3
11	15	700	7	5	6000	500	0	5
12	14	600	7	5	2400	0	1	5
13	13	530	7	4	2500	0	1	6
14	14	600	6	3	650	0	1	5
15	15	640	8	3	500	0	1	5
16	11	450	4	6	1800	60	0	4
17	12	630	4	7	2000	0	1	3
18	10	430	2	6	2400	0	1	4
19	14	250	2	6	3000	100	1	3
20	13	200	6	5	3600	100	0	6
21	12	150	6	4	3600	120	0	8
22	12	200	5	3	1100	0	1	8

Group-C (Household Servants)

	y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇
Sl. No. of the Child Labour	Age of the Labour	Income per month (rupees)	Educational Status (class)	No. of Family Members	Family Income per month (rupee-)	Conspicuous consumption in rupees	Family Har-mony	Future Prospect
1	10	500	1	8	1000	30	1	2
2	8	450	0	7	1000	60	1	2
3	12	550	2	8	900	0	1	4
4	11	550	2	7	900	0	1	2
5	12	600	4	9	1600	300	0	2
6	15	700	3	6	900	250	0	4
7	13	600	3	7	750	0	1	2
8	11	540	2	7	750	0	1	2
9	10	520	3	8	1200	300	0	2
10	11	530	2	8	850	0	1	2
11	11	550	4	6	600	0	1	2
12	9	450	2	8	900	0	1	2
13	14	600	0	10	1800	450	0	3
14	8	430	0	6	900	0	1	2
15	14	650	6	6	800	0	1	2
16	13	580	7	5	600	0	1	2

Social Structure of the Child Labour Force in the Leather Goods Industry of Kanpur

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I. Introduction

The involvement of child labour in production is not a newly emerging issue. There are ample examples of traditional family based industries wherein children are required to assist their parents in carrying out production. The children's participation in production at an early age is due to three main reasons: *inducement-for-training, economic compulsions and socio-cultural factors*. Particularly, in a society of caste based occupational systems, parents generally try their best to induce the children towards ancestral occupations. Inducement through education and training in own production is much easier at an early age of a child rather than at the grown-up stage. Moreover, the weak economic conditions of many producers do not enable them hire wage labour to run their production for survival. Thus, they often seek the help of their own children on a part time or full time basis. There was no child exploitation in such cases. But due to economic compulsions, when some parents sent their children to the labour market for wages to add subsistence to the family, there started the exploitation of child labour. In a few cases, due to social environment or social compulsion some children run away from their homes and eventually join the labour market for their subsistence.

The global issues of child labour are mainly related to the exploitation of wage earning children who work outside the family for remuneration. The problem of child labour was grievously felt at the outset of industrial revolution. The industrialists started using child labour with the objective of minimisation of labour costs and to raise their profits as well as capital accumulation. However, in recent years, the participation rate of children in work force is relatively greater in the informal industrial sector than in the organised sectors. The growing

social awareness and concerns towards exploitations of child labour, supported by U. N. Convention on "*The Rights of the Child*", have brought a new debate on child labour in different countries of the world. Many issues have been raised with respect to abolition of child labour and their rehabilitation. Some of these issues have been taken up for investigation in this paper by undertaking a case study of child labour in the leather goods industry of Kanpur in Uttar Pradesh.

II. The Broad Policy Issues Associated with Child Labour

Broadly, there are two schools of thought with respect to child labour issues :

- *The Poverty School, and*
- *The Education School*

The 'Poverty School' headed by Dunu Roy (1998) argues that poverty is the main reason for emergence of child labour. The poverty-trapped families cannot afford to send their children to school because they need them for work at home or outside. Whatever meagre earnings come from the labour of the children contribute to the survival of the family. From the perception of this group of thinkers, for curbing the incidence of child labour, a complete elimination of poverty would be a priori condition. Kailas Satyarthi, the founder of the South Asia coalition of child servitude, also pointed out that child labour is the cause of poverty. This school has several other arguments in favour of child labour : (a) children can avoid starvation by working a few hours a day for survival, (b) under the present economic distress, if the poor children are prohibited from work, they will move to even more terrible conditions, & (iii) children are part of the labour force in artisan and agricultural economies but it was within their families and the work load allowed time to play and to interact with other children.

On the other hand, the 'Education School' headed by K. Bhatta. (1996), argues that poverty is not the determining factor for not being able to send the children to school. There is no 'evidence' that only poor people are compelled to force the children to work. Nor is there any evidence that the earnings of the children contribute significantly to family earnings or that the family would be very much worse off if they were to send the child to school. According to them, an inadequacy of the school and in associated infrastructure are the main reasons, that induce children to go for work instead of going to school. Therefore, they advocate that making primary education compulsory for all would completely eliminate child labour.

III. Objectives and Methodology of the Study

In this paper an attempt is made to examine some of the issues related to the controversy associated with the child labour. The main objectives of this study are : (i) to examine the relation between incidence of child labour and their educational status, (ii) to test the hypothesis associated with the child labour, i. e., is poverty the main factor for child labour, is there any social element playing key role in the child labour market, are the existing child labour preventive policies adequate, and is it feasible/desirable to completely relinquish child labour in India ? and (iii) to investigate into the grass-root realities with regard to the social factors, such as, casteism and religion and economic factors that play key role in child labour market.

To accomplish our objectives we have undertaken a field study in a typical caste-based and religion based industry like leather goods industry of Kanpur. The study is mainly based on primary data collected through stratified random sampling technique. The city of Kanpur was chosen for sample study because it is considered to be one of the important centres in production of leather items. There are more than 3000 families both from the Hindu & Muslim community who are directly engaged in production of leather goods. The survey covered only the unorganised leather-goods producers but not the tanneries. The size of the sample chosen was 300; out of which 150 are from the Hindu community belonging to the locality of Khatikiyana and rest 150 from the Muslim community of Istikharabad.

The field survey was conducted at two stages : (i) a census of leather goods producing units was made with a few selected questions which were meant for stratification of producers for random sampling. and (ii) a random sample survey was conducted after stratification of census data on the basis of determined criteria. All the household units from the census were classified in two ways (a) production-size-wise and (b) in caste-status-wise. For determining the production size of a unit, the annual investment was taken as parameter, whereas for determining caste-status of a producer, a method of relative caste-status ranking was adopted with the help of information from the experienced persons of the locality. Then all the reported producers were classified into three caste-status categories. A producer investing less than Rs. 3 lakh annually in production was classified as a small size producer; a producer investing between Rs. 3-7 lakh as a medium size producer; and a producer investing above Rs. 7 lakh was considered as large size producer.

In caste-status category, the Jattav and Sonkar, of the Hindu community and Kureshi, Saiyad and Khan Saheb in the Muslim community are placed at the higher caste-status rank. The castes as Ahiriwar and Khatiki in Hindu and Siddiqui, Seikh, Khan and Pathan in Muslims are placed at the middle cast-status rank; and (iii) castes as Kureel, Dhusia, Dohre and Kore in Hindus and Ansari, Bhuti and Gaddi in Muslims are placed at the lower caste-status rank.

IV. Findings of the study

As discussed above, the leather-goods industry in Kanpur City is a typical example of caste and religion based urban household activity. The Kanpuri leather items are not only popular in India but also equally popular among the consumers of Arabian and European countries. The general items, which are produced for local as well as for outside markets are footwear, bag, suitcase, belt and purse. Among them the footwear occupies the top position in quantity-wise, family-wise, and popularity-wise. Although some sorts of diversities are found between Hindu producers and Muslim producers with respect to their socio-economic conditions, yet there are many common features between them in terms of practices of production and business transactions.

(i) Ownership Pattern of the Leather Goods Producers

In our survey area, particularly in the Hindu dominated area, viz., Khatikiana, the leather goods producing households constitute 54.88% of all the households. On the other hand, in the Muslim dominated area, viz., Istikharabad the leather goods manufacturing household constitute 94.38% of the total households. An examination of the caste status of the leather goods producers in the Hindu community reveals that while the upper caste constitutes 60.67%, the middle caste 24% and the lower caste group 15.33% of the manufacturers. But in terms of production size-class, the small size producers constitute 42.66%, the medium size 54.67% and the large size 2.67% only. Among the Muslim community, the upper caste constitutes as big as 48.67% the middle caste 11.33% and the lower caste 40% of the producers. Our study revealed that the incidence of small production units is relatively higher in the Hindu community than in the Muslim community. However, the incidence of lower caste-status producers is relatively higher in the Muslim community than in the Hindu community. It was also found out that the inter-caste-status feelings and prejudices are relatively much greater among the Muslims than the Hindus.

(ii) Incidence of Child Labour

Our study has established that both in the Hindu and the Muslim community children between 8-14 years of age are invariably participating in leather goods production. In the category of child labour force, we have noted two types of child labour, i. e., **Family child labourers**—who assist their parents on part time or full time basis in production, and **Hired child labourers**—who are hired by the producers from outside on a wage payment basis. In terms of demand of child labour, the large size producers employ more than 55% of their labour force among the children. However, the child labour hiring is relatively more pronounced in the Muslim community (45.45%) rather than in the Hindu community (18.92%). It was noted that irrespective of religion, the lower-caste-status producers largely prefer child labour hiring (50%) as compared to the higher caste-status (36.54%) and middle caste—status producers (31.25%).

On the supply side of hired child labour, it was observed that the incidence of hired child labour is relatively much greater in the Muslim community than in the Hindu community. Though the incidence of hired child labour is 43.82%, a relatively larger proportion of hired child labour is drawn from the Hindu community. Our survey results had revealed that there is no instance of any Muslim child labour working with the Hindu producers. On the other hand, out of the total child labour working with the Muslim producers 63.38% belongs to Hindu community. The economic distress factor among the lower caste Hindus is the dominant reason for which the Hindus allow their children to work with any community producer. The child labours are generally hired from the economically weaker producer families who are having a large family size with low production opportunities. The child labourers are usually harassed and exploited by their employers in terms of caste and religious feelings.

With regard to the participation of child labour in their own production activity, we have observed that only 8.15% of them are involved directly in their family production units, out of which 88.16% are male children. The participation rate of family children in family work force is relatively much greater in the Hindu community than in the Muslim community.

A combined incidence of child labour in the leather goods industry is estimated to be 17.69%. But this incidence is comparatively lower in the Hindu producers than the Muslim producers. Within the

caste-status categories, the lower caste producers employ more child labour than the upper and middle caste producers. However when the child labour structure of the leather goods industry is compared with that of pottery industry and lock industry in Uttar Pradesh, we find that the incidence of child labour is relatively much lower in the leather goods industry than in the former industries.

A critical examination of the distribution pattern of the hired child labour and the family child labour has revealed that besides economic factors some social factors such as caste-status and religious feelings play a crucial role in employing the child labour in the leather goods industry of Kanpur.

(iii) The Wage Structure and the Mode of Exploitation

Our study had established that in many instances, the hired child labourers are paid on piece-rate basis. Of course, the payment is made in cash. As regards the wage rate, it varies from unit to unit. The wage rate also depends upon the age of the child and the nature of work assigned to him. The elder and experienced children are generally paid relatively higher wages than the younger and new comers. In the leather goods manufacturing, the processes to finish an item and their complexity depend on the type of the item undertaken. In mechanical processing such as buffing, stitching, dyeing, etc. the involvement of child labour is very limited. Mostly, the child labourers are employed in simple processing such as gum pasting, carrying, manual cutting, etc.

The wage rate of a child labour varies between Rs. 20/- and Rs. 25/- per day per head. It is observed through our results that the Muslim producer units (9.67% of them) pay wage beyond Rs. 25/- per day and those units attract a large number of children particularly from economically weaker sections to join the labour force. But considering the working conditions and working hours of child labour we have experienced that the wages paid by the producers are low and the child labours are often exploited. However, the severity of exploitation is relatively higher in the smaller size production units than in the large size production units.

(iv) Educational Status :

With regard to the educational status of the child labours working in the sample units, we have noted that the incidence of child illiteracy is 3.27%. The intra-community variation shows that it is 3.93% and 2.55% among the Muslim and Hindu community respectively. It is

found that in Muslim community, most of the children leave the school after class seven. A mere 1.83% of Muslim children could continue education beyond class seven. In the Hindu community, the scenario is little different; 4.53% of the children could continue education beyond class seven. Thus, the child dropout rate in schooling is relatively greater in the Muslim community than in the Hindu community. In overall terms, the educational status of the Hindu children is relatively better than that of the Muslim children.

It is further revealed by our results that the children participation in work force is not the vital cause of child dropouts in the schools as well as of child illiteracy. Parents' educational level, their attitude towards education and the culture of the community as a whole wherein they live are most crucial determinants for child education.

The main points of the findings of the above study can be summarised as follows :

- (a) The social structure plays a crucial role in the child labour market in the unorganised sector leather-good industry.
- (b) The incidence of child labour (both family and hired) is relatively higher in the Muslim producer community than in the Hindu community.
- (c) In demand side, the larger size producers in the lower caste status category particularly in the Muslim community largely prefer child labour hiring.
- (d) In supply side, a majority of hired child labour is drawn from the lower caste status category families, who usually operate petty and small size production units with excessively surplus family labour. These types of families are largely found in the Hindu community. Therefore, the flow of child labour from the Hindu producers community to the Muslim production units is relatively much greater than that from the Muslim producers community to the Hindu production units or to the Muslim production units.
- (e) There are instances of harassment and exploitation of hired child labour by their employers belonging to higher caste status category in terms of caste feelings and religious prejudices.
- (f) Most of the leather goods producers pay wage in the range of Rs. 20 to Rs. 25 per day per child on a piece-rate basis. The large size producers particularly in Muslim community pay relatively

higher wages to child labourers than the small and medium size producers. The higher wage rates might be the inducing factor for the children of the poverty stricken producers' families in the Hindu community to join in the child labour market to a larger extent.

- (g) As regards the educational status of child labour employed, it is found out that the educational status of the children of the Hindu producers' community is relatively better than that of Muslim producers' community. The rate of school dropout is relatively lower in the Hindu than the Muslim producers community. This implies that in the Hindu producers' community, although a large number of children are participating in the work force at an early age, still they do not neglect their schooling. Whereas in the Muslim community, the scenario is different. Even though a small number of children participate in the work force, a large number of them do not go to school or drop out at the primary stage.
- (h) The nexus between children's participation in labour force and their schooling is not discernible in our empirical study. Hence our results have substantiated the "poverty school" hypothesis of child labour.

V. Conclusion and Suggestions :

In tune with the new policy on abolition of child labour and in response to the Human Rights Commission's concerns about plight of child labour in U.P., the Government of U.P. had undertaken a number of policy initiatives and actions to curb child labour in the state. In 1995, the Labour Department had undertaken a survey of all possible industries in which child labourers are employed. The industries concerned were the carpet and silk industries of Varanasi, Vadoi, Mirzapur, Sonbhadra, Jaunpur and Allahabad, glass and bangle industries of Firozabad, leather industry of Kannur, lock and hardware industries of Aligarh, non-ferrous metal ware of Moradabad, pottery industry of Khurja and the wood carving industry of Saharanpur. The Department identified around 5 lakh child labourers being employed in different industrial units of the state.

As regards action plan taken by the State Govt. (under the guide lines of Child Labour—Prohibition and Regulation Act., 1986), the Labour Department undertook inspection of 19,536 units and initiated

proceedings against 1296 units. As a consequence of the actions undertaken by the labour department many units raised the wage rate of child labour from 67% to 95% of wages payable to an adult worker. But simultaneously, a large number of child labourers were deprived of their employment. As a rehabilitation measure of the deprived child labour and in order to partially compensate their pecuniary loss, a provision of Rs. 100/- per month was made as stipend. Besides this provision, vocational training, informal education and nutrition provisions were made to discourage child labour. Moreover, under the National Child Labour Project (NCLP), 270 special schools with an admission capacity of 18,500 students were sanctioned in 9 perennially child labour prevalent districts of U.P.. The NCLP schools not only provide free education but provide them with books, stationaries, uniforms and mid-day meals apart from Rs. 100 as monthly scholarship.

In spite of these efforts of the Government of U.P. our study has noted the prevalence of child labour in the unorganised leather industry of Kanpur. These findings will also hold good for other areas of the state, which implies there are a number of short-comings and loopholes in the actions undertaken by the Government. Hence, we would like to suggest some additional measures and policy reformations which can be examined by the Government of U.P. for abolition of child labour in the state.

- (1) There are many informal sector industries where the incidence of child labour is found to be of higher magnitude. Our study of the leather goods industry at Kanpur displays the incidence of child labour to the extent of 17.69% of total labour force. But Kanpur is not covered under the rehabilitation package of the child labour. In this context we suggest that the state action should cover the areas where there is prevalence of child labour in the informal units. Such action can be taken in phases.
- (2) In the present action plans any attention is hardly paid towards the family of child labour. On the basis of perceptions of the people covered, we argue that a readjustment of school time schedule and expansion of schooling facilities in the vulnerable areas where there is concentration of child labour be executed to check the school dropout rates.
- (3) The action plan for rehabilitation should incorporate policy measures for a permanent solution to the problems of the deprived children. Thus more emphasis should be put on their future

career and job-prospects rather than providing them a temporary incentive package.

- (4) The stipend of Rs. 100 per month to a deprived child is not sufficient in terms of his cost of living; hence the amount may be revised.
- (5) No doubt, economic condition of a family is one of the important factors for emergence of child labour, but this may not so important for abstaining the child from the school. Since the social factors are more important, the social awareness, culture and self-realization among the parents rather than their economic condition play a vital role in education of their children. Therefore, we suggest that actions be initiated for creation of social awareness and enlightenment among parents particularly in the child labour concentrated areas. The parents should be induced to send their children to schools rather than sending them to labour market.

The results of our primary survey have revealed that children's participation in work on part-time basis (say, one or two hours daily) would not hamper their schooling, rather it helps them to enhance their skill and experience which would set the foundation of their occupational career in future. Further, children's participation in work for limited hours would be helpful to their poor desperate parents who struggle for wherewithal. Therefore, it is argued that as child labour participation has a positive effect on the productive efficiency, its total abolition may not be possible in the Indian context. This will be possible only after eradication of poverty from our society. However, it is argued that child labour market be regulated in such a manner that the children can be protected from hazardous activities and from employers' exploitation. They should be involved in such types of activities where their mental power and skill could be developed without affecting their studies.

Child Labour—A Harsh Reality

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Introduction

On the eve of 21st century, let us gracefully acknowledge UNICEF's observation that humanity has made some stunning advances and strides for children by saving and protecting the lives of millions of children on earth through a network of better nourishment, greater access to quality education, higher motivation towards child rights with enforcement of adequate legal provisions & campaigns. But at the same moment, let us also evoke uneasy concern for the same UNICEF's candid confession that despite the many stunning steps, forward the lives & future of hundreds of millions of children are still threatened by intergenerational pattern of poverty, violence, conflict, discrimination and disease. The goals to overcome these pressing challenges might remain out of reach in coming years but certainly are not unconquerable. Our society always claims to treat each child as the supremely important asset who is only to be loved, cared and protected at any cost. Every parent wishes to see his child as a complete person in society. Every nation regards the children both as the means and end to economic progress. But ironically, excepting a few millions fortunate, well-nourished & well protected children, these realities still remain myths for most of 600 million unfortunate children on earth who continue to live in abject poverty among 1.2 billion poor people. Among these army of deprived and dehumanised poor children, the worst sufferers are children at work. The lives of most of these are even at daily risk of being snatched away by the cruelty and indifference of adults as observed by Theo-Ben-Gurizab, Foreign Minister of Namibia and President of UN General Assembly in 54th General Assembly. The suffering of child labourers becomes unfathomable when we look at the torture and agony of those children engaged in hazardous and exploitative works. UNICEF rightfully observes that a child engaged in hazardous work is a betrayal of every child's right as a human being and is an offence against our civilization.

Objective

This paper confines to only observations and options on the issue of child labour. Its aims are two fold :

1. To make observations on the staggering dimensions of child labour engaged in hazardous & exploitative works in specific alongwith legal issues with special reference to Orissa.
2. To offer some viable options to eliminate the child labour.

DIMENSION

International

Child labour is a global phenomenon. It exists both in developed & developing countries. More than 250 million children in developing countries alone are out of school and work; and 50 to 60 million of them work in hazardous occupations only. These children are child labourers due to domestic and traditional obligations, abject poverty, lack of educational infrastructure, conflicts and so many other social, economic, political factors. Many of them are exposed to hazardous works, mental and physical torture, sexual exploitations and all the negative aspects of human life. Go to Malaysia: Here child workers are forced to work for 17 hours a day in rubber plantations, exposed to insect and snake bites. Visit Tanzania: Here child workers pick coffee inhaling poisonous pesticides. In Portugal children work in hazardous & exploitative construction industries. Thousands of the Pakistani children workers are engaged in the hazardous leather industry like soccer balls manufacturing units. Child labour is not confined to developing countries only. Developed & industrialised nations also have high concentration of child labour. In US children of most of immigrants or ethnic-minority families work in agriculture, many of them are exposed to pesticides spray daily. The urban centres of Latin America have the largest population of street children in the world.

Thus, there is no end to these victims of human race. Almost all child workers are either trapped in so called hazardous works or exploitative works which not only destroy their physical and cognitive development but also signal the gross distortion in the balance sheet of a quality life every time.

National

India may have lagged behind rest of the world in many aspects., but it enjoys the distinction of being the leader of all countries in the

context of child labour. It has the largest in number of child labourers globally. 1991 census shows 11.28 million children in India as child labourers. But NGO estimates, based on UNICEF's concept of child labour, shows the figure ranging from 44 to 110 million children. However, wide variations are being observed in the estimates of number of child labourers in India from different sources like Census India, NSS Round Surveys, Planning Commission and Govt. sponsored NGO Surveys since 1971. These differences occur basically due to conceptual differences, identification problem of child labour in un-organised rural sectors etc. But the most revealing aspect is that more than 42 lakh child workers are engaged in the most hazardous occupations like carpet making, bidi making, glass industries, match and fire works, glass bangles manufacturing, textile and polythene industries, brick making industries in many parts of India. Tamil Nadu, Uttar Pradesh, Rajasthan, Jammu & Kashmir etc. are the biggest employers of child labourers in India.

Case of Orissa

Orissa has a very disturbing trend of Child labourers. Orissa has 8.31 lakh child labourers in 1994. 2.8 lakh child labourers were added to the working force between 1981 and 1994. Even NGO (CACL) estimates put the figure as 46 lakh in 1996 as per UNICEF concept. The child labourer Survey by Labour Department of Orissa in 1997, complying with Supreme Court Verdict on Child labour in December, 1996 shows two interesting results. First, girl labourers working in hazardous sectors are more in number (56%) than their boy counterparts. Those districts (mostly South West districts) which have low women literacy rates, have high child labour incidents. 87% of total identified child labourers are from South West Orissa. Beedi making, brick making, rice mills, stone crushing, blacksmiths etc. absorb an overwhelming 66% of total child labour under hazardous occupations. Uniquely Sambalpur district has the highest number of boys (1248) child labour and girls (3563) child labour among all the districts under hazardous occupations mostly in beedi making and rice mills. Orissa Labour Directorate observes that about 74% of total child labour are forced to work due to abject poverty. Big sized family, parents' inability to afford education cost, death and accidents of parents, ill habituated father etc. are other causes which force the children to work rather than to go for education.

But this is not the complete picture in Orissa. About 5 to 6 thousand children migrate annually to other districts as bonded child labourers (D. E. & S. survey, 1991-96). If we believe Campaign Against Child Labour (CACL) Report, 27,600 migrant child labourers from Orissa work as bonded labour in major metropolies.

Constitutional and Legislative Provisions :

1. Five sections of our constitution (24, 39, 41, 45, 47) make every provision to accept child right as the fundamental right, to make primary education compulsory, to prohibit employment of child labour in factory establishment etc.
2. There are about 14 major Acts/Rules since 1933 till 1996 relating to protection, education, rehabilitation, prohibition etc. of child labourers all over the country. This includes the child labour Prohibition and Regulation Act, 1986, as accepted by National Child Labour Policy and the recent historical Supreme Court pronouncement in 1996.
3. There are a number of International Agencies like UN, ILO etc., which shows serious concern and make provisions for child right and child labour elimination. Child right got global recognition in 1990. Stockholm Conference in 1996 and OSLO Conference in 1997 on child right and child labour reaffirmed this global issue.

FAILURE

In spite of uneasy concern for child labour problem in international agencies, adequately equipped legislative measures and constitutional provisions, government's committed efforts to develop viable policies and implement actions like NCLEP, changing societal attitudes in recent years, child labour in India continues to remain an unsolved issue, rather increasingly becomes an uphill task. The failure to eliminate child labour can be attributed to series of social and economic problems like less adult wages, unemployment, rural-urban immigration, child resource as cheap labour, no compulsory primary education system, illiteracy, and ignorance, traditional attitudes, inadequate social security measures etc.

But the real impediments to the elimination of child labour in the country may be addressed in different ways :

1. All the legislative measures, Govt policies and programmes are mere emphatic on amelioration of Child labour rather than elimination of child labour from the country.
2. Primary education is more incentive oriented. No provision for compulsory primary education even after 50 years of independence.
3. Political and bureaucratic apathy to the Child labour elimination issue. Even countries poorer than India have done significant

achievement in reducing child labour incidents (Exp. : Zambia, Ghana, Libya, Zimbabwe etc. made primary education compulsory).

4. Some deficiencies in the provisions in the Child labour Acts/Rules/ Policies lead to dispute and delay over prohibition of child labour in many hazardous establishments.
5. Grossly inadequate network of advocacy, monitoring and information relating to child labour issue.

All these factors enforced policy makers to accept child labour as a harsh reality.

TOWARDS SOLUTION :

Child labour is definitely an uphill task before our nation but not unconquerable. The widening gap between intent and implementation of child labour elimination/programmes/policies can be minimized in a phased manner as follows :

1. Compulsory provision of primary education. School laws are easier to be implemented than child labour reduction laws.
2. Help the child labour by helping their families. Uplift them economically. (South Africa has started this practice already) (Supreme Court decision, 1996).
3. Inclusion of 'Child Right' in the text of curriculum of primary education system. (Brazil did it successfully).
4. Network of information disseminations on Child labour is to be made more stronger and open. This is required for changing the established mind sets of people towards child labour issue.
5. NGO's role to be made most crucial. They should be more motivated to work for elimination of child labourer from hazardous works rather than rehabilitation or resettlement of child labour only.
6. More emphasis on women empowerment and girl literacy.

Unless these viable alternatives are properly addressed, this darkest aspect of humanity, will continue to remain a harsh reality indeed.

Incidence of Child Labour in India— An Economic Compulsion and A Social Evil

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The phenomenon of child labour is centuries old. Prevalence of child labour is more or less seen in all periods of time all over the world. The crux of the emergence, growth and dynamics of child labour intrinsically lies with the changing trends in production in relation to the existing socio-economic structure of the society. According to an estimate of I.L.O. (1975) there were 52 million child labourers in the world of which the South-East countries accounted for 55.77%. As regards India although the National Sample Survey (38th round) 1983 revealed that there were 17.36 million child labour, non-Governmental Organisations claimed it to be not less than 40 millions. It is ironic to say that India contains the highest child labour force in the world. India accounts for more than 33% of the child labour force in the world and their growth rate is 4% per annum.

The present paper is an attempt to highlight the following issues.

- (i) To identify indicators in defining the concept of child labour.
- (ii) To analyse the dimensions, magnitude and areas of children employment and their occupational structure.
- (iii) To explain the socio-economic characteristics of child labour and to investigate the causes of emergence of child labour.
- (iv) To study the working conditions and living standards of children in employment and the occupational health hazards faced by them.
- (v) To focus on constitutional safeguards and protective legislation for the child labour.
- (vi) To suggest appropriate policy measures and multi-level strategies in both preventive and curative aspects on the basis of introspection and findings on the above aspects.

The Concept of Child Labour, Definition and Indications :

There are several Acts which define child labour, but there is no uniformity in such definitions. In India the minimum age below which work is prohibited is 14 years. Article 24 of the Constitution of India lays down that "no child below the age 14 years shall be employed to work in any factory or mine or engaged in any other hazardous employment".

The UNICEF has given a comprehensive formulation in its attempt at defining child labour :

- (a) Starting full time work at too early age.
- (b) Working too long within or outside the family and unable to attend school.
- (c) Work on street is unhealthy and dangerous.
- (d) Too much responsibility at too early an age in the domestic situation where children under 18 may have to look after younger brothers and sisters for a whole day thereby forgoing school attendance.
- (e) Inadequate remuneration for working outside the family.

Child labour therefore is the work which involves some degree of exploitation i.e. physical, mental, economic and therefore impairs the health and development of children. Hence, two major indicators exploitative and age have been used to define child labour.

Occupational and Employment Structure :

Residential distribution of child labour shows that 82% of them are of rural and tribal origin. In tribal areas children are employed in dryland farming, collection of minor forest products, rearing livestock population like cows, goats, sheep, poultry etc. and household cottage industries. In the urban industrial sector child labour is mostly prevalent and extensively used in the hotels and restaurants, motor garages, coolies in bus-stand and railway platform, collection of tins, working as domestic servants, making paper flowers, tailoring, cane works etc. In the unregulated or unorganised sector child workers are shamelessly employed and exploited in leather tanning, bidi making, handloom weaving, carpet manufacture, making of glass and bangles, match factories and making of crackers etc.

Attempts have been made by various organisations at national and international level like NSS, NCL Govt. Census. The Red Cross

Society, WHO, ILO, UNICEF and voluntary agencies to estimate the figures of child labours from time to time and it is a fact that the figure is less than what is reported because of omissions in many cases. Existence of child labour in tribal areas of Orissa are largely found in the districts of Mayurbhanj, Kalahandi, Korapur, Keonjhar, Phulbani and Malkangiri. In Orissa child labour in the age group of 5-14 are more than 31 lakhs. Activity wise distribution of child workers in 1981 census shows that in agricultural labour it is highest i. e. 42.75% followed by cultivation 35.73%. Child labour is also extricably linked with bonded labour.

Causes of Child Labour and Their Socio-Economic Characteristics :

Various causes responsible for the emergence of child labour are population explosion, illiteracy, lack of consciousness for education of children and the most important is 'poverty pressures' or 'economic compulsions'. Employers prefer to employ the children as easy and economical because they extract more with lower wages paid to them. Compulsion of economic distress and 'poverty within poverty' keep them as destitutes. In many parts of the tribal areas of Orissa, Bihar, West Bengal and Madhya Pradesh the debt bondage system compels children to accept employment in the families of land lords to repay the debt made by their parents and it is observed from generation to generation. Emergence of street child is primarily rooted in economic compulsion. Many households are forced to part their children in to gainful activities. Children are compelled to prefer earning to learning. Poverty pressure compels the children to migrate from the villages to work in urban centres. Money lenders, contractors and mediators play an exploitative role. Due to high poverty and irrational expenditure the rural child labourers fall an easy prey to the clutches of money lenders. Minimum economic necessities and expenditure on social customs raise their indebtedness. A substantial part of their earnings go to the pockets of the money lenders by way of repayment of loan. Due to the increase in cost of living there is breakdown of the Joint family system and children are employed in domestic and non-domestic work. Destitutes and orphans have no other alternative but to earn and survive.

Working and Living Conditions :

The working conditions of child workers are not uniform and vary according to the type of work. The children are to work up to the satisfaction of their masters in most of the cases. In some cases like

brick making, match industries, crackers etc. piece rate payment system develops the competitive spirit among the children to work. They are characterised by long 'hours of work low remuneration & exploitation in the form of too much responsibility at too early age. They are employed in both organised and unorganised sectors. Due to lack of power to protest, fear of loss of employment and pressure from parents, the children have no choice other than remaining in employment. They are neither covered by Social Security measures, safety measures and compensation against accidents. Microlevel studies reveal that urban working child's earnings vary between Rs. 200 to Rs. 300 per month with the work pressure of 10-12 hours a day. The wages paid to them are 30% to 50% of the wages of the adults.

Besides these victims of exploitation, they work with hardship and occupational risks suffering from various health hazards. The case of physical punishment is rampant in case of employed children.

Child labourers in India lack basic facilities and create a direct negative effect on the physical and mental development of children. It is really inhuman to find the plight of a child of 10 or 12 years carrying heavy load on head, beyond his capacity. Child workers are put under psychological strain whereby they are not permitted to meet their parents and relatives. Teenager prostitution is the outcome of economic compulsion and maid servants are sometimes sexually assaulted by the employers.

When labour market is overloaded with child labour the capitalist method of exploitative practice is being aggravated. Small entrepreneurs are eager to employ large proportion of child labour as their demand for wage and bargaining power is less and suit the best to the cold interests of the employers. The term and conditions of employment, insecurity of work, longer hours of work, uncongenial work environment, low wages and severity of work very often violate the labour legislations. Child labourers are deprived of their rights. They are socially neglected, economically exploited and morally tortured. It is an unhealthy economic practice and social evil. The problem of child labour is extended to child beggary and bonded labour. There is every denial of opportunities for development. Child labour is economically unsound, psychologically disastrous and physically and morally dangerous and harmful in both wage employment and self-employment. Perpetuation of employment at low wages depress general wage units as well. There exists a direct co-relation between adult employment and child labour.

Child labour has an economic base that fits to the demand-supply framework in the labour market.

Constitutional Safeguards for Child Labour :

Despite huge constitutional provisions and a number of legislative enactments from time to time the pernicious problem of child labour rampantly exists. Article 39(e) directs the state to see that tender age children are not abused and are not compelled by economic circumstances to work that is unsuited to their age and strength. Article 39(f) makes provisions for protection against exploitation. There are plethora of laws for the protection of child workers. But nothing succeeds in preventing child labour.

Policy Proposals :

The following recommendations may be made for a workable solution to the problem in both preventive and curative aspect.

- (i) When child labour emerges due to economic necessity, protection of child labour can be made by providing sufficient income to the parents of child labour. It calls for wage payment on adequate basis with wider employment opportunities. It will compensate the loss of income due to non-employment of child labour.
- (ii) Poverty alleviation programmes must be effectively implemented in the child labour prone areas.
- (iii) Universalisation of primary education should be accompanied with special emphasis for economically backward communities. Free and compulsory education should be given highest priority. The Gurupadmaswamy Committee reported that major concern of the government should be in regard to evolving a meaningful policy for education of the children. Scheme for non-formal education should be initiated to cover the dropouts.
- (iv) Voluntary efforts need to be strengthened. The non-government organisations (NGOs) need to be integrated with the Government policies in identification and rehabilitation of child labour with a co-ordinated effect. It is imperative to create awareness against this social evil.
- (v) Central and State level Advisory Committees on child welfare be formed to have a vigilant eye on the problem.

- (vi) Dedication of the Government authorities and a strong political will are required to cure this social cancer. Penalties for violation of legal provisions must be stringent against the employers.
- (vii) Eradication of child labour calls for a long term 'Perspective Action Plan'. The social and economic requirements of the children should not be undermined.
- (viii) Wide publicity must be made through the mass media about the protective legislations for the children to make the parents and employers conscious.
- (ix) The Integrated Child Development Scheme (ICDS) must be strengthened in rural and urban areas.

Child labour is essentially an economic problem which can not be solved by mere legislations. A national policy of labour is called for to improve the socio-economic conditions of working children and their families. The policy adopted in 1987 which comprised three thrust areas—legal action, development programmes on child labour & Project based Plan of Action need to be instituted. The National Human Rights Commission suggested for collection of statistics of child labour and their rehabilitation as a humanitarian issue. Labour welfare is not a charity. It is an economic, social, moral and human claim by the working class. An integration of economic and social change and organised and concrete efforts are needed to bring the child labourers in to the mainstream of national life and provide effective solution to the problem.

Attempt for Abolition of Child Labour— A Warranted Necessity

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The nation's children are "Supremely important assets" and the nation's future lies in their appropriate development. Investment in children is indeed an investment in Nation's future. Only if our children are literate, happy and gay, healthy, well fed & well clothed, then we can say to have prospered as a Nation. This was the proclamation of our former late Primeminister Indira Gandhi. This is also declared in our National Policy for Children enunciated by the Government of India in 1974.

There are 260 million children below the age group of 15. The infant mortality rate is as high as 98 per 1000 live births in Orissa in comparison to All India figure of 72. The status in other states except a few is equally bad. In some of the developed countries IMR is less than 10. Deaths among children of 0-5 years age group account for 40% of all deaths in India as compared to less than 7% in developed countries. The child population in this vulnerable group numbers 135 million. These figures give us the magnitude of human and material waste that takes place in our country right from the time of conception to such early deaths.

Question arises as to why do our children get exposed to such hazards in the early life ? The very particular answer is increase in the number of non-literates and acute poverty facing about 40% of our population. The problem of children in India, as anywhere else in the third world, is closely linked with the poverty, affecting children more than adults with more lasting damages and ill effects. I have personally observed this phenomenon in the Republic of Georgia in CIS country where I was working closely with women & Children group after their separation from Russian federation.

This brings the problem of prevalence of child labour which is a direct outcome of illiteracy, economic necessity of the poor families

who invariably have large number of children. This high incidence of child labour is an indicative of waste of vast human resources which can be improved upon through proper education and training and subsequently can be used in a productive manner. The planners generally tend to consider child welfare as child development programmes as mere welfare programmes, overlooking the fact that investment in children is really an investment in human resource development. Though one can not quantify the return in terms of monetary value, if we consider this as a long gestation investment in human resource development, the return in the form of higher survival rate and better human material would be far more than what an Economist may consider as a reasonable return.

Government of India authorities have come to know that experience in many countries indicates that economic development per se does not necessarily improve the life of children. Even if it is coupled with well designed income distribution policies, it takes a long time for the children to enjoy the fruits of the economic development of the nation as a whole. Hence the child welfare programme assumes importance.

Let us analyse the attainment that the National Plan in 'Reaching the Deprived Child' has achieved and its incidence on the status of Child Labour with reference to Mayurbhanj District of Orissa State. Based on the experience gained, Govt. of India have launched a comprehensive child care scheme called ICDS (Integrated Child Devt. Service) aiming at delivering a package of early childhood services. The package consists of Supplementary Nutrition, Health Checkup, Immunisation, Referral services, Nutrition & Health Education to mothers and non-formal pre-school education for children in the age group of 0 to 6. The scheme presently covers 3,800 Projects in the country with an idea to expand to rest 1, 200 C. D. Blocks/Projects by the end of year 2000 and each project covering on an average 1,00,000 population.

Second major step taken by the Govt. of India is introduction & continuance of Special Nutrition Programme for pre-school children, pregnant women and lactating mothers providing nutrition supplements to the millions of children and mothers. At the moment Govt. has converted many of the SNP centres to ICDS Anganwadies thereby attempting to ensure qualitative improvement by providing health inputs and careful selection of beneficiaries.

Inclusion of Adolescent Girls in the age group of 11 to 18 is another mile stone in Govt's programme and thereby guaranteeing safe motherhood for future generation. Through all such measures, Govt. contemplates all District HQ Hospitals to have improved paediatric units and Doctors and paramedics to be imparted specific training on ICDS pattern to enable them to deliver quality services in the line of maternity and child welfare.

CASE STUDY OF MAYURBHANJ DISTRICT.

The District of Mayurbhanj is rich in forest and mineral wealth. About 3,790 Sq. kms are covered by tropical forest and species like Sal, Peasal, Sisan, Kusum, Asan & Mahua grow abundantly. Other forest produces include Tasar, Cocoon, Lac, Sabai grass etc. There are large deposits of iron ores, china clay in the District. The climate is extreme climate.

The total population of the District as per 1991 census is 18.85 lakhs. During 1971 census, the population was 14.34 lakhs. Thus there was about 10.31% growth during the decade i.e. 1971-1981. The District is thinly populated, the density being 151 per Sq. Km. There is highest concentration of Scheduled Tribe population in the district. They comprise 64.25% of the total population.

Through this write up, I have tried to find out the magnitude of the child labour and its percentage to total population of the working class. The areas included for the study are places like : Baripada Sadar, Betnoti, Barasahi, Morda, Khunta I, Gopabandhu Nagar, Rasgovindpur, Samakhunta, Udala, Kaptipada, Karanjia, Rairangpur, Bisoi and Bangiriposi etc. The survey reveals that total working force in the District as per Bureau of Statistics report works out to 14.62 lakhs. 30% of this i.e. 4.4 lakhs constitute child labour. If this 30% is taken as 100%, study further reveals child employment status to have been as under :

$$\text{Increase \%} = \frac{\text{Increase}}{\text{Original}} \times 100$$

Minimum wage prescribed by the Govt. of Orissa is Rs. 40/- for female and Rs. 50/- for male labour per day which is some what adhered for jobs related to Agricultural operations & other non technical activities. Most interesting fact is that the employment of child labour has very little linkage to such prescription and does not come under purview of the Supervision by the Labour Dept officials in the District. They themselves employ such labour which is easily available at a cheap rate wherever and whenever they need.

Source of Employment.	Employment generated (in days)	Wage paid at the rate.	Percentage of Child labour employed.
1	2	3	4
(a) Employed in Hotels in small townships like that of Baripada, Karanjia, Rairangpur, Betnoti, Bisoi & Jashipur etc.	365 days.	Rs. 200 to Rs. 300 per month + free food	30%.
(b) In Agricultural activities.	90 to 100 days.	Rs. 40/- to Rs. 50/- per day.	30%.
(c) Kendu Leaf collection in Simiipal pleteau of 100 Sq. miles of Sadar, Rairangpur, Bangiriposi & Bisoi Block. areas.	60 days.	Rs. 30/- to Rs. 40/- per day.	2%.
(d) Domestic assignment.	365 days.	At the rate of Rs. 100/- to Rs. 150/- per month plus one time free food.	5%.
(e) Sabai Grass Cultivation.	365 days.	At the rate of Rs. 20/- to Rs. 30/- per day.	33%.

One of the humanitarian grounds advocated by the officials is unlike other districts, the district of Mayurbhanj has multifarious problems. Tribals in this district are mostly landless and right from the age of 3 to 5 begin their employment in form of goat rearing and sheep rearing etc. As such school going habit has never developed and drop-out percentage appears quite high. Likewise such tribals do come under bonded labour system in the house of Gauntias and many a time no wage is paid to them.

Further laterite soil of Mayurbhanj is least productive. As such agricultural activity being less, employment is sought in un-organised sector just to meet their minimum need.

They are totally devoid of their ambitions as such. Added to the above, natural calamities like occasional droughts, floods and cyclones etc. necessitate for child employment in Mayurbhanj District. Having knowing all such impediments, unless certain check measures are taken, this problem cannot be remedied and our popularising several schemes will be of little value to rural poor.

With this view in mind following suggestions are given for consideration.

SUGGESTIONS & RECOMMENDATIONS :

1. The role of elementary education need to be over emphasized with highest priority not withstanding the difficulties in finance, if any. Compulsory free education should be extended to both boys and girls upto the age of 14. Moreover entire education curricula should be job oriented having practical bias. During my tenure with the Ministry of Education, Government of India as "Advisor-Cum-Sr. Consultant" I have observed this phenomenon and the authorities at the Govt. of India level are fully convinced and committed to literacy mission activity on country wide basis.
2. Adequate publicity through different media should be there to popularise the rights of the child and thereby creating awareness in checking exploitations on employing child labour so that all concerned be fully aware of this.
3. Existing labour legislations and acts passed from time to time should be strictly enforced and periodical review of employment of child labour should be conducted. By this process a considerable amount of evil will definitely disappear.
4. At the early stage tribals become habitual intaker of country liquor, may be out of economic necessity. This should be checked by certain legislation and adult working members should be gainfully employed whereby their day-to-day expenses can be met.
5. Service security is much less for Child labour just because they are children. They usually work more in the unorganised sector and can

not form any union being innocent children. Govt. ought to look into this aspect so as to ensure social justice.

6. Whatever be the suggestions, for a vast country like India, Child labour can not be totally eliminated taking into consideration the illiteracy, poverty and starvation condition of the family. Economic need is the basic need and it will be better to pay sufficient wages to the employed parents and ensure their continuity who ultimately become the facilitator in motivating children not to go for employment.

Unless some of these are followed with due seriousness and put into practice in regular frame work, the very purpose will be difficult for achievement.

Child Labour in India

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Introduction :

In all over the world, around 250 million children below the age of 14 years are engaged as labourers while in India the figure ranges from 11 million to 111 million. The number goes on increasing over years due to various reasons such as comparative advantage of child labour over adult in cost and productivity, acceptance of lower wage, search for more flexible work force, subsidising high cost of child education and poverty etc. Obviously acquiring education, knowledge and skill in this age need priority over his/her employment. Children's participation in work, at this tender age, has direct bearing on their access to education, child exploitation in labour market and socio-economic bondage between future generation and nation.

Plight of child labour in all sectors of economy in India is exploitative and hazardous. Children are exposed to dangerous work environment contravening human rights. A study carried out by ILO in India over a ten-year period showed, "children employed in industry and agriculture grow more slowly and weigh less than children at school." "In Bombay, children working in hotel trade or construction industry show symptoms of chronic muscular, thoracic and respiratory complaints."¹

In spite of sustained efforts for abolition of child labour from the international organisations related to the field, concerned Governments and enormous NGOs working over the subject, the problem continues. On the contrary, in some of the developing countries, banning child labour system has created serious negative consequences too.

Considering the gravity of the problem at present, child labour that was largely perceived as a natural by-product of poverty has changed to a concerned threat to the children as well as to the socio-

economic set up of the country. It is in this context that an attempt is made to focus the magnitude of child labour in India from different studies and to unravel the working atmosphere they are exposed of. An issue is raised in this paper in favor and against the abolition of child labour for further study. The paper is prepared based on the secondary data and survey of literature.

Child Labour :

International Labour Organisation (ILO) defined child labour as "Work regularly done by children under the age of 15 with very limited exceptions" while "child work" and "child labour" are distinguished defining former as 'spending few hours a day on tasks which are not onerous—can raise child's self esteem, teach a trade for the future and help the family and defining later as "long hours of hard slog, detrimental to a child's schooling and damaging to his or her emotional, physical and psychological development."

In some of the world's poorest communities child work is often considered as lynchpin of the family economy. A study of nine Latin American countries showed that without the work of 13 to 17 year-olds, the incidence of poverty would rise by up to 20%.² ILO, on the other hand, rejected the argument on the plea that with recent annual growth rates of 12 to 18% in Asia, "These countries have reached the level of development to enable them to end child labour".

On the contrary, the survey conducted by Bonded Labour Liberation Front (BLLF) in different industries revealed that due to non receipt of proper wage they could not contribute to family income; rather very often fall sick due to bad working conditions and bad environments being a burden to their families.³ It is also observed that 'Hard labour can stunt child's growth by up to 30%, exhausting stores of stamina that should last into adult hood'.⁴ As a matter of fact, child labour perpetuates poverty and hampers development by driving wages down, putting adults out of work and denying education to the future work force.⁵

Jargon of Statistics :

International Labour Organisation (ILO) observed, "Though reliable statistics are rare, available information suggests that the number of working children remains extremely high. No region of the world today is entirely free of child Labour."⁶ Estimates of child labour in India by various organisations differ. ILO in 1996 estimated 250

million child labourers economically active all over the world—at least 120 million of them were on full time basis while the others were combining their work with schooling. Regionally, Africa has the highest incidence of child labour, with approximately 41% compared with 22% in Asia and 13% in Latin America.⁷

The range of estimation of child labour in India varied from 11 million to 111 million numbers. The 1991 census of India estimated Child Labourers in the country at 11.28 million⁸ as against 13.5 million in 1981 and 10.7 million in 1971 census. Majorities of rural child workers (84.29%) were in cultivation and agricultural sector were in urban India 39.16% of them were involved in manufacturing, processing, servicing and repairs (Table-1 and Figure-1).

TABLE - 1: % Distributioa of child workers in India by Industrial divisions in 1981 census.

Type of workers	Industrial Divisions								
	1	2	3	4	5	6	7	8	9
Urban	5.32	14.73	3.07	0.20	39.16	3.27	15.03	2.45	16.77
Rural	38.87	45.42	6.61	0.25	5.72	0.47	0.96	0.10	1.60
Total	35.93	42.72	6.30	0.24	8.65	0.72	2.19	0.30	2.93

1. Cultivation, 2. Agricultural labour, 3. Live-stoke, Forestry, Fishery, Plantation, 4. Mining and Quarrying, 5. Manufacturing, Processing, Servicing and Repair, 6. Construction, 7. Trade and Commerce, 8. Transport, Storage and Communication, 9. Other services.

NSSO of India in 1983 estimated the child labour as 17.40 million in tune with Planning Commission as 17.36 million. But in the same year 1983 Operation Research Group, Boroda estimated it to 44 million considering children engaged in remunerative work, within or outside the family, paid or unpaid and involving work at any hour of the day that held well by Labour ministry in 1991. Commission on Labour Standard and International Trade, Government of India estimated it to 77 million in 1996 in tune with UNICEF that estimated child labour in India as 75-90 million. The Balai Data Bank, Manila held the figure at 111 million (Table-2).

Figure 1 -Distribution of child labo ras per 1981 Census of India

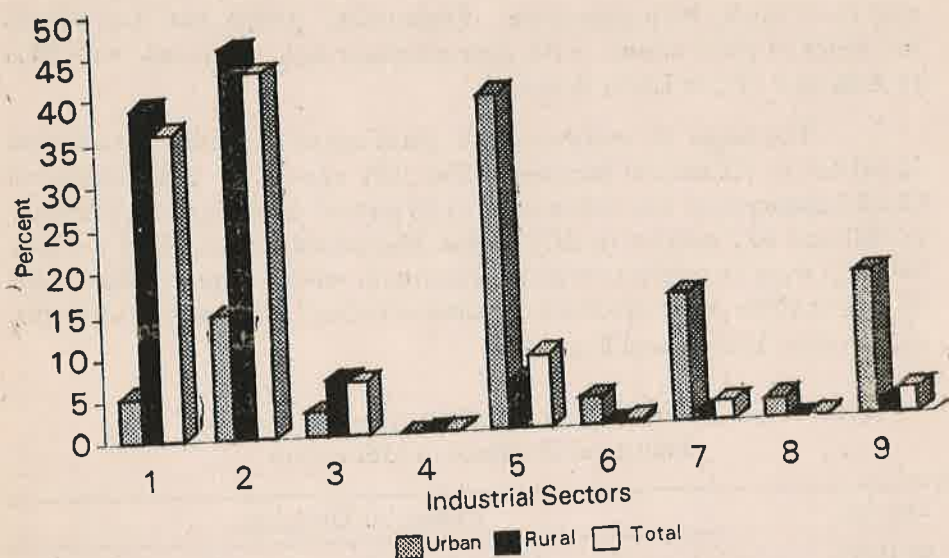


TABLE - 2 : Estimates of child labour in India. (millions number)

Organisation	Year	Magnitude
1. 1981 Census of India	1981	13.60
2. Human Rights Watch	1981	18.50
3. NSS	1983	17.40
4. Planning Commission	1983	17.36
5. Operation Research Group (Baroda)	1983	44.00
6. Labour Ministry	1991	44.00
7. Commission on Labour Standards and International Trade, GOI	1995	77.00
8. Campaign against child labour	1996	75.00
9. UNICEF*	1996	85.00
10. The Balai Data Bank, Manila		111.00

* Based on non-school going children & families living in destitution

The National Institute of Occupational health estimated based on census data that child participation in hazardous industries increased more than 200% between 1961 to 1981⁹ while it is evident from the survey results of 43rd and 50th round of NSSO study that the percent of child labour declined from 4.1% in 1987-88 to 3% in 1993-94 (Table-3).

TABLE - 3 Child Labour in India (% of the total labour)

Year	Rural			Urban			All		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1993-94	2.7	5.3	3.4	1.4	3.4	1.7	2.4	5.0	3.0
1987-88	3.8	6.2	4.5	1.9	4.5	2.4	3.4	6.0	4.1

Source : NSSO

According to Government-appointed Commission on Labour Standards and International Trade, child labour is growing by 4% a year, as well as in absolute numbers and as a proportion of the work force.¹⁰

In absolute terms, most child workers (61%) of the world's total are in Asia, excluding Japan, as compared with 32% in Africa and 7% in Latin America. In Asian countries, economically active children are highly prevalent in Nepal (45.2% of total children) followed by Bangladesh (30.1% of total children). Estimates of economically active children in some of the neighboring countries of India are given in Table - 4 and Figure - 3.

TABLE - 4

Estimates of economically active children in some of the neighboring countries of India in 1995 (% of total children in 10 to 14 years)

Countries	Economically active children	Countries	Economically active children
Bangladesh	30.1	Indonesia	9.6
China	11.6	Japan	0.0
India	14.4	Nepal	45.2
Pakistan	17.4	Thailand	16.1

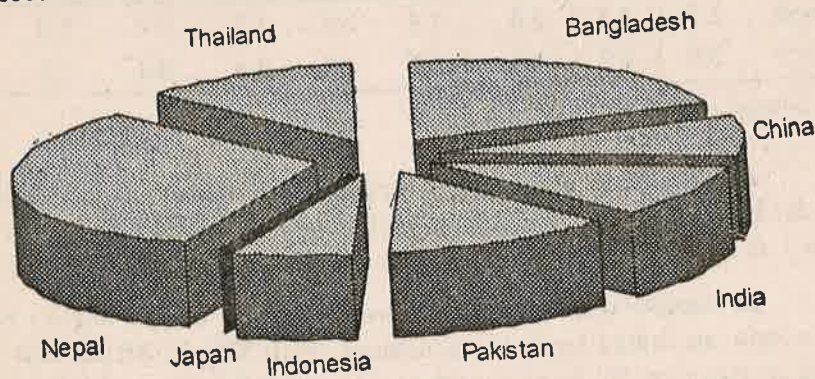
Source : ILO

Working Environment and Child Labour :

Indian children are active in almost every key sector of the economy with the exception of large factories. They herd cattle, pick tea, cut synthetic jewels, labour for up to 16 hours of a day in small huts knotting carpets, weave silk saris, make glass bangles, dig in quarries. Between 11 to 18 million work in the streets : cleaning tables in tea

Figure - 3

Estimates of economically active children in some of the neighboring countries of India in 1995 (% of total children in 10 to 14 years)



houses, shinning shoes, begging, working as rag pickers or railway porters. Many more, as many as 85% of all working children, work in agriculture.¹¹ Majority of child labour work as un-paid labourer in house based activities, family farms and household works in rural areas. They stay with the family, attend school and acquire experience out of it. Waged child labour in manufacturing and service sectors are more rigid and harse. Hours of work are longer and inflexible, such that children are mostly out of school.¹²

Children engaged in work, very often, suffer from numerous physical and psychological work hazards. The environment and the process they work in are obviously dangerous because of the likelihood of accident, injury or disease besides encountering serious psychological consequences such as work burdens beyond capacity, abusiveness, long detachment from the family, deprived from education and play and above all, complete dependence on the mercy of their employers.

Recent surveys at national level revealed that more than two-thirds (69%) are affected by various hazards out of which 5 to 20% suffer acute injuries or illness some of whom stop working permanently. The survey results stated that of the total exposed children 39% suffered from injuries or illness-divided almost equally: 49% of them were injuries and other illness. Most frequent injuries were cuts/wounds/punctures that were 69% of all injuries besides serious injuries that occur less frequently such as burns (7% of total injuries), dislocations/fractures/sprains (6%), crushing (3%) and amputation/loss of body parts. Among the illness reported, body ache/pains were the most frequent

(57% of all illness) followed by skin diseases (21%). More grave illness were gastro intentional (5%), eye strain/eye sight impairment (4%), hearing impairment (1%) and unspecified illness (7%). On average, three children in every 100 had stopped work due to the work related injuries and/or illness, while approximately one half of the working children were obliged to stop work temporarily and the remaining 46% were able to continue working despite their injuries or illness.¹³

Many of the child labour in India work in hazardous industries such as carpet weaving, match and fire works, glass blowing, bidi rolling and sports goods manufacturing, the plights of those children there are illustrated as examples.

Carpet weaving industries concentrated at Rajasthan, Uttar Pradesh absorb six lakh labourers including child labour mainly for making small quick knots on the carpet earning half of adult's wage. Those children work for 12 to 13 hours a day and in the process are affected for a life-time breathing disease, joint and finger pains and emaciation.

Around 50,000 children work in fire work and match factories at Sivakasi, Tamilnadu with wage as low as Rs. 2 to Rs. 8 a day depending on the individual's output.

They get little sleep and while busy in their tasks, their eyes itch, burn. Children also inhale toxic fumes, suffer from intense heat, run the risk of being injured out of accident and suffer from severe back pain.

In bidi making factory, according to the estimates of 51st round of NSSO, 330 hired child workers per 1000 hired child workers, 669 paid house hold in 1000 house hold employees and 209 unpaid child household workers in 1000 unpaid house hold workers were engaged.¹⁴ In these factories, children are exposed to tobacco fumes and sit in crouched positions all day.

Child labourers below 15 years are mostly preferred in glass industries where work resumes for three shifts in the environment such as heat, chemical fumes, soot and coal dust, while the floor is littered with broken glasses. They work with the furnaces on 700 degree C, deal with burning loams of glass stuck on the tips of iron rods, they are constantly on move with the blazing material in hand in the congested space.

Sport industries in India employ around fifteen per cent of the child labour to total workers. This industry had its beginning at Sialkot, now at Pakistan which, after independence, shifted to Jalandhar in Punjab and Meerut in Uttar Pradesh. Besides, tanneries supplying leather to these industries also employ child workers illegally in hazardous conditions.

Contradiction :

Child labour at present that exists either in the informal or the illegal sector has both ethical as well as economic issues. Lack of employment creation in organised sector, despite economic growth, facilitated to depend on children's contribution to family income. Very often children in some sectors prove to be more than productive adults and at times unintended negative consequences happen when children are withdrawn from employment. In Bangladesh, for example, a boycott of garments made by child labour caused 50,000 children to lose their jobs. These children then took up even lower paid jobs in other industries, or other demeaning jobs, some even being pushed into prostitution.¹⁵ History established that in the dawn of Industrial Revolution around 95% of the children had to work. Even if Government of India persistently continues to work for eradication of the problem; it never ends.

Poor enforcement of labour standards in developing countries make exportable goods cheaper than that of developed countries due to cheap labour employment such as child labour. From ethical point of view, therefore, WTO exerts pressure to maintain uniform labour standards for the protection of workers like ban on child labour. Developed nations also desire to restrict imports from developing nations rather than from any humanitarian concern for the plight of child labourers, one has to admit at the same time that India (as well as other developing countries) can not escape the responsibility of putting an end to exploitation of child labour.....Among other things.¹⁶

Amidst divergent views on abolition of child labour, it is strongly argued in India that an immediate abolition of child labour is not practical or even desirable. India's Labour minister M. Arunachalam argued, "Any attempt to link the issue of working children with international trade and to use it to impose sanctions directly or indirectly on countries where the problem of child labour exists are likely to prove counter-productive and are bound to jeopardize the welfare of these very children."¹⁷

Conclusions :

Issues relating to child labour are matter of great concern both from economic as well as ethical point of view. Despite all efforts, the problem aggravates leaving no room for immediate solution. Lack of reliable statistics on its magnitude, abject poverty of the people, hardy creation of jobs in organised sector and failure to make provision of jobs for all adults attribute to the issues.

The idea of abolition of child labour, though noble, needs sustained efforts from all concerned to achieve the goal eventually at the long run taking into consideration of all its pros and cons. Education policy of Government needs to be children oriented to capture all the children at primary level for compulsory education including basic education. Domestic economic reforms can be accelerated to create environment for regular income of parents that in turn would induce them to divert their children towards education rather than to labour market contributing positively for abolition of child labour.

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Child Labour in Orissa : A Case Study Of A Coastal Village

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The phenomenon of child labour is a chronic problem prevalent both in the developed and developing economies of the world. In transitional society though child was considered as a gift of God yet child labour continued to exist simultaneously both as an economic practice and social evil. But in modern civilised society child is perceived as human capital and is conceived as an essential component of human resource development; yet the use of child labour is widespread mostly in the Third World countries as the economies of these countries are characterised by high level of poverty, illiteracy, large family size, low asset base and marginal or no access to basic services like health, sanitation, family welfare, etc. This is more so in the Indian society wherein multi-class social structure exists and a complex of traditional and pre-capitalistic production relations are operative. The magnitude of child labour in India increased from 15.10% in 1975 to 23.17% in 1996 (ILO Report, 1996). However, according to the 1991 census report there are 12.7 million working children in the country, of whom 2.14 millions are bonded labourers. The report also reveals that the state of Andhra Pradesh has the highest child labour population of 1.66 millions in the country and Orissa stands in the 11th position with 0.45 million child labourers. Of the total child labourers in the state 94.65% are engaged in rural sector which is higher than all India average of 91.14% (Labour District Directorate, 1991, Census Report).

Objectives of the Study :

1. To investigate the reasons behind the presence of child labour in marine fishing industry.
2. To study the occupational pattern of the child labourers engaged in fishing activities.

3. To find out whether the child labourers are exploited in the fisheries sector.

Methodology :

Revkotturu, a coastal village in the Ganjam district of Orissa was selected to carry out the study. The sample size of this empirical study is based on 386 households who send their children for fishing activities. Survey method was used with the help of questionnaire as a tool for data collection. Interview method was also followed. The data collected were subjected to percentage analysis.

Socio-Economic Profile of the Sample Village :

The sample village has 386 households and a total population of 2152 of which 972 are males and 1180 are females. Almost all the villagers belong to the fishing community. They are completely involved in fishing activities. Though a few of them own some land, yet their major occupation is deep sea fishing. The women in the household are also actively involved in fish curing, salting, drying, net-making and prawn-seed collection. Sometimes they work on part-time basis as domestic servants in plantations & in paddy fields. Acute poverty, large size of the household, spending huge amounts of money on festivals, social ceremonies like marriages, on alcoholic habits & gambling and illiteracy have forced these fisher folk to take credit from the moneylenders and boat owners. Though the moneylenders too belong to the fishing community yet they are from a different economic strata and so they exploit the poverty ridden fishermen mercilessly.

Data Analysis and Interpretation :

The demographic profile of the sample village in Table-1 gives a clear picture of the composition of population and child workers in that particular village.

TABLE - 1

Composition of Population & Child Workers in the Sample Village

Sl. No.	Particulars	Male	Female	Total
1.	Population of the sample village	972	1180	2152
2.	Child Population	388	472	860
3.	Percentage of child population	18.02	21.93	39.95
4.	Number of child workers	128	317	445
5.	Percentage of Child Labourers to total child population	32.84	67.16	51.85

The above table clearly shows that 39.95% of the population in the sample households are children. Of the total child population 51.79% are child labourers. Nearly 128 of them i.e. about 32.84% are male workers and 317 of them i.e. about 67.16% are female workers. The proportion of male child workers to female child workers is low but it is the male child workers who go into the sea for fishing which is a much more hazardous job. The most astonishing fact which is revealed in the table is the female to male sex ratio is very high in this village.

TABLE - 2
Educational Level of Child Workers

Sl. No.	Level of Education	No. of child workers (Male)	Percentage to total workers	No. of child workers (Female)	Percentage to total workers
1.	Illiterate	95	74.21	283	89.27
2.	Primary	21	16.40	22	6.94
3.	Secondary	12	9.39	12	3.97
	Total	128	100	317	100

The educational level of these child labourers shows that 89 per cent of the female child labourers and 74 per cent of male child labourers are illiterate. Only 26 per cent of male child workers and about 10 per cent of female child labourers have had access to primary education and secondary education, as shown in Table-2. This has been so as illiteracy has deep roots among the heads of households of the child workers and so has an infallible impact on the child labourer.

TABLE - 3
Occupational Mobility of the Sample Households.

Sl. No.	Particulars	Number
1.	Number of Households	386
2.	Heads of households who worked as deep sea labourers in their childhood	380 (98.4)
3.	Heads of households who are working as deep sea labourers at present	365 (94.5)

Note : Figures in the parentheses denote the percentage of households in that particular category to the total households.

The occupational distribution and mobility present socio-economic processes whereby the households supplying child labour are being reproduced from one generation to the other without gap. This is revealed clearly in Table-3 where 98.4% of the heads of households who worked as deep sea labourers in their childhood have initiated their children who constituted around 94.5%, in to the same job in their very childhood itself.

Further, it is also found that 95 male child labourers are engaged in fishing activities of which 55.31% are in 5-10 age group and 85.17% are in the 11-14 years age group. Only 33 of female child workers are engaged in subsidiary activities. The girl child workers are not inclined to go into the deep sea and therefore engage themselves in fish marketing, fish curing, net making etc. Nearly 60% of the 5-10 and 11-14 age group engage themselves in subsidiary activities whereas only 40% are engaged in fishing activities.

Again the number of male children engaged in fishing activities in the 5-14 age group are more than those engaged in subsidiary activities. In case of girl child workers 188 of them are engaged in subsidiary activities whereas only 129 of them are engaged in fishing activities. This shows more of female child participation in case of fishery activities when compared with male child workers.

Since working in the sea is dangerous for these child labourers a specific data analysis has been conducted on the percentage of child labourers employed in the fishing vessels. 78 children are engaged in sea fishing work both on mechanised and non-mechanised crafts. Nearly 68% of the children work on mechanised crafts which go up to 50 fathoms depth and the child labourers both help in catching fish and curing of fish. Only 8 of them usually of 13 years old work aboard the trawlers and go into deep sea for fishing. The other 21% of child labourers are engaged in off-shore fishing which too is equally dangerous as they can be physically handicapped and chances of mortality too is high once they go into the sea.

The wage structure shows that wage earning by the child labourers is much lower than that of their adult counterparts. In subsidiary activities one adult member gets five times (Rs. 25) more than that of a child in the age group of 5-10 years (Rs. 5) working for the same hours; and Rs. 10 more than that of a child in the age group of 11-15 years, whereas in fishing activities an adult gets (Rs. 40) four

times more than that of a child (Rs. 10) of the age group of 5-10 years and two times more than the child of 11-14 years (Rs. 20) working for the same hours in a day. Child as well as adult members of the community get more wages in fishing activities than that of non-fishing activities. From the field it is observed that the child labourers in the age group of 11-14 years do equal work as that of adult labourers. Despite this they get much less wage than that of adult members. This shows exploitation of child labourers by the boat owners and others who employ them.

The study also reveals that 97.5% of the households in the village belong to the income size group of below Rs. 1000/-. The households with lower income groups send maximum number of children to work as a child labour. This reflects that the supply of child labour and household income have an inverse relationship.

We have discussed various aspects of the employment of child labour in the marine fishing industry. Our study helps us to answer the questions as to why these child labourers are used and abused in the marine fishing industry. It is seen that about 57% of child labourers are supplied by the households to supplement the family income. This shows that they are suffering from acute poverty. Nearly 22% child labourers work because their parents are alcoholic and they have to look after the family and 4.27% work as there are no other earning member in the family. Only 13% of heads of households take their children along for acquisition of skill which would be their future source of sustenance and 5% work as contract labourers. Here contract labour means they sign a contract to work under the boat owner or moneylender for a period of one year that is from Dolapurnima to Dolapurnima, just to repay the debt of their parents. They don't get any share of income, which shows exploitation of these child workers by the money lenders.

Findings and Suggestions

From the study it can be noted that poverty is an important, but not the sole factor for child labour in the Revkotturu. In addition to poverty, deep rooted social bias and indifference to education particularly in the case of girls is another reason for child labour. The present educational system seems irrelevant to the fisherfolk. They say that it gives nothing to them and an educated boy or girl is a burden to them; because the educated persons neither want to continue their family occupation nor they get any other alternatives. Therefore, it is necessary to reorient or restructure educational system in accordance with the local situations so that it can give some benefit to them. In Revkotturu village.

almost all families live below the poverty line and depend on the moneylenders and boat owners for their survival and these people exploit them. Under these circumstances government must provide loans for boats and other subsidiary activities. As mentioned earlier reduction of poverty will not necessarily result in reduction in the incidence of child labour. The deep rooted social bias and indifference to education among the fishing communities are other important reasons for child labour. In this context there is a need to create awareness, educate and motivate the fisherfolk against child labour and in favour of education.

Government bear enormous responsibilities in ensuring the promotion and protection of child rights and all other development aspects. There is a need to establish a special Child Rights Commission on the lines of Women's Rights Commission properly staffed and with the necessary enforcement powers. The children's rights cannot be served through piecemeal measures. It needs a coordinated and integrated long-term measures.

NGOs play a very important role in this direction. They are the link between ordinary citizens on the one hand and on the other official bodies, national and international. They mould the public opinion against the violation of child rights. There is a need to encourage and support the NGOs that are working in the field.

CHILD LABOUR : THE INNOCENTS' AGONY

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The problem of Child labour has assumed a global phenomenon. It is ironic to mention that India has the largest number of child labourers in the World. According to the International Labour Organisation (ILO) reports, India suffers from the dubious distinction of having the largest child labour force in the world—about 17 million. Unofficial estimates reveal that the magnitude of child labour in India ranges between 44 and 100 million.

Most of the Children in India are found employed in the unorganised sector in both rural and urban areas. They perform multiple types of jobs and a vast majority of them are found in hazardous occupations in the urban informal sector.

The estimates of child labourers as portrayed in the census reports of 1971 and 1981, reveal that the number of child labourers has increased from 10.74 million to 14.50 million during the period.

TABLE - I

Number of child labourers employed in various units.

OCCUPATION	AREA/INCIDENCE OF CHILD LABOUR.
(i) Agriculture	All India—8.8 Million (As per 1981 Census)
(ii) Brassware	Muradabad (U.P.) —40,000-45,000
(iii) Carpet-Weaving	(a) Mirzapur, Varanasi (U.P.) 50,000 (b) Kashmir — 27,000 (c) Rajasthan — 50,000
(iv) Handloom	Trivendrum — 10,000
(v) Match & Fire Works	Sivakashi — 50,000 — 70,000
(vi) Glass and Bangles	Firozabad — 50,000
(vii) Dimond cutting and polishing.	Surat — 50,000
(viii) Gem Cutting	Jaipur — 15,000
(ix) Lock Making	Aligarh — 8,000 — 10,000
(x) Mines	Meghalaya — 28,000
(xi) Bidi Industry	Tiruchirapalli (Tamilnadu) 7,000

Table-I highlights only a microscopic picture on the employment of child labour in some selected manufacturing Units. Apart from this, there are unspecified number of children employed as domestic servants, hotel boys and agricultural labourers all over the country.

TABLE - II

Population of Child Labourers below the age of 15 years and their Work Participation Rates
by Sex and Rural/Urban Residence in India, 1981.

(Figures in million)

Type of residence	Sex	Total Population (5-14 years)	Workers (in percentage)			Work participation Rates		
			Main	Marginal	Total	Main	Marginal	Total
Total	Combined	179,597	6.23	1.36	7.60	6.23	1.36	7.60
	Male	93,533	7.95	0.72	7.68	7.95	0.72	8.67
	Female	86,064	4.37	2.09	6.42	4.37	2.06	6.42
Rural	Combined	140,153	7.28	1.69	8.97	7.28	1.69	8.97
	Male	73,051	9.17	0.88	10.05	9.17	0.88	10.05
	Female	67,102	5.22	2.57	7.79	5.22	2.57	7.79
Urban	Combined	39,444	2.51	0.20	2.72	2.51	0.20	2.70
	Male	20,482	3.61	0.16	3.76	3.61	0.16	3.76
	Female	18,962	1.33	0.25	1.59	1.33	0.25	1.59

Source : Census of India, 1981

It is evident from Table-II that in terms of total child labourers as well as their rate of work participation, the rural area is dominated compared to urban areas. Again, the work participation rate of male child labourers is much higher compared to female child labourers in both rural and urban areas.

TABLE - III

Percentage distribution of child labourers (5—14 years)
by their status

Status of labourers	Rural		Urban	
	Male	Female	Male	Female
Self-employed in household enterprises	63	57	46	46
Regular salaries employees	11	5	31	25
Casual wage labourers	25	38	23	29
Total	100	100	100	100

Source : Survey on employment/unemployment NSSO (1987-88).

It is inferred from Table-III that in self-employed household enterprises both in rural and urban areas the incidence of child labour is the highest. The percentage of child labourers employed on regular salary basis is higher both in case of male and female child labourers in urban areas compared to rural areas.

The genesis of child labour problem owes its origin from a galaxy of factors like acute poverty, inadequate educational facilities, lack of employment opportunities, low wages, failure of planning in rural areas, recurring drought, natural catastrophes and inability of the government machinery to enforce the existing laws etc.

It is deplorable to note that working children are the most exploited and a large number of them are almost bonded. Their wages are far below the statutory minimum and their work environment is distressing. Because of callous attitude of the insensitive enforcement agencies, the Child Labour (Prohibition and Regulation) Act, 1986, could not bring any fruitful result in ameliorating the condition of child labourers in India.

The plight of child labourers is more acute in case of urban working children and street children compared to rural areas.

It is high time to conceive of the seriousness of the problem as it is detrimental to the human resources development and thus, the future of India.

Needless to mention that child labour exists in India on account of socio-economic compulsions and its total elimination can not be achieved over night. Concerted efforts need to be made to generate an awareness among the parents about the need to send their children to schools.

Wages are also to be fixed so as to wean away the employers from employing child labour.

Children should be protected from physical, sexual and emotional abuse and exploitation through proper implementation of legal and constitutional provisions.

The social attitude — viz. parental attitudes of considering it as the duty of the children to work and support the family and their right to eke out a living on their earnings—as well as the public attitude that child labour is inevitable as long there is poverty, — have to be changed.

Strict enforcement of the Bonded Labour Act, 1976 to eliminate the cases of pledging of children and enforcement of child labour (Prohibition and Regulation) Act, 1986 are highly imperative, to combat the problem.

An interface between the employers of child labour, their organisations, trade unions and Government officials should be chalked out in order to eliminate child labour with suitable rehabilitation strategy. The provision of education, health care, minimum wages and employment opportunities etc. —should be guaranteed to children as long as they are employed in various sectors of the economy so as to minimise the gravity of the problem.

In this context, it is heartening to note that the Government has formulated the ambitious Rs. 850 crore scheme in 1994, to eliminate child labour in the manufacturing and services sector over a five year period. The scheme under operation since April 1995, would concentrate on first 15% of the estimated 17 million child labour population in the country.

Problem of Child Labour : A Rethinking in Indian Context

Dr. Durga S. Sarangi
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In a fast moving world, the attitude of statesmen all over the world, towards children has undergone a sea change from the draconian 'spare the rod and spoil the child' to a growing awareness of the rights of the child. In pre-independence period, in our society, seniors avoid any mention of the rights of the child and dismiss it as an absurd proposition and a futile intellectual aberration. Elders quote the ancient Indian practice of child slavery where children of less than 8 years were treated as a commodity used or abused according to the whims of their masters. At the same time, Manu and Kautilya have pointed out the need and practice of giving protection to working children in their writings. Time has changed and people have come to realise that if due attention and proper care are not given to the children to ensure their healthy growth (mentally and physically) we are bound to invite doom for our citizens of tomorrow. We can not deny the fact that improvement in the condition of child labour is the primary concern of any nation in the 21st century.

Keeping in View the significance of children in building the future as youth of tomorrow, an attempt has been made in this paper to define the nature of labour, social legislation and movement in this regard, factors responsible for the evil, role of NGO's and people to eradicate exploitation of child labour with our recommendations at the end.

I

Child labour is the major cause of child abuse and exploitation in many parts of the world. This is a grim tale not only in Asia, but also in countries of Africa and Latin America. Child Labour assumes the character of a social problem as it hinders, arrests or distorts the natural growth process and prevents the child from attaining full manhood. Homer Folks, the chairman of the US National Child Labour Committee (USNCLC) defines child labour as "any work commonly by children

that interferes with their full physical development, their opportunities for a desirable minimum of education or their needed recreation”.

The Committee on Child Labour of the Government of India (1979; p. 7) concludes in its report that “child labour can broadly be defined as that segment of the ‘child population’, which participates in work, either paid or unpaid.” However, the problem is that when the conditions of work change the picture changes dramatically. Work turns into exploitation, when children :

- work too young;
- work for too long hours;
- work for too little wage;
- work in hazardous conditions;
- work under slave like arrangements.

II

The importance of child has been brought into focus through various forums at the global level. The universal Declaration of Human Rights adopted by the UN in 1948 emphasised that the child must be protected against every form of exploitation and provided with all requisite means for normal development. In India, historically, the problem received attention over a century ago when the Indian Factories Act, 1881, provided, among other things, safeguards in respect of employment of children in factories. Three broad areas covered by the Act were minimum ages of employment, successive employment, and duration of employment.

In the post independent India, the Constitution of India in Article 24 prohibits employment of children below 14 years in factories, mines and other hazardous occupations. Besides the constitutional provisions, employment of children is regulated by the factories Act 1948, Mines Act 1952, Motor Transport Acts, Shops and Commercial Establishments Act 1952. Government of India adopted a National policy for children where emphasis was laid on free and compulsory education and provided protection against exploitation of child labour under 14 years. On 22nd January, 1997 a conference was called to finalise a detailed action plan to implement the verdict of the Apex Court on elimination of child labour.

However formidable the legal framework created for protecting child labour, the inadequacies in its enforcement and enormous spread of child labour in the unorganised sector have precluded us from achieving the desired results.

Secondly, the prevalence of the socio-economic setting that plays a dominant role in initiating the child to the family trade have not been conducive to the success of different statutes.

Finally, factors like children's suitability to specific employment, their adaptability, their cheap price etc. have also run counter to the expected results of the concerned law.

Regarding the inadequate implementation of national laws, some limitations are responsible :

- (I) In some cases the national laws are not sufficiently realistic. For example, the sectarian coverage may be well beyond the country's institutional and enforcement capacity.
- (II) Enforcement is rendered meaningless by the absence of schooling opportunities.
- (III) In many places the labour inspectorate are inadequately staffed and ill-equipped in terms of material support to carry out their legal responsibilities.
- (IV) Work of these inspectorates is hampered by problems of the verification as units or enterprises employing children are generally unlicensed and unregistered and do not usually keep a record of employees.

III

There is great variation in the nature of child labour both state-wise and sectorwise. Agriculture and allied activities account more than 4/5ths of the working children, half of them working as (i) agricultural labourers and other half engaged as (ii) cultivators and in (iii) plantations, livestock, forestry, fishing etc. The remainder, that is less than 1/5th of the child labour is engaged in (i) manufacturing processing (ii) servicing (iii) trade and commerce (iv) construction (v) transport (vi) storage (vii) communication etc.

It is obvious from the above that the child labour is prevalent more in the rural areas than in the urban centres. The survey of All India Trade Union Congress shows the data in Table I.

In the unrecognised sector besides agriculture, manufacture of beedies, matches, fireworks, glass-works, handicrafts like carpet weaving, embroidery, polishing of precious and semi-precious stones etc. have a concentration of child labour. However, it has been observed that the child labour in urban centres especially in restaurants, road side shops etc. is on the increase due to urbanisation and migration.

TABLE - I

(Shows the rural-urban category of child labour in India)

Category	Rural	Urban
(1) Male	6.30%	2.46%
(2) Female	3.30%	0.88%

The working children may be broadly classified into the following categories.

- (a) Migrant child labour
- (b) Bonded child labour
- (c) Family child labour
- (d) Working children of poor handicapped parents
- (e) Working children without parents

There are numerous factors pushing children out of school. On the supply side, the most cited explanation given for child labour is the poverty of households that supply children to the labour force, but there are many other implications as well. Some of the social implications are enumerated below.

Poverty

It is believed that the poor very often send their children to work in order to increase household income. This is so among the minority communities particularly among Muslims of coastal Orissa, & Scheduled Caste and Scheduled Tribe population of rural areas. Couples in poor households have more children, partly because the existence of child labour reduces the cost of having children. High fertility, in turn, a vicious cycle, increases the need for the income provided by child labour. It also reduces educational level of the future generations that in turn increases high fertility since parents' education is one of the most important determinants of fertility.

Parents of this class usually see their children as "economically productive units" with least possible investments. At every traffic jam in metropolis we see begging women holding infants. Generally these children are fast asleep. A small dose of opium is given to such children because the mother wants to keep the child in her lap continuously. She is neither concerned with his mental health nor with the physical growth because child to her is a productive unit right from birth. In this way not only a child worker but even an infant earns for the family.

A common argument used to justify the elimination of child labour is that its use increases adult unemployment and therefore, if

child labour was abolished, it is generally assumed that adult unemployment would drop more or less on a one-to-one basis. The study shows that in UP and Bihar where per-capita income is low, child labour constitutes only 4.8% and 6% of the total labour force whereas in AP and Karnataka which are better off with respect to per capita income the percentage of child labour is higher i.e., 9% and 8% respectively of the total labour force.

Gender bias

In late 80s UNICEF calculated that there are 44 million child workers in India. According to that calculation 56 children are found missing; where are they? Neither they are working nor are they going to school. They are lost in between the two words. In 1996 ILO provided some information regarding these missing (invisible) children.

Invisible boys are either helping their parents in business or in agriculture but invisible girls are taking care of the siblings and household work. Studies reveal that 60% of children under six may be left in each other's care, 48% of sibling care givers may be 4-8 years of children not in school, one fifth specially do not attend because of child care responsibilities. Of these 70% to 80% are girls. In most economically disadvantaged families, the girl child is denied educational, nutritional and health care; her growth and development is further restricted by the process of socialization. For better understanding of the issues of child labour, the first important step is to understand the specific situation in depth and the complexities involved in its various manifestations.

Education

National Commission on Labour in its report in 1969 said, "Ignorance of parents is also responsible for child labour..." Uneducated child is an asset as desire to educate becomes a double liability (a) loss of earning if he does not work and (b) expenditure on education.

Public Report of Basic Education in India reveals that most of the schools surveyed by them in rural areas of U.P., Bihar, M.P. and Rajasthan lack proper buildings, books and teaching aids. Half of the schools had no teaching activity when the visit was made by the research committee.

In order to make schools more available, relevant and appealing, it is essential to know exactly what kind of problems children face in this regard and what they expect from school. The reasons are as follows :

- (a) In some areas, school and/or teachers may not be available.
- (b) The contents of the curriculum may seem irrelevant for poor children.
- (c) Problem of cost (in the form of school fees, cost of uniform, school bag, books, pencils and other related materials.
- (d) Sub standard; non-result oriented teaching.
- (e) Families having traditional crafts or occupational castes engage children because it is easy to teach youngsters.
- (f) Many parents do not send their daughters to school because of traditional attitudes about woman or there are no female teachers.
- (g) Nomads and tribal people find it difficult to send their children to school due to frequent movement.

Traditional Norms .

Child labour is not the domain of developing countries of recent times. It has been continuing in India and other Afro-Asian countries since ancient period. In UK more than one million under age school children work illegally and many of them for as little as two pence per hour. Even US has about eight lakhs children engaged in harvesting crops with their families.

It is crucial to understand the demand of child labour. Factors which are responsible for increase in demand of child labour may be listed as per the following :

- (a) More docile and less troublesome.
- (b) Greater willingness to do repetitive and monotonous work.
- (c) More trustworthy and innocent.
- (d) Less absenteeism.
- (e) Do not form trade unions.
- (f) Easy supply of child labour in the market.
- (g) Do not demand over time wage.

Wage structure of adults :

Wage structure of adults has a direct bearing on the incidence of child labour. The more the financial burden in the family is, the more a person will be compelled to send his child to work.

Unemployed adults :

When adults are unable to get themselves employed, there is no option left except to depend on the earning of children. Studies by Lumpkin and Dough revealed that even two-third of the children seek employment of adults or part time job and one-third because of cut in the pay of the adults.

A study by N. Burra finds that due to unemployment among rural poor on a massive scale in Bulandshar district of UP, child labour is high in Khurja potteries. Similar situations also arise in Shivakasi.

IV

Since nineteen hundred eighty, a number of NGOs initiated programmes to improve the conditions of life and living of child labour. Since then a number of meetings and discussions have taken place at different levels to conceptualise the issue. Plans, strategies and programmes of actions have been devised to deal with the problems. Further the task of their development is such a gigantic one that it can not be left only to the government. NGOs are expected to play a crucial role in the direction of relief and rehabilitation of such children. They should come forward to call upon public attention to the tragic existence of child labour, activate proper implementation of labour laws, social security measures and monitor government programmes to ensure that they serve the children concerned rather than the vested interest. As these organisations generally enjoy the trust of the local communities, they can do a great job for the distressed. Many NGOs are providing soft services to working children through the running of nonformal education centres, but it is not sufficient to combat the evil.

V

In the concluding remarks we can say that collective efforts are required to abolish or eliminate child labour from Indian social system. First and the foremost, compulsory primary education must be introduced simultaneously with large scale improvement in the educational system. This is undoubtedly the single most effective tool in keeping children away from the labour force. In this regard the experience from Kerala is note worthy. In Kerala the work participation rate of children in 1971 was 1.9% as against the all India average of 7.1%. Simultaneously all children in the 6-11 age group & 88% of the 11-14 age group were in school. The all India average in the latter age group was only 38%. Hence strengthening the system of education to make it more attractive for poor children coupled with a system of mandatory attendance enforced by local pressure groups could be an effective way of controlling the influx of children into the labour force.

The second suggestion is that a strong determination for the cause by all sections/ professionals of the society is a must as it would help the government for effective enforcement of the law to root out the evils of child labour. However, the NGOs can play a bigger role in strengthening the hands of the law enforcing machinery for identifying and monitoring the units where child labour is used.

Child Labour in India : Dimensions, Issues and Policies.

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Child labour is the single most important source of child exploitation and child abuse in the world today. The problem of child labour can not be viewed in isolation because it is a symptom of the disease which is spread at various levels. At the national level, the lopsided development process in the background of exploitative and left socioeconomic structure results in marginalisation of the poor who with no option but to work as child labour as a survival strategy. The problem of child labour can not be viewed in isolation because it is a symptom spread at various levels.

Inequitable distribution of land, poor access of the weaker section to resources, gradual destruction of the environment, existing socio political system—all put so many constraints on the poor that they are forced to use the meagre income of children to support themselves. Since a number of jobs which can not very well be performed by adults are taken up by children. The lower wage to children also brings down the bargaining power of adults, thus lowering the overall wage rate. The working condition and the occupational risk put a lot of strain on the tender bodies of the children who can not cope with it for a very long period and give rise to high mortality rate. Higher mortality leads to higher fertility. The vicious cycle of child labour goes on and on, acting at the individual, family and social level, interconnected with each other.

Dimension of the Problem :

The data on the strength of child labour are not accurate as they are scattered widely in unorganised sectors as family workers and children are sometimes absorbed in permanent jobs. The employers do not provide accurate data to the researchers. Child labour is also engaged in domestic service, non-monetary service, illegal activities like prostitution. Children also work in non-agrarian environment, as bonded labour, antisocial activities like smuggling drug and liquor pedalling.

Economic exploitation of child labour is reflected in long working hours, low wages, casual nature of work, absence of holidays, absence of social security, poor working environment, all of which cause injury to their health due to hazardous occupation in unhealthy and unsafe surroundings.

Causes of Child Labour :

Poverty and unemployment, illiteracy, adult unemployment are the main causes of child employment. Moreover, child employment finds favour with most of employers because child earnings are the source of livelihood for some other families. On demand side the employers minimise cost and maximise profit by using child labour as they are cheap, sincere in work not unionised, easily controllable and easy subject of exploitation (Indira Hirway : 1991). Employers take maximum work out of them by giving them minimum wage for their survival. National govt. also supports child labour: "Poverty can not be eradicated in short-run, therefore child labour must be tolerable". Socio-cultural constraints, illiteracy have been responsible for child labour. Poor people think that the cost of education is high and the return is low. It leads to high drop-outs. The co-relation coefficient between percapita income and percentage of share of child labour in the labour force is -0.72 which is significant at 5%. The coefficient between incidence of literacy and incidence of child labour was -0.78 significant at 5% (Indira Hirway : 1991). Phenomenon of child labour is a consequence as well as cause of child labour.

Child Labour : Exploitation in National and International Level :

Exploitative system is not confined to national boundaries. It is also reflected in international level. There is keen competition among developing countries to cater to the markets of developed countries. The unjust international trade order supports and sustains this exploitation. There is abuse of child labour as children are forced to work (economically active children about 70%) in agriculture, fishing, forestry & hunting. About 8% work in manufacturing, whole sale, retail trade, restaurants & hotels. About 7% work in transport & storage. About 2% work in construction, 1% in mining and quarrying. Children are exposed to health and safety risk. They face numerous hazards such as sharp and unwieldy tools, bites from snake, insects, transport in unsafe vehicles, and regular exposure to toxic substance such as chemical fertilizers and pesticides. They are exposed to extreme temperature and carry heavy loads. Bonded child labour is more seen in farm sector.

Policies and Laws :

There are two types of policies of govt. at present : (1) Short term & (2) Long term. So far short term measures are concerned they include : (1) Banning child labour from hazardous employment, improving working and living condition, improving general health, nutrition and

providing education, rehabilitation programme. The labour laws include minimum age prescribed for child workers. In India the minimum age of child labour is 14 years. For hazardous work, it is 14-18 years. In India child labour prohibition and regulation act 1986 bars the employment of children under 14 years of age.

In India National Human Right Commission found that labour inspectors are conducting poor quality inspection, and prosecutions are faulty. The defaulters go scot free due to lacuna in the law. India's Ministry of Labour issued a notice and prohibited work of 54 processes. In 1977 in Andhra Pradesh a pilot-back-to school programme for 23 districts have been started. It has enrolled 37,000 children in schools.

Suggestions to Eradicate Child Labour :

The half hearted and haphazard monitoring of implementation, corrupt officials, close linkage between vested interest and bureaucracy have created obstacles for implementation. Compulsory primary education, improvement of syllabus, midday meals, vocational training, political will, active and honest NGOs are the crying need of the time. A multiple policy approach, dialogue with trade union, periodical medical check up & apprenticeship act can solve the perennial problems of child labour.

It goes without saying that the issue of child labour and compulsory education are not yet on the political agenda in India. No political party in India has made policies towards children. India has a long way to go to build mass human resources base that can contribute to present efforts to move from the state-led autarchic industrialisation policy to market oriented model in which India can operate in a global economy.

Child Labour in India

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Children are the pride of a country. A country gains recognition and glory through them. They have an important role to play in future, and may also guide the destiny of the nation along with the path of progress and achievement. It is really sad to mention that children in most of the developing countries are living miserable, cheerless lives, toiling endlessly to ward off starvation totally deprived of all comforts and opportunities for self growth and development. Child labour has always been a stark truth and a necessity for families living below the poverty line. Though child labour is a global phenomenon, still it assumes serious dimensions in developing countries like India, Pakistan, and Bangladesh. Nearly 25% of world's working children are found in India.

According to V. V. Giri the term "Child Labour" is commonly interpreted in two different ways : First as an economic practice and secondly as a social evil. The child labour in a restricted sense, means the employment of children in gainful occupations which are dangerous to their health denying them the opportunities of development.

The Dimension :

Child labour contributes significantly to the Indian economy. It contributes 20% of GNP and 8% of work force. Most of our export industries like carpet, brass ware, diamond, glass, match and fire works etc. are based on child labour. India has become the largest exporter of cut and polished small diamonds. There are about 13,600 children below the age of 14 years working in the industry. It is only due to low wage paid to children which provides industry's comparative advantages in international market. The social scenario according to Gurupada Swami, child labour has changed radically due to globalisation, industrialisation and urbanisation. Apart from the export industries, traditionally the children are engaged in various sectors like agriculture, Zari industries, glass factories, fire cracker industries, shoe making factories, eating centres, and domestic servants. Child labourers move far away from families to work in hazardous industries of unorganised sectors.

Therefore, exploitation has started with the change in the nature of work done by working children.

Children's employment in all sectors is preferred (i) as they work for less remuneration than the adults, (ii) young people are more flexible mentally as well as physically and can be moulded and pressurised easily into the exploitative methods of the employers, (iii) they do not require many amenities, (iv) they can easily handle many delicate works and (v) they can be pressurised to work more hours than the statutory provision. A survey conducted by K. N. George in Madras revealed that children were made to work from eight to fifteen hours and in certain organisations even more.

Causes of Child Labour :

Many a reasons can be attributed to the growing menace of child labour in India. The following are some of the important ones.

(a) Poverty :

Poverty is a major contributing factor which has given rise to the problem of child labour. Several child labour experts opine that the wide spread poverty in India is the root cause of child labour. Poor people consider their children an economic asset. Income accruing from a child may be very small but it plays a crucial role in saving the family from starvation.

However, C. P. Chandra Shekhar's study finds no correlation between poverty and the child labour. According to his study, 5 Indian States viz. Andhra Pradesh, Rajasthan, Tamil Nadu, Karnataka and Maharashtra have the highest ranks in terms of child labour. Maharashtra and the three southern States mentioned above have much higher intensity of child labour than the poor States like Uttar Pradesh, Bihar and Orissa.

The Chairperson of the South Asian Collation on Child Servitude (SACCS)—Kailash Satyarthi emphasises, "Child labour is not a necessary consequence of poverty; rather it is the rampant menace of child labour that perpetuates poverty". The UNICEF latest report also holds a similar view.

(b) School dropouts :

There is another factor which contributes to the high ratio of child labour which is the factor of school dropouts. The very nature of curriculum, the system of education and the regimentation prevailing therein make the rural children prefer earning to learning not realising the future consequences of such decision.

(c) In most places schools are situated in very remote areas and are inaccessible to a sizeable population. The schools also present stale and dismal pictures and hold little attraction for children. Due to lack of funds, many schools do not run regularly with teachers absenting most of the time. Schooling of the children becomes burdensome for the poorer families which involves certain expenses on one hand and deprives them of the income that accrues from child labour on the other.

(d) **Illiteracy :**

The higher rate of illiteracy indicates the ignorance of the persons in realising their duties as guardians. So they push their children to join the child labour force instead of providing them with education and other facilities.

(e) The children of poor families very often follow the traditional occupation of their parents & learn the skills from them without attending schools.

(f) In some industries like bidi, glass, match box, carpet etc. children as workers are increasingly preferred. The most plausible reason for their preferential employment in such industries is lack of organisational support to child labour. The working children are usually not associated with any trade unions. As such, they have no voice, and strength to fight for their dues, rights and privileges.

(g) Last but not the least insufficient protective legislations are responsible for increasing child labour in India. There is hardly any organisational or institutional set up which can protect the children from their miseries of work.

Consequences :

As long as child labour continues, it is profitable for the poor to have more children. Each child starts earning income as early as at the age of even five. And each such poor parent is tempted to have supplementary income in the form of wages earned. Most often, such parents consider their children as capital which involves a very less investment and cost. According to the Gurupada Swamy Report 1979, "Child labour assumes the character of a social problem in as much as it hinders, arrests or distorts the natural growth processes and prevents the child from attaining his full blown manhood.

II

The problem of child labour has caught the attention of the researchers, social workers, media personalities, courts and of course

the Government. A number of research studies have been commissioned under the aegis of the government and non-governmental organisations. They have been impressing on the Government about the urgent need for total ban on the pernicious practice of child labour. The Government too is alive to the issue and it passed the child labour (Regulation and Prohibition) Act, 1986. However, the provisions of the legislation leave much to be desired

Constitutional Provisions :

According to Article 24 of the Constitution, children below the age of 14 are not to be employed in any factory or mine or engaged in any other hazardous employment. Similarly Article 39 (e) directs the state to see that the tender age of children is not abused and that citizens are not compelled by economic circumstances to do work that is unsuited to their age or strength. Further Article 39 (f) emphasizes the need to see that childhood and youth are protected against exploitation and against rural and material abandonment. Article 45 also directs the state to provide for free and compulsory education for all children until they complete the age of fourteen.

Legislative Measures :

A number of enactment of child labour laws have concentrated mainly on a few aspects such as minimising working hours, increasing the minimum age and including different processes, occupations apart from factories. The Employment of Children Act, 1938 was the first comprehensive Act which was repeated and substituted by the child labour (Prohibition and Regulation) Act 1986.

The Child Labour (Prohibition and Regulation) Act, 1986 is an outcome of various recommendations made by a series of committees. The National Commission on Labour 1969 recommended fixing the hours of employment of children so as to enable them to go to school.

The Committee on child labour (1979) recommended banning of child labour only in hazardous areas and regulate and ameliorate the conditions of work in other areas. The Seventh Plan was forth right in demanding immediate attention to child labour and stated that the ultimate goal of abolition of child labour can only be achieved when there is sufficient improvement in the conditions of living of families whose children are compelled to work.

The National Policy for Children Resolution, adopted in August, 1974 set out a Policy frame work and measures aimed at providing

adequate services for children. This policy also emphasises the importance of free and compulsory education for all children up-to the age of 14 years along with provisions of health and nutrition etc.

In pursuance of constitutional directives and legal provisions, the Government of India formulated a National Child Labour Policy in 1987. The basic thrust of the Policy is to co-ordinate and intensify on-going developmental progresses for income generation and employment in areas prone to child labour.

Court's Verdicts :

The Supreme Court has shown its concern for child workers by bringing occupations or processes under the Court's order by the direct application of constitutional provisions. The Court provides some suggestions in order to prohibit child labour.

However, in *M. C. Mehta Vs. State of Tamil Nadu*, 1991, the Supreme Court has allowed children to work in a prohibited occupation. According to the judges, 'the provisions of Article 45 in the Directive Principles of State Policy have still remained a far cry and though according to this provision all children upto the age of 14 years are supposed to be in School, economic necessity forces grown-up children to seek employment. Children can therefore, be employed in the process of packing but packing should be done in an area away from the place of manufacture to avoid exposure to accidents.

The attitude of the inspectorate staff is also responsible for the poor enforcement of child labour laws. They consider it as a necessary evil, because no law can change attitude of the parents to prevent their children to go to industries.

III

Steps to check Child Labour :

The Govt. of India is making various efforts to minimise the child labour by announcing various programmes and plans. The Central Advisory Board of Child Labour was constituted in 1981 and suggested legislative measures as well as welfare programmes for working children. A major activity undertaken under the NCLP is the establishment of special schools to provide non-formal education, vocational training, supplementary nutrition etc. to children withdrawn from employment. Under the project based action plan of the policy, 12 NCLPs were started

in Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamilnadu and Uttar Pradesh. A major programme was launched on August 15, 1994 for withdrawing child labour working in hazardous occupations and rehabilitating them through special schools. By 1997, 76 child labour projects under the National Child Labour Project (NCLP) schemes have been sanctioned for covering 1.5 lakh children.

IV

The constitutional provisions, the legislative measures and above all the government policy implications cannot solve this mammoth problem. NGOs and other voluntary organisations suitably supported by industrialists and people in general should also come forward and lend their full fledged co-operation and support to reduce, if not eliminate, the social, economic and psychological problems of child labour.

Issue of Child Labour in Keonjhar District of Orissa—Problems and Policies

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Child labour implies, the use of children below the age of 15 in different organised and unorganised sectors of the country. It is a social malady and one of the greatest social malaise which vibrates towards the under development of the economy as it does not support in propelling qualitative population growth.

The children of poor parents work in different hazardous industries for the production of glass, brass, locks, gems, matches, fireworks, slates, tiles, carpet making, stone polishing, diamond cutting, wood carving, mining sector, leather tanneries and beedi works. Besides these hazardous industries, child labourers are also used in service sectors like restaurants, shoe polishing and domestic services.

The producers employ the child labourers because they can work like the adult labourers with less wage rate. Child labour is not only very cheap for employers, but also troublefree; since they can not organise agitations by themselves. It falls into two categories; one category is children in industries who are removed from their own homes & consequently have no proper shelter or economic security that children need. The other category is children who migrate with or without their families from rural to urban slums.

India has the largest population of child labourers who constitute nearly 7% of the work force and are contributing considerable amount to the Gross Domestic Product (G.D.P.). According to the I.L.O. Statistics, in India approximately 45 million children are employed in organised and unorganised sectors and they work between 10 to 12 hours daily for an average monthly wage of Rs. 250/- —in many cases they work for no wage at all.

Poverty remains a basic reason for the appearance of child labour in the Indian labour market. In many cases parents are forced to send their children work in order to gain some income. It is quite possible

that in many cases parents are looking for avenues for food for the children and would be glad if food was given to them. Thus these suppressed, neglected, illiterate and poverty stricken children have become a source of income for the poor parents in India.

The Problem of Child Labour in Keonjhar District of Orissa :

The Keonjhar district is dominated by the tribals. Champua and Keonjhar sadar sub-divisions are dominated by the different tribes like Kolha, Majhi, Saunti and Bhumija. These tribes use their children in different mines and other small mineral based industries because they can earn for their family to reduce their poverty, ignorance, superstition, illiteracy and poverty are important causes in generating child labour which is more acute among the tribals in the district. The children are used in different hazardous industries like cashew processing, coal including coke industries, fireworks and manufacturing of explosives located in Keonjhar and Champua sub-division.

It is observed, as the tribal children are employed in different hazardous and non-hazardous industries, they face death normally between 06 to 10 years of age. As a result of which tribal population is in a declining trend and creates an alarming condition for the economic development of the tribals. Thus poverty, destitution and basically use of tribal children may be contributing to such reductions in the proportion of tribal population in the district.

The rate of prevalence of child labour is much higher among the primitive tribes (Juang and Bhuyan) than the other tribes of the district. It is noticed, they are more conservative, dogmatic and superstitious, in their attitude. They can not accept a change to their culture and habit. They do not want that their children should be educated. They take a little interest & are passive to send their children to tribal schools. Even they are not mobile and engage their children to collect sal leaves and fuelwood from the forest. They also use their children in stone cutting and in the construction works. Hence due to lack of proper nutrition, food and awareness tribal child labourers face death and contribute in reducing the size of their population in the economy. The hazardous occupations in Keonjhar subdivision, Anandpur subdivision and Champua subdivision come to 21, 15 and 50 respectively totalling 86 in Keonjhar district. Non-hazardous occupations in Keonjhar subdivision, Anandpur subdivision and Champua subdivision come to 471, 121 and 245 respectively totalling 837.

Highest number of non-hazardous establishments exist in Keonjhar sub-division and lowest number of establishments are found in Anandpur sub-division.

SUGGESTIONS TO SOLVE THE CHILD LABOUR PROBLEM

1. Free and Compulsory Primary Education :

One of the requirements for removing child labour is provision of free and compulsory primary education. The Indian Constitution states that, "the state shall endeavor to provide within a period of ten years from the commencement of this Constitution for free and compulsory education for all children until they complete the age of 14 years; but the constitutional provision has been largely ignored on the question of child labour.

2. Spread of women education :

Provision should be made to educate the poor mothers of the family. Teaching should be imparted to the mothers during night time at least 1 hour daily, because the mother can influence the child to go to school.

3. Generate awareness among the parents about the value of human life :

Illiterate parents do not know about the value of human life or the need of qualitative children for the economic development of the economy. Hence, it is imperative to organize awareness campaign in the weekly 'Haats' of the rural areas of the country through the Information and Public Relation department of the government.

4. Expansion of more employment opportunities :

Government should take interest in the execution of Employment Assurance Scheme (EAS) and infrastructural development programmes like construction of rural roads, drainage, Water Harvesting Structure (WHS), school building etc. which can generate increased employment opportunities for the poor parents. These schemes are very useful as they create more employment and generate income for the poor people. Hence there can be a dependable source of employment and income for the parents and as such they will not be dependent upon their children.

5. Recruitment of more labour inspectors :

The necessity is felt to recruit more number of labour inspectors in the industrial zones of the country. Both centre and state government

should take interest in this respect. Existing number of labour inspectors are not sufficient to check employment of child labour in different factories of industries under the hegemonistic attitude of the industrialists.

6. Provision of giving incentives to

Rural Labour Inspectors (R.L.I.) :

Some incentives like additional increment, supply of free vehicle etc. must be given by the government to the labour inspectors. So, they will be encouraged to supervise and prevent the child labour.

7. Promotional role of voluntary organisations :

The NGOs should take keen interest in imparting to the poor parents about the evils of child labour. So more grants-in-aid must be released to the NGOs concerned in this respect both by the state and central government.

8. Organization of Training Camps :

It will be appropriate to organize different training programmes for the poor and poverty stricken parents by the D.R.D.A., and Urban Development department. Training should be given to the poor labourers to work in technical fields which can help to alleviate poverty and hence the use of child labour can be eliminated from the economic scenario.

9. Extensive use of T.V. in creating more

encouragement for the spread of education :

Now a days, T.V. has become important mass media which can enlighten the horizon of awareness. T.V. can play a prominent role in increasing the general awareness of the poor parents. Teaching can be imparted in the rural areas as well as in the *Basti* areas of cities with the help of Television—an audio-visual system. Therefore the existing situation warrants that, at least one T.V. should be supplied to one *Basti* area primary school of the country set. It will generate more interest among the poor students to read in their schools locally available.

Gender Perspectives in Child Labour : A Case Study

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Child labour in India is widespread and the percentage of child labour to total labour forces is highest in India. The incidence of working children could be found in all three core sectors of the economy. Among child labours, girl child labours could be found working in almost all occupations and it constitutes a high percentage among domestic labourers.

The term 'Child Labour' itself suggests that it is the most miserable section of the work force. But the exploitation is much more for the girl child labourers—first, due to the tenderness of their age and second due to gender related disadvantage. Thus, girl child labour in India requires special attention, as she is a child, a girl and a labourer and faces discrimination on all accounts.

The Problem :

A girl child experiences a kind of deliberate neglect in the family and in the society. Labouring at an early age is considered natural for girls and accepted as their core activity. Thus despite their significant contribution to the family income, the participation of girls in the economic activity goes unnoticed as they are employed, either in family as domestic worker or in the unorganised sector.

The situation of a girl child is made worse and is aggravated in the economically disadvantaged families. The social practice isolates the girl child from education, health care and adequate nutrition, which restrict her growth and development. Households put a ceiling on aspirations of a girl child through stereotype-regulatory gender behaviour. She is deprived of rights, which are available to her brothers.

In our state, it is estimated that every 20th child is a child labour. Girl child labourer constitute 25% of the total child workers in the state. According to 1991 census child labour is estimated to be 7.22 lakhs. About 27% of them are girl child labourers.

The study of Labour Directorate, Orissa, 1990 indicates that the major area of employment of girl child labour is the agrarian Sector. Out of 1.27 lakhs of girl child labour in the state, 1.07 lakhs (i. e. 84%) are engaged in the agrarian sector and the remaining 16% of girl child labour is distributed among other industries and services.

Girl Child Labour—A case study :

Methodology

The present paper is based on a case study of selected areas in Berhampur city. The total of 158 girl child labourers belonging to different occupations were surveyed. They belong to 103 households. The present paper is aimed to find out genesis, magnitude, causes and the extent of exploitation of girl child labourers.

A structured questionnaire has been prepared to collect data. Households supplying girl child labourers were interviewed. The data were also collected from the institutions where the girl child labourers were employed. The authenticity of data in this survey was tested by cross examination and observation method.

The Berhampur city, the cultural capital of Southern Orissa, has a female population of 1.08 lakhs. The total number of child labourers are indentified by National Child Labour Project (NCLP) in 1995 as 3878 of which 2441 are male child labourers and 1347 are girl child labourers. 42% of girl labourers belong to Scheduled Caste community, 35% of them belong to other backward community, 16% are general caste and the rest 7% are from others.

Our study confines only to the girl child labourers belonging to Gate Bazar and Khaja Street area of Berhampur city. These afore-said two areas are considered as most backward areas dominated by SC and Muslim population respectively. All the 103 households surveyed were below the poverty line. Almost all the households have large families i.e., more than 5 members.

We also found that, the parents of them are mostly illiterate and also workers. They treat their children as assets to earn some income to meet their daily requirements.

Dimension of Girl Child Labour :

The preponderance of girl child labour could be found in various occupations. The study reveals that out of 158, Agarbati industries employed 42.54% of total workers followed by domestic servants (16.46%).

rag pickers (14.00%) and Achar and Papad makers (12.64%). Others like beggars and tea sellers constitute a small percentage.

The income earned by child labourers is varied and fluctuate from time to time. In most of the cases like agarbati making, pampad making, rag picking, there is piece wage system. More-work more payment is the prevailing dictum of these sectors. Therefore, the child labourers indulge in prolonged hours of work to earn more money. The average income of the girl child labour in different occupations is indicated in table-1.

TABLE - 1

Average Daily Income of Girl Child Labour

Occupation	Amount in Rupees
Domestic servant	10
Agarbati maker	15
Achar and Papad makers	12
Tea sellers and Hotel work	8
Rag Pickers	12

Source : Field Survey.

The Table indicates that the income earned by a child labour is not uniform. Again, the study finds that the income goes on fluctuating from time to time.

Problems faced by Girl child labourers :

Majority of children expressed that long hours of work made them tired and restless. Thus, they are in most cases careless about their body. It affects their normal growth and development. They are also paid low wages and that also sometimes irregularly. Sometimes the wages are paid in kind, making it difficult to calculate its value.

Some times sexual abuse is also inflicted on the girl child labourers. The various news items are published in different papers now-a-days. The two respondents, employed as the domestic labour unwillingly and fearfully told that they were sexually abused by their employer's kins.

NCLP Approach to check child labour :

National Child Labour Project was launched by the Central Government to control and eliminate the child labour practice in 1995.

The objective of it is to rehabilitate child workers by providing education and vocational training. Accordingly NCLP opened a number of special schools. In April 1996, 15 special schools were opened in Berhampur.

Special schools provide formal education to child labourers and also vocational training for self employment. The position of aforesaid two schools is given in Table-2.

TABLE - 2

	Male	Female	Total
Gate Bazar Special School	46	54	100
Khaja Street Special School	45	51	96

Source : NCLP Office File, Berhampur

The project provides Rs. 100/- as stipend to each child labour student and also gives Rs. 2.50 worth of mid-day meal to each student per day.

Conclusion :

The child labour in general and girl child labour in particular are a curse on the society. The problem of girl child labour is numerous and they suffer in many ways. We the conscious citizens of the country, should adopt certain mode of action to provide education for all children abolishing gender biases. A movement should be started to demand that education be made a fundamental right. The system of education should be relevant to the children's need.

The Problems of Child Labour in India— A Case Study of the Hotel Boys of Cuttack City

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Introduction :

Children are the budding resources and the future citizens of a nation—A nation's future lies in their proper development. A healthy and educated child of today is the active and intelligent citizen of tomorrow. So it is pertinent to look into various aspects of this important segment of human resource. The UNDP's Human Development Report 1996 proclaimed that the children, who should be the most protected in any society, are subject to many abuses like neglect, malnutrition, anaemia, under weight, mental retardation, victim of prostitution etc. Another astounding problem of children is the evil of child labour.

However the Constitution of the country in its Article 24, 39 (e), child labour (Prohibition and Regulation) Act, 1986, Directive Principles of State Policy and Regulation under factories act section 73 (1) have provisions for the prohibition of this abominable child labour practice. Since then, several organisations and institutional bodies like International Labour Organisations (ILO), Central Advisory Board on child Labour (CABCL), National Authority for the Elimination of child Labour (NAECL), etc. have made several provisions to eliminate child labour. Nevertheless the child labour system is rampant to-day and the problems of child labourers are manifold. So at this juncture, a time has come to analyse the problems with broad vision and to suggest suitable measures for their total elimination.

Objectives :

Considering the importance of the problem in the world to-day the present study has been undertaken with the following objectives.

- To find out the causes for child labour.
- To find out the age, educational status of the child labourers and the contribution they make to the family income.

- To find out the nature of the problems faced by the child labourers like number of hours they work, their place of work and residence, the treatment they receive from the employers.
- To find out the adequacy of the government's efforts and people's co-operation to government's initiatives to wipe out child labour.

Hypotheses :

The study has been planned with the following hypotheses.

- Child labour, poverty and the size of the family are inter-related.
- Poverty, illiteracy and age of the child labourers are the main causes for the exploitation
- Measures provided to protect child labour from maltreatment are not adequate.
- The degree of elimination of child labour depends on the government's efforts and people's co-operation.

Methodology :

Here the study has been undertaken collecting data at the researcher's discretion from 20 hotel boys of the age group of 10-15 of Cuttack city and 5 officials of District Labour Office, Khapuria, Nuapada Chhaka, Cuttack through developed questionnaire. Out of the five officials one was District Labour Officer, three were Assistant Labour Officers and one was the Rural Labour Inspector. Besides this, relevant informations have been collected from certain published sources,

Back Ground of the Study :

The Concept of Child Labour :

Child labour is the work which involves some degree of exploitation i.e. physical, mental, economic and therefore impairs the health and development of children.

UNICEF has given a comprehensive formulation in its attempt at defining child labour :

- (a) Starting full time work at too early an age.
- (b) Working too long within or outside the family and unable to attend school.
- (c) Work on the street is unhealthy and dangerous.

- (d) Too much responsibility at too early an age as in the domestic situation, where children under 18 may have to look after younger brothers and sisters for a whole day thereby foregoing school attendance.
- (e) Inadequate remuneration for working outside the family.

According to the latest report of the International Labour Organisation (ILO) nearly a third of world's 250 million child labourers work under dangerous conditions—Tens of Millions of these children live in South Asia, many of them in acute poverty. UNICEF estimates that in 'Africa one child in three works; and in Latin America the figure is one in five. In the U. K., 11 years old children constitute between 15 and 26% and 15 years old children constitute between 33 to 66% of the child labour work force. The state of this problem in the U. S. A. is very depressing. There was an increase of 250% of labour force in U. S. A. during 1983-90.

Child Labour in India :

Regarding child labour, India occupies probably the highest-rank in the world. It is estimated that out of 75 to 300 Million child labour of the world, India alone accounts for about 44 to 100 million while Pakistan and Bangladesh have 2 to 19 and 15 million respectively. A non-official report estimated that there were over 140 million children in the work force in India. The 1991 census estimated a total of 12.7 million child workers while this number was 20 million in 1994 according to the estimate of the Labour Ministry. In India every fourth child in the age group 5 to 15 is employed in one or other form.

According to Ministry of Labour, Annual Report, 1996-97, Andhra Pradesh had the highest child labour population (1.66 million) while Uttar Pradesh, Maharashtra and Madhya Pradesh each had above one million child labour population. In Orissa the number is 4,52,394.

Position of Child Labour in Orissa :

Another survey conducted by the Orissa government has found that 2,15,222 children were employed in various work establishments in the state. It was found that 23,761 children were employed in hazardous establishments while 1,92,461 children were employed in the non-hazardous establishments. The figure includes 1,21,526 boys and 93,696 girls. Among the boys 10,294 were employed in hazardous establishments while rest were employed in non-hazardous areas. In the case of girls, the number of child labour in hazardous establishments was higher than

that of the boys at 13,467 and the remaining were engaged in non-hazardous establishments. The survey showed that the districts in the coastal belt of the state had less child labourers. For example Jagatsinghpur had only 412, Sundargarh 871 and Puri had 937 child labourers, while the tribal/advansi districts of Nawrangpur had the highest 32,684 child labourers.

Problems of Hotel Boys in Cuttack City :

All the child labourers under survey have pointed out that poverty is the cause for which they are working in such an early age. In addition to poverty the big size of the family is responsible for their plight in case of sixty percent child labourers while alcoholic addiction of their parents is responsible in forty percent cases. When the officials of the labour department are asked about the causes of child labour all of them explained that poverty is the cause of this system. In addition to poverty, repayment of family obligation, earning of subsistence income for the family due to high cost of living, big size of family and unemployment are the causes of child labour according to 20 percent officials. Of course they have said that the big size of the family is not a sufficient condition for the child labourers. Though eighty percent of child labourers are literate their standard of education is very low. Twenty percent of the child labourers are illiterates. Out of the total child labourers fifty percent have got education up to lower primary standard while thirty percent up to upper primary. Most of the labourers are getting from rupees three hundred to five hundred per month as their remuneration. Their per capita income per month is rupees four hundred only which is very inadequate. Of course they get free fooding by the employers. Though their work is non-hazardous they work both in domestic and non-domestic spheres. Being non-hazardous it does not affect their health. While all of them work inside the hotel sixty percent of them work both in sun and rain for marketing and carrying goods and services in addition to their work inside the hotels. The child labourers work for longer hours while sixty percent of them work from 8 to 12 hours, forty percent of them work more than 12 hours in a day. As their place of work is the hotel they never take rest until the close of the hotel. They become restless due to non-availability of space for their rest and longer hour of work.

Sixty percent of child labourers say that the employers use harsh words for any minor mistake committed by them. While forty percent of them explain that they are compelled to work for longer hours

by their employers. Forty percent of the child labourers express regret as they are exploited by the employers. They are exploited due to their poverty and the crucial unemployment situation of the economy at present. None of them protests or rebels against their employers while eighty percent of the child labourers express their inability to protest, twenty percent fail to do so due to the present unemployment situation. All the officials under survey have given their positive response regarding exploitation of child labourers by the employers. According to them illiteracy and poverty of the labourers, their low age and inability to protest against the employers are the causes of exploitation. While eighty percent response is due to illiteracy, sixty percent each for poverty & low age of the workers.

While the child labourers point out that government is not taking any step for their betterment, the officials indicate that the Government is taking some steps to eliminate the child labour system. But eighty percent of the officials point out that the steps taken by the government are inadequate. They point out that the government fail to get information due to reluctance of the individuals and non-government organisations to furnish informations. While the child labourers point out that people have no cooperation to implement government's programme to prohibit child labour, eighty percent officials also agree with this.

The following are suggestions for the elimination of the child labour system.

The factors like child labour, population growth, illiteracy, poverty & unemployment are so deeply interconnected that the success of one programme depends upon that of the other. For the elimination of child labour system various poverty eradication programmes and employment schemes may be undertaken. The programme should be implemented vigorously in tribal areas as the problem is concentrated more in the said area in comparison to the coastal areas.

As big size of the family is the other cause of the child labour system, population control and adoption of family planning programme may be undertaken effectively to check the size of the family.

Though free and universal education to children has been introduced it should be made result oriented persuading parents because a higher standard of education will go against the size of big family and help the labourers from the exploitation of employers.

As the ultimate objective of the elimination of child labour programme is to convert working children into productive and participative members of the society, the most important aspect which it requires is the people's participation, generation of public awareness and simultaneously gearing up of enforcement machinery to meet the challenge.

Checking the ineffective management of government policies, introduction of new methods of monitoring and evaluation of child labour programmes and projects will help to implement a programme in a result oriented manner. So Government needs to realise the entire policy for the development of rural people and children.

The welfare measures and efforts of the nongovernment organisations, private organisations, charitable trusts and private bodies will go a long way for ameliorating the health, education, socioeconomic and psychological aspects of these handicapped segments of human race. Hence Dr. Vatnabe, the UNICEF representative of India rightly said, "In times of plenty or in times of need, children should be first call on a nation's or society's resources. Spending money on children's health, education should be viewed as investment for future."

Problems of Child Labour in India : A Socio-Economic Analysis

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Child labour is a global phenomenon but its incidence is the heaviest in India. The roots of the problem of child labour are hidden in the socio-economic environment. It is quite pervasive, spatially, and sectorally. India has the highest number of child labour in the world, and the number tends to be rising instead of declining. In order to probe into the roots of the child labour problem, it is highly imperative to analyse the population characteristics and socio-economic forces operating in the society.

Objectives :

This paper intends to pursue some specific objectives :

- (1) to analyse the structural composition of child labour in India;
- (2) to measure the magnitude of child labour in terms of state-wise and sector-wise distribution; and
- (3) to highlight the major problems and causes of child labour in India.

In order to study the child labour problem, and to measure the magnitude of child labour in India, it is very much essential to analyse the characteristics of child population to differentiate between rural-urban boy-girls, literate-illiterate & among various types of occupations. Data from different published sources have been compiled and analysed.

By analysing the inter-state variation in the incidence of child labour in India, it is observed that in 1981 Census, percentage of child labour to total population is 1.68%. It is the highest for A.P. (3.28%) and lowest for Kerala. It constitutes 5.03% of the workers and 4.26% of the total child population in India. Similarly boy workers constitute 66.4% and girl workers constitute only 33.6% of the total child workers of the country. 83.36% of rural boy workers is the highest in Punjab and lowest in Manipur (38.22%) and percentage of girl workers is highest in Manipur (53.34%) and lowest in Punjab (3.68%).

It is also observed that the majority of child workers are illiterate. In the rural sector 80% of boy workers and 39% of the girl workers are illiterate. Similarly in the urban sector 63% of the boy workers and 77% of the girl workers are illiterate. Girls, because of their employment in household activities work longer hours, than boys each day. This is an important reason why girls receive less schooling than boys. Literacy rate among 5-9 and 10-14 age groups is very low in India. It reflects the urban bias and rural negligence in elementary education.

It is observed that Child Work Participation Rate (CWPR) among literate children is lower than the illiterates. In the rural sector CWPR among literate is 4.1 for boys and 2.2 for girls as against 13.4 for boys and 6.4 for girls among illiterates. Similarly, in urban areas the CWPR is highest among illiterates—7 for boys and 2.5 for girls as against 1.9 for boys and 0.5 for girls among literates. Thus there is a high degree of positive co-relation between illiteracy and work participation among children.

By estimating sector-wise distribution of child labour in India we get more revealing results. That during 1981, Kerala has engaged highest 35% of its child workers in tertiary sector followed by West Bengal. J & K has engaged highest 37% of its child workers in secondary sector followed by that of Kerala and Tamilnadu. Further Meghalaya has engaged highest 95% of its child workers in the primary sector followed by MP (93%) and Orissa (87%).

Thus majority of child workers are found in the primary sector. Primary sector employs 87% of child workers, while secondary and tertiary sectors employ only 9% and 5% respectively.

Child workers mainly in manufacturing and construction activities have increased over last three decades and in household industry and other tertiary activities have declined over last three decades.

Thus the structural composition of child labour in India leads to the conclusion that, the magnitude of child labour is very high in India. Its incidence is much heavier on primary or agricultural sector. Estimates of child labour may differ but one thing is certain that the number of child workers in the country has a rising trend. As per the estimate, the magnitude of child labour is projected to rise from 13.64 million in 1981 to 20 million by the turn of the century.

Problems :

The problems of child labour is extremely complex in origin and manifestation. The major causes of exploitation of child labour are :

- (1) Incidence of poverty.
- (2) Level of illiteracy.
- (3) Under development and backwardness.
- (4) Lack of vocational training.
- (5) Ineffectiveness of child labour laws.

As long as population explosion continues, poverty persists, poor and inadequate educational and medical facilities exist and unless social attitude of the upper caste class society changes, and attitude of the state action towards the child labour is changed, the poor families continue to engage their children as an earning source which accelerates the persistence of child exploitation and practice of child labour in Indian Society.

Abolition of Child Labour

Myth or Reality

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The emphasis of this paper is on the magnitude and causes of child labour in India. Efforts are made to examine the adequacy of policy legislation enacted by the Government of India to put an end to child labour. Secondary data assembled from reports of I.L.O., standard text books and periodicals like Yojana and economic and political weekly constitute the basis of the present study. This paper begins with presentation of the dimensions and causes of child labour in section I, followed by analysis of contemporary situations at country level in section II. The policy measures of Government of India and various international organisations are analysed in section III. The conclusions and suggestions proceeding from the study are discussed in section IV.

Basic goal of economic development is the enhancement of the capabilities that the citizens can enjoy. Human development involves formation of human capabilities on the one hand and the use of acquired capabilities for productive use for participation in socio-political affairs of the country on the other hand. With the declaration of the year 1979 as the INTERNATIONAL YEAR OF THE CHILD by the U. N. General Assembly a situation is fast emerging in which rich and poor countries should review their programs for the well being of children. The trend towards equal protection of children's rights got focussed attention of the government of India on 26th September 1994, with the installation of National Authority for Elimination of child labour. Any long policy on human investment or human capital formation must begin with today's children. The international labour organisation defines any non-adult worker as child labour.

Magnitude of Child Labour

Recent years have witnessed a phenomenal increase in the number of child labourers in India. The total number of child workers in India were estimated at 13.6 million according to 1981 census. On the other hand, the total number of working children between the age

of 5 and 14 in developing countries are estimated at 250 million (ILO 1996). The total number of full time child labourers in India are estimated at 12.7 million (1991 census). It is a matter of grave concern that, today the Indian economy is saddled with as many as 20 million child labourers.

It may be noted that Bihar, Karnataka, Madhya Pradesh, Maharashtra and Uttar Pradesh are prominent among the states where child labour is more than one million. The state with the highest child labour population is Andhra Pradesh, which had 1.95 million child workers as per 1981 census

Types

It is plausible to believe that child labour covers every aspect of work and human life. Child workers are engaged in agriculture and allied activities. Many of them work either as full time or casual workers. Mentions may be made of bonded labours, the total number are estimated at 2,14,000 (1991 census). Cultivation, livestock rearing efforts and agricultural labour account for 84.98% of child labour. In the urban sector, manufacturing, serving and repairs account for 8.98% of child labour. Female child workers are engaged in household or other works complementary to agriculture.

Causes of Child Labour

The operation of a constellation of a number factors accounts for the prevalence of child labour in India. Poverty is the principal cause of child labour. It seems that, planned economic development at country level has not brought about a perceptible improvement in the level of living of the masses. So, a vast segment of population in India lives below the poverty line (210.8 Million). Child labour is closely associated with the level of development of the economy, as reflected in GNP per capita. The average India's per capita income is awfully low (\$ 310).

It is well known that, higher the proportion of children in population, higher becomes the incidence of child labour. Every fourth child in the five to fourteen age group is employed in one form or the other because, the percentage of population 0 to 14 age group is estimated at 35.56% by the 1991 census. It is admitted on all hands that, higher dependence on agriculture tends to generate child labour by providing scope for worksharing. Till today, agriculture is the sole source of sustenance for 66.8% of population in India. There is close association

between parental education and child labour. It is probable that, educated adults, especially educated women may have reduced fertility. The adult literacy rate of 52% at country does not seem to be rosy. It is endorsed by many, that, schooling is a powerful weapon in the battle against child labour. One sinister aspect of plan performances in India is the prevalence of growing differences in educational achievements between males and females and between urban and rural areas. In this context it is pertinent to note. Amartya Sen's observation "The abysmal inequalities in India's educational attainments represents a barrier against widely sharing the fruits of economic progress." Income disparities in rural and urban area account for the rising tide of child labourers in india.

SECTION - II

Contemporary Situation in the Country :

There is considerable substance in the statement that, children suffer because we take this suffering for granted. It is awesome to note that, children are working in 3600 authorised and 3000 unauthorised slaughter houses in cities and towns. A large proportion of working children are self-supporting or supplementing the meagre earning of their parents, through low paid, unskilled, part time or full time work of various types¹. It is revealing to quote from plantation of Labour Act and Child Labour by K. Bhowmik (Economic and Political weekly, Oct. 17, 1992) that, children are paid half the wages of adults, whereas hours of work prescribed by plantation and Labour Act and Child Labour are more than half of that of adult. The 1982 amendment of the Act lays down that, the minimum working hours for adults are 48 hours, whereas it is 27 hours a week for children.

It seems difficult to repudiate the finding of ILO statistical survey in 20 countries which reveals that nearly 70% of the working children face hazards such as fractures, cuts, loss of body parts, burns and sight or hearing loss. In case of child labour what is at stake is not only long hours of work with low returns but also deprivation of the child of affection and understanding of home life.

In pursuance of Child Labour Act 1986, children under 14 years of age are not permitted to work in certain hazardous occupations as also in occupations notified as hazardous process and dangerous operation under the Factories Act 1948. Yet when it comes to implementation social and economic rights do not receive the attention they deserve.

Factors like loneliness, lack of love and affection and shortage of housing facilities may develop the traits of delinquency in the minds of child labourers.

SECTION - III

The problem of child labour is multipronged. Education, nutrition, income support and skill formation are the package of inputs and services which are to be tried simultaneously to combat child labour. India has a long history of legal protection. Article 23 prohibits traffic in human beings and forced labour. Article 29 prohibits employment of children in factories and mines. According to Article 39 the state shall direct its policy towards securing that, the health and strength of workers, men and women and the tender age of children are not abused and that, citizens are not forced by economic necessity to enter into avocations unsuited to their age $\times \times \times$ and that childhood and youth are protected against exploitation.

Two broad based approaches to tackling child labour problem have been proposed by Rizwanul Islam, in his inaugural address at Ahmedabad workshop. These are categorised as preventive and rehabilitative. The first preventive measure is to accelerate economic growth of the country so that there will be an improvement in the income levels of poorer sections of society. (C.Munivenkatappa "Inaugural address at Hyderabad workshop" Child Labour). A Report of workshops for District Collectors and Project Directors, National Resource Centre on child labour, V. V. Giri, National Labour Institute, India, states that.

"It has to be emphasized that, trade is an engine of growth, which may reduce child labour by enhancing the incomes of the poor. So, it is necessary to abolish trade barriers on export oriented industries employing child labour".

RPEP, IRDP and JRY are notable among the preventive instruments which are designed to raise the incomes of poor families with high incidence of child labour. Efforts are made under JRY to provide wage employment to one person from each poor family for one hundred days in a year. Careful identification of poor families for pecuniary assistance and effective implementation of programmes are necessary.

Plan endeavour has embarked on the programme of providing free and compulsory primary education to all children in the age group

of 0-14. The task appears to be herculean, when we note that in 1991, there were 10.5 crores children of school going age out of them 3.5 crores are out of school. Providing education to all these may cost Rs 40,000 crores beyond the capacity of the government.

National Policy on Education (1986): The new initiative was directed to involve all children, who attain the age of 11 years by 1990 with five years of schooling in Non-Formal Education Centres. Some thrust areas in the new arrangement are imparting of part time courses and vocational courses. Among working children, girl child gets the necessary focus. The Non-Formal Schools will be run by Panchayats and Voluntary Agencies. The Central and State Governments are supposed to assist SC and ST families with scholarships and wage employment opportunities.

Set up of NCL Projects :

The orchestral endeavour of planners has culminated in the launching of Nine National Child Labour projects in states with high incidence of child labour. The NCL projects emphasise on enforcement of child labour laws, Non-Formal Education, Adult Education, Employment Generation, Raising Public Awareness, Survey and Evaluation.

The progress of Indian economy in abolition of child labour seems to have gathered momentum with the launching of (CLASP) Child Labour Action and Support Programmes by the Government of India with full aid from Germany. Some thrust areas of coverage of CLASP are conduct of surveys, establishment of data bank on child labour, conduct of workshops and seminars for official and Non-Governmental Organisations, guideline preparations for labour inspectors and plant managers and preparation of model education curricular for special schools run under NCLP.

Conclusion :

There is an impression in society that, the story of progress towards protection of child labour's entitlement is less impressive. Human dignity involves security of individual, equality of opportunity and access to basic needs essential to human development. It needs recognition that poor quality of education and the absence of a direct link between education and earning possibilities are responsible for child labour. There is substance in the argument that children may not be retained in school because the content of education lacks relevance and

potential returns in terms of ability to generate income. Potential enterprises often resort to child labour because the low cost of child labour.

Legislations which reduce inequalities may reduce child labour. Land reforms, Inheritance Tax and Small farm development strategy may be considered as steps in this direction. The magnitude of the problem requires huge resources and concerted action on the part of the Non-Governmental Organisations, Government and the whole community.

Every child has a dream, but often it is shattered. It is an urgent necessity to create awareness among parents so that the future flow of children in to the world of work is prevented. Social action is bound to pick up momentum with political commitment showing the right direction.

Child Labour in India : View Points of Employers

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Introduction :

Child labour has remained both an economic and a social problem in our country since a long time. It is usually argued and accepted that the phenomenon of working children is associated with poverty. The highest incidence of child labour is said to be found in the poorest countries of the world and the poorest region of these countries. The largest numbers work in agriculture, the services sector, and small scale manufacturing workshops that are generally not covered under the scope of national laws. Many of the world's working children labour in occupations and industries that are dangerous and hazardous. It goes without saying that there has been significant increase in international concern regarding the plight of working children around the World. It is true that child labour is a complex problem that requires comprehensive, multifaceted solution. The magnitude of the global child labour problem has drawn the attention of the international community over past few years. It now seems to be a serious mistake to believe that childhood is a lovable state and child is a 'national asset', ironically in under developed country like India, most can hardly dream of childhood, may realise the promises of adulthood and that with stunted growth.

Genesis of the Problem :

There are many factors which cause child labour. Poverty is one of the factors. But is only a minor explanatory factor behind incidence of child labour. Ahmed's study (1999) of multiple regression results show that economics with very unequal income distribution and with a high dependence on agriculture have higher rate of employment of child labour. In India more than 50% of population is below poverty line. The incidence of child labour has been very high as it depends on the demand for labour and general labour participation ratio. Literacy rate is another variable which is often used to explain the difference in child employment ratio. Kerala furnishes evidence for a strong correlation between literacy and decline of child labour. Kerala has lower incidence of child labour than Punjab & Haryana. It is believed that demand for

labour on the pull side is not balanced by a desire for education on the push side. States like Bihar & U. P. have relative low child labour ratio because of falling demand for labour inspite of educational backwardness. Weiner (1991) observes that situation in India is grim and despite the window dressing by the Govt. in the form of progressive labour laws and the solution to the problem is not yet in the making. He is of the opinion that social order, respective role of upper and lower social strata, role of education as a means of maintaining differentiation among social classes, excessive and inappropriate education for poor would disrupt existing social arrangements. It is imperative that economics is never the sole factor of incidence of child labour rather religion, hierarchical caste system, India's view of social order, notions concerning the respective role of upper and lower social strata and role of education as a means of maintaining differentiations among social classes are the important parameters of incidence child labour.

It seems that the phenomenon of child labour is a consequence as well as the cause of child labour. Large family size becomes a motivating factor for parents to send their children to work. Employers moreover prefer child labour because of their sharp reflexes, greater efficiency in respect of fine operations, vigorous and energy and because they can take advantage of their docile nature and physical weakness. India has 30% of urban population. The urban child labour accounts for 5.5% of entire child labour in the country. The study reveals that about 80% of workers are engaged in agriculture, 3.6% working child population is engaged in household industry & 4.7% work in manufacturing units. Construction workers constitute 0.7% & mining 0.22%. The study of Singh and Mohanty (1993) shows that total labour force of 1.5 million is engaged in non-agricultural sector. This also reveals that about 15 to 20 million children in India are working. Moreover child labour is associated with high fertility levels. It is also said that Green revolution has increased the demand for child labour. The demand for child labour was seen as a powerful incentive against official efforts to induce family planning. Dyson states that children work because people have children, rather than people have children because children have work.

The liberalisation has not helped for the decline in child labour. There is greater demand for child labour in export industries. From Indian experience it is seen that correlation between poverty and child labour is weak. A few research studies have been made to throw light on the issue of child labour. Some sporadic attempts have been made to make studies in organised and industrial Sector. Most of the

research focus has been placed on examining the Socio-economic conditions surrounding the children and their families.

In this study an attempt has been made to bring to light "attitudes and disposition of employers for child labour. A complete grasp of the problems of child labour would become possible if the role of employers is adequately studied. In this study an humble attempt has been made to throw some light on employers' attitude and views about child employment in Rourkela Steel City.

Methodology :

The informal sector activities in the growing steel city of Rourkela are many. It is very difficult to estimate the number of employers operating in the sector. Hence the major five occupations where large cluster of child workers are found employed in the informal sector have been selected for the study. They are construction work, domestic service, shops-establishments, garages, workshops, hotels and restaurants. The sample of the study consists of 125 chosen equally from five occupations following quota sampling methods and ensuring geographical representatives. The results presented in this study form part of a larger study based on primary data collected through pre-tested questionnaires. Employers' opinion is not uniform. About 64.80% employers believe that child labour is desirable. Most of the employers prefer to hire children. Children have less developed ego and status consciousness. They are less affected, afflicted by feelings of guilt and shame. They can be put in non-status, demeaning jobs. They are more active, agile, quick and feel less tired in certain tasks.

They are more amenable to discipline and control and they can be tackled, admonished, pulled up, punished for default, without jeopardising relations. The cost of child labour is less. The child labour can be easily removed and the child labour cannot take the shelter of the court. About 28.80 per cent of children are docile and they do not create industrial relation problems, and employers need not pay retrenchment benefits.

The study also reveals that about 64.80 per cent employers believe that child labour is desirable. About 76% of employers who own garages and workshops opine that child labour is justified. About one third of employers believe that child labour is not desirable. Most of the employers in shops and establishments, hotels, restaurants, dhabas, construction work consider child employment desirable because income

of many poor families are supplemented by child earnings. Children are adaptable to certain jobs. The employers of child labour in most of the garages agree that children were the bread winners and the employment was desirable. About 44% employers agree in the study that it is not desirable because child employment will hinder the proper growth and development, children will be deprived of their joy and happiness at a very tender age and it may aggravate the problem of poverty. Some employers are also of the opinion that children are sexually exploited and engaged in inhuman and hazardous work. About 45.60% of employers believe that children are not exploited by the employers and 35.20% employers believe that children are exploited to some extent. Some employers are of the opinion that they are conscious of legal provisions (about 44.80%), 22.40% of employers have not made compliance to different legal complicacies. Some employers are sympathetic towards the children and help them to pursue their studies further. Majority of respondents in construction work, garrage, work-shops, hotels, restaurants feel that no educational facilities are provided to some extent to the child labourers.

Conclusion :

Thus causes of child labour are many and complex—as are its solutions. The child labour is a necessary evil for the poor due to poverty. To all intents and purposes successful eradication of exploitative child labour requires a clear govt. commitment. The employers should also help the govt. to eliminate exploitation. There has been an increase in awareness of child labour abuses around the world. There has to be a code of conduct for child labour. The NGOs have a responsible role to play to end the plight of child workers.

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Child Labour in Hazardous Occupations : The Scrap Collectors of Berhampur City of Orissa

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Employment of child labour is a universal phenomenon. In developing countries like India, their problem is more acute. Child labour does not exist in the organised sectors due to legal restrictions. Hence a large scale employment of children is found in the urban and rural unorganised sectors. Such children are deprived of education and are subject to exploitation. In fact, employment of children is an economic waste and a social shame. As revealed by a sample survey conducted recently about seven lakh children are engaged in different occupations in the State. A sizeable number of child labourers are engaged in hazardous occupations, as a result they become victims of several diseases. Alarming, the survey reveals that more female child workers are employed in hazardous work places than their male counterparts. This creates a social and economic problem. Accordingly, the Union Government and State Governments have embarked upon a plan of action gradually to wear away child labour from hazardous occupations and to rehabilitate them in phases.

The large scale employment of children in hazardous nature of job particularly in carpet making, weaving, fire works, match making, glass factories, slate industries, diamond polishing, brass working industries, lock-making industries, drew the attention of the Honourable Supreme Court of India by a writ petition filed against such type of employment of children.

The Honourable Supreme Court of India directed the Government of India to take up a survey for identification and direction of child labour in various industries. Subsequently, the district wise identification of child labour was conducted in Orissa. There is a large scale employment of children in hazardous occupations of unorganised sector.

Even though the aforestated industries/factories do not exist in Orissa, employment of children in construction, auto repairing shops, fishing, hotels and restaurants, transports, shops and commercial establishments, domestic house holds, agarbati making, papad making, paper bag making, rickshaw pulling, shoes shining, rags picking is largely seen. The present work is confined to the problem of rag pickers in Berhampur city of Orissa.

Scrap Collectors of the City :

Berhampur is the nerve centre of trade and commerce of southern Orissa. The largest city of southern Orissa does not have an industrial base. The undivided Ganjam District is agrarian in nature and drought prone. Due to lack of irrigation and chronic drought, the marginal farmers and agricultural labourers in large number migrate to Berhampur and other cities outside Orissa in search of employment. The migrated rural labour to Berhampur hardly finds gainful employment in the organised sector. He is compelled to remain in the urban informal sector where he is subject to exploitation and paid low wages. Such a migrated labour force dwell in the slum pockets of the city and add to the urban poverty. Children of such families are forced to work in hazardous and non-hazardous occupations to supplement family income.

In Berhampur like other cities, one will come across in posh as well as depressed areas small children, both boys and girls, scrounging dustbin and garbage dumping grounds for waste materials like paper, coconut shell, tin, iron, polythene, plastic and glass pieces. These children move from locality to locality in search of garbage heaps with gunny bags and baskets on their heads.

There are two types of rag pickers found in Berhampur City. Most of the rag picking children live in the slums with their families and the others in pavements like platforms of the railway station. During the period of study no child labourers was found staying in the pavements. So fifty sample units of child labourers were chosen at random from 72 garbage-dumping centres of Berhampur City. Information about the children and their families were obtained through the questionnaire prepared for the purpose. Suitable data were collected through the trained investigators appointed for the purpose.

Objectives of the Study :

The objectives of the study are :

- (a) To find out the cause of child labour in general and rag picking children in particular.

- (b) To find out the contribution of rag pickers to the family income.
- (c) To find out the working condition and occupational hazards of such children.
- (d) To evaluate the child labour rehabilitation project.
- (e) Suggest measures to project such children.

Religion, Caste and Age composition of sample children :

Children belonging to different religions are engaged in rag picking work. Almost 90% of the sample children belong to the scheduled caste and only 10% of them are from the upper caste groups. None of them has gone to school and is literate.

About 80% of the sample children belong to the age group 12-15 years and 20% belong to 8-12 years. The number of girl children exceeds the number of male children of the occupation. The female children move with their parents or in-groups. They have a constant threat of dogs and unruly elements in the streets.

Family size and housing condition of sample children :

All the children under study live in slums with their parents and relatives. They use tap water supplied by the Municipality. The houses are without electricity and without permanent latrines.

The average size of the family of sample units is 5. All the sample children's families remain below poverty line. Barring 3, all other children's families hold ration cards. They purchase wheat and rice and sell away sugar to the local dealer. Their parents compel them to work to earn whatever may be their income.

Income of Rag Pickers :

The children engaged in scrap collection work sort out the scrap collected and sell the other goods to the kawadiwalas (Junk dealers) who have their shops located in all (depressed) slum areas. The city of Berhampur has as many as 31 kawadi shops. An interview with a Kawadiwala located at Aska Road reveals the rates as mentioned in the table :

Purchase and sale of items**TABLE :**

Sl. No.	Items	Purchase Rate (per Kg.)	Sale Rate (per Kg.)
1.	Iron Scrap	Rs. 4.00	Rs. 5.00
2.	Glass Pieces	Rs. 0.75	Rs. 1.25
3.	Glass bottles (Beer Bottles)	Rs. 1.00	Rs. 1.50
4.	Other unbroken Bottles	Rs. 0.50	Rs. 0.75
5.	Polythene Scraps	Rs. 3.00	Rs. 5.00
6.	Plastic (Soft)	Rs. 4.00	Rs. 5.00
7.	Plastic (Hard)	Rs. 5.00	Rs. 6.00
8.	Foot wear (Plastic)	Rs. 5.50	Rs. 7.00
9.	Tin Scraps	Rs. 2.00	Rs. 3.00

The average income of a rag-picking child worker comes to about Rs. 7/- a day. Almost 70% of such children sell the rags collected through their parents, 18% through intermediaries, and 12% of them sell to the Kawadiwalas themselves.

The entire junk business of the city is controlled by four partners. The biggest and the richest of them hails from Bihar. Recently the local businessmen have entered into this profession, as the profit margin is very high.

The scraps collected from the city are sent to Cuttack, Calcutta and Visakhapatnam. Plastic scraps (both hard and soft) are sent to Calcutta whereas the bottles and iron scraps are sold in Visakhapatnam and Cuttack.

Health status of Sample Workers :

The scrap collection work is very unhygienic and poses health hazards especially skin diseases and tetanus. The work kills completely the sense of personal hygiene among those children and they never appreciate the value of cleanliness in the rest of their life. Because of their poverty, these children can seldom afford toilets for washing of their body dirt. They don't have in many cases even water facilities for an ordinary bath. The result is that these children develop several kinds of skin diseases. While collecting rusted iron pieces, they receive cuts on their hands and become susceptible to tetanus. The scrap glass pieces lying hidden in the garbage injure their bare feet and the injury deve-

lops into fastening wounds later on. Their habits of consuming left over food from the garbages expose them to several kinds of stomach and intestinal diseases. Though their work is unbecoming, their earnings from it are quite tempting (Rs. 7/- or so a day). The income that the work yields makes these children and parents completely oblivious of the danger it poses to their health and future well being.

These children by and large belong to the poorest scheduled caste families living in slums. They are attracted to this work because it does not require any investment capital, fixed place of accommodation or any training or any skill. As these children belong to the exterior castes, they do not suffer much from the feeling of shame and guilt. On their own these children might not have taken up this work, it is their parents who often induce them to go in for this type of work. The tragic part of the whole episode is that whatever the children earned, they don't and can't spend on improving their own development and well being. A substantial part of their earning is grabbed by the father who spends it otherwise. The parents of these children never like to inculcate the habits of cleanliness in them; for if such habits are ingrained in them, they would do this job no more.

Habits of Sample Children :

Almost 50% of the sample children are free from bad habits like smoking cigars, chewing tobacco and pan. About 30% of the sample children have the habits like chewing tobacco, pan and smoking cigars. About 20% of the sample children take tea and chew betel occasionally. Parents of such children rarely mind for such habits of their children.

N.C.L.P. At Berhampur (Working since 1991)

The special schools run by the NCLP, Berhampur provides non-traditional and vocational education to around 1500 students per year. These schools meant for providing non-traditional and vocational education have hardly served the purpose. Only 30% of the enrolled children are child labourers and the rest are drawn from the families above the poverty line, old drop-outs and transferred from the nearby schools. The vocational education like painting, coir and jute work, is neither adequate nor likely to provide productive employment to such children in future.

Students in large number attend these schools for availing free lunch provided to them at 1 P. M. (Also the sum of Rs.100 per month

which is credited to the saving account of each child). This is the other attraction for the heavy enrollment into such schools). Hence such special schools are called as "Rutti and Anda" Schools (bread and eggs schools). Such special schools run by the NCLP, Berhampur are only parallel schools imparting inadequate, traditional and ineffective vocational education.

One will be surprised to know that the total annual expenditure of the NCLP of Berhampur is Rs. 40 Lakhs and the annual report of 1995-96 clearly states about the fund crunch faced by it.

Findings of the study :

- (1) Almost 90% of the rag picking children's families are remaining below poverty line. Again, 60% of the male child workers and 90% of the female child workers belong to scheduled caste and the rest of the child workers belong to the general caste category.
- (2) Poverty, illiteracy, unemployment and largeness of the family are the causes of employment of child labour.
- (3) Children remain in rag picking occupations, as they find no alternative job opportunity to supplement their family income.
- (4) The number of female child labourers engaged in hazardous occupations exceeds their male counterparts. This could be due to the non-availability of job opportunities for girl child labourers.
- (5) The government and NGOs look horns over labour statistics in Orissa. The total number of child labourers according to these agencies varies between 3 lakhs to 50 lakhs.
- (6) Child rag pickers are susceptible to skin diseases, leg and hand injuries and remain in unhygienic and inhuman conditions in slum pockets of the city of Berhampur.

Suggestions :

1. Alleviation of poverty among the slum dwellers is an urgent need for them. This approach should be people based and not commodity based.
2. A complete survey of child labour families should be made from time to time by the reliable agencies specially NGOs to ascertain the number of child labour in hazardous occupations.

3. As it is not possible to eradicate poverty of slum dwellers in the short run, protection must be given to the child labourers as and when they need.
 4. The special schools run by the NCLP of Berhampur do not seem to be imparting effective vocational education. Funds earmarked for such projects could be diverted for providing assets to such families, which would cater to their economic needs in a better manner.
 5. Compulsory primary education for such children in the night schools would be a sound step in this direction.
 6. Periodic Health Care Programmes through issue of health cards to such children is badly needed. With all these, we can shorten the period of complete abolition of child labour in India.
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**FINANCING DEVELOPMENT
IN ORISSA :
PROBLEMS & PROSPECTS**

Resource Mobilisation and its Deployment by Commercial Banks in the Context of Economic Development in Orissa—The Post Economic Reform Experience in the Utilisation of Funds

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Introduction :

Commercial banks are the catalytic agents of economic development. They perform two important functions in the economy. They mobilise saving from those who have surpluses to spare and channelise them for purpose of productive investment in favour of those who are in dire need of the same. Capital formation has three important stages: saving, financing and investment. Of the three important stages, commercial banks are more concerned with the 'financing' stage of economic development. This refers to an act of deposit mobilisation and its channelling for productive investment in the economy. The growth of real sector ultimately depends upon the expansion of the financial sector. In fact financial sector development must ultimately precede real sector development (Narasimham, 1992). Proper development of the financial system is no longer regarded as an 'ancillary' or an adjunct to the development of the real sector, but as a necessary pre condition for growth (Jalan : 2000). In the financial sector it is the commercial banks who occupy a pivotal position by undertaking the twin functions of deposit mobilisation and deployment of credit. In this paper an humble attempt is made to analyse the deposit mobilisation effort by commercial banks and the utilisation of these deposits for purpose of productive investment in the context of economic development of Orissa. The analysis broadly covers the post-economic reform period in Orissa.

Objectives :

The study is pursued with following aims :

- (i) To investigate the extent of deposit mobilisation and deployment of credit by commercial banks in the context of economic development of the state.

- (ii) To enquire against the background of economic liberalisation and financial & banking sector reforms as to what extent banks have utilised funds for the development of the state and the problems associated with it.
- (iii) To suggest policy measures for improving investment environment in the state including the commercial banks.

Methodology :

The study is pursued with secondary data. For this, greater reliance is placed on the data published by Reserve Bank of India and Regional offices of Nationalised banks located in the state. The study mainly covers the period from 1990-91 to 1998-99, the post economic reform period in Orissa.

Deposit Growth : its Characteristics :

Deposits mobilised by Commercial banks in Orissa has the following salient features :

(i) Deposits of commercial banks in absolute terms were Rs. 2735 crores on the eve of economic reforms i.e., 1991 and the amount increased to Rs. 10359 crores in the year 1999 when the economy of the state was in full swing of liberalisation process. There was, therefore, 3.8 fold increase in the amount of deposits between 1990-91 and 1998-99. Per capita deposit during this period increased from Rs. 85.4 in 1990-91 to Rs. 324 in 1998-99, showing an improved saving habit of the people.

(ii) The type of deposits mobilized by commercial banks indicates that the percentage point decline was more visible both in the case of current and savings bank deposits between 1990-91 and 1998-99. On the other hand percentage share of Term deposits to the total deposits, was more pronounced in 1998-99 compared to the year 1990-91. Between the periods, percentage point increase in term deposits by commercial banks in Orissa was 11.8. There is thus a shift of preference from short term deposits to long term deposits.

(iii) The maturity pattern of term deposits for the period 1990-91 to 1998-99 reveals that the savers in general have a strong preference for holding term deposits of shorter maturities than longer maturities. In 1990-91, the proportion of term deposits maturing within 2 to 5 years and above constituted 75.4 per cent of total term deposits. However, this declined to 60.6 per cent of the total in 1998-99. On the other hand, whereas term deposits with a maturity period of 90 days to 2 years

stood at 24.6 per cent of the total term deposits in 1990-91, the same increased to 39.4 per cent in 1998-99. This development has two implications: First, the larger preference for term deposits of shorter maturities is an indication of the speculative behaviour of the depositors who desire to secure quick gain within the short period. Secondly, the margin of rate of interest between deposits of short and long period, is so narrow that the depositors preferred to put their savings in the form of deposits of shorter maturity than longer maturity.

(iv) With regard to ownership pattern of deposits bulk of the deposits of commercial banks has come from household sector. Data available for March 1998 reveal that household sector alone accounts for 76.3 per cent of total deposits. Safety and security of deposits backed by the guarantee coverage under Deposit Insurance Corporation of India mainly motivated the households to opt for bank deposits in lieu of others (Onkarnath 1997). Next to the household sector, the share of state government and other institutions in total deposits of banks was about 17.2 per cent. One of the dismal pictures is that the share of private sector in the total deposit was only 1.2 per cent. Similarly the share of financial sector in the total deposits mobilized by commercial banks was 3.3 per cent. The non-resident Oriyas accounted for 1.6 per cent of the total deposits mobilized by banks as against 12 per cent by NRTs at the national level. There is, therefore, greater scope for mobilising deposits by banks in Orissa from private corporate sector and from non-resident Oriyas living in foreign countries. In Kerala, the banks were able to collect sizeable amount of deposits from non-resident Keralites living abroad.

(v) Population groupwise distribution of deposits by commercial banks reveals that the deposits of semi-urban and urban centres of Orissa accounted for the bulk of the deposits out of the total compared to that of the rural centres between 1990-91 and 1998-99. Average percentage share of rural deposits to the total during the period was 30.2 per annum. As against the rural deposits, the semi-urban and urban centres together had on an average 69.6 per cent of total deposits per annum during the above period. There is, therefore, further scope for mobilising deposits by commercial banks from rural centres through attractive rural oriented deposit mobilisation schemes.

(vi) Bank groupwise, the average share of deposits to the total by SBI group was 38.7 per cent to the total between 1990-91 and 1998-99. During the said period the average share of deposits to the total by

nationalised banks was 52.0 per cent. It is noticed that these two groups of public sector banks alone on an average accounted for 90.7 per cent of the total deposits per annum during the period under observation.

Credit deployment : Its salient features :

Deposits are the raw materials for the commercial banks. Deposits once mobilized, if not utilised timely become idle assets for the banks. It is therefore necessary that the deposits so collected by banks need be utilised productively. The credit deployment of the banks, however, reveals certain features :

1. The loans and advances of commercial banks were Rs. 2093 crores in the year 1991 and the amount increased to Rs. 4487 crores in the year 1999, an increase of 2.1 fold over the period. The average annual growth rate of advances was 9.1 per cent during the period under observation. On account of the growth of advances, per capita credit which stood at Rs. 65 in 1991 increased to Rs. 140 in 1999.
2. Sectoral distribution of credit shows that banks had supplied more credit in favour of industries compared to other sectors of the economy during the post economic reform period : 1990-91 to 1998-99. Average distribution credit by commercial banks to the industrial sector was 33.0 per cent per annum followed by agricultural and trade sector where average distribution of credit per annum was 20.3 per cent and 16.2 per cent respectively between 1990-91 and 1998-99. It is important to observe that in Orissa, the banks had supplied on an average 16.3 per cent of total credit per annum in favour of personal and professional sector of the economy to satisfy growing demand for consumer durable commodities by the people. The increased consumerism and demand for new products like computer software, automobiles and electronic gadgets etc. have resulted in greater reliance for bank loans by customers.
3. Priority sector advances stood at 54.6 per cent of total credit in 1990-91, which increased to 60.6 per cent of total in 1998-99. This is in contrast to the share of priority sector to the total at the all-India level which stood at 35.7 per cent in 1998-99. It is pertinent to observe that the banks had deployed more credit in favour of priority sectors than what they were officially directed to lend to these sectors i. e. 40 per cent of the aggregate bank credit. In the post reform period, after the recommendation of M. Narasimham Committee, they were directed to phase out priority sector credit and to limit the same to only 10 per cent of aggregate bank credit to

the newly redefined priority sectors. The banks in Orissa had failed to adhere to this compliance. It is to be noted that bulk of the commercial bank credit to traditional priority sectors had not yielded desired results due to poor implementation of the several schemes and mounting overdues due to non repayment of loans by the borrowers.

4. Population groupwise distribution of credit by commercial banks reveals that in the post economic reform period, the average share of rural sector in the total bank credit was 35.6 per cent per annum. However, the average share of credit deployed by banks in semi-urban and urban centres of Orissa still remained at a very high level i.e., 64.3 per cent of total credit per annum during the period under observation. This, therefore, demands immediate attention by the banks to explore the feasibility of improving further scope for extending credit to rural areas.
5. It is observed that both the State Bank of India group and the nationalised banks had taken the lead in deploying on an average 88.4% of total credit per annum for meeting the credit needs of the people. Compared to these banks in the public sector, the private sector banks and Regional Rural banks had lagged behind in the deployment of credit. They accounted on an average only 0.2% and 11.4% of advances per annum respectively of the total between 1990-91 and 1998-99.

Utilisation of funds :

The ultimate test of strength of financial institutions in general and commercial banks in particular depends on how effectively they have utilised the funds for the purpose of development of the economy. The accepted parameters measuring utilisation of loans by banks are : Credit-deposit ratio and Investment-deposit ratio. Though the parameters are themselves not fullproof yet, in the absence of any other acceptable parameters, they are considered to be the only alternatives.

Credit-deposit ratio :

The ratio of credit to deposit, measures the ability of the commercial banks in deploying credit in a region out of the deposits mobilised from that region. The official yardstick directs the banks to utilise more than 60% of deposits by way of loans and advances for the growth of the economy. The credit-deposit ratio as per sanction and utilisation is seen from the table given below :

TABLE - 1

Credit-Deposit Ratio by Commercial banks in Orissa: 1990-91 to 1998-99
(As per sanction and as per utilisation)

Year	Credit Deposit Ratio	
	As per Sanction	As per Utilisation
1991	76.5	72.3
1992	69.0	71.1
1993	67.0	69.5
1994	60.0	62.1
1995	64.5	55.9
1996	55.9	56.6
1997	45.9	53.1
1998	47.6	49.4
1999	43.3	44.2
Average Credit-Deposit Ratio	57.7	59.4

Source : R. B. I., Banking Statistics, Basic Statistical Returns 1990-91 to 1998-99) relevant issues.

The foregoing table shows that the credit-deposit ratio both as per sanction and utilisation has declined between 1990-91 and 1998-99, the post economic reform period under consideration. The average credit deposit ratio during the post economic reform period as per sanction was 57.7% and as per utilisation it was 59.9%. With regard to bank group wise distribution of credit-deposit ratio, there was significant decline between 1990-91 and 1998-99. The State Bank group exhibited a decline of 19.5% of credit-deposit ratio between 1990-91 and 1998-99. On the other hand, the decline in credit-deposit ratio was more pronounced in the case of nationalised banks. They accounted for a decline of 26.3% during the period under observation. Even RRBs and private sector banks also witnessed a decline of credit deposit ratio to the extent of 67.5% and 9.9% respectively during the post economic reform period. This shows that almost all bank groups experienced a decline of credit deposit ratio in 1998-99 over the year 1990-91, the year in which economic reform measures were initiated.

There was also a decline in the credit-deposit ratio in the population groupwise centres. The rural centres witnessed a decline of 41.0 per cent of credit-deposit ratio between 1990-91 and 1998-99. The decline in the ratio was also witnessed in semi-urban centres (22.6 per cent) and urban centres (36.0 per cent) between the period mentioned above.

It is further revealing to note that almost all the 13 undivided districts of Orissa for which data are available have witnessed a decline in the credit-deposit ratio between 1990-91 and 1996-97. Being unsuccessful to deploy full amount of deposits in the form of loans and advances, the commercial banks resorted to undertake investment of funds in state government and quasi-government shares, bonds, debentures and equities. Under Directed Investment Programme (DIP), the commercial banks were statutorily required to invest their funds in government and quasi-government sectors. The credit plus investment deposit ratio of commercial banks for the period 1990-91 to 1996-97 is seen from table-2

TABLE - 2

Credit plus Investment deposit ratio of commercial banks
as per sanction and utilisation in Orissa : 1990-91 to 1998-99.
(In percent)

Year	As per sanction	As per Utilisation
1990-91	104.0	107.2
1991-92	69.0	71.0
1992-93	67.0	69.5
1993-94	60.0	62.1
1994-95	54.5	55.9
1995-96	89.3	91.4
1996-97	76.7	78.8
Average Credit Deposit Ratio	74.4	76.6

Source : R.B.I., Banking Statistics, Basic Statistical Returns (1990-91—1996-97), relevant issues.

The above table indicates that the average credit plus investment deposit ratio as per sanction and utilisation in Orissa was 74.4 per cent and 76.6 per cent respectively in the post economic reform period. The commercial banks have not succeeded substantially in utilising the full amount of deposits in the state. There is therefore the doubt that the banks have utilised the unutilised portion of deposits in places outside the state.

The arguments in support of the above belief are substantiated by the following underlining practices pursued by the commercial banks in Orissa.

1. There is a belief that all the credit sanctioned in Orissa is not utilised in the state. Instead a major chunk of that sanctioned credit

is channelised through trade and commercial channels for the purpose of utilisation in other states. As for instance, Kerala Transport Corporation (Private) Limited has its head office in Mangalore. At the same time the Company has its Regional office in Bhubaneswar. The Company primarily handles transportation of motor tyres, tubes and other accessories. The Regional office, by virtue of its reputation and standing raises loans from commercial banks operating in Orissa and more particularly from Bhubaneswar. The amount sanctioned by bank to the Company does not mean that the said amount will be utilised in the State of Orissa. After receiving the credit, the Company deposits the money with the head office for receiving the required lot of tyres and tubes from the MRF Company located in Mangalore. The head office later invests that money in the MRF Company with the condition that the required lot of tyres be supplied to it for onward transportation to several depots located in different states. The Regional office of Kerala Transport Corporation (P) Ltd. receives the tyres in due time and markets the same to the dealers of the said products. Here it is a moot point to observe how far the sanctioned amount of credit by commercial banks has helped to promote real development of the economy in the state? In fact the real development was more visible in Mangalore where rubber plantation and tyre manufacturing industry were located. Such type of examples can be multiplied to convince that all the sanctioned credit is not wholly utilised in the state for real development. A major portion of such credit find its outlets to other regions outside the state for investment.

2. It is a common belief among the outside banks operating in Orissa that there are no 'Takers' of bank credit in Orissa. For them entrepreneurship in the state is at the nascent stage. With the advent of IT sector and its use by the banking organisations, the head offices of commercial banks quickly know from the daily and weekly returns furnished by the concerned zonal and regional offices about the surplus funds available in a region. By all intent and purpose Orissa is considered as a 'soft state' having less prospect for the use of funds. Since 'takers' are readily available in other states, the surplus fund of Orissa gets channelised to other states for the purpose of use. This investment of funds is made in other regions at the cost of the interest of Orissa. The decision is mainly undertaken at the head offices and put into practice by

managers acting as the agents of head offices for the smooth operation of the flow of funds without being accountable to any authorities of the concerned state governments.

3. Of late, the Reserve Bank of India, on account of the public criticism about the utilisation of funds by commercial banks, has furnished statewise data relating to credit sanctioned in a state but utilised in another state. Similarly the Bank has also prepared data relating to credit sanctioned in one state but utilised in another state. This can be observed from the table given below :

TABLE - 3

Classification of outstanding credit of scheduled commercial banks
according to place of sanction and utilisation
March 1996 and March 1999

States	Credit sanctioned in the state but utilised in other states (lakhs)		Credit utilised in the state but sanctioned in other states (lakhs)	
	1996	1999	1996	1999
Orissa	15.98	13.76	140.49	109.34
Bihar	55.48	124.64	232.49	676.33
Madhya Pradesh	47.96	283.55	739.68	1176.97
Andhra Pradesh	130.64	169.34	518.93	643.76
Karnataka	179.79	381.22	418.47	859.57
Gujrat	199.31	181.38	1206.12	2393.77
Haryana	219.38	147.41	1049.29	1794.79
Punjab	115.25	101.35	577.64	779.56
U.P	919.41	105.65	1402.37	2255.82

Source : R. B. I., Banking Statistics, Basic Statistical Returns (1996-1999), relevant issues.

From the table it is clear that the Reserve Bank of India for the first time officially acknowledged that there is out flow of funds from Orissa to the extent of Rs. 15.98 crores in 1996 and 13.76 crores in 1999. The data further reveal that there is inflow of funds from outside the state to the extent of Rs. 140.49 crores in 1996 and Rs. 109.34 crores in 1999. The inflow of funds, however, explains certain vital features. First, all the banks credits flowed into the state from other states were not utilised for the development of the real sectors of the economy.

In other words, these funds were rarely used for the development of industries, agricultural and other productive sectors in the economy. Secondly, most of these funds were utilised for meeting establishment and other overhead expenses of the satellite offices installed by outside organisations. Thirdly, these funds also formed a part of trade expenses by the outside manufacturers. It is therefore, seen that on account of several such factors commercial banks have not succeeded in utilising funds productively. Finally whatever funds had come to Orissa by way of investment were much less than the amount that had gone to other states say, Haryana, Andhra Pradesh and Madhya Pradesh etc. (Table-3)

Policy Prescriptions :

The following measures, if adopted in right earnest, the banks would be able to promote the development of the economy of the state.

1. In order to improve the investment climate, the banks need to promote the growth of entrepreneurs through regular training and guidance, assist the entrepreneurs in the preparation of viable feasibility reports and supply of information relating to technology innovation and its application.
2. The growing magnitude of non-performing assets which stands at 16% of net worth be brought down in a phased manner. In order to improve the recovery performance, the borrowers be kept under thorough supervision & monitoring regarding the use of bank funds. Besides, to bring the wilful defaulters on the record, the legal method as suggested by M. Narasimham Committee be strengthened.
3. Banks need to reduce their investment of funds in state government shares, bonds and debentures. The state government and state-associated bodies must rely more upon the market than on the banks. This would help to release more funds for direct lending by banks. There is further need for reducing priority sector advances in the state, which is at present more than 60% of aggregate bank credit. The redefined priority sector as suggested by M. Narasimham Committee be allowed to borrow credit at market related rate of interest than administered rate of interest.
4. There seems to be very little co-ordination between commercial banks and Development Financial Institutions in Orissa inspite of the recommendation of the committee for a large co-ordination between the two. Time has come for a closer co-ordination between

the money and capital markets of the state interns of institutions, credit instruments, and access to the market.

5. The organisational structure as suggested by M. Narasimham Committee be made a fair play. In the organisational structure more emphasis is put for the development of Regional/Local banks. Instead of having a bunch of all-India banks operating in the state for the same purpose and for the same customers, a shift in the direction of Regional/local banks to cater to the needs of individual states would help to promote the economy in a better way.

Conclusion :

Commercial banks have succeeded in garnering adequate deposits from the state during the post reform period. Their loans and advances have increased no doubt but those have lagged behind the amount of deposits collected. In Orissa credit plus investment deposit ratio has declined significantly in the post liberalisation period. Measures suggested above would help to arrest poor use of funds by banks.

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Finances of Rural Social Consumption Activities (SCAs) in Orissa.

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Introduction :

The Social Consumption Activities (SCAs) of an economy represents the foundation and is popularly known as "infrastructure" or "social economic overheads". Availability of these services leads to dynamism in an economy by removing the other bottlenecks likely to arise in the development process. At the national level the govt. attempts to provide these services by keeping an eye on the macro-economic demand for these services. These services are railways, road and road transport, civil aviation, ports and shipping, power generations, telecommunication, postal services, etc. The private sector may not come forward to produce these services due to their long gestation period and very low rate of return. The industrially developed countries of the World spend about 25 to 30 percent of their total investment in infrastructure sectors.

Definition :

'Infrastructure' is defined as those structural elements of an economy, which facilitate the flow of goods and services between buyers and sellers. Communications and transport (roads, railways, harbors, airports, telephones, etc). housing, sewerage, power system, etc. come under these structural elements which are not necessarily but usually provided by public authorities and may be regarded as prerequisite for economic growth in an economy. It is pointed out that infrastructure is the basic structure and facility necessary for other economic sub-systems to function efficiently, e.g. buildings, transport, water and energy resources and administrative systems etc.. In development literature the terms 'infrastructure' and 'social overhead capital' (SOC) have been used interchangeably. It may include such intangible assets like education and social attitudes of the population, industrial skills and administrative experience.

Infrastructure services facilitates smooth functioning of the production process, associated with a single individual firm as well as for the aggregate national economic activity. Hence, it bears strong bias of indigenous resources mobilisation and thereby capital formation in terms of physical input facilities (Ghosh & Chattopadhyay, 1997). It is the underlying layer of the economy, which enhances productive capacity. It comprises all those activities and facilities which support operation of production function. Like factors of production infrastructure facilities are not factor inputs, which result in direct production. These services are facilitative in character and contribute indirectly but importantly to the productivity. Their influence is diffused and pervasive. In a way, Infrastructure is taken as public goods having collectivity and non-rivalry in consumption (Lakshmanaswamy, 1997).

Meaning of Rural Infrastructure :

In developing countries still now 60 to 70 percent people live in rural areas. Agriculture is the predominant occupation in the rural areas and plays a greater role in the national income of a poor country. So, rural development is the primary necessity of a backward country. The rural infrastructure like major & minor irrigation projects, rural roads and bridges, primary schools, dispensaries, etc. are important components of rural development. Infrastructure in many cases is prescribed for all. The perception is that, once the necessary rural infrastructure is created in a village or region, the rural development will almost be automatic. Financing these different rural infrastructure sectors gives direct and indirect benefits to the economy. For example, the construction of primary schools may have direct impact on rural literacy & education, but little or no impact on irrigation. The direct impact of infrastructure on development includes specific consequences such as an increase in agricultural pump sets, which may in turn have indirect consequences such as improving well irrigation and consequently agricultural yields. Increase in the health condition of rural people directly leads to a positive direction in the agricultural production.

Scope of the work :

In view of the importance of Social Consumption Activities in the rural sector of the economy, the present paper is an attempt to analyse the importance attached to these programmes in the planning process. Selected activities are identified for this purpose. It is felt that some other services like irrigation facilities, credit facilities, etc. are also equally important for the purpose of promoting economic development but these could not be included as it is felt

that the benefits of such services fall on a wide range of economic activities and it is difficult to identify the rural component of these activities. The Government of India set up a Rural Infrastructure Development Fund in 1995-96 with an initial corpus of Rs. 2000 crores to extend loans to state governments to enable them to complete various types of infrastructure projects in the field of irrigation, flood protection, rural roads, and bridges. These schemes continued for a period of 4 years and helped the state Government to complete many such rural infrastructure projects. This paper includes the analysis of some of these projects.

Methodology :

This paper used secondary sources of data available in Plan Documents, Finance Accounts & Annual Reports. The plan documents since 5th Plan have included a scheme named National Program of Minimum Needs (MNP) and identified 6 items for ensuring minimum provision. The 6th Plan renamed it as Revised Minimum Needs Programme (RMNP) and continued it with a new set of norms as decided in the National level. The 7th Plan and 8th Plan also continued the scheme with more emphasis on qualitative impact of the schemes rather than quantitative aspects.

The expenditures and receipts under different rural sector programmes are taken from the Finance Accounts of the state. The period chosen for this purpose is 6th plan, 7th plan and 8th plan periods. Growth rate, elasticity of expenditure are calculated for the 17-year period. There is some confusion in the items included in the activities as rural-orientation of some programmes are not strictly mentioned. Marginal error is likely to be there due to this factor. For example, in the elementary education expenditure both rural and urban sector is included but the work could not separate urban component due to lack of data.

The data so compiled and processed are interpreted and some tentative conclusions on the state financing on basic social consumption activities in the state are derived.

National Policy of Rural Infrastructure :

In India provision of integrated essential services to the population has been the objectives of planning process since the 1st plan period. To start with, the 1st plan emphasises on creation of administrative infrastructure by launching the community development and strengthening

ning it in the first four plans in the country. The 5th plan, rightly included the objective of strengthening the basic minimum requirements in the rural areas and initiated the "National Programme of Minimum Needs". The plan revised a national norm and made a determined effort to provide a network of facilities and services meant for social consumption. The items included under the programme are : (i) elementary education, (ii) rural health, (iii) rural water supply, (iv) rural roads, (v) rural electrification, (vi) rural housing and (vii) nutrition. In addition to these, there is an item "Environmental Improvement and Urban Slums" which has the objective of improving the quality of life of the urban slum-dwellers. The 8th plan reviewed the progress and concluded that the 'physical and financial targets have been achieved satisfactorily except in the area of rural sanitation' (Government of India, 1992). However, the plan viewed that the achievements have not generated satisfaction in other related variables like literacy, death rate, infant mortality rate, adequate quality of drinking water, per capita consumption of electricity, etc. It is also noticed that there is significant inter-state variation in the availability of these services. The 8th plan proposed to integrate the MNP with other on-going rural development programmes and provide an 'united' portion of the fund for maintenance of these services on a continuing basis.

The 9th plan review of progress of these services indicates that the investment has brought about improvement in infrastructure and services available but performance under MNP was sub-optimal in states where the access to these services was poor (Ninth Plan, Government of India, 1992). The 9th plan, thus, on the basis of conference of Chief Ministers held in 1996, initiated a time bound development plan to promote Seven Basic Minimum Services i.e., (i) primary health care services, (ii) provision of safe drinking water, (iii) universalisation of primary education, (iv) housing assistance to shelterless, (v) nutrition support, (vi) streamlining of PDS with a focus on the poor and (vii) connectivity of unconnected villages.

Performance of Rural Infrastructure in Orissa :

In Orissa specific effort to provide Basic Social Consumption Activities was taken during the Fifth Five Year Plan under the National Programme for Minimum Needs (MNP). It was recognized that it may not be possible for the poor to buy all essential goods and services for maintaining 'reasonable living standards' with the existing level of his earnings. The main objectives of the MNP were to provide certain social

consumption facilities like education, health, drinking water, communication, electricity, housing and nutrition. Even though the programme is not rural specific but as the service levels of all these items are deficient in the rural areas, it is an attempt to create a minimum level of rural infrastructure for facilitating effective implementation of other Rural Development Programmes. It was envisaged that provision of these services will create opportunities for employment and generate adequate income with the other economic activities to have a decent standard of living. Important Schemes undertaken under this Programme were (i) provision of elementary education, (ii) expansion of primary health care facilities in rural areas, (iii) supply of drinking water in the villages, (iv) construction of allweather roads to all villages to a population of 1500 and above, (v) provision of rural electricity to atleast 40% of the rural population by the end of Fifth Plan, (vi) allocation of house sites to rural landless population and (vii) supplementary feeding programme for pre-school children, pregnant women and nursing mothers and mid-day meal programme for school children. Only a single scheme under MNP is related to the urban areas i.e. slum improvement and clearance. The physical targets of the Fifth Plan were (i) to achieve additional enrollment of children in the age group of 6 to 11 to the extent of 6.5 lakhs and (ii) in the age group of 11 to 14 to the extent of 2.27 lakhs, (iii) population coverage under rural health services to the extent of 12.27 lakhs, (iv) rural water supply coverage for 1012 villages, (v) rural road construction to the extent of 11000 Kms, (vi) covering 10373 villages under rural electrification scheme and around 20 lakhs persons to be covered under the nutrition programmes. To budget allocation for these purposes was Rs. 216 crores. This constitutes about 25% of the total plan outlay under the Fifth Plan Programmes.

The plan documents from the 5th Plan to the Seventh Plan document presents figures regarding (a) Availability of Rural Infrastructure at the end of the Fourth Plan, (b) Achievements under MNP in the Fifth Five Year Plan, along with percentages of achievement, (c) Financial achievements of RMNP in Sixth Plan & (d) Physical achievements of RMNP in the Sixth Plan. An analysis of the receipt and expenditure of RSCAs is given below.

Analysis of the Receipt and Expenditure on Rural Social Consumption Activities (RSCAs) :

To analyse the trend in the growth of expenditure on Rural Social Consumption Activities, the compound growth rate and the elasticity coefficient for each plan period is calculated.

Growth Rate :

The growth rate is calculated by using the formula :

$$g = [\text{Antilog } (\beta) - 1] \times 100$$

Where β = regression coefficient in a semi-log regression model.

Table-1 below indicates growth rate of expenditure in Orissa on different Rural Social Consumption Services. It is noticed that the rate of growth is very high in the 6th plan period for rural housing (35.6%), rural health and family welfare services (28.0%), and elementary education (14.5%). The growth rate is very low for rural water supply schemes and negative for other rural development programmes. In the 7th plan high growth rate is recorded for rural health and family welfare services (84.6%) followed by elementary education (32%) and rural development programmes (23.8%) and rural water supply schemes (12.7%). In the 8th plan (1990-97) highest growth rate is recorded for rural housing (90.6%). For other programmes the growth rate is in between 4 to 15%.

TABLE - 1

Rate of Growth of SCA Expenditure in Orissa

Sl. No.	Items	6th Plan	7th Plan	8th Plan
1.	Rural Health & Family Welfare Services	28.1	84.6	12.7
2.	Rural Water Supply Programme	2.1	12.7	6.4
3.	Elementary Education	14.5	32.0	14.5
4.	Rural Development	1.8	23.8	4.0
5.	Rural Housing	35.6	3.1	90.6

Source : Compiled from different Finance Accounts of Orissa.

Elasticity Coefficient :

The elasticity coefficient is calculated to understand the response of the expenditure on specific rural infrastructure items as a result of rise in the NSDP of Orissa. With the assumption of 1% rise in NSDP the elasticity coefficient measures the percentage change in specific expenditure programmes. It is noticed that in the 6th plan, the elasticity coefficient is greater than 1 for rural housing and rural health and family welfare services and for all others it is less than one. In the 7th plan it is greater than one for rural health and family welfare services (3.8), elementary education and rural development programmes and less than 1 for others. In the 8th plan the elasticity coefficient is greater than one only for rural housing and for all others it is less than one.

TABLE - 2
Elasticity Co-efficient

Sl. No.	Items	6th Plan	7th Plan	8th Plan
1.	Rural Health and Family Welfare Services	1.7	3.8	0.8
2.	Rural Water Supply Programme	0.73	0.78	0.43
3.	Elementary Education	0.9	1.8	0.9
4.	Rural Development	0.4	1.3	0.2
5.	Rural Housing	1.8	0.2	4.6

Source : Compiled from Finance Accounts (1980-81 to 1996-97) of Orissa.

Rural Infrastructure Development Fund :

From 1995-96 the Govt. of India started a fund for development of infrastructure in the rural areas with a corpus money of Rs. 2000 crores. Subsequently it is increased to Rs. 2500 crores in 1996-97, 2500 crores in 1997-98 and 3000 crores in 1998-99 and 3500 crores in 1999-2000. The purpose of this fund is to assist the State Govt. for taking loan from NABARD, the agency implementing the programme. The achievement of the scheme upto 31.03.1999 varies from state to state.

Findings and Conclusions :

The discussions carried out in the above paragraphs indicate the following conclusions :

1. Since 5th plan the social consumption activity sector has been given importance in a big way.
2. The qualitative impact of these expansions in expenditure is not commensurately being felt in the economy. The slow growth of agriculture production adequately manifests this position.
3. The norms and method of financing of these programmes are not very clear and there are many overlapping areas. To streamline the process it is necessary to prepare a detailed infrastructure development plan for rural areas as a sub-plan of the State plan.
4. Provision for maintenance is an important dimension and the programmes must chalk out this while launching this at the beginning stage itself.
5. Greater community participation in supplementing the effort of the government is necessary to fully realise the benefit. The sense of

belongingness is not forthcoming from the rural areas and this creates an obstacle to healthy and efficient functioning of infrastructure already created.

6. It is now time to examine the reasons for wide divergence in the provision of these basic social consumption activities across the states and channelise more resources to backward states by adopting liberal matching formula. Many of the Centrally Sponsored Schemes are open-ended schemes and require matching share by the states concerned. The richer states could mobilise more resources out of the central pool due to their favourable resource position.
 7. Timely completion of many Rural Infrastructure Development Projects is another major area of concern. Many schemes could not be completed due to resource crunch but the political masters are always interested in new projects for their own political advantage. This pressurises the economy unnecessarily with heavy debt burden without any tangible return on the investments.
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Financing Development in Orissa : Issues and Challenges

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Orissa is one of the poorest and most backward states of India. Its per capita income is the lowest among the states, except Bihar. At the same time, it does not have financial resources to make adequate investment to improve the economic status of the people. The gap between the per capita income of the state and the national average is increasing year after year, which has reached to a level of almost Rs. 1300 in 1996-97. In terms of area and population Orissa is fairly small, making up only 4.75 per cent of India's total area and 3.74 per cent of its total population (according to 1991 census). Orissa has also the largest proportion of disadvantaged people in the sense that 38.42 per cent of its population belongs to SC and ST. According to the estimate of the Modified Expert Group, about 49 per cent of Orissa's population live below the poverty line as against about 37 per cent for India as a whole.

Agriculture, which is the most important sector of the state, suffers from many weaknesses like low productivity, instability, inadequate irrigation facility, low level of fertiliser and power consumption, and such other weaknesses, which hamper its sustained growth. On the other hand, Orissa does not find a reasonable place in the industrial map of India. The contribution of industry to state domestic product remains very low and in terms of gross output of industry, Orissa ranks 14 out of 15 major states. However, Orissa is one of the states having largest percentage of forest area with valuable woods and is rich in minerals like iron, chromite, manganese, coal and lime stone among others. In spite of being rich in forest and mineral resources, the development of the state remains far from satisfactory.

With regards to basic needs and social infrastructure, Orissa fairs very poorly. Not only the infant mortality rate is very high, the literacy rate also remains far behind the country as a whole. All this implies that Orissa has to make massive investment in order to change economic scenario of the state.

But how to mobilise resources for the purpose ? The White Paper (Govt. of Orissa, 1999) presents a grim picture about Orissa's financial position. Not only the state is incurring deficit in the revenue account, but also the deficit is increasing year after year. At the same time, the borrowing has reached an unsustainable proportion. This makes difficult for financing development in Orissa.

Sources of Finance for Development :

Financing for development in a state comes mainly from five basic sources :

- (1) Balance from current revenue
- (2) Additional resource mobilisation
- (3) Contribution of public sector enterprises
- (4) Central assistance
- (5) Borrowing

While the state of Orissa does not have much resource in the first three aspects, the last two take leading role for financing development in the state. Let us discuss the status of financing from these sources in the context of Orissa.

(1) Orissa does not have surplus in current account. Since 1984-85, the state is showing deficits continuously in this account. This shows that there is negative contribution from current account for development. The deficit in current account is mostly due to the faster growth of current consumption expenditure than the revenue receipts. During the period 1980-81 to 1998-99, revenue expenditure has grown at the annual compound rate of 15.40 per cent as against 13.86 per cent in case of revenue receipts. As a result, the revenue account, which had a surplus in 1980-81, started showing deficits continuously since 1984-85. The deficit in 1998-99 (BE) reached a level of Rs 1583.19 crore. This is quite a big amount for a poor state like Orissa. The revenue receipts should, however, cover the whole of revenue expenditure and the surplus should go to finance a part of the capital expenditure. Instead, the state has been compelled to fill the gap in revenue account by borrowing, which is meant for capital formation.

(2) Additional resource mobilisation is likewise a budgetary resource apart from ordinary revenue receipts. This is mobilised and earmarked entirely for Plan finance. The effort of the state government

in this respect is not satisfactory. Not only the mobilisation of additional revenue in Orissa is very low among the major states in Indian federation but also the growth is not encouraging. The low mobilisation of additional revenue is mainly due to the lower effort in case of non-tax revenue.

(3) The third source of financing development is the contribution of public sector enterprises. In Orissa, the contribution of public sector enterprises is very poor. It comes to Rs 0.36 crore in the year 1996-97 and in total Rs 4.41 crore from the year 1991-92 to 1996-97. This is despite the state government's investment to the tune of Rs 1527.73 crore, i.e. 43.80% of the total investment. Hence, this source is also negligible for financing development in Orissa.

(4) Central assistance is one of the major sources of finance for development in Orissa. Central assistance on Plan account (as opposed to assistance on revenue account) is composed of grants and loans. For Orissa, the assistance is given on a 70% loan and 30% grant basis, except for the funds earmarked for Plan expenditures in tribal areas, which are given on a 10% loan and 90% grant basis. Hence, more the assistance, more is the loan element. Since the financial position of Orissa is not strong it has to depend on the central government heavily for financial assistance. Therefore, loan burden becomes more and more heavy. The annual plan outlay of 1997-98 shows that 80% of resources mobilised is loan and 20% is grant.

(5) Besides the central assistance, the state government also borrows from open market and depends on other capital receipts for development financing. These are negotiated loans from LIC, NABARD, NCDC, Provident funds, short-term loans from central government, etc. These sources of finance, like central assistance, have been increasing rapidly in the absence of surplus from current revenue for development financing.

It is clear, therefore, that whatever progress the state is able to make will be a function of resources from external sources or borrowing. The state will also continue to be affected closely, and far more than other states, by the formula used by the central government in determining the patterns of assistance, both on revenue and plan account, to the states. As a result of the heavy dependence on central assistance and other loans, the public debt of the state is increasing year by year. The outstanding debt of the government which was less than

Rs. 1200 crore in the year 1980-81 has increased to about Rs. 15000 crore in the year 1998-99 (BE). But a substantial part of the loan is being utilised for non-plan expenditure. As such the debt burden goes on increasing. In the year 1997-98 the repayment of the loan comes to Rs. 265.67 crore and interest burden Rs. 1291.74 crore. The government of Orissa borrows from the government of India a sum of Rs. 1153.68 crore in the year 1997-98 and pays back by way of repayment and interest Rs. 222.37 crore and Rs. 555.64 crore respectively. There is a surplus of only Rs. 375.67 crore. However, the state's borrowing from other sources during the same year comes to Rs. 567.87 crore and repayment and interest come to Rs. 43.30 crore and Rs. 736.10 crore respectively. Therefore, there is a deficit of Rs. 211.53 crore. Which means, of the total loan both from the government of India and others, which comes to Rs. 1721.55 crore in the year 1997-98, only a sum of Rs. 164.14 crore is available for utilisation for other purposes. The government is also retiring low cost borrowing. If this state of affairs continues, Orissa will be in a debt trap very soon.

The expenditure trend in the state shows that the share of revenue expenditure has been increasing and comes to more than 80 per cent in 1998-99. At the same time, the share of capital expenditure has been declining and becomes less than 20 per cent in 1998-99. This decrease in share of capital expenditure leads to decline in developmental efforts in the state. This can be clearly seen from the Plan expenditure. The approved outlay for the 8th Plan (1992-97) was Rs. 10,000 crore. Owing to resource constraints, the outlay was revised downward to Rs. 7290.60 crore. Expenditure incurred during the 8th Plan was of the order of Rs. 7005.52 crore which was 96.09 per cent of the revised outlay. Again the approved outlay for the Annual Plan 1997-98 was Rs. 2529.46 crore. But the expenditure was of the order of Rs. 2037.09 crore only.

It follows from the preceding discussions that while the debt of the government has been increasing year after year it is directed mostly towards the current expenditure of the government, and the decreasing amount of fund is being used for developmental activities. That means, increasing amount of borrowing is being made for public consumption. This not only reduces developmental efforts of the state government but also the debt becomes unsustainable. Hence, for a sustainable development, the borrowing should not be diverted towards public consumption. Rather, steps should be taken to create surplus in revenue

account. This will be possible by compressing current expenditure, on the one hand and strengthening revenue efforts, on the other.

Expenditure Compression :

As discussed earlier, current expenditure is growing faster than revenue receipts. At the same time, the growth of current expenditure is significantly higher than the growth of capital expenditure. During the period 1992-93 to 1997-98, while the current expenditure has grown at the annual compound rate of about 13 per cent the capital expenditure has grown at the annual rate of only 7.8 per cent. This shows that the state government has not succeeded in directing increasing proportion of state resources to development sectors. Hence, there is a need to curtail revenue expenditure in order to make surplus in revenue account. The surplus generated in revenue account can be utilised for development purpose. But surplus in revenue account may not be possible in the short-run. Therefore, the short-run measure should be to make at least a balance in revenue account. The borrowed funds, which were used for financing current expenditure, therefore, could be used for financing development. The measures in the medium term should be to create surplus in revenue account which can be used for financing development in Orissa. This would reduce the dependence on external sources for financing development.

The deficit in revenue account is, however, mostly due to the non-developmental expenditure in the sphere of interest, salary and pension. The expenditure in these three heads which was 38.13 per cent of the total revenue expenditure in the year 1980-81 increased to 70.45 per cent in the year 1997-98. The expenditure on salary and pension alone becomes so high that even the state's own sources of revenue is unable to finance it. During the year 1997-98, the total expenditure on salary and pension (Rs. 2606.84 crore) was Rs. 644.18 crore more than that of revenue from own sources (Rs. 1962.66 crore). There is considerable overstaffing and a considerable part of government expenditure is accounted for by undue benefits and perquisites conferred on those in the government. It is difficult to persuade the people to bear a higher burden of taxation for financing increasing amount of salary and related expenditure. Hence, there is an urgent need to reduce the staff related expenditure. This can be done by the following :

- (a) Downsizing the government establishment.
- (b) Drastic cuts in fresh recruitment of government staff along with abolition of large number of posts which have proliferated in recent years.

- (c) Identification of surplus staff and their redeployment in order to moderate the growth of wages and salaries.
- (d) Cutback on perquisites like LTC, bonus and leave encashment, which would help to decelerate the growth of staff related expenditure.
- (e) Banning transfer of government servants for next five years. However, for important reasons of state policy a few exceptions could be made.

Another area of concern is the increasing allocation to education sector. While about one-fourth of the total revenue receipts is used for financing it, more than one-fifth of the total revenue expenditure is spent in this sector during the year 1997-98. However, one cannot deny the increasing allocation to education sector is required for a developing economy like Orissa where more than 50 per cent are illiterates. But the uncontrolled growth of higher schools and colleges without considering the quality of education is a waste of resources. The political parties are mainly responsible for this state of affairs. It is not that they do not know its repercussion but the fact is they are more interested for increasing their length of life in the government rather than thinking about the future of the state. In order to control the expenditure in this sector, there is an urgent need to—

- (1) ban opening of new colleges and high schools,
- (2) make a review of the present status and requirement of the number of these institutions according to some fixed criteria and cancel grants to the institutions who do not qualify the criteria,
- (3) encourage the existing institutions for self-financing.

Strengthening Revenue Efforts :

A significantly higher proportion (more than 60 per cent) of the state government is received from central transfer, both in terms of shared taxes and grants. This has a significant role in the finance of the state government. The state, therefore, is closely affected by the formula adopted by the central government for transferring resources. However, the central transfers are not designed to offset the inherent fiscal disadvantages of the poor states like Orissa. Unfortunately, both statutory and plan transfers are given mainly on the basis of general

economic indicators, with dominant weight being assigned to population rather than fiscal disadvantage (Rao and Aggarwal, 1991). The state government, therefore, cannot depend on the centre for its development. It has to be self-reliant for a sustained growth.

Considering the low income of the majority of the people, though emphasis has to be placed more on reducing the growth of current expenditure of the government than on raising the rate of growth of revenues, attempt needs to be made to raise the tax and non-tax revenues. Between these two sources of revenues, the scope for raising more revenue in case of the former is, however, limited due to the low income of the majority of the people. However, steps can be taken to rationalise the tax structure and to improve the tax administration. On the other hand, there is more scope for raising non-tax revenue. Due to the poor flow of non-tax revenues the growth of total revenue has become slow. Own non-tax revenue, which had a share of about 32 per cent in 1986-87, declined to 26.42 per cent in 1996-97. The sluggish growth of non-tax revenues in the state is due to the poor cost recoveries from various public services provided by the state. As a consequence of both uneconomic pricing as well as low efficiency of departmental and non-departmental enterprises, most of them have been reporting substantial losses. There is much large flow of implicit subsidies (difference between the cost of delivery of goods and services and the recovery of the cost) by way of uncovered cost in a whole range of social and economic services. The implicit subsidy in case of higher education, irrigation and power sector alone becomes Rs. 306 crore in 1997-98, which amounts to one-third of total deficit in revenue account. If these services are properly priced so as to recover costs, except target where the subsidies are deliberately introduced to support particular groups, this would very substantially augment the total flow of non-tax revenues.

A large part of the subsidy in economic services actually flows in the form of budgetary support to offset the poor cost recovery of the public enterprises. Far from contributing net surplus to the revenues of the government most of the public enterprises have constituted a major source of drain. Hence, there is a need to take strong measures in order to at least stop the drain of government resources, even if large surpluses are not immediately forthcoming. There is a need either to privatise these enterprises or to close them, except those are of strategic importance. It would release a substantial amount of financial

resources. A part of these resources so released could be deployed to augment the quality of some subsidised services, of where such services are desirable, improve their quality. The rest would significantly reduce the size of the deficit.

In case of social services, the recovery rates are much lower. These services are, therefore, being delivered virtually free of cost. The state cannot continue to subsidise on a vast scale. However, social services like primary education and health are precisely the services which ought to be subsidised on equity and 'merit good' considerations. The pruning of subsidies here, therefore, has to be very carefully calibrated in order to ensure that budgetary pressures do not subvert these large social objectives. There is a need for much closer targeting of subsidies in social services. This would help to filter out unnecessary or unintended subsidies. The resources saved through improved cost recovery could then be deployed to actually raise the level of subsidy to deserving target groups, while at the same time, reducing the total volume of subsidy (Mundle and Rao, 1992) and hence, deficit.

Conclusion :

Being a poor and most backward state, Orissa needs to make massive investment for its development. But the financial position of the state is bleak and it has to depend on external sources not only for financing development but also for public consumption. Due to the increasing deficit in revenue account, investment in capital has been squeezed. As a result, the development has been hampered. Hence, there is an urgent need to reduce the deficit in revenue account and increase the finance for human and physical capital development. The paper suggests compression of current expenditure by reducing staff related expenditure as well as strengthening revenue efforts by streamlining tax administration, increasing user charges and reducing subsidies. This can, however, be possible by a strong political commitment.

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Developmental Expenditure in Orissa : An Analysis

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I. INTRODUCTION :

The fiscal federalist approach to decentralisation calls for a sub-national government structure with several tiers, each delivering services that benefit those residing in the sub-national government's jurisdictions (Dillinger & Fay, 1999). The importance of the state for successful implementing the economic functions is clearly revealed by the constitutional assignments of responsibilities and their share in public expenditure. The benefits of infrastructure services are evident from the point of view of a state. Infrastructure services include number of diversified functions, such as, water supply, roads maintenance, power and telecommunications, medical facilities, education and the like. The expenditures on infrastructural services are provided in the budget through the development expenditures.

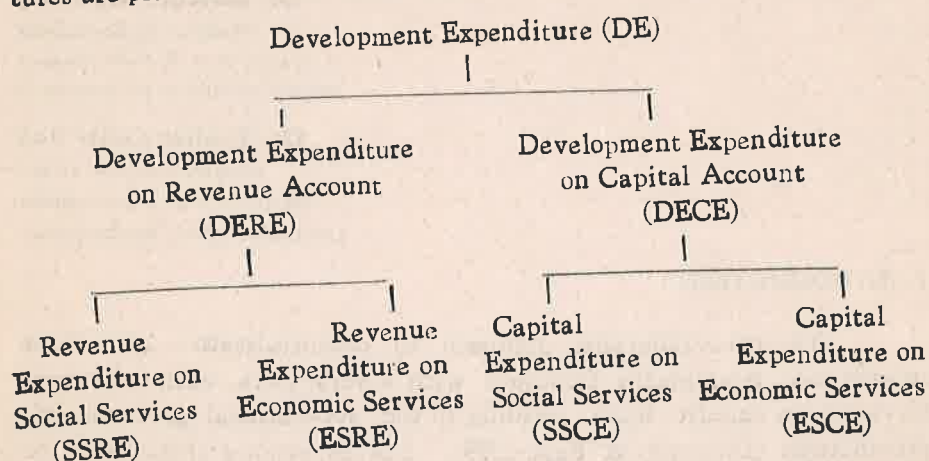
The objectives of the present study are to study the composition and growth of development expenditure of Orissa during the period from 1970-71 to 1996-97. The impact of development expenditure on the net state domestic product of Orissa is also analysed for the period. Section-I introduces the problem under study. In section-II the theoretical aspects of developmental expenditure along with the expenditure on infrastructures are discussed. Data source and methodology adopted in the study are presented in section-III. Section-IV deals with the findings of the study. Section-V is the concluding section.

II. INFRASTRUCTURE AND DEVELOPMENT EXPENDITURE :

Development expenditure as different from *maintenance expenditures*, comprised expenditures for development purposes in the revenue

account (DERE) and capital account (DECE). These development expenditures are allocated under both plan and non-plan expenditures.

These development expenditures refer to (a) expenditure on social services and (b) expenditure on economic services. These expenditures are presented in the figure below :



Expenditures on social services consist of expenditure on (i) education, sports, art and culture, (ii) medical and public health, (iii) family welfare, (iv) water supply and sanitation, (v) housing, (vi) urban development, (vii) welfare of SC and ST and other backward castes, (viii) social security and welfare, (ix) others. On the other hand, expenditures on economic services include (i) agriculture and allied activities, (ii) rural development, (iii) special area programme, (iv) major and medium irrigation control, (v) energy, (vi) industry and minerals, (vii) transport, (viii) communications, (ix) science and technology, (x) general economic services.

The expenditure of the State Government could be developmental or non-developmental in character. Expenditure of items like maintenance of the organs of the state administrative services, pensions, interest payments, etc., are non-developmental in nature. Expenditures on education, health, various other social services are categorised as developmental in nature. Development expenditures include expenditures on various infrastructural services. The availability of adequate infrastructure is taken as the fundamental corner stone of development strategy. The availability of adequate transportation facilities, power communication etc. is taken as essential preconditions by any entrepreneur deciding on an investment project in any region. In the current thinking there are two important aspects of the concept of infrastructure.

Physical Infrastructure :

Physical infrastructure was conceived as a set of physical facilities without which an integrated, independent modern economy could not function. Emphasis on physical infrastructure was based on the following characteristics of these facilities.

- (i) They involve technological indivisibilities and considerable lumpiness in investment.
- (ii) The investment projects have long gestation lags.
- (iii) They are subject to substantial external economies and diseconomies through the interdependence of economic activities or even of infrastructure facilities themselves.

Social Infrastructure :

The identification of infrastructure with only physical capital was considered inadequate. This is because the recognition of the importance of human capital in the growth process. Human capital affects growth both through its effects on innovations and technological change as well as increases in labour productivity. Investments in the areas of health, education, water supply, housing etc. have all got marked public good characteristics. They have strong linkages with each other and with physical productivity. Investments in these areas have long gestation lags sometimes even longer than the case of physical infrastructure.

Also the recognition that quality of life was not perfectly related to measures of income and hence these other factors better proxy other needs of human society. Adequate infrastructure physical or economic and social is treated as the basic pre-requisite for sustained development.

III. DATA SOURCE AND METHODOLOGY :

Information about development expenditure (DE) of Orissa from 1970-71 to 1996-97 are collected from various issues of the RBI Bulletins. The components and sub-components development expenditures (DERE, DECE, SSRE, ESRE, SSCE and ESCE) are classified in pattern of that of the RBI Bulletins. The Net State Domestic Product of Orissa during 1970-71 to 1996-97 is collected from 'Estimates of Net State Domestic Product' Published by CSO.

The alternative models generally used in a time series analysis are linear, semi-log and double log models. Development expenditure incurred during the current year in the State has effect on its Net State

Domestic Product in Orissa in the next year. That is, Net State Domestic Product responds to development expenditure with a lapse of time.

Let the linear lag model be

$$\text{NSDP}_t = \alpha (\text{DE})_{t-1} + \varepsilon_t$$

Assuming ' ε_t ' to be well behaved, the ' β ' value is estimated.

The elasticity coefficients are estimated by double-log model.

Let the exponential model be

$$\text{NSDP}_t = \alpha (\text{DE}_{t-1})^\beta$$

Here, ' α ' and ' β ' are the parameters of the model. The double-log transformation is commonly employed because it corresponds to the assumption of a "constant elasticity" between ' NSDP_t ' and ' DE_{t-1} '. The simple application of linear models to the logarithms of the variable produces directly an estimate of that elasticity.

The growth rate of development expenditures can be found using the semi-log model. Let the exponential model be

$$\text{DE}_t = \alpha \beta^t$$

Here, ' α ' and ' β ' are parameters of the model, ' t ' represents the time (in years) and is an independent variable. The growth rate can be found out from the estimated parameter.

That is,

$$\text{Growth rate} = [\text{Anti-log}(\log \beta) - 1] \times 100$$

The significance of the estimated coefficients is tested using the students t-statistics.

IV. FINDINGS

The nature of development expenditure in Orissa is analysed in this section.

(a) Composition

To study the composition, the proportions of development expenditure are calculated using the moving-average method. Here, moving average percentage is calculated at three point of time. They are 1970-71 to 1972-73 (First period), 1982-83 to 1984-85 (Middle period) and 1994-95 to 1996-97 (Last period). As the sub-components of development expenditure (SSRE, ESRE, SSCE and ESCE) are not available for the first three years of our study, they are taken for the years 1973-74 to 1975-76.

The composition of developmental expenditure in the revenue account (DERE), developmental expenditure in the capital account (DECE) and their sub-components are presented in Table-1.

Development expenditure in the revenue account (DERE) increased over the years from 73.60% in the first period to 74.63% in the middle period to 83.58% in the last period. On the other hand development expenditure in the capital account (DECE) decreased continuously over the periods, 26.398% in the first period to 25.363% in the middle period to 16.413% in the last period. Social services expenditure in revenue account (SSRE) first increased from 57.31% to 65.66% then it decreased to 60.59%. Economic service expenditure in the revenue account (ESRE) on the other hand first decreased from 42.68% to 34.34% and then it increased to 39.405%. Social services expenditure in the capital account (SSCE) first decreased from 9.45% to 6.15% and then it increased to 13.61%. Economic services expenditure in the capital account first increased from 90.546% to 93.847% then it decreased to 86.39%.

(b) Growth Rate of Development Expenditure

The growth rate of various components and sub-components of development expenditures during 1970-71 to 1996-97 of Orissa is presented in Table-2. The growth rate of developmental expenditure is 15.50%. Growth rates of development expenditure in the revenue account (DERE) and capital account (DECE) are respectively 15.81% and 14.31%. The growth rates of expenditure on social services (SSRE) and economic services (ESRE) in the revenue account are respectively 15.42% and 14.56%. Growth rates of expenditures on social services and economic services (ESRE) in the capital account are respectively 15.36% and 13.23%.

On the other hand the growth rate of Net State Domestic Product (NSDP) is only 12.81%. Here it is evident that the growth rate of all the components and sub components of development expenditure is higher than the growth rate of Net State Domestic Product.

(c) Impact of Developmental Expenditures

The impact of developmental expenditures on the NSDP of Orissa is analysed using the linear lag and double-log lag model. The results are presented in Tables - 3 and 4.

(i) Linear Lag Model:

Development expenditure incurred last year has a significant effect on the NSDP of Orissa during 1970-71 to 1996-97. The effect is significant at 1% level of significance. Similarly development expenditures on revenue and capital account have significant effect on the

NSDP at 1% level of significance. In multiple regression model development expenditure on revenue account has significant effect on the Net State Domestic Product but development expenditure on capital account has no significant effect on the Net State Domestic Product.

Social services expenditure in revenue account and economic services expenditure in revenue account have significant effect on the Net State Domestic Product of Orissa. Both are significant at 1% level of significance. Social services expenditure on capital account has significant effect on the Net State Domestic Product of Orissa but economic services expenditure has no significant effect on the Net State Domestic product of Orissa. In a multiple regression model (with four variables; SSRE, ESRE, SSCE and ESCE) taken together only social services expenditure on revenue account and economic service expenditure on revenue account have significant effect on the Net State Domestic Product. The effects of social service expenditure and economic service expenditure on capital account have no significant effect on the Net State Domestic Produce.

(ii) *Elasticity*

In a double-log lag model the estimated coefficients indicate the proportionate change in Net State Domestic Product due to proportional development expenditure incurred last year. Elasticity coefficient of NSDP due to a proportionate change in developmental expenditure is 0.8132. This is significant at 1% level of significance. Elasticities of NSDP due to proportional change in expenditure on revenue account and capital account are respectively 0.8016 and 0.8338. Both of them are significant at 1% level of significance. In multiple regression model developmental expenditure on revenue account has significant effect on the Net State Domestic Product but developmental expenditure on capital account has no significant effect.

Elasticities of NSDP with respect to revenue expenditure on social services and revenue expenditure on economic services are respectively 0.5516 & 0.3033. Here elasticity of NSDP with respect to revenue expenditure on social services is significant at 1% level but elasticity of NSDP with respect to revenue expenditure on capital expenditure on economic services is not significant. Elasticities of NSDP with respect to capital expenditure on social services and capital expenditure on economic services are respectively 0.5568 and 0.2811. Here, elasticity of NSDP with respect to social services is significant at 1% level. In multiple regression model elasticities with

respect to SSRE, ESRE, SSCE and ESCE are estimated. Here elasticity with respect to SSRE is only significant at 1% level and is 0.6291.

(V) CONCLUSIONS

The proportion of developmental expenditure in revenue account has increased and the proportion of developmental expenditure on capital account has decreased over the years. But, the proportions of expenditure on social services in both revenue and capital accounts have increased over the years which implies that proportion of revenue expenditure on economic services and capital expenditure on economic services decreased over the years.

It is worth mentioning that the growth rates of development expenditures and that of their components and sub-components are higher than the growth rate of Net State Domestic Product of Orissa during the period of the study. Developmental expenditures have significant effect on the Net State Domestic Product of Orissa during the period under reference. Net State Domestic Product responds to both developmental expenditure on revenue & capital account with a time lag.

Expenditure on education, health and other social services and economic services are categorised as developmental in nature. However, in Orissa the response is more in the case of expenditures on social services compared to that of the economic services.

TABLE - 1

Composition of Development Expenditure in Orissa.
(in percentage)

	First Period 1970-71 to 1972-73	Middle Period 1982-83 to 1984-85	Last Period 1994-95 to 1996-97
DERE	73.602	74.637	83.587
(a) SSRE	57.316	65.66	60.595
(b) ESRE	42.684	34.34	39.405
DECE	26.398	25.363	16.413
(a) SSCE	9.454	6.153	13.61
(b) ESCE	90.546	93.847	86.39

Note : SSRE, ESRE, SSCE and ESCE are available from 1973-74 onwards and in the first period they are taken for the years 1973-74 to 1975-76.

TABLE - 2

Growth Rates of Development Expenditure and its Components

Types of Development Expenditures	Growth Rates (in percentage)
Total Development Expenditure	15.50
1. Revenue Expenditures	15.81
(a) Social Services	15.42
(b) Economic Services	14.56
2. Capital Expenditures	14.31
(a) Social Services	15.36
(b) Economic Services	13.23
Net State Domestic Product	12.81

TABLE - 3

Effect of Development Expenditures on the NSDP (The Lag Model)

Variables	Linear Models				Double Log Models			
	1	2	3	4	5	6	7	8
Constant	34956 (1.82)	66094* (4.27)	-15723 (0.22)	6305* (3.45)	1.6574* (12.00)	1.8122* (15.14)	2.0739* (9.78)	1.7979* (15.20)
DE	4.6645* (41.60)				0.8132* (28.80)			
DERE		5.6739* (50.33)		5.5859* (19.13)		0.8016* (31.95)		0.9589* (7.99)
DECE			22.872* (11.54)	0.4187 (0.33)			0.8338* (16.80)	-0.1723 (1.34)
Adjusted R ²	0.9852	0.9898	0.8356	0.9895	0.9696	0.9751	0.9154	0.9759
D-W Statistics	1.8256	2.0785	1.6738	2.2215	1.9112	1.6219	1.6723	1.9247

Note : Figures in parenthesis indicate the t-statistics.

* : Indicates significance at 1% level.

TABLE - 4
Effect of Components of Development Expenditures
on the NSDP of Orissa (The Lag Model)

Variables	Linear Models			Double-Log Models		
	1	2	3	4	5	6
Constant	68953* (3.55)	42437 (0.56)	68784* (2.79)	1.7879* (14.51)	2.6723* (8.06)	1.8367* (8.75)
SSRE	5 6261* (5.18)		5.2371* (4.22)	0.5516* (3.59)		0.6291* (3.75)
ESRE	5.7146* (3.37)		5.6888* (3.17)	0.3033 (1.87)		0.3412 (1.89)
SSCE		143.03* (3.95)	11.387 (0.73)		0.5668* (3.43)	0.0075 (0.07)
ESCE		7.5553 (1.47)	-0.2994 (0.15)		0.2811 (1.53)	-0.1393 (1.25)
Adjusted R ²	0.9875	0.8733	0.9866	0.9781	0.9188	0.9778
D-W Statistics	2.1254	1.9243	2.2404	1.8177	1.7227	2.0955

Note : Figures in parenthesis indicate the t-statistics.

* : Indicate significance at 1% level.

Financing Development in Orissa

Problems And Prospects

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Introduction :

Orissa, a coastal state along the Bay of Bengal on the eastern side of Indian peninsula, comprises 4.74% of India's landmass with 31.66 million people, 3.74% of the population of the country. About 87% of the population live in villages. Scheduled castes and scheduled tribes constitute 16.20% and 22.21% respectively of the total population of the state (1991-Census). The state lags the rest of the country on most social indicators like literacy (51.2%), infant mortality rate (9.6%) and poverty head count ratio (48.7%). The per-capita income was only Rs 1634 compared to all India average of Rs 2608 (80-81 prices) for the year 1995-96. Since 1980-81 the state's income has registered an annual growth rate of 3.19% which is less than the national growth rate. As a result the gap between the state per capita and the national average has widened over the years. The unemployment situation in the state is very bad. The backlog of unemployment was estimated to be 9.19 lakhs in the beginning of the year 1997-98. The dependency ratio is quite high. The main workers mostly constitute the cultivators (44.13%) labourers (28.68%), household workers (31.13%) and others. This speaks of the disadvantaged groups sheltered in the state.

Orissa is also underdeveloped in terms of infrastructure. On most measures it lags the all India average. It suffers from a particular lack of railways and telecommunication infrastructure. Agriculture which is considered the mainstay of the people has shown the slowest growth of 1% only over the period 1987-88 to 1997-98. Industries which are expected to accelerate the pace of growth are yet to make any dent. In a nut shell Orissa continues to be poor and underdeveloped by all standards even after 50 years of independence. This is needless to say that we have miles to go in order to change the economic scenario of the state. However, this may be possible by large-scale investment in all

the sectors. Investment in a big way requires huge finance in which the state appears to be very weak and deficient. The present paper makes a modest attempt to analyse the problems and prospects of financing development in Orissa.

Objectives :

The requirements of development in a low income state like Orissa include not only continued economic growth but much more besides. Apart from capital formation and technological progress, certain changes are required in the social and institutional settings which have been both causes and effects of a low level of economic development. Since the government has an important role to play in all these ingredients of development and the prevailing psychology is that the state is the primary engine of growth, the objective of the present work is to discuss the position of the state government in financing the development plans of Orissa.

Data and Methodology :

The present work makes use of only secondary data collected from the Finance Department, Govt. of Orissa and Directorate of Statistics and Economics. Simple statistical tool has been used for calculating the trend growth rate of different variables.

The time period for which the trend growth rates are calculated is from 1990-91 to 1999-2000.

Result and Discussion :

The various sources of finance which merit discussion in the context of development of Orissa are as follows.

- (i) State's own resources.
- (ii) Resources transferred from the centre
- and (iii) Borrowings.

STATE'S OWN RESOURCES :

The state's own resources have continuously increased from Rs. 869.9 crore in the year 1990-91 to Rs. 2971.7 crore in the year 1999-2000. This shows a trend growth of 5.74%. In order to know the nature of this growth, it is imperative to look to its constituents.

State's own resources include both tax and non-tax revenues. State's own tax revenue consists of land revenue, rates of cess, tax on agricultural income, stamps and registration fees, state excise duties, tax on vehicles, taxes and duties on electricity, taxes on goods and passengers, entertainment tax and sales tax. On the other hand state's own non-tax revenue comprises income in lieu of general services, social

and community services and economic services; income from forest, interest dividends and profits from public enterprises.

The State's own tax revenue which was Rs. 668.8 crore in the year 1990-91 has continuously increased and stands at Rs. 2086.6 crore in the year 1999-2000. This has registered a trend growth of 5.79%. Moreover, the per capita state's own tax revenue has also gone up from Rs. 211.6 in 1990-91 to Rs. 557.9 in the year 1999-2000. When looked at different constituents of states own tax, a similar pattern is observed, with sales tax contributing maximum followed by state's excise duties. It is to be noted here that there is no tax on agricultural income and the income from rates and cess on land is quite low and volatile during the reference period. Income from land revenue is almost stagnant. The same is also true of the income from stamps and registration fees.

So far as state's non tax revenue is concerned, it is found that the amount has gone up from Rs. 201.1 crore in 1990-91 to Rs. 885.1 crore in 1999-2000. The trend growth is 5.73% during this period. The income from general services has increased from Rs. 21.9 crore in 1990-91 to Rs. 161.3 crore in 1999-2000. The income from community and social services has gone up from Rs. 22.4 crore to Rs. 47.0 crore and in case of economic services the corresponding figures stand at Rs. 39.2 crore and Rs. 502.9 crore during the same period. Income from forests has increased from Rs. 109.1 crore to Rs. 120.0 crore while income from interest, dividends and profits has increased from Rs. 8.5 crore to Rs. 53.9 crore during the study period.

The fact is that state's own tax revenue works out to be only 4.9% of the Gross State Domestic Product (GSDP) compared unfavourably to that of 7.3% of the 14 major states and 6.4% of the country as a whole during 90-91 to 97-98. At the same time own non-tax revenue as a percentage of GSDP stands at 2.5% compared favourably to 2.2% of the country during the same period. Thus it is evident that while the state's performance is unsatisfactory with regard to the former, it fares relatively well in case of the latter. It may be said here that though its own tax revenue is third lowest among the states, its position is helped by good non-tax revenue, particularly on account of mining royalties.

RESOURCES TRANSFERRED FROM THE CENTRE :

It is observed that the total amount of resource transfer from the centre which was Rs. 1301.0 crore in the year 1990-91 has steadily increased to Rs. 3224.6 crore in the year 1999-2000 registering a trend growth of 3.98%.

Resources transferred from the centre consists of shared taxes and grants and contribution. Shared taxes include union excise duties, taxes on income other than corporation tax and Estate duty. Grants in aid from the central government is subdivided into (i) statutory grants and (ii) other grants. Grants received from the Finance Commission under non-plan schemes comes under the purview of statutory grants. Other grants-in-aid include grants for meeting plan deficits, social welfare schemes, irrigation, navigation, community development projects, national extension services, public health, family welfare, grants in lieu of tax on railway passengers' fares, assistance for natural calamities and relief and rehabilitation of displaced persons etc.

It is also observed that the shared tax which was Rs. 694.1 crore in the year 1990 is found to have continuously increased during the reference period and in the year 1999-2000 it stands at Rs. 1828.5 crore. The trend growth during the period is 4.49%. While the share in excise duties has increased from Rs. 525.8 crore in 1990-91 to Rs. 1047.0 crore in 1999-2000, the share in taxes other than corporation tax has increased from Rs. 168.3 crore to Rs. 781.0 crore during the same period. But there seems to be no income share from the estate duties. The share from excise duties is observed to be more in comparison to the share receipts from the taxes on income.

It is heartening to note that the state's share in central taxes as a percentage of GSDP stands at 6% in comparison to only 3% for the country as a whole. Similarly central grants as a percentage of GSDP works out to be 4.5% in comparison to 2.5% of the country. It is found that Orissa is the second highest beneficiary of central assistance just behind Bihar. From the above analysis one can imagine how far the state is dependent on the centre. Orissa's favourable treatment in respect of grants is a reflection of the transfers mandated by the quinquennial Finance Commissions which favour poor states.

BALANCE FROM CURRENT RECEIPTS

It is evident from the above figures that the total revenue (own revenue plus central transfers) which was Rs. 2170.9 crore in the year 1990-91 has zoomed to Rs. 6196.3 crore in 1999-2000. The trend growth during the period is seen to be 4.47%. As a percentage of GSDP the total revenue of the state is calculated to be 17.9% as compared to 15.1% of the major states and 14.1% of the all India average during 90-91 to 97-98. At the same time it is found that the revenue expenditure which was Rs. 2190.5 crore in the year 90-91 has jumped to Rs. 8061.9 crore in 1999-2000 registering a trend growth of 6.1%.

Due to unbridled rise in revenue expenditure the revenue deficit has increased from Rs.19.6 crore in 1990-91 to Rs. 1865.6 crore in the year 1999-2000. The trend growth rate in revenue deficit is maximum i.e 14.52%. This indicates that the state's fiscal situation has been increasingly deteriorated during the period under study. This is also vindicated by the escalating fiscal deficits.

BORROWINGS :

It is observed that the borrowing of the state government has substantially increased during 1990-91 and 1999-2000. It has increased from Rs. 1393.4 crore in 1990-91 to Rs. 4075.2 crore in 1999-2000. The borrowing has increased almost three times during this period. It is found that a major part of the borrowed funds meant for capital formation is diverted towards filling the gap in revenue account. Fresh borrowings are made to pay back the previous borrowings. This has led to increasing debt servicing liability. If this trend is not reversed, then the state will be dragged into a debt trap. Thus it is manifest that financing development by borrowing is not easy given the fiscal situation of the state.

SUGGESTIONS :

On the basis of the above discussion the following suggestions may be of great use to our planners and policy makers to find ways and means so as to carry on the development work in the state. On the one hand the government has to tap the resources where there is scope without putting additional pressure on the economy. On the other hand the government should efficiently & prudently manage fiscal activities so that the burden is lessened. In particular the following recommendations may be noted.

A : 1. Since own tax revenue seems to be low there is a need for tax reforms in the state.

- (a) The sales tax has now been equal across the states. The government cannot raise such taxes on commodities sold in order to raise its own revenue. There is the need for strengthening administration in preventing evasion which is widespread in the state.
 - (b) Measures should be taken to phase out sales tax incentives, beginning with incentives under 1989 industrial policy.
- 2.** There is the need of developing a new excise policy to
- (a) Combat evasion at the macro level.
 - (b) Strengthen monitoring of enforcement by excise officers and to link their promotion with their performance.
 - (c) Reduce rates on foreign liquor to compete with country liquor.

3. It is high time to revamp the stamp duties in the state. Particularly the rate may be rationalised which is already high. There is also the requirement of introducing guidelines for valuation verification.
4. Reviewing mining sector to find scope for rising more revenue.
5. Introduction of a professional tax may also be tried.
6. Bringing agricultural income into the tax net may be suggested to tide over the fiscal situation.

B: To reduce the unsustainable fiscal deficit there is the need of adjusting and strengthening expenditure management. This will result in increasing productivity of government spending.

1. It may be suggested to down size the civil service which involves,
 - (a) Abolition of posts and rationalisation of functions.
 - (b) Reviewing feasibility of voluntary retirement scheme (VRS) for certain classes of civil servants.
2. (a) Improving the techniques of budgetting to identify potential budgetary saving.
 - (b) Increase financial accountability including auditing functions.

C: Sectoral Reforms: There is the need of accelerating sectoral reforms currently under way to promote growth and contribute to fiscal balance.

1. In the agriculture sector there is the need,
 - (a) to set up a committee to investigate causes of low agricultural growth and suggest remedies.
 - (b) to legalise tenancy with appropriate laws.
 - (c) to develop pro-poor forestry policies and liberalise the marketing practices.
 2. In the social sector there should be measures,
 - (a) to increase cost recovery in higher education and health services.
 - (b) to improve targeting and monitoring of social sector spending for greater effectiveness.
 3. There is an urgent need of reforming the public sector enterprises with specific suggestions to
 - (a) sell additional stake of Orissa Power Generation Corporation.
 - (b) closing or privatising the loss-making units.
 4. Development of new roads policy with private sector participation in transport sector.
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FINANCING OF STATE PLAN IN ORISSA

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Poverty in the midst of potential plenty constitutes the paradox of Orissa's economy. Orissa continues to be one of the less developed states with 48.6% of its total population still reeling in abysmal destitution as per Planning Commission estimates of 1993-94. The developmental efforts of the State have remained largely trapped in this vicious circle of poverty on account of stagnant agriculture and slackening industrial production. In order to dismantle the vicious circle of poverty and to get rid of the low level equilibrium trap, a big push in terms of massive capital investment is inevitable. Since the scope for mobilisation of State's resources is somewhat inelastic, desired level of investment can be achieved only if substantial resources are mobilised from outside the State's economy. With a view to ensuring a larger flow of foreign & domestic private investment, it will be imperative to devote greater attention to the development of social and economic infrastructure. Development of a State largely depends on its financial resources. Although the availability of per capita own resources has improved from Rs. 233.95 in 1989-90 to Rs. 849.06 in 1999-2000, however the relative position of Orissa among different states is low. The per capita own revenue of Orissa was Rs. 584.5 as against Rs. 2935.6 of Haryana, Rs. 2366.9 of Punjab and Rs. 1816.5 of Maharashtra in 1996-97. Resources transferred from the Centre to the State through shared taxes, plan and non-plan grants have not been able to correct this imbalance. The proportion of revenue deficit to State Gross Domestic product has increased from 1.1% in 1988-89 to 3.2% in 1996-97. There is need for proper resource planning to improve the resource position of the state.

To visualise the resource position of the State it is imperative to analyse State's own tax revenue, shared taxes, own non-tax revenue and resources transferred from the Centre. The break up of revenue receipt of the State from 1985-86 to 1999-2000 is given below.

The percentage of own tax revenue to the total tax revenue of the State constituting 50.93% in 1985-86 decreased to 46.15% in 1996-97 but increased to 53.3% in 1999-2000. State's tax revenue as percentage of total revenue receipts which was 59.7 in 1985-86 increased to 67.8 in 1996-97 but declined to 63.2 in 1999-2000. Grants from Centre to Orissa as percentage of non-tax revenue constituting 65.6% in 1985-86 declined

to 65.06 per cent in 1996-97 and declined to 61.2% in 1999-2000. State's own tax revenue as a percentage of total revenue receipt of the State constituting 30.4% in 1985-86 increased to 31.3% in 1996-97 and increased to 33.7% in 1999-2000. However the percentage contribution of State's own tax revenue to total revenue receipts has almost remained static over the time span which is a major concern for the State economy.

Major components of State's own tax revenue are mentioned in the table below.

TABLE - 1
State's Own Tax Revenue. (Rs. in Cr.)

Year.	Land rev.	State's Excise duties.	Tax on vehicles.	Tax on Electricity.	Sales tax.	Total own tax Rev.
1985-86	7.3	21.6	25.3	49.8	248.4	285.9
1990-91	9.9	45.6	52.3	98.8	354.6	668.8
1999-00	35.9	220.6	196.0	151.0	1265.0	2086.0

Source : Orissa Budget 1994-95 and 1999-2000.

From the above table it is evident that the percentage contribution of State excise duties to state's own tax Revenue which constituted 7.6% in 1985-86 increased marginally to 10.6% in 1999-2000. The contribution of Sales Tax to State's own tax revenue which was 51.9% in 1985-86 increased to 60.6% in 1999-2000. Sales tax in fact has been more buoyant than the State excise duty over the time span.

State's own resources comprise State's own tax revenue and own non-tax revenue. State's own resources from 1985-86 to 1999-2000 are mentioned in the table below.

TABLE - 2
States own resources (Rs. in Crore)

Year	State's Own Tax	State's Own non-tax	Total State's own resources
1985-86	285.9	130.6	416.5
1990-91	668.8	201.1	869.9
1999-00	2086.0	885.1	2971.7

From the above table it is seen that the contribution of State's own tax revenue to total state's own resources constituted 68.6% in 1985-86 but increased marginally to 70.2% in 1999-2000. Thus the percentage contribution of State's own tax to State's own resources has been more than that of State's own non-tax revenue over the years. The percentage of State's own resources to total revenue receipts of the State which was 44.3 in 1985-86 increased to 47.9 in 1999-2000. This implies that the percentage contribution of State's own resources has been less than that of shared taxes and resources transferred from Centre to the State. The percapita State's own resources which were Rs. 157.76 in 1985-86 increased to Rs. 782.03 in 1999-2000. The percapita State's own tax revenue which was Rs. 108.3 in 1985-86 increased to Rs. 557.9 in 1999-2000.

Resources transferred from Centre to Orissa along with State's own resources are presented in the table below.

TABLE - 3

Year	Shared Taxes	Grants & contribution	Total resources transferred to State	State's own resources	Total Tax Rev.	Total Rev. receipts
1985-86	275.5	248.8	524.3	416.5	561.4	940.8
1996-97	1566.0	897.0	2463.0	1823.8	2908.0	4286.8
1999-00	1828.5	1396.1	3224.6	2971.7	3915.1	6196.3

From the above table it is evident that the percentage of shared taxes to total resources transferred to State constituted 52.5% which increased to 63.6% in 1996-97 but declined to 56.7% in 1999-2000. The percentage of total resources transferred to State to total revenue receipts of the state constituting 55.7 at the commencement of 7th plan increased to 60.5 at the commencement of 8th plan, decreased to 57.4 at the end of 8th plan and further decreased to 52.0 in 1999-2000.

For the effective implementation of five year plans in Orissa there has been mushroom growth of public expenditure. But the percentage of developmental expenditure to total expenditure constituting 68.5% in 1985-86 remained at 68.4% in 1989-90 declined to 65.2% in 1996-97 and further declined to 60.9% in 1999-2000. Thus the trend of developmental expenditure has been gradually plummeting whereas non-developmental expenditure has exhibited upward trend. The percentage of non-plan non-developmental expenditure to total non-developmental

expenditure has increased from 66.1 in 1985-86 to 89.7 in 1996-97 and declined marginally to 88.0 in 1999-2000.

The sources of finance from which funds will be made available for financing State annual plan from 1996-97 to 1999-2000 are mentioned in the table below.

TABLE - 4
Financing of State Plan (Rs. in Crore)

Items	1996-97	1997-98	1998-1999	1999-00
(1) Balance from current receipts	(-)151.71	(-)444.9	(-)826.0	(-)1384.6
(2) Marketing borrowing (Net)	344.07	416.3	416.3	514.7
(3) Upgradation Grant (TFC)	82.59	89.5	96.4	173.6
(4) State provident fund (Net)	326.00	452.0	650.0	800.0
(5) Share in small savings	250.00	260.0	275.0	290.0
(6) Negotiated Loan	128.63	116.1	177.7	217.9
(7) Misc. Capital Receipt	(+)157.56	10.7	403.7	243.5
(8) State's own resources	1131.14	899.7	1193.1	855.1
(9) Central Assistance	936.34	1417.3	1491.9	2031.1
(10) Aggregate resources of State Govt.	2067.48	2317.0	2685.0	2886.2
(11) Resources of Public Sector undertaking	120.00	493.0	399.4	423.0
(12) Grand total	2187.48	2810.0	3084.4	3309.2

From the above table it is seen that the balance from current receipts has been negative over the years. Market borrowing has been steadily rising. Govt. is borrowing a significant proportion from State Provident Fund. State's own resources are subject to fluctuation for which Orissa is increasingly dependent on Central assistance. The percentage of Central Assistance to State's aggregate resources has increased from 45.3% in 1996-97 to 70.4% in 1999-2000.

The State Government finances have been precarious in view of the super cyclone which has jeopardised the economy of Orissa and consequently State's own tax revenue will be drastically reduced and

the State will be crucially dependent on Central divisible pool. The implementation of 5th pay commission recommendation for Central Government and State Government employees has further aggravated the fiscal imbalance of Orissa. In view of financial constraint the anticipated large scale retrenchment of Government Servants will cause discontentment among the public.

To effectively tackle the fiscal crisis faced by the State, financial austerity tends to be inevitable. Non-plan expenditure has to be significantly curtailed. Since the present fiscal situation is unsustainable, there is an urgent need for restoring balance between revenue receipts and revenue expenditure. Since the scope for additional taxation is bleak, colossal amount of borrowing has caused the impending debt trap of Govt. of Orissa. To get rid of this aggravation the Eleventh Finance Commission should provide increased amount of Grants-in-aid and there should be increased central assistance.

Financing Development in Orissa: Issues and Constraints

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ABSTRACT

The financial position of the Government of Orissa is bleak. Its critical situation is well reflected in the recent 'White Paper' presented in the State Assembly. All macro socio economic indicators of development, such as, high infant mortality rate (IMR), greater illiteracy, high percentage of people living below the poverty line, traditional/rain-fed agriculture, poor infrastructure in roads, hospitals, schools, railways, drinking water, housing, sanitation facilities etc stand testimony to its precarious underdevelopment. These are amidst plenty of mineral deposits coupled with precious forest resources, large irrigation potential, a long coastline where maritime civilisation had thrived two thousand years ago. Despite the so-called planned economic development during the last five decades or so, yet, the magnitude of poverty and backwardness is staggering. The low productivity of the primary sector coupled with significant fluctuations in the growth rate has pushed annual average compound growth rate downwards to 3.33% in 1997-98 (1980-81 prices). This has resulted in widening the gap of per capita income to Rs. 1292/- in 1996-97 at 1980-81 prices.

The scope for mobilisation of State's own resources for meeting desired level of investment to bridge of the gap needs annual growth rate of NSDP at some 10.0 per cent or so. Though massive investment (both public and private) could reasonably remedy the dismal poverty and could improve upon quality of life, Orissa's present economic status does ill-afford to deploy public resources to catalyse the scale of development we need. The poor financial position is accentuated by (a) Low Saving and Meagre investment; (b) greater debt burden where bulk of it is in terms of interest; (c) increasing salary & pension payments to govt. employees.

Further, a larger inflow of foreign as well as domestic private investment is remote due to the absence of a supportive industrial

policy, entrepreneur—friendly environment, adequate social and economic infrastructure, committed bureaucracy, robust optimism, political will etc. Though, there is need to shift our focus and infrastructure needs to be perceived as an industry for ensuring a sustainable environment for private entrepreneur to enter into lucrative areas like Thermal power, Steel, Aluminium etc., the grass root level situation is not ideal to attract massive investment to cause any substantial change in the economic scenario of the State.

State's fiscal situation is dismal since 1984-85. The growing mismatch between revenue receipts and revenue expenditure over years has made it more critical. In 1998-99 (B.E.) it has reached Rs. 1583.19 crores and may reach Rs. 3000/- crores or so this year. Recurring borrowing to meet growing non-developmental expenditures is on an increase. The magnitude of borrowing now constitutes around 38% of the N.S.D.P.. The phenomenal increase in non-plan expenditure has increased from 38.0 per cent to 70.5 per cent in 1997-98. While non-developmental expenditure is on increase, the non-tax revenue shows a decline. Return to capital expenditure is meagre and so also contribution of the public sector. The revenue expenditures being around 80.0 per cent of the total, the scope for capital expenditure is very much squeezed. Such a trend has successfully countered to developmental efforts of the government and that is how the concerted economic drive has inevitably suffered from. With very high fiscal deficit of nearly 6.0 per cent of the NSDP during 1998-99, the inevitable borrowings may accentuate the position as much as 10.0 per cent of the NSDP. In such a situation the government has two limited options :

- (a) concerted drive to curb revenue expenditure
- (b) drive towards progressive borrowing notwithstanding the capital content of the development plans.

But, it appears that at present, the government is retiring low cost debt every year to acquire high cost borrowing. Therefore, two immediate corrective measures: (a) expenditure reduction & (b) revenue enhancement are indispensable. The tasks are very tough at this critical time though inevitably stupendous.

Here are a few selected social, economic and political barriers in the developmental drive to the government of Orissa at this very critical stage of resource crunch. We present below some issues concerning barriers to and stimulants of growth of the Orissa's economy.

* At the current level of disparities between National per capita & the State per capita, NSDP roughly has to grow by 7.0 per cent at par

with NNP growth rate of 5.5 per cent. More importantly, if the NNPs were to grow at 7.0 per cent, NSDP has to grow at 9.3 per cent and to achieve this level of growth huge private investments as well as reasonably greater amount of public investment are warranted to which possibly at this stage the State very much ill-afford to raise. Thus, financing developmental project is not only difficult but also more challenging.

* The declining trends of lower public investment on social sector; such as education, health, drinking water, housing, sanitation etc. have accentuated poverty in the state and so also deteriorated the quality of life. Further, private investment is meagre on such infrastructures. More regulations and less governance also have caused great deal of difficulty for which the sector suffers from serious setbacks.

* Development funds being scarce, grant of subsidies on recurring basis indeed has distorted rationalisation of plan priorities. As a result, while very often the merit areas have been missed out, the non-merit areas have prevailed upon heavily and have accentuated inequalities.

* Development funds being limited, external sources being inadequate as well as uncertain, large number of medium and major irrigation projects remain incomplete, bulks of precious investible funds remain blocked since the projects remain in disuse and cost escalation causes severe strain on State's exchequer.

* Apart from infrastructural development areas like irrigation, power, banking structure, market network, progressive land reforms and tenant's security measure, supportive industrial policy, an entrepreneur—friendly environment etc. have not been adequately attended to owing to varieties of social, economic and political factors. Inadequate government support, delay in decision making, non-committed bureaucracy, lack of transparency, unsuitable environment for investment etc cause a great deal of hardship to developmental programmes in all sectors of the economy.

* The other crucial area which has received inadequate attention and indeed needs fresh policy intervention is the primary sector whose growth is decelerating over the years despite bulk of dependent population on it. Apart from huge investment on this primary sector, structural changes in land, credit and market need to go simultaneously to yield positive results. It is our firm conviction that once agricultural sector gets the boost in terms of investment, industrial development

and in particular growth of agro-based industries will come up in a big way to raise the socio-economic capabilities of the rural poor.

Therefore, massive investment in the form of a shift of scarce investible funds to this sector and shift in focus are of consideration on priority, so that the benefits of investment in this sector could effectively percolate down to weaker sections of rural population.

* The investment pattern in course of planned economic development on three major sectors has been such that the sectoral growth exhibits a distorted performance. The pattern of shift in sectoral composition of NSDP is a direct result of differential sectoral rates of growth. It is evident that during 1980's the rate of growth of tertiary sector (5.5%) has far exceeded that of the primary (3.3%) and secondary sectors (3.3%). However, both the secondary and tertiary sectors have grown impressively during 1980-81 to 1988-89, while the primary sector and agriculture in particular have grown at a much slower rate (2.3%). But, the average sectoral growth rate during 1980-81 to 1995-96 exhibits a dismal performance at 1.24% in case of the primary sector (agriculture alone at 0.41%) compared to 5.17% and 5.61% in case of secondary sector and tertiary sector respectively.

To conclude, the author says that in the emerging situation of economic liberalisation huge private investment is warranted to this sector to enhance export growth notwithstanding replacement of food output. Therefore, in development priorities, this sector needs special attention (which has been severely neglected in the past) to ensure food security to millions of poor people living in the rural areas whose primary source of livelihood is agriculture. The other areas, which need attention in the context of critical financial situation, are: Expenditure management, Revenue mobilisation, Restructuring of public sector enterprises and drive towards reduction in Revenue Expenditure in order to ensure an effective management of State Finance. In the new millennium, it is time for its leaders, policy makers, development planners, administrators to rethnik with determination to raise the socio-economic capabilities of millions of poor through 'sound fiscal management' as well as 'developmental resource management' so that investments could be maximised (following prioritisation of development programs) since the State financial resources at present are under severe strain.

Financing Housing Development in Orissa

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ABSTRACT

The population in India 1901 was 234 million and in 1991 it increased to 843 million accounting 16% of the total world population. By 2001, this would be 1 billion. Increasing population pressure on land and infrastructure and other ancillary activities create considerable difficulty to the poorer segment of society in acquiring houses. In this context massive investment on housing is necessary. To meet the requirements of the poor, the state can create an enabling environment for attachment of goal of "shelter for all".

The housing shortage in India in 1991 was about 31 million units and would be 41.5 million in 2001. It was about 4.91 lakhs in Orissa in 1981 which would be 28.56 lakhs in 2001. Again 40% existing houses in rural Orissa and 15% of the existing houses in the urban Orissa would require upgradation in the same period.

It is estimated that a total amount of Rs. 184 crores per annum is required for tacking the total housing programme of the state by 2001. The fund includes the construction of new housing units and upgradation of existing housing stock.

In the corporate sector only, i.e., public and co-operative sector, the total funds required for construction of new housing units and upgradation of old ones are estimated to be Rs. 694.12 crores per annum. To fulfil the above requirement in the corporate sector the public financing institutions can finance up to Rs. 145 crores per annum and the state Government can make a budgetary provision of Rs. 37.25 crores.

The public sector through various social schemes has intervened in providing housing to the people. However, the gain from these schemes is marginal. The private households play a dominant role in providing houses for themselves and to the housing market.

The planned development in housing sector has been continuing since the first five year plan. From an annual average of Rs. 1.3 crores during the fourth plan period (1969-74), investment flows in nominal terms was raised to approximately 31.5 crores annually in 8th five year plan and are estimated to have risen further in the current plan period.

This era has also seen emergence of new financial instruments and increasing reliance on financial intermediation in the housing sector. Most notable feature has been the expansion of housing finance institutions which now account for significant proportion of the total housing investment

An depth analysis of housing investment flows over the period, however, shows of following conclusions.

- A. The total investment and the rate at which it has grown have proved to be grossly inadequate in relation to the size of the demand. The result is that the supply-demand gap is larger and going to increase further.
- B. Housing as an investment proportion has a low priority in the financial affairs of the Government. In recent years the sector has typically accounted for less than 2% of government expenditure.
- C. Expenditure on housing is meagre in relation to the rate or level of economic growth and development.
- D. Public sector investment on housing is very small and decreases over the years in relation to the private sector investment and housing.

In this context, the paper dwells on the nature of construction inhibiting the flow of investments into the housing sector.

- (a) The low saving rate.
- (b) Inability of financial services to grow as rapidly as could be expected in view of the growth of the economy.
- (c) Regulatory constraints like land registration system, town development plan approval, rent control etc.

The following measures may be taken to increase housing facility.

1. The nature of housing finance should be highly specialized.
2. Security in the housing financing market should be developed.
3. The rules and regulations in acquiring housing financing should be minimized and liberalized.
4. Financial benefit like tax concession and subsidy on lower income housing finance etc. should be given.
5. The financial agencies should provide housing finance to rural and non-salaried people who are unable to provide security.

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LIST OF PRESIDENTS

<u>YEAR</u>	<u>HOST</u>	<u>VENUE</u>	<u>PRESIDENTS</u>
1968	Ravenshaw College	Cuttack	Prof. Sadasiv Misra
1969	Dhenkanal College	Dhenkanal	Prof. Devendra Ch. Misra
1970	Khallikote College	Berhampur	Prof. Bidyadhar Mishra
1971	Utkal University	Vani Vihar	Prof. Baidyanath Misra
1972	Bhadrak College	Bhadrak	Dr. Chakradhar Mishra
1973	Panchayat College	Bargarh	Prof. R.C. Patnaik
1974	O.U.A.T.	Bhubaneswar	Prof. S.P. Gupta
1975	Kendrapara College	Kendrapara	Prof. H.K. Mishra
1976	S.C.S. College	Puri	Prof. Devendra Ch. Misra
1977	Nimapara College	Konark	Dr. S. Tripathy
1978	Berhampur University	Bhanja Vihar	Prof. Nilakanth Rath
1979	Utkal University	Vani Vihar	Prof. K. Kanungo
1980	G.M. College	Sambalpur	Prof. Pravat Kumar Patnaik
1981	O.U.A.T.	Bhubaneswar	Prof. Dayanidhi Mohapatra
1982	Municipal College	Rourkela	Prof. Bibekananda Das
1983	Ravenshaw College	Cuttack	Prof. Ghanashyam Das
1984	Berhampur University	Bhanja Vihar	Prof. Basudeb Sahoo
1985	Vikram Deb College	Jeypore	Prof. Sanatan Mohanty
1986	Banki College	Banki	Prof. B.C. Parida
1987	Kendrapara College	Kendrapara	Prof. Benudhar Bhuyan
1988	S.C.S. College	Puri	Prof. Gyana Chandra Kar
1989	M.P.C. College	Baripada	Prof. N.P. Patro
1990	Not Held	—	—
1991	Utkal University	Vani Vihar	Prof. Khetra Mohan Patnaik
1992	Sambalpur University	Jyoti Vihar	Prof. Trilochan Satpathy
1993	Ravenshaw College	Cuttack	Prof. Surendra Nath Mishra
1994	B.B. College	Chandikhol	Prof. Adwait Ku. Mohanty
1995	P.N. College	Khurda	Prof. Benudhar Mishra
1996	Paradip College	Paradip	Prof. Gajendra Nath Das
1997	Municipal College	Rourkela	Prof. Jyoti Prakash Patnaik
1998	Govt. Women's College	Keonjhar	Prof. Ajit Kumar Mitra
1999	Talcher College	Talcher	Prof. Binayak Rath
2000	Govt. Women's College	Sambalpur	Prof. Satya P. Das