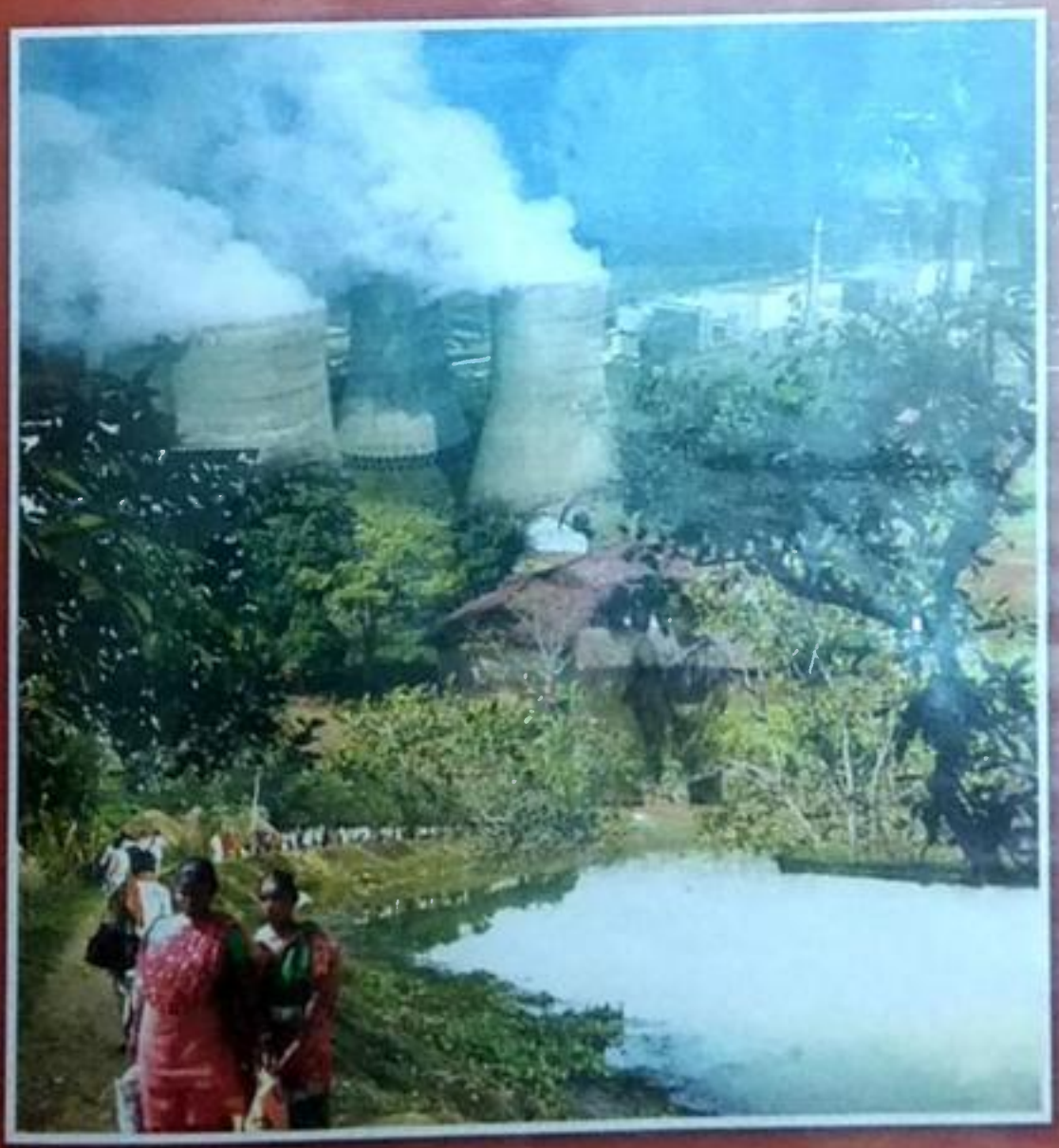
Development Projects and Displaced Tribal : An Empirical Study

Prof. A. B. Ota



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(An Empirical Study to Identify the Livelihood Restoration Status, Impoverishment Risks and Critical Areas for Livelihood Interventions)

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June, 2010

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Preface

Large scale development projects have been taken up throughout the country ever since Independence to usher faster economic growth and development. While some of the projects have been completed, some others are ongoing and still some others are in the pipeline. Various sectors where development projects have so far been undertaken are dam/ irrigation, mining, industrial, urban infrastructure including slum clearance, wildlife sanctuaries, linear projects such as road and railways, defense related projects etc.

Orissa was identified by development planners as one of the most resource rich states conducive for undertaking development projects for which large number of projects of different sectors have been undertaken so far. Conservative estimate has revealed that on account of the completed development projects in the state of Orissa, more than 10 lakh people have so far been physically displaced while more than 40 lakh people have been adversely affected without getting physically uprooted.

Orissa has the unique distinction of being the first state in India to have come up with an R & R package for proper resettlement and rehabilitation of the displaced persons in 1973. Subsequently, the state came up with a comprehensive R & R Policy for the Project Affected Persons (PAP) of the

Irrigation Projects in 1994 following the Operational Directives of the World Bank and it also introduced a comprehensive R & R Policy in 2006 covering the affected and displaced persons of all sectors which is regarded by far the best and most progressive in the country.

Despite the state being a pioneer in the field of formulation of R & R Policy, it is a matter great concern that the Resettlement and Rehabilitation of the displaced and affected persons give a sorry figure. In recent times although MOU for a large number of projects have been signed, due to stiff resistance by the impacted persons most of the projects have been facing rough weather. It is obvious from the above facts that there is some gross problem at the implementation level which is primarily responsible for poor translation of the policy provisions to practice.

The situation is further worse when we look at the status of the displaced tribals. Conservative estimate shows that till the year 2000, about 35% of the total displaced persons belonged to tribal category, but with the coming up of large number of industrial and mining projects in recent times which are going to be set up mostly in tribal pockets, the percentage of displaced and affected in respect of the tribals will be around 80%.

In this backdrop it is extremely essential to take up a diagnostic study on the Displaced Tribals of some of the completed projects to ascertain the livelihood status of the Displaced Tribals in the post displacement scenario, the factors responsible for non-restoration of livelihood of the displaced tribals and critical areas of concern for sustainable resettlement and rehabilitation of tribals. In fact an empirical study was conducted by SCs & STs Research and Training Institute during 2008-09 in 4 completed Development

Projects where majority of the displaced families belong to the ST category. This study has identified the impacts of development projects on the displaced tribals with special focus on their livelihood restoration using the Risk and Reconstruction Model of Prof. Michael Cernea. The study also has identified critical areas of concern pertaining to Resettlement and Rehabilitation of the displaced tribal and the key factors responsible for poor R & R.

The present book is the outcome of the empirical study conducted by the institute and the findings of the study is expected to be useful input for planners, policy makers and agencies/corporate houses involved in the implementation of Resettlement and Rehabilitation of the affected and displaced people in general and tribals in particular. The findings of the study will also go a long way in providing insight to the Corporate Houses and all implementing agencies of development projects having tribal displacement component. The inputs of the study, I am sure will provide extremely useful tips for developing appropriate Resettlement and Rehabilitation Plan which will ensure culturally appropriate sustainable Resettlement and Rehabilitation of the Tribal displaced families.

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Abbreviations

BALCO	Bharat Aluminum Company
BSA	Benefit Sharing Agreement
CIL	Coal India Limited
FGD	Focus Group Discussion
FRL	Full Reservoir Level
GNP	Gross National Product
HAL	Hindustan Aeronautics Limited
ITPS	Ib Thermal Power Station
LA	Land Acquisition
MCL	Mahanadi Coal Limited
NALCO	National Aluminum Company
NGO	Non-Government Organization
NTPC	National Thermal Power Corporation
PWD	Public Welfare Department
R & R	Resettlement & Rehabilitation
RA	Rehabilitation Assistance
RPDAC	Rehabilitation Periphery Development Advisory Council
RSP	Rourkela Steel Plant
S.C	Scheduled Caste
S.T	Scheduled Tribe
TSTP	Talcher Super Thermal Power Station
TTPS	Talcher Thermal Power Station

Chapter - I

INTRODUCTION

Since the days of "Renaissance" in the medieval period and the beginning of the "Industrial Revolution" in seventeenth century Europe, humankind has relentlessly marched on the path of economic progress and development. Economic development of human society and enrichment of the wealth of nations have become the primary goals of mankind. The Industrial Revolution of the eighteenth and nineteenth centuries and the technological revolution of the twentieth century have fostered the idea that modern science and technology is endowed with unlimited power to bring socio-economic transformation in terms of a progressive increase in the Gross National Product (GNP) and material wealth in many parts of the earth. Imbued with this materialistic ideology, human society everywhere in the world is trying to fast-track its economic development goal without pausing to think about the unintended consequences and negative effects of the process among different strata of the human population and other bio-social systems.

The development paradigm in the present day world entails uninterrupted growth of GNP by the application of modern science and technology through the construction of hydropower dams, irrigation and drinking water systems, extension of highway networks, excavation of mines, exploration of minerals and the like. However, this form of development has not been

an unqualified blessing for mankind. On the one hand, it entails involuntary displacement of a large number of people heaping untold hardships and deprivation on them, destruction of the symbiotic relationship between man and nature, increasing environmental pollution, deforestation, loss of agricultural land and marginalization of the poor and weaker sections in the project area. On the other, there is increasing prosperity for a privileged few emanating from the linkage and multiple effects of the project. While the nation at large enjoys the benefits of 'spread effects', the local population in the project area bears the brunt of the 'backwash effects' and the fury of nature. Often, the cost-benefit analysis of development projects concentrates solely on economic loss and gain, completely ignoring the social costs of a project. The belittling of the social aspects of the project invariably causes immense hardship for the locals, ecological imbalance and economic unsustainability in the long run.

1.1 Development Strategy in Independent India

When India got her independence, the country's economy was in doldrums due to long years of colonial exploitation, partition of the Indian sub-continent into two independent nations of India and Pakistan and the consequent communal carnage. Impressed by the success of the Soviet economy under the planned development process, the Government of India adopted the path of State Centered Planning in a mixed economy set up to accelerate the pace of economic development in the country. The focus of the country's First Five Year Plan in the 1950s was on restoration and reconstruction of the truncated economy. The Second Five Year Plan, prepared under the able stewardship of Professor P. C. Mahalonobis, emphasized on development of key infrastructure such as shipping, air and rail transport and key industries like iron and steel, heavy engineering, heavy electricals, machinery and machine tools,

etc. to lay the foundations of a robust and self-sustaining economy led by the public sector. In the years since then, the country has been making sincere efforts to put in place key infrastructure like power and irrigation in all parts of the country for the development of agriculture and industry. Under this development strategy, the Government has laid great emphasis on the construction of multi-purpose dam projects on India's major rivers to generate hydro-electricity at a cheaper cost and to provide agricultural fields located downstream of the river and the water reservoir year-round irrigation through the canal system. It is easy to see why. Power is what drives industry. And irrigation not only increases agricultural output and cropping intensity, but also immunizes crops from the vagaries of weather uncertainties. There is little doubt that the country's food grain production has nearly trebled since independence primarily due to the Green Revolution, which hinged on the construction of a series of multi-purpose river dam projects. A food deficient country in the 1950s and 1960s, it has now earned the status of a net food exporting country with buffer food stocks of more than 20 million tons to meet any possible food shortage and drought conditions in any part of the country. So excited was Pandit Jawaharlal Nehru, the first Prime Minister of India, at the commissioning of Bhakra-Nangal, independent India's first multi-purpose river dam project, that he described it as a 'modern temple'. He obviously believed that building of multi-purpose river dam projects in different parts of the country will not only enable the country to accelerate the pace of agricultural growth by controlling nature's fury such as recurring floods and droughts, but will also lay the foundation of a strong power base in the form of cheap hydro-electricity.

However, it is now being increasingly realized that these mammoth river dam projects are seldom an unmixed blessing to mankind. Building of large dams results in massive involuntary

displacement of people, destruction of prime forests, agricultural lands and - above all - ecological imbalances and degradation of the natural environment. The cost-benefit assessment worked out by the planners of such projects does not take into account the social gains and losses. In any case, such assessments never factor in siltation, which almost always reduces the projected lifespan of the dam. While such projects add to the nation's prosperity at the aggregate level, the socio-economic gains emanating from them are shared in such a manner that it favours a privileged few at the cost of the pauperization and deprivation of the underprivileged sections. Such development affects different strata of population and rural households differently and in different degrees.

1.2 Development and Displacement

In the drive towards rapid economic growth after independence, a number of major developmental projects have been initiated and implemented by both the central and state governments as well as the private sector. These projects include construction of mega Irrigation/Dam projects, Power Plants, Industries, Mining Operations, Linear Projects like roads and railways etc. Though these developmental projects have provided irrigation to parched lands, energy for growing industries and brought about economic prosperity for the country as a whole, they have also caused forced displacement of millions of people - a large number of them belonging to the Scheduled Tribes, Schedule Castes and other backward communities, which have been always regarded as the poorest and the most disadvantaged sections of the society.

The present pattern of development, which is based on the strategy of building large multi-purpose dams and erection of large industries and power plants, excavation of mines,

construction of urban infrastructure projects, linear projects like roads, railways and the like, results in large scale displacement and relocation of human population, destruction of forest and submergence and conversion of farm land into non-farm land. Involuntary displacement is a natural corollary of the present pattern of development. When India and other developing countries gained their independence after centuries of colonial rule, the self-sustaining economic base of the countries had been largely decimated by the western colonial powers. But far from trying to revive the indigenous institutions, the newly formed governments and the elite in these countries blindly followed the western model of development that they inherited from their colonial masters.

The present pattern of development, based on the measurement of GNP-oriented growth, hides the level of inequalities it generates in the economy. Neither does it reveal the injustice that is done to a section of the population in the name of development. The oustees, who invariably belong to the weaker sections, are too powerless to resist this. They get evicted without any participation in the process or a share in the benefits of the development projects that displace them. The rehabilitation measures taken by the Government have so far remained only nominal. Studies have pointed out that less than 25 per cent of those displaced during the three decades between the 1950s and 1970s have been rehabilitated properly (Hansda, 1983:23). According to an estimate of Fernades, Das and Rao (1989), the number of people in India who have been displaced and not rehabilitated properly between 1950 and 1980 is over 11.5 million or roughly 1.45 per cent of the country's population. Unlike the developed countries of the West, the lifestyles and settlement patterns of the people in a pluralistic and multi-ethnic country like India are quite heterogeneous in nature.

Since the onset of the modernization process of the economy and society unleashed in India by the colonial regime, the country has witnessed involuntary human displacement on a large scale to make way for various development projects. However, involuntary displacement of human population during the colonial rule was on a limited scale because the colonial masters were more interested in the exports of precious raw materials and intermediate goods to the European countries via the port cities of Bombay, Calcutta and Madras. So, they took up limited development of road and transport infrastructure in the hinterland and the periphery of a few important urban centres. The need for a higher level of consumption of inanimate sources of energy to run the wheel of industry or to increase agricultural productivity was not felt so much. The colonial Government was mainly interested in the exploitation of precious and scarce mineral resources, intensification of plantation economy and cash crops such as tea, coffee, jute, cotton etc. As a result, displacement caused due to laying of national and state highways, railway lines, exploitation of forests and mines, construction of water reservoirs and dams for irrigation and electricity generation and the like took place on a very limited scale.

Though millions of people have been displaced by various planned developmental projects since independence, the State has not taken the issue seriously. It is only recently that it has promulgated a National Policy on Resettlement and Rehabilitation for those who have been or are going to be displaced on account of development projects for the nation's prosperity. In the absence of a National Policy till recently, the whole process of dealing with the issues of displacement and rehabilitation remained ad-hoc and piecemeal. Various case studies done by scholars show that as many as 75 per cent of the displaced people have not been rehabilitated suitably and their income sources and livelihoods have not been restored properly

(Fernades: 1991, Fernades et.al, 1989). The displaced, who generally belong to the most underprivileged and disadvantaged communities of the Indian Society, are pushed into impoverishment, marginalization and further backwardness in the absence of proper resettlement and rehabilitation.

This is a blatant violation of both the Fundamental Rights - the right to settle and reside anywhere in the county [Article 19 (1) (e)] and the right to life and livelihood [Article 21] and Human Rights (Jai Sen 1995:241). This also implies de-facto lack of social justice and inequality in the involuntary resettlement process. In a welfare state like ours, it is an irony that the benefits of development have not been shared by all sections of society. In the development process that has been pursued in the country, the displaced people only share the pains of development while others share the gains. Needless to say, it is completely contrary to the very goals and spirit of development.

1.2.1 The Planning Era

The process of development-induced displacement has taken a massive leap with the commencement of the planned development process in Independent India since the early 1950s. As mentioned earlier, the Second Five Year Plan, under the guidance of Prof. P. C. Mahalonobis, emphasized on development of large and heavy industries to accelerate the process of economic development. The strategy was mainly based on the Harrod-Dommar growth model, Lewis's two sector model consisting of (i) – traditional rural subsistence sector and (ii) – a highly productive modern urban industrial sector into which labour from the subsistence sector is gradually transferred. This

necessitated the development of key infrastructure projects such as big dams for water electricity, large scale exploitation of forests and mines, setting up of many basic and capital goods industries in the mineral rich tribal and hilly areas. Predictably, it led to massive human displacement, deforestation and ecological degradation.

1.3 Development Dilemma

Under the present development strategy, involuntary displacement and relocation of human population is inevitable. Modern economic development requires setting up of a large number of hydro-electric projects, thermal power projects, large water reservoirs and perennial canal irrigation systems, vast rail and road networks, intensive exploitation of natural resources such as land, water and minerals and promotion of large and key industries powered by inanimate sources of energy. The setting up of all these development projects requires acquisition of vast amounts of land in a consolidated form in the region or area of their location. Acquisition of forests, human settlements, cultivable land and the like is the key to implementation of these projects. As these projects are essential to accelerate the pace of economic development and to feed the teeming millions in both developed and developing countries and also to maintain the present standard of living of various categories of population in the future too, putting a halt to them is simply out of question. Nor can existing projects be disbanded on the grounds of ecological disruption or massive displacement and dislocation of human population. The remedy perhaps lies in the minimization of the cost of displacement and uprooting of human population by protecting the interests of the weak and vulnerable among the displaced and in the

maintenance of ecological balance with a little modification or alteration in the existing support systems.

1.4 River Dams and Displacement

Immediately after independence, the Government of India went in a big way for building big river dam projects. The logic behind the decision was that dams are useful for flood control, navigation, generation of hydro-electric power and internal water transport, besides being a perennial source of irrigation to boost agricultural productivity and save crop failures resulting from irregular precipitation. Although construction of dams and water reservoirs to create irrigation facility and to meet the potable water needs of the people dates back to the ancient past, construction of large multi-purpose dams in mighty rivers to create an infrastructural base for rapid economic growth is certainly a feature of the modern industrial/urban society. The Government of India has spent hundreds of crores of rupees on construction of multi-purpose dams since the First Five Year Plan to develop the backward agricultural economy of the country and also to increase its hydro-electricity generation capacity.

Between 1951 and 1985, 246 major and 1,059 medium irrigation projects were taken up for execution in the country. Among them, 65 major and 626 medium projects were completed by 1985. During the Seventh Plan, 18 new major and 29 new medium projects were taken up. Further, out of 199 major and 462 medium irrigation projects of an ongoing nature, 16 major and 151 medium projects were reported to have been completed during the Seventh Plan period (Government of India, 1993:421). The major irrigation projects taken up and completed during the period between the First Five Year Plan and the Seventh are shown in Table 1.1.

Table – 1.1

Major Irrigation Projects in India, 1951-56 to 1985-90

Sl. No.	Plan Period	Expenditure (Rs. In Crore)	No. of Projects Taken-Up	No. of Projects Completed
1	First Plan (1951-56)	376	24	1
2	Second Plan (1961-61)	380	23	4
3	Third Plan (1961-66)	576	27	9
4	Annual Plans (1966-69)	30	11	1
5	Fourth Plan (1969-74)	1242	33	9
6	Fifth Plan (1974-78)	2516	73	4
7	Annual Plans (1978-80)	2079	14	1
8	Sixth Plan (1980-85)	7369	41	36
9	Seventh Plan (1985-90)	11107	18	16

Source:

1. *Government of India (1994); India 1993: A Reference Annual, Publications Division, New Delhi, and PP.23-24.*
2. *2. Government of India (1993), India 1992: A Reference Annual, Publications Division, New Delhi, and P.421.*

1.5 Development Induced Displacement and Protest Movements

Involuntary displacement of human population due to building of large dams has always been a burning issue. The country has witnessed several protest movements launched by displaced people, with moral support from environmentalists and social activists, against development projects that are accompanied by massive displacement of human population, submergence of forests and agricultural lands. The ongoing movements of people against the Narmada Valley Project in Madhya Pradesh, Tehri Dam Project in Uttar Pradesh, BALCO (Bharat Aluminium Company) Mining Projects, Baliapal Rocket Launching Projects in Orissa and Koel-Karo Hydro-electric Project in Jharkhand are quite well known. In the past, the oustees of Hirakud Dam, Rourkela Steel Project (RSP), NALCO (National Aluminium

Company), HAL (Hindustan Aeronautics Limited), Rengali Multipurpose Dam Project, Upper Indravati Project and various mining and industrial projects had fought against the location of these projects in their respective regions. The main reasons for such protests were apprehensions about (i) loss of livelihood, (ii) destruction of the social fabric and loss of existing community life, (iii) inadequate compensation for the acquired land and property, (iv) occupational shift and displacement and (v) improper rehabilitation measures by the Government.

1.6 Displacement Effects

A large number of studies relating to the displacement aspect of development projects in India and other foreign countries (Fernandes and Ganguli Thukral, 1980; Karve and Nimkar 1969; Paranjpye 1988; Reddy, 1988; Sawant, 1983; Satrunghna, 1981; Sharma and Sharma 1981; Singh 1990; Mahapatra, 1991; Jaine, 1978; Finsterbusch, 1980; Cernea, 1985; Goldsmith and Hildyard 1984) focus on human problems associated with involuntary displacement such as the complex social and cultural problems inherent in the resettlement process, poorly managed resettlement resulting in increased poverty, the labyrinth of broken communities, broken families, loss of social ties, destruction of life support systems, ecological disorder and so on.

Some of these studies argue that the oustees do not get a fair treatment when they are asked to vacate their own land. Their relatively weak and subordinate position in the Indian social hierarchy means that they have little political or economic bargaining power vis-à-vis other interest groups. A large majority of oustees of development projects in the country belong to lower socio-economic strata and have little political clout or access to national resources (Areeparampil, 1989; Ganguli Thukral, 1989; Fernandes, Das and Rao, 1989). Resettlement results in serious

decline and deterioration of the socio-economic conditions of the oustees. The compensatory mechanism of resettlement measures have failed to restore the pre-project income and land holding size of the relocated families (Centre for Science and Environment, 1982). A study by Lokayan showed that the land-holding size of all categories of oustees reduced by between 53 to 63 per cent during the post-relocation period (Lokayan, 1985). Even the studies of Hirakud dam, by Baboo (1992) and Viegas (1992) clearly show that the oustees have largely failed to regain their lost socio-economic status and community life of yesteryears even years after their relocation. They are yet to overcome the socio-cultural shock. Many of them are yet to be properly integrated into the socio-cultural milieu of the host population in their region of relocation.

In short, a majority of the displaced as well as affected families of development projects in India have failed to restore their pre-project living standards. Most of them have become marginalized and even slipped below the threshold of poverty. A number of empirical studies have shown that the affected families in general and the displaced families in particular have encountered some or all the 8 impoverishment risks (which have been advocated by Prof. Michael M Cernea):

1. Landlessness
2. Homelessness
3. Joblessness
4. Marginalization
5. Social Disarticulation
6. Lack of access to Common Property Resources
7. Increased Morbidity.
8. Food Insecurity

1.7 The Development vs. Displacement Debate

The international debate on involuntary displacement and resettlement has generally followed two broad patterns. One school completely rejects the idea of involuntary resettlement and questions the very legitimacy of development projects that lead to massive displacement of human population and submergence or loss of forests and agricultural land. The other is not totally averse to the commissioning of large development projects causing massive involuntary displacement, but criticizes the quality of specific resettlement operations (Cernea, 1994).

1.7.1 The Negativists

People and researchers holding a negative view of the modern development process argue that most development projects that cause massive involuntary displacement fail to restore the pre-project socio-economic status of the displaced population, notwithstanding several policy measures for their proper rehabilitation. Besides, such projects affect the regional ecosystem adversely due to use of forest and agricultural land for industrial and unsustainable use. According to them, the costs of such projects are often underestimated and the benefits grossly exaggerated. The fact that large multi purpose river dams and reservoirs lead to myriad ecological problems - increasing deforestation leading to soil erosion, sedimentation and silting up of the dam, massive industrial pollution leading to loss of crop yield, salinity and infertility of land and the like – is seldom taken into account while working out the cost-benefit ratio, they point out. They refuse to accept large dams as the only means to combat poverty and malnutrition and ensure health, longevity and prosperity for all.

1.7.2 The Positivists

In contrast, the votaries of large developmental projects like big dams and large industries attribute the lack of proper rehabilitation of oustees to the absence of policy and legal frameworks that clearly define the rights and entitlements of people affected by state imposed displacement in many countries. It is because of this policy vacuum, they point out, that standards are disregarded; arbitrariness sets in and the powerless are victimized rather than being enabled to share in the benefits of the development for which they make great sacrifices. Their sole emphasis is on protection of the interests of the affected people by devising suitable policy measures. As resettlement and rehabilitation require culture-specific and region-specific treatment and one successful model of resettlement cannot be replicated in another region due to divergent socio-cultural systems and ecological set ups, the affected people should be given the right to determine along what lines they want to pursue their own development (Mc Andrew, 1995, Sutton, 1995).

1.8 Rationalization of Present Development Strategy

Those on the side of large development projects hold the view that opposition to development projects on grounds of massive involuntary displacement and ecological disorder is a ruse created by feudal and orthodox elements in the society who are wary of rapid socio-economic transformation and uplift of the downtrodden. According to them, these feudal and parasitic groups create a phobia among the poor about involuntary displacement, loss of livelihood and disruption of socio-cultural ties and incite them to oppose such development projects in every possible manner. As building of multi-purpose dams and large irrigation projects challenge the supremacy of the existing feudal agrarian structure by ensuring regular wage employment for the rural landless and increase in the earnings of small and marginal farmers, many

such projects have witnessed protest movements under the leadership of big landlords, religious institutions and other feudal elements (Chakravarty, 1987). The economic development strategy of many developing as well as developed countries in the contemporary world is based primarily on the setting up of large number of key sector industries and infrastructure projects. Such projects are essential to feed the teeming millions and to maintain the present standard of living of various categories of population in future, goes the argument. Under these circumstances, proposed or new development projects cannot be stopped or discouraged on the grounds of ecological disorder, massive displacement and dislocation of human population unless there is an immediate threat to the survival of the people. If the development strategy in the case of such big infrastructure projects aims at the minimization of the cost of displacement and dislocation of human population and upsetting of ecological balance, then there is very little possibility of a conflict between national interest and the interests of the project affected people.

1.9 Need for the Study

As discussed earlier, most development-displacement-resettlement studies have focused on the deteriorating living conditions and pauperization of the oustees, the inadequacies of resettlement and rehabilitation, lack of basic amenities for the displaced families in the relocation site, lack of opportunity to earn a livelihood for the affected families, loss of community life, breaking of kinship ties and above all non-restoration of the livelihood of displaced families in the post-displacement stage. Very few empirical studies have been conducted on the displaced Tribals, who constitute a significant chunk of the population displaced due to development projects. In the early years of the planning and setting up of many large development projects in India, the displaced people - mostly Tribals - suffered a lot due to the lack of a proper rehabilitation policy, the failure to address

the adverse effects of such projects, mass illiteracy and lack of awareness among them. However, increasing public awareness and governmental concern about the problems of massive involuntary displacement in recent years have forced the project authorities to take all possible steps to ensure better living conditions for the oustees and restoration of their social, economic, cultural as well as religious life.

Orissa is one of the most backward states of India notwithstanding its rich natural resources. Since the commencement of the country's Five Year Plans, the state has gone for setting up of large development projects in the fields of infrastructure and industries. Many multi-purpose river dam projects like Hirakud, Rengali, Upper Kolab, Indravati, Subarnarekha etc. and large industries like Rourkela Steel Plant, National Aluminium Company at Angul and Damanjodi and Hindustan Aeronautics Limited (manufacturing MiG planes) at Sunabeda have been set up at the initiative of the Central government to put the economy on the fast track. But there is no denying the fact that large scale involuntary displacement of poor and weaker sections have taken place on account of such development projects. The findings of many studies relating to displacement and rehabilitation of the oustees in new as well as old resettlement areas present a dismal picture (see, Baboo, 1992; Behura, 1990; Reddy, 1990; Dalua, 1995; Viegas, 1989, Mahapatra, 1992). All these studies point out that the level of compensation paid to the oustees was grossly inadequate and the rehabilitation measures were too *ad hoc* and shortsighted to restore/improve the pre-project living conditions of the displaced.

However, most of these studies have not been able to present an accurate picture of the socio-economic status of oustees in their former habitations (before displacement) vis-à-vis the same in the areas they have been resettled in due to

their exclusive sociological and anthropological orientation. A quantitative assessment of the living conditions of the oustees to measure the degree of change – whether positive or negative – in the post-project period has seldom been attempted.

It is a proven fact that a sizeable proportion of families displaced and affected by development projects belong to the tribal communities. It is also an admitted fact that the problems encountered by tribal families are quite different from those of non-tribals for more than one reason. No R&R Policy – whether it is the 1973 Rengali Dam Project policy or the 2006 Orissa State Comprehensive R&R Policy - has fully addressed the core issues of the displaced tribals. Besides, there has been a paradigm shift in recent times, especially after the promulgation of the Industrial Promotion Resolution (IPR) 2001. Earlier, more than 75% of the displacement was caused by dam/irrigation projects. Since such projects, by and large, are located and feasible in the coastal plains (not undulated) areas, which are mostly inhabited by non-tribals, displacement of tribal people was comparatively less (about 35% of the total displacement). But in more recent times, more than 80% of the ongoing and pipeline development projects are either in the mining or industrial sectors. Such projects have been invariably coming up in tribal pockets since almost all the mineral wealth of the state is concentrated in these areas. Conservative estimates based on the current trend put the percentage of tribals among displaced families in future development projects at as high as 80%. It is crucially important to examine and assess the livelihood restoration status of the displaced and the factors responsible for non-restoration of their livelihood as well as the poor resettlement and rehabilitation of the displaced tribal families in case of completed projects so that the lessons learnt can be used as important tips by the planners and implementing agencies for ensuring a better deal for the displaced tribal families in future.

Chapter - II

BACKGROUND OF THE STUDY

The inventions and applications of modern science and technology for the improvement of the standard of living of human beings have led to many undesirable consequences all over the world. The emphasis of both developed and developing countries on giant development projects such as big multipurpose river dams, thermal power plants, large industries, open cast mines and a host of such mega projects has forced large numbers of people out of their home and hearth and from forests and agricultural land they have been enjoying for ages. Seeking as they do to control nature, such projects have generated serious ecological imbalances and have destroyed the symbiotic relationship between man and nature in quite a few cases.

2.1 Development and Displacement: The Global Scenario

Involuntary displacement and resettlement have invariably accompanied the development process all over the world. People in both developed and developing countries have been victims of the present development model in equal measure. However, it is in the developing countries that it has caused particular concern as the victims in their case are, more often than not, the depressed and marginalized sections of the society. Construction of major hydel dams, irrigation projects and drinking water systems and extension of highways have led to displacement of people from their original habitat in all parts of the world. The beautiful city of Paris today was made possible by the painful relocation of a large

number of people in the 19th century under the firm hand of Baron Haussman. Similarly, the impressive Cross Bronx Expressway in New York led to the slashing of many neighbourhoods and the huge hydro-electronic complexes in Canada uprooted many indigenous groups (World Bank; 1994a). Under the influence of western developmental model, with its emphasis on large projects, people in the developing countries too have been evicted and displaced from their native places in large numbers in order to make way for development projects in their traditional homeland. Involuntary displacement and resettlement of human population have become serious issues of global dimension of late. Many big development projects aimed at accelerated economic growth at the national level have had adverse effects in the form of massive displacement of human population - the marginalized sections, in particular - from their centuries-old habitats. Not only do they get displaced, they also lose their self sustaining livelihood. Statistics on involuntary displacement are not available at the global level. But estimates of displacement caused by development projects in some of the large and important developing countries of the world by Guggenheim and Cernea (1993) reveal that human displacement due to development projects has now taken a serious and critical shape. During 1950-90, nearly 4 crore people were displaced and resettled due to development projects in China and India (Table – 2.1). In other words, an average of around 5 lakh people were displaced annually during this period by such development projects in each of the two countries. Even in less populated countries with lower land-man ratio, displacement is a major problem.

In recent decades, the scale of development related displacement has registered a marked increase in developing countries - particularly in Asia. A 1994 World Bank estimated that at least 10 million people had been displaced for around 300 large dams and another 6 million due to urban development and transport programmes. Another estimate (Cernea, 1994) put the number of people forcibly resettled in the last few decades at 80-90 million.

Developing countries have been investing at the rate of $200 billion annually to provide basic amenities to a fast growing population through construction of multi-purpose dams and creation of essential urban and transport infrastructure.

Table – 2.1

Estimates of National Resettlement Caused by Development Projects

Countries	Time period	Number of People
China	1950-90	20,000,000
India	1950-90	18,500,000
Thailand	1960-77	1,30,000
Brazil	1980-90	4,00,000
Turkey	1980-90	3,00,000

Source:

Roli As Thana (1996) 'Involuntary Resettlement: Survey of International Experience', Economic and Political Weekly, Vol.31, No.24, June 15, p.1469

2.2 Development Projects and Displacement in India

The major developmental projects entailing large scale involuntary displacement of people in India are dams, industries, open caste mines, roads, railways, ports etc. Involuntary displacement existed in the colonial period too. But it intensified manifold after planned development started in the post-independence ear. Although it is difficult to assess the exact size and magnitude of displaced persons in India, a conservative estimate puts the number of people displaced by development projects between 1951 and 1991 at a whopping 213 lakh (Fernandez, 1994). The projects that displaced these people included dams, mines, industries, and wildlife sanctuaries.

Fernandez, Das and Raj (1989) estimated the number of people displaced by development projects in the country to be around 15.5 million by the mid eighties.

The varying estimates by researchers about the number of people displaced by developmental projects at various points of time prove one thing: the nation has failed to keep track of displacement and rehabilitation in the country. Fernandez's estimate underlined two important facts that suggest a definite pattern in displacement in the country. First, as many as 77% of the 213 lakh people estimated to have been displaced between 1951 and 1991 were displaced by river dam projects. Secondly, tribals constituted 40% of the total number of people displaced. (Table 2.2) The estimate also reveals that barely 25% of the people displaced by developmental projects have been resettled by the government or project authorities.

2.3 Development and Displacement in Orissa

Since Independence, a large number of projects have been taken up in Orissa to usher in economic growth and development. The projects undertaken include dam/Irrigation, industrial, mining, urban Infrastructure development and wild life sanctuaries projects, besides linear projects like roads, railways and so on. As per conservative estimates, more than 10 lakh people have been displaced while over 50 lakh have been affected adversely in varying degrees without getting physically displaced by development projects so far. Empirical studies reveal that most of the people displaced by development projects have failed to retain their pre-project living conditions in the post-project period. Many of the displaced have actually slipped below the threshold of poverty.

Displaced tribals, who constitute more than 35 per cent of the total displaced population in Orissa, are the worst sufferers.

Table – 2.2

Displacement due to developmental projects in India during 1951-1990 (in Lakhs)

Type of Project	All DPs	% of DPs	Re-settled	% Resettled DPs	Back-log	% Back-log	Tribals	% of All Dps	Tribals Dps Re-settled	% of Tribals DPs	Back-log of Tirbal DPs	% of Back-log
Dams	164.0	77.0	41.00	25.0	123.0	75.0	63.21	38.5	15.81	25.0	47.40	75.0
Mines	25.5	12.0	6.30	24.7	19.20	75.3	13.30	52.2	3.30	25.0	10.00	75.0
Industries	12.5	5.9	3.75	30.0	8.75	70.0	3.13	25.0	0.80	25.0	2.33	75.0
Wild life Sanc.	56.0	2.8	1.25	20.8	4.75	79.2	4.50	75.0	1.00	22.0	3.50	78.0
Others	5.0	2.3	1.50	30.0	3.50	70.0	1.25	25.0	0.25	20.0	1.00	80.0
Total	213.0	100.0	53.80	25.0	159.2	75.0	85.39	40.0	21.16	25.0	64.23	75.0

Source:

Walter Fernandes (1994). Development Induced Displacement in the Tribal Areas of Eastern India, pp.24, ISI, New Delhi (Mimeo)

A majority of them have been forced into deplorable conditions in the aftermath of displacement necessitated by development projects. A sizeable number of them have migrated out to unknown places in search of livelihood, losing their culture and kinship linkages built over several centuries and generations in the process.

Project based development began in Orissa in the late forties, but gained momentum in the fifties after the implementation of Five Year Plans. The major developmental projects undertaken in the fifties were the Rourkela Steel Plant and Hirakud Dam Project. Hindustan Aeronautics Limited (HAL), Talcher Thermal Power Station (TTPS) and the Balimela Dam Projects followed in the sixties.

During the Seventies, several multi-purpose dam projects like Rengali, Upper Kolab, Upper Indravati and Subarnarekha were started in the State. The Ib Thermal Power Station (ITPS), Talcher Super Thermal Power projects (TSTP) and the National Aluminium Company (NALCO) came up in the Eighties. These projects were established in the resource rich highland districts of the State, which are predominantly inhabited by tribals and other marginalized sections of the society.

These large projects left a trail of unintended adverse effects at the local level. Besides massive displacement, they also led to myriad economic and socio-cultural problems for the oustees.

The extent of displacement caused by development projects in Orissa may be divided into five categories. They are:

(a) Thermal Power Projects;
(b) Industrial Projects;
(c) Mining Projects
(d) Irrigation and Hydel Power Dam Projects
(e) Other Projects

2.3.1 Thermal Power Projects

The large coal deposits in the Ib valley area of Jharsuguda district (erstwhile Sambalpur) and Talcher area of Angul district (erstwhile Dhenkanal) have spawned many thermal power projects in the State.

The Talcher Super Thermal Power (TSTP) project is being executed by the National Thermal Power Corporation (NTPC) and is located at Kaniha near Talcher. A total of 1463.16 hectares of land has been acquired for the project, affecting 940 families in 53 villages in and around Talcher (NTPC, 1993). According to another report, the number of families affected by TSTP at Kaniha is 1632 (Rout, 1999).

The Talcher Thermal Power project (TTPS), set up in 1964, was the first thermal power project in Orissa. It required the acquisition of 205.67 hectares of land and displaced 157 families spread over 17 villages in and around Talcher town in Angul (then Dhenkanal) district.

The Ib Thermal Power Station (ITPS) at Banharpali in Jharsuguda district (formerly Sambalpur) was started in the early 1990s. The project acquired 486.48 hectares of land from three villages, affecting 329 families. Out of the 329, 169 families were fully displaced and evacuated for the commissioning of the project at its present site.

Together, the commissioning of various thermal power projects in the state has led to the displacement of around 1,500 families and acquisition of around 2,155 hectares of cultivable and homestead land. According to a recent estimate, the number of families displaced and affected by Thermal Power Projects is 2426, accounting for 2.60 per cent of the total displacement in the state (Ota: 1999).

2.3.2 Industrial Projects

The major industries in Orissa include the Rourkela Steel Plant, National Aluminium Company's plants functioning at Angul and Damanjodi, Fertilizer Corporation of India plant at Talcher, Paradeep Phosphates Limited at Paradeep, Aluminium Plant at Hirakud, Tata Refractories at Belpahar, Hindustan Aeronautics Limited at Sunabeda and the Ordnance Factory at Saintala. There are plans to construct five more steel plants at Daitari, two at Gopalpur and two aluminium plants in Kashipur. The setting up of these large industries has led to large-scale acquisition of land and displacement of marginalized and downtrodden people - mostly in the backward but mineral rich highland districts of the state.

The Rourkela Steel Plant, set up in the fifties, acquired 7,917.84 hectares of land and displaced 2,464 families from 30 villages in Sundargarh district (Roy-Burman, 1966). According to an estimate by Mahapatra, 1231 (50.37%) out of the 2464 families displaced were tribals and 733 families (30%) were scheduled castes (Mahapatra, 1990). 2741 hectares of land had to be acquired in Damanjodi in Koraput district for the aluminum plant, mining activities and township of NALCO. The project affected 17,678 people in 26 villages, out of which tribals constituted 52.44 per cent, scheduled castes 10.84 per cent and other castes 36.72 per cent (Kar, 1991). NALCO also acquired a further 3877.81 hectares of land in Angul for its smelter plant, captive power plant and township. This affected 3,997 families in 40 villages. Out of the affected families, 12.76 per cent belonged to scheduled castes and 2.78 to scheduled tribes (Fernandes et al, 1992).

The Hindustan Aeronautics Limited (HAL) set up the MiG factory at Sunabeda in Koraput district in 1963. The project acquired 3,764 hectares of land and displaced 468 families from

10 villages (Reddy, 1993). The ordnance factory at Saintala in Bolangir district, established in 1984, displaced 1200 families from 14 villages (Pandey, 1998). The total number of families affected by industries in Orissa is 10,704, which accounts for 11.47 per cent of the total displacement in the state (Ota, 1999).

Clearly, industry has been the second biggest reason for displacement in Orissa. Within the broad spectrum of industry, mineral based industries have caused greater displacement than other industries.

2.3.3 Mining Projects

Among various kinds of mining operations in Orissa, coal mining has caused the maximum displacement. Though mining of iron ore has displaced a large number of people in north Orissa, the exact magnitude of displacement has not been fully documented (Mahapatra, 1960). Hence, we shall restrict ourselves to coal mining operations alone. Orissa's coal deposits are concentrated in two areas - Talcher area int Angul district and Ib Valley area in Jharsuguda district. Coal mining operations in Orissa are carried out by Mahanadi Coalfields Limited (MCL), a subsidiary of Coal India Limited (CIL). By 1994, MCL has acquired 2,576 hectares of land in Talcher area. Twenty three villages in the area were affected by four underground mines while 38 others were affected by five open cast mines (MCL, 1994). In the Ib Valley area of Jharsuguda district, MCL acquired 929.58 hectares of land by 1993 for five open cast mines. These five open cast mines affected 17 villages and 130 families from two of these affected villages were displaced (MCL, 1993).

There are around 600 mines all over Orissa; located mostly in the tribal pockets of the state. It is common knowledge

that exploration of minerals through open cast mines results in displacement of human settlements, felling of forests and acquisition of agricultural land. There is no official record of the magnitude of displacement caused due to mining projects in the state, conservative estimates. But going by the thumb rule that one mine affects the livelihood of an average of around 50 to 100 families in the project area, the number of people displaced by the 600 mines in the state must have been around 50, 000. Worse still, a majority of those displaced belonged to the most marginalized section of the society. As can be seen in Table 2.3, operation of 79 mining projects in Orissa in the period 1950-1993 caused displacement of 3,143 families, accounting for 3.37% of the total displacement in the state. It also required acquisition of 2,427.03 hectares of land. (Ota, 1999).

2.3.4 Other Projects

Development of urban infrastructure, creation of wildlife sanctuaries and construction of roads and railways have also contributed in no small measure to the problem of displacement in Orissa. So far, a total of 12,000 slum dwellers have been displaced from various parts of Orissa. The two wildlife sanctuaries - Similipal Tiger Reserve and Chandaka elephant sanctuary - have displaced 42 and 100 families respectively (Ota, 1999).

Table 2.3 further reveals that various kinds of development projects in the state have together displaced 81,176 families and led to the acquisition of 6.22 lakh hectares of land between 1950 and 1993. But major and medium dam projects have caused the lion's share of displacement in the state. About 65, 000 of the families displaced, accounting for roughly 70% of the total displacement in the state, were displaced on this count. Construction of river dams also required the acquisition of around 6 lakh hectares of land.

Table – 2.3

Magnitude of Displacement due to Various Developmental Projects in Orissa during 1950-1993

Types of Project	No. of Villages Displaced/ Affected	No. of Families displaced/ affected	Total Land Acquired (in ha.)
Mines	79	3143	2427.03
Industries	113	10704	21963.00
Thermal Power	73	2426	3155.31
Irrigation & Hydel Dams	1181	64903	595918.60
Total	1446	81176	622463.94

Source:

Balaji Pandey (1998). Depriving the Underprivileged for Development, ISED, Bhubaneswar, p.116.

2.3.5 Irrigation and Hydel Dams

2.3.5.1 Multi-Purpose Hydel Dams

The multi-purpose hydel dams taken up in Orissa before and in the immediate aftermath of independence were Machhkund, Hirakud and Balimela. Rengali, Upper Kolab and Upper Indravati were added to the list in the 1970s.

Machhkund dam, started in the 1940s on river Dumduma in Koraput district, was the first major river dam project in Orissa. It displaced 2,938 families, out of which 51.00 per cent belonged to schedule tribes and 10.21 per cent to scheduled castes (Mahapatra, 1990).

The construction of the Hirakud multipurpose dam project on river Mahanandi in Sambalpur district started shortly after impendence and was completed in 1957. The project affected 249 villages of Orissa and 36 villages of Madhya Pradesh (Baboo, 1992). About 1, 10, 000 families belonging to 22, 144 families were affected by the project. (Government of Orissa, 1968; Patnaik, et al, 1987). The project submerged an area of 74,300 hectares, which included 23,988 hectares of forestland and 49,888 hectares of agricultural land (Dalua, 1991).

The Balimela multipurpose dam project, constructed in the undivided Koraput district in 1962-63, was an inter-state project of Orissa and Andhra Pradesh. It submerged 17,496 hectares of land in Orissa and 648 hectares in Andhra Pradesh and affected nearly 2, 000 families, most of them tribals. The estimated number of tribal families displaced by the project was 1,507 (79.31%).

The Rengali multipurpose dam project on River Brahmani in Angul district of Orissa (erstwhile Dhenkanal) was started in 1973 and was completed in March 1991. The project submerged 4, 23,000 hectares of land in the undivided districts of Sambalpur

and Dhenkanal. A total of 263 villages from Deogarh, Pallahara and Talcher subdivisions of the said districts were submerged under water. The total number of families affected by the dam was 10,897, out of which 1,710 (15.69%) belonged to scheduled castes and 1,172 (10.75%) to schedule tribes. The rest belonged to general caste Hindu category. Many in the latter category were from the cultivator caste, popularly called *Chasa* in Orissa (Dalua, 1993).

The Upper Kolab multi-purpose dam project on River Kolab in Koraput district was initiated in 1976 and was completed in 1991. It submerged 16,258 hectares of land and displaced 3, 180 families from 53 villages (Status Report on Upper Kolab Irrigation Project, August, 2005). Out of the displaced families, 442 (13.90%) belonged to the schedule caste category and 1, 421 (44.70%) were from the schedule tribes (Government of Orissa, 1993).

Work on the Upper Indravati multi-purpose dam project, which envisaged the creation of a composite reservoir by damming Indravati, Padagoda, Muran and Kapur rivers in undivided Koraput and Kalahandi districts, started in 1978-79. It submerged 11,000 hectares of land in 99 villages (Dalua, 1991). A total of 5,301 families from 99 villages were displaced by the project, out of which 2,223 families (41.94%) were Tribals and 796 families (15.02%) were scheduled castes (Government of Orissa, 1993). The number of people affected by the dam was around 20, 000 in 105 villages going by the World Bank Staff Appraisal Report (Mahapatra, 1990).

The Subarnarekha multi-purpose project is an inter-state project of Orissa, Bihar and West Bengal on the river Subernarekha. The project aims at construction of two major dams namely, Chandil and Ichha dam, which are expected to affect 3,830 families in 36 villages of Orissa. A whopping 3152 (82.3%) of the affected families are STs, 116 families (3.0%) SCs and 562 (14.7%) families belong to other castes

(Government of Orissa, 1990). Together, Ichha and Chandil dams will submerge 2,600 hectares of land in Bihar (now Jharkhand) and around 4,000 hectares in Orissa. The number of families to be affected will be 10,000 in Bihar (Jharkhand) and 1,000 in Orissa (World Bank, 1982).

Further, the three reservoirs created by these two dams in Orissa - namely Jambhira, Haldia and Baura - are estimated to displace 2,483 families in Orissa (Government of Orissa, 1990).

2.3.5.2 Irrigation Projects

Besides multi-purpose dams, people are also displaced by irrigation projects. The Salandi irrigation project at Hadagarh on river Salandi in the district of Keonjhar was completed in 1976. The project submerged 1,229 ha. of land affecting 589 families (Dalua, 1991). A study on the project reports that out of the 589 displaced families, 552 (93.23%) were Tribals (Mohanty, 1984).

The Samal Barrage known as Rengali Irrigation Project in Angul district has submerged 2,888 ha. of land affecting 8 revenue villages including 3 uninhabited villages. Agricultural lands in 30 villages were also affected by the barrage and around 828 families were affected due to submergence caused by the water reservoir (Government of Orissa, 1994). According to another report, the number of displaced families in Samal Barrage is 1,057, out of which 315 families opted for resettlement in colonies provided by the Government and the rest 739 were rehabilitated by other types of rehabilitation packages as provided in the Orissa Resettlement and Rehabilitation of Project Affected Persons Policy, 1994 (Rout, 1999).

In other major irrigation projects like Kanpur, lower Indra, Ib, Lower Suktel, etc. the total number of villages to be affected is estimated to be 122, the land area to be submerged about 30,233 ha. and families to be affected by displacement 9,221 (Dalua, 1991; Government of Orissa, 1993). According to studies

conducted by Government of Orissa, the medium irrigation projects envisaged for implementation under the various plans are likely to further displace an estimated number of 5,889 families in 210 villages and submerge 26,583.60 ha. of land under water (Government of Orissa, 1993; Pandey, 1998). An estimate reveals that till date, Government of Orissa has planned for 70 major and medium irrigation projects. These projects, which have either been completed or are on the verge of completion, have displaced 3.80 lakh persons till now. Among them, S.C. and S.T. population together account for more than 50 per cent of the total displaced people while the STs alone constitute 35 per cent of the total.

The overall picture of displacement in Orissa reveals that till 1995, around 4 lakhs people had been displaced by development projects while dam projects alone have displaced around 70,000 families, which constitutes 75 per cent of the total displaced (Ota, 1999). Besides completed and ongoing projects, there are also a large number of projects in the pipeline. In the first decade of the 21st century, there are about 30 important pipeline projects, out of which 20 are in the non-irrigation sector - mostly power and industrial projects - and the rest in the irrigation sector. If this trend is anything to go by, there is likely to be a shift of development projects from the irrigation sector to the industrial sector in the 21st Century.

2.3.6 Development and Displacement: Interrelated Problem

The foregoing analysis of various types of development projects and their unintended effects in the form of involuntary displacement of human population in the project areas clearly shows that human displacement has now become an inseparable companion of the present mode of economic development. However, when development induced displacement occurs in a populous and developing economy like India, the problem becomes more acute and it gets even more aggravated in the case of backward regions of undeveloped states like Orissa.

Fernandes' (1994) study of displacement and development projects at the all-India level shows that the country has failed to rehabilitate the oustees of most development projects. It is further observed that commissioning of development projects relating to river dams and water reservoirs leads to massive involuntary displacement of human population, destruction of forests and agricultural lands and thus brings in ecological disorder. When the magnitude of displacement is large, it becomes difficult for the government to take proper care of the rehabilitation measures required for the outstee population. In the subsequent sections, we make an attempt to analyze the resettlement efforts and rehabilitation measures followed in the case of development projects at different levels in various parts of the country and the world at lrage.

2.4 Displacement Effects

Most development projects underestimate the displacement statistics and give more importance to the engineering aspect. Displacement causes a great deal of social disorganization, dismantles production systems and community structures, brings economic marginalization, increases poverty and has negative environmental effects. It may be noted that involuntary resettlement occurs due to what is known as the 'push' factor, whereas voluntary displacement or resettlement mostly takes place due to 'pull' factor effects (Guggenheim and Cernea, 1993). Indigenous and tribal people and other marginalized ethnic minorities constitute a large percentage of those who lose their livelihoods due to developmental projects. The impact of development projects upon indigenous people is especially harmful as most of their communities have already suffered centuries of exploitation and displacement, and their remote mountain valley, forest or desert reservations are often their last refuge from cultural obliteration (Mc Cully, 1998).

The adverse effect of displacement is usually the culmination of years of waiting, hearing rumours, and receiving threats. There is usually withdrawal of public and private investment in the reservoir area as a dam is proposed. Thus the people begin to suffer, and banks refuse to give loan. No new educational institution or hospitals are built. Existing facilities may be closed long before people move out of the area. This problem is worse for dams than other type of projects as their gestation period is comparatively longer (Mc Cully, 1998).

Involuntary displacement consists of two closely related issues such as displacement of people and disruption of their livelihood. The complexity of resettlement is that when people are displaced, their production systems are dismantled, kinship system broken and the long established linkages of settlements disorganized. Many jobs and assets are lost. There is marked deterioration of health care system. Links between producers and customers are severed and the local labour markets are disrupted and disbanded (World Bank, 1994a).

When people are displaced, the oustees lose their land (in full or in part), their residential dwellings or both. So, successful restructuring of income and livelihood of the displaced persons needs to be given due importance through proper implementation of rehabilitation plan and packages. When people are displaced from their homeland, their economy and social relationship and ties get affected to a great extent and the effects of such displacement on oustee population, according to Cernea (1994), may get reflected in the form of

(i) Dismantling of production system;

(ii) Disorganization of residential settlements;

(iii) Loss of many jobs and assets;

(iv) Disruption of local markets;

(v) Severance of link between producers and their customers;

(vi) Dislocation of informal social networks such as short-term credit, food security, etc;

(vii) Disappearance of legal organization and formal and informal association; and

(viii) Abandonment of symbolic markets such as ancestral shrines and graves.

The cumulative effect of all these is impoverishment through landlessness, joblessness, homelessness, marginalization, food insecurity, loss of common property, increased morbidity and destruction of social fabric and local economy. It also raises legal issues.

Landlessness is the main form of decapitalisation and pauperization of displaced people, through loss of both physical and man-made capital and assets. Expropriation of land by project authority destroys the principal foundation upon which the production systems, commercial and trade activities and livelihood are based. Joblessness particularly affects urban people. In rural areas, displaced landless labourers, service workers, artisans and small businessmen often have to engage in non-farm activities. Homelessness is temporary for most oustees. Marginalisation occurs when families lose economic power and their economic position moves downward. Loss of access to common property resources (forestland, grazing land, ponds, tanks, riverbeds, etc.) leads to fall in income and livelihood for poor people, particularly the landless and assetless. The main adverse effect of displacement is that the income of oustees is affected to a great extent due to dislocation of economic activities.

2.5 Resettlement and Rehabilitation

Throughout the world, it is found that the efforts of governments to rehabilitate the displaced people in a proper and

integrated manner have been far from satisfactory. The relocation of the displaced people has been flawed in many cases due to lack of proper socio-economic planning. Resettlement measures often fail to restore, let alone improve, the social and economic well-being of displaced people. Often, the resettlement packages provided by the Governments hardly covers 20 to 25 per cent of the displaced population in the true sense of the term. As a result, displacement has always been a curse for the poor and marginalized all over the globe. In almost all resettlement operations, the majority of oustees have landed up with reduced incomes, less land than before, less work opportunities, inferior housing, less access to common property resources such as fuel wood and fodder, grazing land, burial ground, space for woodlot and community pond.

When displaced farmers receive cash compensation for loss of land, it is invariably far lower than the cost of replacement of land. Sometimes, this is because the value of the land is estimated according to outdated tax assessments. At other times, it is because of inflation in the years between the survey of the land to be submerged and the actual payment. Land compensation received may also be insufficient because corrupt officials or other middlemen skim off a cut for themselves. There is a unanimous view that giving land for land is much better option than cash compensation. But even when replacement land has been given, it is often inadequate for similar reasons, as people do not get decent cash compensation and lack legal title to all land they cultivate due to improper land records.

The situation of the Tribals affected by development projects is likely to be more vulnerable in the ongoing and future projects (which are either in the pipe line or are at conception stage). After the promulgation of the historic 2001 Industrial Promotion Resolution (IPR 2001) by Government of Orissa, a large number of Industrial Houses/Business Houses have shown their interest

to set up their projects in the state. With industrial houses eyeing Orissa, there has been a distinct shift towards industrial projects. To put things in perspective, more than 90% of developmental projects, which are ongoing or are in the pipeline, are in the industrial or mining sectors. Unfortunately, almost all such projects are located in the tribal pockets.

It has been estimated that more than 80 per cent of Displaced Families in the pipeline/ongoing projects will be Tribals. In such a backdrop, it is crucially important to undertake an empirical study among the displaced Tribals in respect of completed projects so that their livelihood restoration status and the factors responsible for non-restoration of their livelihood can be identified. Such a study will have a lot of policy implications too in the sense that it will be extremely helpful to come up with specific recommendations for ensuring effective resettlement and rehabilitation of the Tribals. It is expected that such a study will be able to identify the critical issues associated with poor R&R of the Tribals and will help the Policy makers to reformulate and modify their strategy for sustainable Rehabilitation and Resettlement without infringing on the culture of the Tribals.

2.6 Objective of the Study

Keeping the aforementioned facts in view, an empirical study was undertaken on an urgent basis with the following specific objectives:

I. Assess and find out the status of the Displaced Tribals in the post- project period

II. Find out the extent of livelihood restoration of the Displaced Tribals

III. Identify the factors responsible for non-restoration of livelihood of the Displaced Tribals in post-displacement period

IV. Come up on the basis of the findings of the study with specific modifications in the existing R&R strategy, including provision of special packages in the R&R Policy specifically targeted for the Tribals.

2.7 Geographical Coverage of the Study and the Sample

This study covers 4 completed development projects. Two of the Projects are Dam Projects, one is an Industrial Project and the fourth is the Mig Factory. All these 4 Projects are located in Tribal Pockets. A total of 475 Sample Households are covered in this study. Besides, a number of FGDs have been conducted and some key stakeholders interviewed for the study. The four projects, which have been covered in this study, are:

I. Harabhangi Medium Dam Project (Gajapati)

II. Upper Kolab Hydro Electric Project (Koraput)

III. Hindustan Aeronautics Limited, Sunabeda (Koraput)

IV. Mahanadi Coal Fields (Ib Valley) (Jharsuguda)

2.8 Methodology

Various kinds of anthropological and sociological tools have been used for this study. The following are some of the key tools and techniques that have been used for collection of data for the empirical study:

I. Schedule

II. Interview Schedule

III. Case Study

IV. Focus Group Discussion

V. Participatory Rural Appraisal.

Chapter - III

PROFILE OF THE PROJECTS

3.1 Upper Kolab Hydro Electric Project

The construction of Upper Kolab masonry-cum-concrete dam across river Kolab near village Koranga and a small earthen dyke near OSAP Colony, Koraput have formed a reservoir with a storage capacity of 1215 M.cum. at the full reservoir level (FRL) elevation of 858.00 m. The minimum draw down level of the reservoir is EL 844.00 m. with a capacity of 280 M.cum. The water-spread area at FRL and minimum draw down level are 122 sq. km. and 35 km. respectively.

Due to the formation of the reservoir, valuable cultivable land, forests, villages etc. have been submerged requiring large scale displacement of human beings and cattle. Valuable and costly public works e.g. roads, water works, transmission lines etc. have also been submerged or otherwise affected. Before the formation of the reservoir, the following works are to be taken up on priority basis.

1. Acquisition of private, Government and forest land and payment of compensation.
2. Rehabilitation of the affected people.
3. Payment of compensation to different departments for submerging their assets e.g. roads, water works, transmission lines etc.

Displacement of people from their villages is a human problem. In order to consider the problems arising out of the displacement of people, a committee was formed with Revenue Divisional Commissioner (Southern Division) as Chairman to recommend various measures for obtaining approval of the Government.

3.1.1 Land Acquisition and Rehabilitation Problems as Envisaged in the Project

Even though the full reservoir level (FRL) was EL 858.00 m, it was proposed to acquire land and remove habitation up to EL 860.00 m. taking into consideration backwater effects.

Based on the surveys conducted during the investigation period, it was anticipated that 2173 families from 40 villages would be displaced involving a population of 8475. It was proposed to resettle them in the command area of Upper Kolab Irrigation Project, after reclaiming land. Villages with low cost, but good houses were to be set up with all modern amenities like hospitals, schools, community centers etc. The houses were to be first constructed by the project authorities and later sold to the displaced persons at the construction price. Each village was to be connected to the nearest major road by an all weather road. In short, all possible efforts were to be made by the project authorities for the development and well being of the displaced persons.

Some portions of the NH-43, MDR-52 and MDR-55 were also to be submerged and reconstruction of these roads was to be part of project cost.

3.1.2 Acquisition of Land and Property

The first step in this connection was to mark the FRL contour in the field. Levels were carried from the GTS benchmarks available at the dam site. The Central Water Commission had recommended acquisition of land up to EL858.50 m. But it was

decided to acquire land up to EL 858.00 m., which was the FRL as well as MWL of the reservoir. After carrying the levels in the field, the FRL contour was marked on the village map. The work of FRL marking had commenced during October 1975 and was completed in January 1978.

The next work was to prepare land acquisition documents as per the Land Acquisition Act I of 1894.

The following rates of payment were fixed by way of compensation for land, houses, wells, tanks and other structures:

a) Land

Land cost was computed on the basis of the actual sale deed in the locality within 3 years prior to 4(1) notification. An additional market value of land @ 12 per cent per year for 3 years in addition to 30 per cent extra towards solatium charges were also added to arrive at the land cost.

The highest rate paid in the Upper Kolab Project was Rs.8000.00 per acre for paddy-I land in Balda village and the lowest Rs.340.00 per acre for dry land in village Kalchur.

The total land required for the entire project was about 16258 Ha. Except 2.09 Ha. of Private land, all other lands have been acquired. The balance private land is under advance stages of acquisition.

b) Land, Houses, Tanks, Wells and Other Structures

Besides land, houses, wells, tanks and other structures were also submerged for which compensations were paid. The norms followed for Rengali Project were followed in the case of the Upper Kolab Irrigation Project.

c) Government Land

Alienation proposals for 6567.90 acres of revenue land submerged in the reservoir were sent to the Tahsildars of Koraput, Pottangi and Machkund.

d) Forest Land

189.95 acres of forest land spread over 27 villages was submerged in the reservoir. The project work started prior to the enactment of the Forest Conservation Act 1980. Payment of Rs.2, 15,697.20 was made in favour of Divisional Forest Officer, Rayagada for raising compensatory afforestation. Further 2,834 ha. of forest land were reclaimed for establishing rehabilitation camps and Rs.4.62 lakhs paid to Divisional Forest Officer, Nawarangpur towards compensatory afforestation.

3.1.3 Rehabilitation and Resettlement

This is a major human problem in any hydroelectric project and the Upper Kolab Irrigation Project is no exception. Displaced persons usually raise demands, create hurdles and launch struggle to achieve their goal in any project. But since the displaced persons of Upper Kolab Hydro Electric Project were mostly innocent and ignorant tribals, there was little no resistance to land acquisition, evacuation and the eventual completion of the project. But their innocence has failed to lessen the pain and suffering they were made to undergo on account of the project.

In the Project Report (as per initial investigation report), it was estimated that 2173 families of 40 villages involving a population of 8475 people would be affected by the project. But ultimately, 2897 families of 49 villages were affected. Impounding of the reservoir and evacuation work started almost simultaneously in 1984. The details of villages and families affected due to evacuation are given below (Table 3.1)

Table – 3.1

No. of affected villages and families due to evacuation in Upper Kolab Hydro Electric Project

Phase wise evacuation	Year	Reservoir level in mts.	Villages affected	No. of families affected	No. of families shifted to rehabilitation camp
1st Phase	1984 Monsoon	835.0	5	699	23
2nd Phase	January 1985	850.0	21	1410	57
3rd Phase	June-July 1986	850.0	5	78	299
4th Phase	1987	858.0	18	710	
			4	283	147
Total			**53**	**2897**	**526**

The impounding of reservoir started from 29.8.1984 (from initial level, i.e. 816.17 mts) and at the time of commissioning of Unit-I, i.e. 15.3.1988, it was 856.03 mts.

■ Rehabilitation Policy

It was decided by Government that rehabilitation policies adopted for Rengali Project from time to time were to be followed in the case of the Upper Kolab and Upper Indravati Projects. The rehabilitation policy for Rengali Project was adopted by the Government in December 1973. In April 1977, a uniform policy was approved for all major and medium irrigation projects. But this policy was not followed in the case of the Upper Kolab Irrigation Project as the Rengali policy was being followed at the time. The displaced persons of Rengali Project demanded more liberal provisions in the policy, which were conceded by the Government in May 1978.

■ Rehabilitation Package

53 villages of Koraput district were affected by the reservoir and submergence out of which 27 villages were fully submerged. 3180 families - including 1421 families of scheduled tribes, 442 from scheduled castes and 1317 from general categories – were displaced by the project. Demographically speaking, altogether 11,397 people were displaced from their ancestral homes.

The rehabilitation process started in the year 1984 and was completed in three phases. In June 1984, impounding of the reservoir up to a level of RL 835 m was made. Accordingly, five villages with 699 persons were displaced. Only 23 of them opted for the government built rehabilitation colony in Kotpad area. In June 1985, 21 villages, with a combined population of 1410, were evacuated from the reservoir area. Most of them opted for cash based rehabilitation assistance. In the third phase, 20 villages involving 85 families were evacuated from the submergence area by June 1987.

When it was later found that some more areas came under submergence, a second survey was conducted and another 9

villages evacuated from the Upper Kolab reservoir area. Two more were evacuated for construction of the Satiguda balancing reservoir. Project authorities have constructed 7 rehabilitation camps in Kotpad and Borigumma Tahasil of the district for resettlement of the PAPs. Only 526 displaced families, who opted for Govt. sponsored rehabilitation camps, were settled in four camps.

Taking into account various orders and instructions of the Government at different times, the rehabilitation and resettlement measures adopted for the displaced persons of Upper Kolab Project are as follows:

(a) House Sites

Initially, it was decided that each displaced family would be given homestead land to the extent of 0.30 acres free of cost depending on the availability of land. The cost of development of the house sites and village layout were to be borne by the Government. Subsequently, it was decided to increase the ceiling to 0.50 acres.

(b) Agricultural Land

Displaced persons were eligible to get 3.00 acres of irrigated or 6.00 acres un-irrigated land if they were landless or possessed land up to 6.00 acres. For land over and above 6.00 acres held by displaced persons in the submersible area, they were to be given the option either to take compensation or reclaimed land free of salami in lieu thereof subject to a ceiling under the Land Reforms Act. In computing allotment of land in lieu of compensation, 1.00 acre of irrigated land was to be taken as equivalent to 2.00 acres of un-irrigated land. This principle of land for land was also extended, as a matter of liberal policy, to unobjectionable encroachers, which have been recorded.

The cost of reclamation of land was to be borne by the Government - subject to a maximum of Rs.960.00 per acre excluding the cost of compensatory afforestation. Land was to be

allotted free of salami but 50 per cent reclamation cost was to be borne by displaced persons subject to a maximum of Rs.300.00 per acre to the extent of their land being submerged for which they would get compensation. However, if a displaced person got more than Rs.50, 000.00 as compensation, he was to pay the full reclamation cost. Further, if the reclamation cost exceeded Rs.960.00 per acre, the excess amount was to be paid by the displaced persons.

(c) Displaced families who opted for resettlement in existing revenue villages were to be allotted 6.00 acres of un-irrigated land including reclamation cost of Rs.300.00 per acre, if required.

No submergence was to be allowed till rehabilitation facilities were established according to the schedule of submersion.

(d) House Construction

The Displaced persons were provided with (i) free transportation of building materials to new colonies, (ii) building materials by Forest Department at Govt. rate, (iii) free technical know-how to build low-cost houses with fireproof roofing, (iv) facilities of loan for construction of low-income group house.

(e) Common Facilities

It was also decided to extend common facilities to the displaced families and also in the re-settlement colonies as detailed below:

(i) Drinking water wells and tanks in the resettlement colonies as per the following norms
Up to 44 families – One well
45 to 70 families – Two wells
75 to 100 families – Three wells

(ii) One tank in each resettlement village (irrespective of the number of families).

(iii) One number of two roomed school for each resettlement village with less than 50 families.

(iv) Club house for each village

(v) Village road for each village

(vi) Gochar land and land for Smasan (Burial Ground), community facilities and electricity in each resettlement colony.

(f) For compensation of submerged building, wells, tanks, no depreciation was calculated. Compensation was also provided for trees (owned by displaced persons), submerged in the reservoir.

(g) Transit sheds were constructed as part of the project cost for immediate occupation by displaced persons.

But over two decades down the line, most of these promises are yet to be fulfilled.

A displaced family (as per Govt. norm) was defined as a family which would lose its homestead land due to complete submergence in the reservoir. Further, families who lost his agriculture land completely but not his homestead land, was not entitled to rehabilitation benefits. This definition resulted in a number of social problems which would be discussed separately.

■ Some of the Submergence Problems – Solved/unsolved

A number of social and human problems were encountered during the impounding of the reservoir. Some of them were solved at the cost of displaced families while others remained unsolved - making the displaced families suffer forever. Some such submergence related problems are detailed below:

(a) Some displaced families, after shifting to other places of resettlement, found that they would not be compensated for their cultivated land because of its location above FRL. With no compensation in lieu of a precious asset, they hurtled down the road to impoverishment.

(b) During 1st phase of evacuation, only 23 out of the 699 families agreed to move and the rest - i.e. 676 families - were forced to evacuate. The present status of these 676 families is not known to anybody.

(c) To avoid the 1st phase evacuation problem, it was decided to pay Rs.14, 040.00 to each family which opted for self-rehabilitation. Under constant persuasion, pressure and force, only 57 families (out of 1410) preferred to take cash grant and leave their fate at the mercy of almighty. There is no record of the rest 1353 families.

(d) In the 3rd and 4th phase of evacuation, only 299 families shifted to rehabilitation camps (out of 788 families), in spite of constant persuasion ad other methods.

(e) The "Parajapandi" village with about 200 families faced a peculiar problem. After impounding, three sides of the village were surrounded by the reservoir and fourth was covered with hill. Parajapandi village was thus cut off from the rest of the area. After repeated requests by the villagers, the Govt. finally agreed to extend the rehabilitation benefits to them, but their inherent problems still exist.

(f) Doraput and Chikapar villages, with 58 and 14 families respectively, were surrounded by the reservoir on three sides while the fourth was occupied by naval authorities. It was not possible to construct any alternative road link. After a series of requests by the villagers, the rehabilitation benefits were extended to them. But their basic problem is not yet solved.

■ Details of Land affected due to submergence

(a) Agriculture land	21,927.08 acres
(b) Homestead land	267.93 acres
(c) Other Kisam lands (Gochar, Samsan etc.)	533.04 acres
(d) Revenue land	6567.90 acres
(e) Forest land	189.95 acres
(f) No. of villages affected indirectly)	131 Nos. (Fully/ partially/

■ Problem of Rehabilitation Camps

The problems of rehabilitated people were both social and economic. The displaced persons were settled at a distance of 80 to 100 km from their own land, in a completely new environment. No wonder they faced a series of problems. Some of these problems are discussed below.

(a) The problem of water scarcity, especially in Camp No. 4 (both 4 (a) and (b)) is acute and not settled so far. Most of the tanks and wells get dry by February-March every year.

(b) Road links to the camps are very poor.

(c) No electricity connection to Camp No. 4(b).

Facilities Provided in Rehabilitation Camps

3. 2. Mahanadi Coalfields Limited (MCL)

Orissa's coal deposits are concentrated in two regions - the Talcher belt in Angul district, and the Ib Valley Area in Jharsuguda district. Coal mining operations all over the State are carried out by the Mahanadi Coalfields Limited (MCL), a subsidiary of Coal India Limited (CIL). In the Talcher belt, a total of 4,214.38 ha of

land had been noticed for acquisition by 1994 for mining, which included 2,423.60 ha of tenancy land, 1,250.90 ha of forestland and 539.98 ha of Government land. Out of this notified area, the MCL has already acquired 2,576 ha of land, which includes forestland and 322.86 ha of Government land. In the Talcher area of MCL operations, 23 villages have been affected by four underground mines and 38 villages by five open cast mining projects. The latter include one village which has already been displaced, seven that are to be displaced soon, 10 partly affected (some losing their houses only and others only their land) and eight affected in other ways. Twenty-two families, all belonging to other castes (non-scheduled castes) have already been displaced from one village. Some of these 38 villages are, however, uninhabited (MCL, 1994).

In the Ib Valley area, the five open cast-mining projects in operation have affected 17 villages and 130 families belonging to two villages from among them have already been displaced. In all, 1,782.20 ha of land was required for those projects. By 1993, 292.38 ha of land had already been acquired (MCL, 1993).

Table 3.2
Facilities Provided in Rehabilitation Camps

Camp/ Colony No.	No. of Displaced Families Settled				Land Allotted (Acre)	Tanks	Open Wells	Tube Wells	Up School	PHC	Roads in Km. (Kutcha)
	SC	ST	OC	Totals							
4	21	198	43	262	734.23	2	4	4	2	--	24.25
5	3	--	54	57	155.50	1	3	2	1	1	8.0
6	--	--	76	76	286.79	1	3	5	1	--	6.60
7	6	1	124	131	498.47	2	2	4	1	--	20.10
Total	30	199	297	526	1674.99	6	12	15	5	1	58.75

Table - 3.3
Project-wise No. of Persons Affected by MCL

Area	Project	No. of Affected Village		No. of PAP	No. of PAP Shifted	Employment Provided to Land Oustees
Ib Valley	Lajkura	1	Ramudera-I	13		
		2	Ramudera-II	46		
		3	Gourapara	18		
		4	Lajkura Fatak	13	81	221
	Samaleswari	5	Kudopali	138		514
		6	Brajarajnagar	3		
	Lilari	7	Kadalimunda	39	39	50
	Belpahar	8	Charla	154		
		9	Darlipali	160		
		10	Kirarama	5		
		11	Jurabaga	364		965
	Lakhanpur	12	Khuntamahal	11		
		13	Banjipalli	26		
		14	Khairkuni	107		
		15	(Ghanamal)			
		16	Kusraloi	31		

Contd...

Area	Project	No. of Affected Village		No. of PAP	No. of PAP Shifted	Employment Provided to Land Oustees
		17	Tingismal	28		
		18	Ubuda	27		
		19	Darlipali	60		
		20	Chingrigula (Bijapara)	63	70	193
Jagannath	Jagannath	21	Balanda	410		
		22	Purnia	40		
		23	Chandpur	5		
		24	Nakshitraprur	40		364
	Ananta	25	Hensumul	265		
		26	Khandualbahal			373
Talcher	Lingaraj	27	Balugaon	200		
		28	Langijoda	200		
		29	Ambamunda	100		
		30	Nakhetrapur	100		293
Kalinga	Bharatpur	31	Anataberini	269		
		32	Baideswar	22		
		33	Lachhmanpur	40		

Contd...

Area	Project	No. of Affected Village		No. of PAP	No. of PAP Shifted	Employment Provided to Land Oustees
		33	Lachhmanpur	40		
		34	Pabitrapur	--		744
	Kalinga	35	Brahmanabal	175		728
Basundhara	Basundhara	36	Talipara (Tikipam)	132		103
Hingula	Hingula-I	37	Gopalprasad	203		
		38	Kusampal	83		
		39	Anantagadia	15		
		40	Malibandha	10		
		41	Nuamuhi	15		
	Kaniha	42	Jarada	242		
		43	Telisinga	185		
		44	Aditprasad	45		
	Bhubaneswari	45	Hensumul	344		
		46	Jilinda	140		
		47	Naraharipur	187		
		48	Langijoda	178		
		49	Madanmohanpur	92		
Total				**5043**		**4548**

3.2.1 Displaced Households

The Ib Valley Coal Mining Projects

The village Ramudera was close to Brajarajnagar town before its displacement. The rehabilitation colony where its residents have been resettled is situated in Sanjob village, some 2 kms away from the old village and is located close to the town. The resettlement colony, called Madhuban Nagar, is being developed in the revenue village of Sanjob. The land acquisition notification under section 4(1) was issued in 1984, but the people were displaced in 1988. The total numbers of displaced families is 90. Out of the 90 families, 81 have been rehabilitated in the colony and the remaining 9 households will be shifted. They had been shifted in phases. 71 families were resettled in the first phase (1991), 3 families in the second phase (1999) and seven more in the third (2001). Out of the 81 families, 52 belonged to Schedule Tribes, 2 to Schedule Castes and 27 to other castes. The village is dominated mostly by the Kisan and Munda tribes. After displacement, 10 persons were employed in the Orient Paper Mill (OPM) at Brajarajnagar and 72 were employed in coal mines. The old village committee continues to be active in the new colony and looks after the needs of its residents, identifies the problems and resolves them with assistance from the MCL authorities. It also manages educational and other institutions in the colony with co-operation from the residents.

Table - 3.4
MCL Ib Valley (Lajkura Open Cast Project)

Name of the Acquired Village	No. of Family Identified for Resettlement	Name of the Re-settlement Site	No. of Families already received Patta	No. of Families Received Cash Compensation in lieu of Plots	Total Families Resettled	Balance Families to be Resettled
Ramudera-I	13	Madhuban Nagar	0	0	12	1
Ramudera-II	46	-do-	0	0	46	0
Gourpara	18	-do-	0	0	18	0
Lajkura Fatak	13	-do-	0	0	5	8
Total	90		0	0	81	9

Table - 3.5
Land Acquired by MCL in Ib Valley Area

(Area in Acre)

Name of the Acquired Village	Land Acquired through		
	LA Act	CBA Act	Total
Brajarajnagar Town Unit No.-I	450.895	--	450.895
Brajarajnagar Town Unit No.-II	7.781	--	7.781
Bundia	73.25	--	73.25
Chingiriguda	2.31	259.30	261.61
Kudopali	265.21	56.82	322.03
Katapali	26.67	16.14	42.81
Kirarama	29.10	--	29.10
Total	855.216	332.260	1187.476

The following information is recorded about the displaced people of Lajkura Open Cast Project in the official records of MCL:

Date of Notification : 8.3.1984
Total Area Acquired : 160.968 Acre
Agriculture Land :156.514 Acre
Homestead Land :4.454 Acre
Total Compensation Award : Rs.58, 59,003
No. of Project Affected Families : 167
No. of Displaced Families : 90 (81 Resettled and 9 are to be resettled)
No. of Employment given : 221
Year of Shifting : 1st phase 1991 – 71 Households
2nd phase 1999 – 3 Households
3rd phase 2001 – 7 Households

Demographic Profile of Madhuban Nagar Resettlement Colony

Table- 3.6
Total No. of Household and Population in Madhuban Nagar Resettlement Colony

Ethnic Group	No. of Households	Population		
		Male	Female	Total
SC	1	3	2	5
ST	70	150	117	267
OC	31	140	210	350
Total	**102**	**293**	**329**	**622**

The Sub-caste of Schedule Caste is Chamar, Schedule Tribes are Oram, Munda, Khadia and Kishan and Other Castes are Rajput, Gouda, Mali, Keuta (Chudakuta)

Compensation Provided by MCL

By way of compensation, MCL provided 10 decimals of homestead land to each household, @Rs.20,000/- per acre of agricultural land, government evaluated rate of the house at the time of displacement, shifting allowance of Rs. 2000 to each household and job to one person in the household in MCL according to their eligibility criteria. The homestead land provided by MCL is Gochar land, which is not converted to homestead land. The MCL Officials say that the company had deposited Rs.89, 58343 with the Government of Orissa in 1997 for providing land patta in Madhuban Nagar Resettlement Colony (73.249 acres of land). But the Government of Orissa has failed to provide patta to the people to date.

Utilization of Compensation Money

It was observed that most of the oustees of the project used the compensation money in wasteful consumption, social functions like marriage, birth and death rituals, repayment of past debts and the like. In the process of their shifting from the original place of habitation to the resettlement area, a major portion of the cash compensation was spent to meet the pressing consumption needs of the household in a new scenario of high economic and income uncertainty, socio-psychological insecurity and the like. Only a few people utilized their compensation money in house construction.

Dwelling Condition of the Household

The socio-economic condition of the people of a particular place or region usually gets reflected in their dwelling set up. Food, shelter and cloth are the three basic needs of life. Each displaced

household had been allotted 0.10 acre of homestead land in the Madhuban Nagar resettlement colony to construct its own house of choice with provision of separate plots for all adult members of the household. The dwelling conditions of the non-tribals are good: pucca houses with concrete or asbestos roof. But the dwelling places of the tribals are invariably thatched with *khapar* (desi tiles) roof in a bad condition. At the time of the field study, it was observed that this colony is situated near the Lajkura open cast mines. For easier catching of coal, the workers resort to large scale blasting. Blasting causes vibrations in the houses at the Madhuban Nagar resettlement colony and understandably creates panic among the people. The team also observed that a large number of houses have been broken due to blasting.

Basic Amenities Provided by MCL

It is well recognized that access to basic amenities must be an integral part of the strategy not only for alleviating poverty but also for improving the quality of life of the displaced people. Socio-economic development and basic amenities are interdependent. The improvement in socio-economic condition attracts or includes development whereas the availability of basic amenities facilitates the process of growth. The basic amenities facilities provided by MCL to the Madhuban Nagar resettlement colony are School building, Road, Health Centre, Veterinary Centre, Community Centre, Market Complex, Well, Drinking water, Electricity and Worshipping Centre.

School

There is only a Primary School (From Class-I to Class-V) in this colony The School building was constructed by MCL in 1990-1991and classes started in the year 1992. Till now, the school has not been taken over by Government of Orissa. The School is

managed by the Village Educational Committee. MCL pays Rs.50, 000/- per annum towards total expenditure of the school, including the salary of two teachers. There are 77 students in this school while 30 to 40 more students of this colony are going to outside school for their education because of lack of facilities in the village school. Parents want that government facilities like mid-day meals, free book etc should be made available to the village school. But since the Madhuban Nagar Colony School does not provide such facilities, many parents have chosen to send their children to Sanjob Primary School, which is located 1.5 km from this colony.

Table - 3.7

Gender and Class-wise strength of the Madhuban Nagar Primary School

Class	SC		ST		OC		Total		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
Class-I	1	--	7	5	3	1	11	6	17
Class-II	--	--	6	3	2	2	8	5	13
Class-III	--	--	7	4	2	1	9	5	14
Class-IV	--	--	6	5	1	5	7	10	17
Class-V	--	--	9	5	2	--	11	5	16
Total	1	--	26	21	10	9	46	31	77

Anganwadi Centre

An Anganwadi Centre was established in Madhuban Nagar in 1999. The building for the Anganwadi Centre was provided by MCL. An Anganwadi Worker and an Anganwadi Helper were appointed by the Government of Orissa. The total number of beneficiaries of the Anganwadi Centre is 66. Out of this, the number of pre-school children is 18 (male 9 and female 9), 0.6-1 year child 5 (male 3 and female 2), 1-3 year child 33 (male 12 and female 21). Besides, there are also six pregnant mothers and six lactating mothers. Immunization camp is not conducted here; it is held in Sanjob Anganwadi centre, which is near the resettlement colony.

Road

This colony is classified as urban area under Brajarajnagar Municipality. There are 5 lanes of this colony and all these lanes are interlinked with internal pucca roads. One of the lanes of the tribal people, however, is not a pucca road. MCL has provided all these roads. In the absence of any maintenance, the roads in the colony are in a bad shape.

Drinking Water

At the time of resettlement, MCL provided 5 dug wells for drinking water purpose inside the nala. Despite this, people faced a lot of problems for drinking water at the time of resettlement. After a few days, some households dug another well for their requirement. Now PHD supplies water to this resettlement colony but the supply does not cover the whole colony. The people's demand for a pond for bathing purpose has fallen on deaf ears. The people of the colony use the nala for bathing purpose. But in summer, the nala goes dry causing immense hardship to them.

Health Care Centre

At the time of resettlement, MCL provided a building for a health care centre in this colony. But several years down the line, it remains just that - a building - sans doctors, medicines and other facilities. The people pf the colony, therefore, have no choice but to depend on the Brarajnagar hospital for all their health care needs.

Veterinary Centre

There is no veterinary centre in the colony. Neither is there need for one since there is no livestock. There are tow reasons for this. First, none of the residents has any agricultural land. Second, all

that s/he has is a mere 10 decimals of homestead land, which is hardly enough to house livestock.

Community Centre

At the time of resettlement, MCL provided a community centre. But it is not functioning properly.

Electricity

MCL provided electricity facilities to the resettlement colony at the time of resettlement. The number of electricity consumers in the colony is 59. 70 to 80 per cent of the people of the colony use electricity. At the time of resettlement, MCL also provided street lights in the colony, which have since become dysfunctional due to absence of maintenance. Now, the people are demanding that government should provide street lights in the colony again.

Worship Centre

There was a Shiva temple in the displaced village Ramudera. There was stiff resistance by the people when MCL sought to bring it down, forcing the company authorities to announce that the company would construct a Shiva temple in the Madhuban Nagar resettlement colony. But once the resettlement process got over, MCL lost interest. Repeated protests by the residents of the colony did force it to start the construction. After the MCL abandoned the construction midway through, the people had to pool in money to complete the construction.

3.3 Hindustan Aeronautics Limited (HAL)

Hindustan Aeronautics Limited (HAL) came into existence on **1st October 1964.** The Company was formed by the merger of Hindustan Aircraft Limited with Aeronautics India Limited and Aircraft Manufacturing Depot, Kanpur.

The Company traces its roots to the pioneering efforts of an industrialist with extraordinary vision, the late Seth Walchand Hirachand, who set up Hindustan Aircraft Limited at Bangalore in association with the erstwhile princely State of Mysore in December 1940. The Government of India became a shareholder in March 1941 and took over its Management in 1942.

Today, HAL has 16 Production Units and 9 Research and Design Centers spread over 7 locations in India. The Company has an impressive product track record - **12** types of aircraft manufactured with in-house R & D and **14** types produced under license. HAL has manufactured **3550 aircraft** (which includes 11 types designed indigenously), **3600 engines** and overhauled over **8150 aircraft** and **27300 engines**.

Hindustan Aeronautics Limited (HAL), established in Koraput district for the safety and security of the country displaced more than five thousand families from thirteen villages such as Chakarliput, Chikapar, Sunabeda, Chulapadhi, Pangiguda etc. After 50 years, the people displaced beg the question: what about our safety and security? Going down memory lane, 63-year old Gopinath Galari says, "I was 10 years old at the time. The people of my village were asked to vacate their houses as early as possible. There were approximately 1500 houses in our village. They threatened to seal our houses and dismantle them, if we did not vacate them immediately. It was about to rain. The male members were in the field. I went to the field to inform my father and others about it. When we came back, we saw that all the women were standing outside and were trembling with fear. Our houses were collapsing in front of us. All our household articles lay scattered outside. Our houses were razed to the ground by a Tractor. We had never seen a vehicle, let alone a tractor and were scared at the sight of it. Its sound caused panic among the

villagers. Women came out of the house with their children. The village deity Gangamaa's temple was demolished. All collected paddy seeds were forcibly thrown away and the food grains taken away. Prior to this, our houses were set afire twice. We were thrown on the roads with compensation paid at the rate of only Rs.75/- per acre of land. Everybody who lost home and hearth and got physically displaced frantically searched for a shelter for himself or herself. Some people migrated to Maliguda of Nandapur located near the Andhra Pradesh border. But after 15 days of moving in, we were attacked by the Telugu people. We came back and scattered over villages like Damanjodi, Sindhipalli. Damunigudia, Barangaput, Gaudamuda, Sukuriguda, Kantaguda and Aanabali. But we could not stay there for long. We were displaced again when NALCO was established. Like pre-historic men, we wandered from place to place in search of livelihood. When NALCO was set up, we were not included in the displaced list because we did not have any land record with us. In the name of development, we were made refugees in our own land." Anadi Kharpa (69) of Rajupadma village, Anada Kirshani (63) village of Pitampadi, local old ladies named Khinibudi (67), Dasukhara (70), Karuna Kilo (56), Baidehi (67), Nila Kilo (61) revealed that they had taken occupation of some land from the tribal people by paying them money but without entering into a registered deal with them. (The Tribals who sold the land to us did not have any recorded rights but were in possession of these lands for generations). At the time, we hardly knew that we would not get a single pie by way of compensation in lieu of the land purchased on the ground that we did not have records for the same. Since there was no law or provision of Rehabilitation & Resettlement at the time, the displaced people suffered an enormous loss. "We had little option but to accept all this as out fate. We could not even feed our children. We were simply thrown out of our houses with the help of lady police and left to fend for ourselves", they say.

Table - 3.8

Village-wise estimate of land acquired and number of D.Ps identified for HAL, Sunabeda

Name of the Village	Land Acquired (in Acre)	No. of DPs Identified	No. of Families/ Persons Affected	No. of Families/ Persons Resettled
Kaki	917.55	NA	Total 397 Families were affected as their private land has been acquired.	138 Persons who were appointed in HAL are provided with company accommodation.
Chikapara	870.28	NA		
Thalaput	316.58	NA		
Kodigam	166.65	NA		
Chakraliput	44.66	NA		

The number of affected persons provided with employment in HAL was 138. Out of them, 52 were from the Scheduled Caste, 78 Scheduled Tribes and 8 from other castes. The rest have been denied jobs on the ground that HAL is a hi-tech industry and they did not meet the eligibility criteria. They are engaged by Job Contractors to work in the factory and the township.

3.4. Harabhangi Irrigation Project

Harabhangi is a tributary of Bansadhara River. The Harabhangi Medium Irrigation Project was taken up by the Government of Orissa to utilize the state's share of water from the Vansadhara Basin up to Gotta, i.e. 50%. The Project is located about 6 kms North-West of Adava village lying on SH 17 in Gajapati District of Orissa. The Project envisages construction of a 690-meter long Earth Dam across river Harabhangi and an ogee shaped, Gate controlled Spillway on the right saddle to reserve water and then to transfer to Rushikulya basin through a tunnel for Irrigation. The Spillway will have 8 Radial gates of 12m.x9m size with its crest level at 378.5m. An earthen dyke of 120-meter length and 13-meter maximum height is provided on the right side of the spillway. The Dam intercepts a catchment area of 503.8 sq km. The reservoir will have a gross capacity of 14125 ham. of water at its maximum water level of 387.5 meters with live storage capacity of 10,000 ham.

Six villages were affected by the construction of the dam on Harabhangi river (3 fully submerged 3 partly submerged). The position of the Rehabilitation programme and progress is as detailed below:

Fully Submerged

Village Bebiri: RL.381.78M.

It is a fully submerged village. As per the original list, 17 families were enumerated as beneficiaries in the year 1980-81. But at the time of shifting of the families in 1989-90, the number of beneficiaries was put at 21 after re-enumeration. Rehabilitation benefits have been sanctioned and paidas oper the revised estimate. In anticipation of the submergence of the village during high flood discharge, the families were displaced and rehabilitated in the Rehabilitation colony sponsored by the Irrigation Department near Kantahuru village.

Village Pankalguda: RL.363.28M.

It is a fully submerged village. The RL of the village was approximately 363.28m. Originally, 23 families were enumerated as beneficiaries in the year 1980-81, but the number went up to 37 after a second enumeration at the time of shifting in 1989-90. As in the case of Bebiri, rehabilitation benefits were sanctioned and distributed as per the revised enumeration. Out of these 37 families, only five families have been resettled in the Rehabilitation Colony at Kantahuru. The rest 32 families have self-rehabilitated themselves at a higher level above F.R.L. near the old village.

Village Poipani: RL.363.28M.

This village was adjacent to the toe of the Earth Dam at RL.363.28M. All the 4 families of the village were shifted and they have self rehabilitated themselves during 1989-90.

Partly Submerged:

Village Padagam: Av.RL.390.00M.

This is a partially submerged village. The homestead lands are above F.R.L. but the agriculture lands of the village will come under submergence when the reservoir is impounded up to F.R.L. i.e. up to 387.5M. Originally, 29 families were identified as beneficiaries. The number went up to 45 at the second enumeration in 1994.

Village Adapanka: Av.R.L. 385.5M/397.00

This is a partially submerged village. The homestead lands are partly submerged and the agriculture lands of the village will come under submergence, when the reservoir is impounded up to F.R.L. 387.5M. The number of beneficiaries, originally 28, later became 49 after the second enumeration in 1994. Homestead land belonging to 27 of these families will actually get submerged when the reservoir is impounded.

Village Gunduripadar: RL.385.5/390.00M

This is a partially submerged village. The homestead lands are partly submerged and the Agricultural lands of the village will come under submergence when reservoir is impounded up to F.R.L.387.5M. The number of beneficiary families went up from 53 initially to 70 at the time of the second enumeration in 1994. Homestead land of 18 of these families is set to get submerged, when the reservoir is impounded.

Table - 3.9
List of Displaced Families
(Phase wise)

Name of the Village	Family Enumerated															
	As per 1980-81				As per 1990-91				As per1993-94				As on 01.01.94			
	SC	ST	OC	Total	SC	ST	OC	Total	SC	ST	OC	Total	SC	ST	OC	Total
Bebiri	--	3	14	17	--	3	18	21	--	3	18	21	--	3	18	21
Pankalguda	--	19	4	23	--	33	4	37	--	33	4	37	--	33	4	37
Poipani	--	3	--	3	--	4	--	4	--	4	--	4	--	4	--	4
Adapanka	3	25	--	28	4	39	--	43	4	44	--	48	4	45	--	49
Padagam	2	27	--	29	2	36	--	38	2	43	--	45	2	43	--	45
Gunduripadar	3	50	--	53	4	69	--	73	4	63	--	67	4	66	--	70
Total	**8**	**127**	**18**	**153**	**10**	**184**	**22**	**216**	**10**	**190**	**22**	**222**	**10**	**194**	**22**	**226**

Table - 3.10
Amount of Compensation Paid to Displaced
(Village wise)

Name of the Village	Land Acquired (in Ha.)			Total Compensation Paid (in Rs.)
	Govt. Land	Private Land	Compensation Paid (in Rs.)	
Bebiri	141.00	47.705	220,787.50	2,81,414.50
Pankalguda	28.813	0.899	5,673.00	41,707.00
Adapanka	149.071	21.600	113,456.00	1,85,107.00
Padagam	88.402	68.090	349,585.00	4,59,960.00
Gunduripadar	136.382	65.784	311,644.00	4,69,255.00
Poipani	38.480	13.511	34,494.00	34,561.84
Total	**582.148**	**217.589**	**10,35,639.50**	**14,72,005.34**

Forest Clearance

The total area of submergence below F.R.L. 387.5M. i.e. 1215.30 Ha, out of which reserve forest was 535.10 Ha, revenue forest land 410.40 Ha, Private land 185 Ha and Govt. land 84.80 Ha. The Forest clearance was obtained in 1986. But in the meanwhile, there has been re-growth and some big trees need to be cleaned before impounding. The F.A.C. may decide whether these trees would be removed or not.

An amount of Rs.22.11 lakhs has been deposited with D.F.O, Parlakhemundi for raising compensatory afforestation. 535.10 Ha. has also been handed over to D.F.O., Paralakhemundi in the following villages for the purpose.

1. Adava	62.121 Ha.
2. Padagam	16.797 Ha.
3. Rachama	327.065 Ha.
4. Solaguda	129.960 Ha.
Total	535.943 Ha.

Table - 3.11
Details of Rehabilitation Assistance Paid in Harabhangi irrigation Project

Name of the Village	No. of DPs/ PAPs	Rehabilitation Assistance paid as per New/Old Policy				
		Maintenance Allowance	House Building Grant	Agriculture Land Cost	Homestead Land Cost	Total
Poipani	4	24,000	68,000	80,000	--	1,72,000
Bebiri	21	1,26,000	3,57,000	4,20,000	--	9,03,000
Pankalguda	37	2,22,000	6,29,000	7,40,000	--	15,91,000
Adapanka	27	1,62,000	5,40,000	10,80,000	1,08,000	18,90,000
Gunduripadar	70	--	14,00,000	28,00,000	2,24,000	44,24,000
Padagam	28			84,000		84,000
Total	**187**	**5,34,000**	**29,94,000**	**52,04,000**	**3,32,000**	**90,64,000**

R.A. Paid by L.A.O. Chhatrapur Rs.28,06,000

R.A. Paid by Spl. LA & RRO. Rs.62,58,000

Total Rs.90,64,000

Proceedings of the 5th Rehabilitation Advisory Committee meeting of Harabhangi Irrigation Project

The 5th Rehabilitation Advisory Committee Meeting of Harabhangi Irrigation Project was held on 23.4.98 at Adava. The Revenue Divisional Commissioner, Southern Division, Berhampur and Chairman of the Committee presided over the meeting.

The rehabilitation and resettlement matters of the project were discussed in detail and the following decisions were taken.

1. Out of the 159 families displaced by the project, 62 families have been paid rehabilitation assistance as per the old policy while the rest are being paid as per the new policy. 4(1) notification under the Land Acquisition Act for all the 6 affected villages were issued some time in 1984 and compensation was paid as per provisions of L. A. Act. But Rehabilitation assistance was given as per Rehabilitation facilities announced by the Government in 1977. Keeping in view the permissible inflation, the amount of rehabilitation assistance on different items like house, agricultural land and maintenance allowance etc. should have been more than what was provided in 1977 policy. Rehabilitation assistance, in many cases, was paid in the month of September, 1994 i.e. after the announcement of the latest Rehabilitation package by the Water Resources Department in April, 1994. The R.A.C., therefore, resolves to recommend rehabilitation assistance to 62 families as per the 1994 Policy.

2. In the initial stage, Padagam and Adapanka villages were declared as fully affected villages. But subsequently these two villages were excluded from the list due to reduction of FRL of Dam from 390 m to 387.5 m. The villagers of these two villages have been demanding that they be

declared fully affected and rehabilitation assistance paid accordingly. Adapanka and Padagam are affected to the extent of 60% and 68.5% respectively of the village area, which marginally falls short of the required 75% for declaration as fully affected village. So A.R.C. recommends that these two villages be treated as fully affected villages for payment of assistance.

3. NGO SAMMAN is requested to ensure completion of the houses at Adapanka and Jhiliki constructed by DPs before June, 1998.

4. The condition of the diversion road to SH-17 along the reservoir is very bad. R&B was entrusted to take up repair work way back in 1992. The department is now sending a revised estimate asking for an additional amount of Rs.80 lakhs. It is not justified to release further amount to the PWD. Repair of this part of the road, which is about 3-km long, may be taken up by the Project authorities. They may be allowed to take up the repair work departmentally.

5. Adava village, which is very close to the river, is to be provided with necessary protective measures. Connecting road facility on the left side of the river should be provided by the project authorities.

6. The Tahasildar, Mohana will conduct field enquiry on the death of 9 displaced persons of Gundripadar and submit his report to facilitate disbursement of rehabilitation assistance to their legal heirs.

7. Parbati Dalei and Nabin Chandra Patra Marfazdar of Radhakrushna Temple of Adava village have not received the compensation amount towards acquisition of land.

Spl. L.A & R.O. has paid the compensation from available funds. The amount should be duly reimbursed.

8. On enumeration of eligible displaced persons as on 1.1.97, 16 and 4 persons in Gundripadar and Adapanka villages respectively are found eligible.

9. Two L.I. Points are to be provided for irrigating the agricultural land of Adava village out of ITDA and RR Funds.

10. A Fishermen's Co-operative Society is to be formed with Displaced Persons as Members exclusively for taking up pisciculture in the reservoir.

Compliance Report on 5th RAC Proceeding

1. Out of 159 displaced families, 62 families have been paid Rehabilitation Assistance as per old policy recommended by Govt. in 1977. According to that policy, those 62 families have been paid rehabilitation assistance in installments by the Land Acquisition officer, Chhatrapur. These 62 families were paid maintenance allowance in the year 1989. In some cases, they were paid their last installment in the month of September, 1994 towards the construction of their house. These 62 families have been paid as per the old policy. But the rest 97 families, who were rehabilitated after 1994, got Rehabilitation Assistance as per the new policy of 1994. But the 62 families who were rehabilitated earlier are also demanding assistance as per the new policy with. As they are the affected persons of the same Harabhangi Project, they argue, they should be treated equally as per the new policy.

The Rehabilitation Advisory Committee has considered their cases and recommends payment to these 62 families as per the new policy.

2. Land Acquisition for Padagam village has been done taking the top Dam level (390M. RL) into consideration. But later, it was decided that the FRL (387.5M) should be taken as the basis of Land Acquisition. After a joint inspection made by Superintending Engineer, Rayagada irrigation Circle and Deputy Secretary, Water Resources, Department of W.R, it was decided that Padagam will be taken as a partially submerged village as the village is situated at RL.389.30M. RL.

Similarly, Upper Adapanka (22 families) which is situated at RL.395M. is also taken as partially submerged village. The displaced families of Lower Adapanka have also settled near the Upper Adapanka. But as 60% and 62% of Agricultural land in Padagam and Adapanka villages respectively are submerged in the reservoir water, these people are demanding to be treated as fully submerged villages.

Rehabilitation Advisory Committee recommended that these villages be treated as fully submerged.

Chapter - IV

DEVELOPMENT PROJECTS AND THE R&R PROVISIONS

Wherever development projects are implemented, acquisition of land is a must. This always affects those directly or indirectly dependent on land. These people, who are forced to sacrifice their livelihood for the cause of development, should therefore be considered the most important stakeholders of the whole project. And they should be rehabilitated suitably to improve or at least retain the standards of living they were enjoying prior to displacement and be provided with appropriate compensation and adequate social and physical rehabilitation, infrastructure, including community services and facilities.

Projects undertaken to promote development often cause ecological disorder, displacement of human population from their home and hearth on the one hand and economic prosperity of the elite and privileged sections at the cost of the poor and downtrodden on the other. Among all such issues, displacement of human population and their resettlement is the most painful process. In the past, development projects meant for the people and society at large, were not of gigantic nature. Consequently, displacement of human population was on a much smaller scale. The few people who were displaced due to such activities could be rehabilitated easily and resettled in the larger society without causing serious disruption to their community life.

However, modern development projects in both developed and developing countries have caused massive involuntary displacement of human population while the rehabilitation measures adopted for the oustee population in the new resettlement areas have left a lot to be desired. Evidence from the findings of many studies in India and other developed and developing countries analyzed in the first two chapters of the present work confirms that resettlement rarely worked well. This is mainly due to the absence of a well defined resettlement and rehabilitation policy of the authority responsible for the implementation of the development projects in these countries. After independence, India has carried out many development projects such as big dams, water reservoirs, thermal, hydel and atomic powerful plants, excavation of mines for exploration of minerals and metals, setting up of large and key industries and the like. Further, with a view to achieving the plan goal of balanced development of regions, many such development projects have been promoted in backward and tribal areas of Bihar, Orissa, Madhya Pradesh, Assam, Uttar Pradesh, Rajasthan, etc. Unfortunately, the people who had to sacrifice everything they had in the name of development and had no option but to agree to resettle in the new areas with the compensation package offered by the Government, have ultimately become the worst victims due to the ad hoc resettlement polices and casual approach of the authorities. The main reason for the failure of the resettlement measures is that they deal too much with the technical and economic aspects and ignore the cultural, sociological and ecological aspects of rehabilitation. Even the technical and economic issues relating to resettlement of the displaced people are taken up in a hurry at the top level without any involvement and participation of the affected group in the policy making process.

4.1 Resettlement and Rehabilitation Policy in India

As mentioned earlier, after independence, several developmental projects including major dams, power plants, mining-operations etc. have been implemented to accelerate the tempo of economic development displacing millions of people in the process. Despite the magnitude of displacement and the multiple traumas that most oustees face, one of the most glaring examples of successive central governments shunning their constitutional responsibility has been the lack of a national policy for those who have been forcibly displaced in the 'national interest' (Kothari, 1996). In the last five years, only a Draft of National Rehabilitation Policy has been prepared by the Ministry of Rural Development (MRD) and Water Resources Department (WRD) of Government of India (Fernades, 1995), which is yet to be made into a law.

In the absence of a national level policy on rehabilitation, it is left to the project authorities to prepare plans for rehabilitation and implement them in accordance with various circulars issues by the concerned state governments. But of late, a few state governments like the Karnataka, Gujarat and Maharashtra have prepared detailed resettlement and rehabilitation policies for the displaced people.

In post-Independent India, the Governments both at the Central and State levels designed and launched many development projects through Five Year Plans in order to accelerate the process of economic development in the country. These development projects basically aimed at strengthening of the infrastructure base and key industries in the public sector such as irrigation and hydro power, iron and steel industries, coal and thermal plants, aluminium and the like to develop and transform the traditional subsistence oriented agriculture and craft economy into a modern industrial economy. These mega projects - especially building of multipurpose river dams to generate hydro electricity and to provide flow irrigation facility to farmers for rapid agricultural growth - required massive involuntary

displacement of human population and relocation of human settlements. In the first flush of euphoria after independence, everybody believed that implementation of development projects relating to irrigation, power, basic industries and mines would solve the problems of poverty and economic backwardness of the people at large. Consequently, no serious thought was given to the proper resettlement and rehabilitation of the people displaced and negatively affected by such development projects.

As a result, the resettlement plans developed for project affected persons were purely ad hoc and of a very casual nature. They were not based on any detailed studies to focus on the people to be rehabilitated and the actual cost of resettlement. The project authorities did not view resettlement of the displaced persons as their responsibility and tended to offload the job to the local authorities. Both for the project authorities as well as the Government, the responsibility of rehabilitation and resettlement of the displaced persons was over the moment they were paid cash compensation for the property acquired for the project. As a result, many landless and asset-less poor in the project area were deprived of their bread and butter. Secondly, the quantum of compensation was often determined arbitrarily by the Government and varied from project to project depending upon the bargaining strength of the displaced people. Thirdly, such cash compensation was often not paid in time and in quite a few cases, the oustees continued to fight for just compensation even 30/40 years after completion of the project as in the case of Hirakud Dam in Orissa (Baboo, 1992).

In the past, compensation for land and houses was grossly inadequate and no oustee was paid for loss of job/employment or disruption of livelihood other than farm land. Many such development projects in the past affected the livelihood of small and marginal farmers, landless labourers, share croppers, tenant cultivators and the minor forest produce collectors. The displacement of village artisans and other servicing castes also caused occupational

displacement and the threatened the survival of such categories of population. In the absence of a clear cut R&R policy, the displaced families were harassed and condemned to a state of destitution by unscrupulous elements, including project officials. Their illiteracy and ignorance often brought untold miseries and sufferings. In the case of Srisailam Project is a case in point. Though the law provided for compensation at the market rate according to the latest land deals in the area, the compensation was arbitrarily fixed by the authorities. In the case of the Sardar Sarovar Project, it is alleged that terms of acquisition and other procedures were never orally explained to the people and in the process, the illiterate people were cheated by the officers and their intermediaries (CSE, 1985:104). To make matters worse, there were no clear cut guidelines for the partially affected persons such as individuals who lost whole or part of their agricultural land and houses without being physically displaced.

"Land for land" has long been accepted as the better resettlement measure than mere cash payment. However, project authorities in the past rarely took measures to rehabilitate the displaced families in an area close to the project. The displaced families were sometimes resettled in a completely alien environment and culture. The oustees of Pong dam in Himanchal Pradesh, for instance, were settled in Anupgarh in Rajasthan bordering Pakistan. The policy on rehabilitation of the tribals displaced by Inchampalli and Bhopalpatnam Projects in Mahasashtra and the Koel Karo project in Bihar had created similar problems for the outsees (CSE, 1985:105).

Till the early 1970s, neither the Central Government nor the State Governments in India bothered much about resettlement. Maharashtra is the first State in India, which has a legislation that recognizes the right of people displaced by irrigation, power and other utility projects to get land in the area benefited by the projects. According to the Maharashtra Resettlement of Project Displaced Persons Act, 1976, the displaced people are given land in the command area of irrigation projects. While agriculturists get at least

half the amount of land lost by them, agricultural labourers, artisans and other landless people also get one acre of land if they live along with other displaced persons. Under the Act, the Government appoints a resettlement officer at the very inception to survey the families to be displaced and identify land in the benefited zone made available for resettlement (CSE, 1985:103).

Although resettlement of project displaced persons is now viewed more seriously at the all-India level, only four States have so far enacted state-wise R&R Policies for the displaced persons. They are Maharashtra, Madhya Pradesh, Punjab and Karnataka. Rajasthan has taken necessary steps to evolve an R&R policy for its project affected people at the State level. Apart from this, sector specific policies are being developed in many states. West Bengal has developed a sector specific R&R policy for the coal mines while Andhra Pradesh, Orissa, Tamil Nadu and Gujarat have issued Government Orders/Resolutions to tackle the problem of displacement in various development projects executed in these States. At the national level too, many big national companies like National Thermal Power Corporation (NTPC), Coal India Limited (CIL), and National Aluminium Company (NALCO) have formulated sector specific policies.

4.2 Resettlement and Rehabilitation Policy of Orissa

The Government of Orissa has undertaken a number of mega projects with then objective of utilizing the vast water resources and mineral resources in the state to usher in rapid economic growth. About 5 lakh people (nearly 86,110 families) have been displaced on account of these projects. Despite the large scale displacement of people due to various state-sponsored projects, no uniform and concrete state level resettlement and rehabilitation policy was formulated by the Government of Orissa till 1994, when the Water Resources Department of came out with a detailed resettlement and rehabilitation policy due to tremendous pressure from World Bank, which is the major funding agency of various ongoing irrigation projects.

Before 1994, resettlement and rehabilitation activities in relation to developmental projects were carried out by individual project authorities and were based on a broad set of guidelines issued by the Government of Orissa that have been revised periodically. The eligibility criteria for identifying a displaced person and for making available rehabilitation benefits to him/her have kept changing.

A displaced person, according to the Irrigation and Power Department Resolution No. 131619 dated 20.04.1977 means: "A person who, on account of the acquisition of his/her lands for the purpose of the major and medium irrigation projects, has been displaced from such lands, including any landless and homeless person, who is independent for his livelihood, by manual labour, on agricultural lands immediately before the area comprising such land is taken up for acquisition by the project and who is being deprived of such livelihood on account of acquisition of the lands" (Circular and Orders, Department of Irrigation, p.14).

A displaced family has been defined as "displaced persons and his or her spouse minor brother(s) or sister(s), father and mother and other members residing with him and dependent on him for their livelihood". In the year 1990, as per the Department of Irrigation Resolution No.31888, dated 21.8.1990, two more clauses were incorporated in the definition of family viz. (i) a person who is more than 18 years of age irrespective of his marital status, and (ii) physically and mentally retarded person irrespective of his/her age.

In 1992, two additional clauses were added to the definition of displaced family by two different resolutions of the Irrigation department. As per Resolution No. 13446 dated 20.4.1994, minor orphans who have lost both parents and have nobody to fall back upon (such orphans numbering more than one in a particular family will be clubbed together and counted as one family) are treated as displaced families. Similarly, Resolution No. 25101 dated 14.7.1992 stipulated inclusion of divorcees with or without dependent children but having no source of livelihood were also brought under the purview of displaced family. (For the purpose of treating women as divorcee, the claimant should make an affidavit and file her claim

along with a copy of such affidavit. After receipt of the claim, the officer-in-charge of rehabilitation shall enquire into the matter and take a decision depending on the merit of the case).

4.3 Policy Guidelines for Selection of Displaced Person and Displaced Village

The R&R Policy defines a displaced person as "a person who since at least one year or prior to the date of publication of the notification under Section 4 of the Land Acquisition Act, 1894, has been ordinarily residing, and who, on account of acquisition of his/her and including homestead land in the submerged zone for the purpose of the project, is displaced from such land. This would also include landless labourers".

The policy guidelines also mentioned that for the purpose of selection of a displaced village, village submerged will be taken us a unit. Any village where homestead land is not affected or partially affected; but where more than 75 per cent of the total agricultural land is acquired, or it is found on due inquiry that partial acquisition of land and property in the submergence zone may lead to socially and economically unviable living, the entire village may be treated as fully submerged village and R&R benefits given to all the villagers as per the resettlement and rehabilitation policy.

A person who loses land but is not displaced due to a project, is entitled to get compensation for such acquisition, amounting to an equal area of land if un-irrigated or half of the area if irrigated but not more than four acres of un-irrigated land, as rehabilitation benefit along with reclamation cost.

A person losing his/her only house due to land acquisition under a project and is entitled to get compensation –even when the village is not displaced - will be given an equal area of house site subject to a maximum of AC.20 along with house building assistance as applicable to the oustees.

A person of the affected village who has no landed property whatsoever will not be entitled to any rehabilitation benefit, if the

village is not evacuated due to construction of the project. But if the whole village gets relocated, he/she will get the rehabilitation benefits. In case of displacement from encroached government land, rules and procedures as in force in settlement of encroachment will be followed.

4.4 Gujarat Policy of Resettlement and Rehabilitation

Item	Gujarat Policy
I. A. Eligibility	Every family displaced from (more/less) than 25% of its land holding through acquisition shall be entitled to resettlement and rehabilitation benefit.
B. Landed Oustees	Land equivalent to that acquired with a minimum of 2 Hectares and maximum limited to ceiling. Irrigation facility is to be provided by the state. In case Government land is not acceptable, then private land would be purchased.
C. Major Son	2 hectares of land free of cost.
D. Encroacher Oustees Eligible	Those Cultivating Government waste land/ forest land, which is going under submergence. No cut off year is mentioned. Entitled to 2 ha. of land.
Land Allotment	Entitled to 2 ha. of land.
(D) Landless Agricultural and non agricultural labourers	2 ha. of land.
(E) For Women	Only those women who became widows after 1980.
II. A. Land Holders	The cost of the produce of only 40% of the total cultivable land for 5 years and after deducting the cost of the Produce 3 years' lost due to drought would be sum of the total compensation.
B. For Encroacher Land	Ex-gratia payment as per the prevailing rates of private land after excluding solacium interest.
III. Civic Amenities	a) One primary School (3 rooms) for 100 families. b) One Panchayat House for 500 families. c) One dispensary for 500 families. d) One seed store for every 500 families. e) One children's park for every 500 families. g) Drinking water with through for every 500 families h) Each colony will be linked to main road. i) One platform for every 500 families. j) One religious place of worship for every 500 families. k) Electrification, water supply to all colonies.
IV. Other Benefits A. Transportation Grant	To be borne by the state
B. Rehabilitation Grant-in-Aid	a) Each family is paid subsistence allowance at Rs.15 per day for 25 days in a month for a period of one year. b) Rs.750 per family as resettlement grant with an increase of 8 per cent per year worked out with January 1980 as the base year Grant-in-aid up to Rs.500. c) Rs.5, 000 as assistance for economic development to all families. Tribal oustees covered under tribal sub-plan get subsidy varying form 50 per cent to 100 per cent against 50 per cent admissible to them with a maximum of Rs.5000
C. Insurance	a) Personal Insurance of Rs.3000. b) Households materials worth Rs.1000.

4.5 Orissa Resettlement and Rehabilitation Policy 2006

In order to ensure sustained development through a participatory and transparent process, the Government of Orissa has framed a comprehensive resettlement and rehabilitation policy.

Government of Orissa has been pursuing various development initiatives to improve the quality of life of the people. Since ensuring social justice is one of the cornerstones of development, the Government always proactively tries to ensure people's participation in the development process. In spite of the Government's best intentions, however, development interventions, at times, do create undesirable consequences. Displacement due to large development projects is one such consequence. The Government of Orissa has been responding to this problem through various project specific Resettlement & Rehabilitation Policies and plans. The current policy formulation has actually taken note of the lessons learnt through these past policies, which reflects the government's genuine spirit of learning and retrospection. The present Policy draws on experiences from the implementation of past policies, best practices in other states and the Orissa Government's Industrial Policy Resolution, 2001. A series of consultations with various direct and indirect stakeholders, including the civil society in the state, has been conducted and the views of academicians and specialists in the field of resettlement and rehabilitation considered as part of the democratic response of the government in policy formulation. The limitations of past policies have been acknowledged and analysed and a flexible framework has been attempted, which demonstrates the dynamism of the government. Unlike many other policies, there is a strong focus on the modalities of implementation in this Policy, which makes it a vibrant instrument to promote sustainable development in the state.

4.5.1 Policy Objectives

The broad objectives of the Policy of the Government are:

(a) To avoid displacement where possible and minimize it, exercising available options, otherwise.

(b) To facilitate resettlement/rehabilitation process:

(i) Recognizing the voices of the displaced communities (emphasizing the needs of the indigenous communities and vulnerable sections); and

(ii) Ensuring environmental sustainability through participatory and transparent process; and

(c) To help guide the process of developing institutional mechanisms for implementation, monitoring, conflict resolution and grievance redressal.

4.5.2 Project Types

For the purpose of R&R benefits under this Policy, Development Projects are classified into the following types:

A. Industrial Projects;

B. Mining Projects;

C. Irrigation Projects, National Parks and Sanctuaries;

D. Urban Projects and Linear Projects like roads and railways lines; and

E. Any other Projects

4.5.3 Land Acquisition and Payment of Compensation / Award

The procedure prescribed by Government shall be followed in acquiring land and other property and for payment of

compensation/award. All compensation money due to the "displaced families" shall be through account payee cheques.

As regards "public property" like School Building, Club House, Hospital, Panchayat Ghar, electrical installations, place(s) of worship, value of such property affected shall be deposited with the concerned District Collector. Either Project authorities or the District Administration shall take up construction at the place as would be determined in consultation with representatives of the displaced persons.

The Project proponent may opt for direct purchase of land on the basis of negotiated price after issue of notification requiring acquisition of land under relevant Act(s). If acquisition of land through direct purchase fails, other provisions of the relevant Act may be resorted to.

4.5.4 Resettlement and Rehabilitation Plan

Based on the list approved by the Government and option of displaced families, a plan shall be prepared by the Collector for resettlement and rehabilitation after due consultation with displaced communities in the manner determined by the Government. The plan should address the specific needs of the women, vulnerable groups and indigenous communities. The same will be placed before the Rehabilitation & Periphery Development Advisory Committee (RPDAC) for approval.

While preparing the plan, the following aspects should be taken into consideration:

(i) Site for the resettlement habitat shall be selected by the RPDAC in consultation with the displaced families.

(ii) No physical displacement shall be made before the

completion of resettlement work as approved by the RPDAC. The certificate of completion of resettlement work will be issued by the Collector.

(iii) Gram Sabha shall be consulted.

(iv) Where there is multiple displacement, additional compensation amounting to 50% of the normal compensation payable shall be paid to each displaced family over and above the normal compensation in the form of ex-gratia.

(v) Provisions relating to rehabilitation will be given effect from the date of actual vacation of the land.

(vi) Project Authority shall abide by the provisions laid down in this Policy and the decisions taken by RPDAC from time to time provided they are within the ambits of the approved Policy of the Government.

(vii) District Administration and Project Authorities shall be jointly responsible for ensuring that the benefits of R&R reach the target beneficiaries in a time bound manner.

(viii) Record of Rights of the land and houses allotted to the displaced persons should be handed over to them by the District Administration while resettling them in the Resettlement habitat. The District Administration shall take steps for immediate declaration of the new Resettlement habitat as a Revenue Village if it is not a part of an already existing Revenue Village.

(ix) Steps will be taken by the Project Authorities for acclimatization of the resettled people in the new habitat including development of cordial social relationship between the host and resettled communities and to ensure as far as practicable overall improvement of standard of living of the displaced families.

(x) Subject to the details regarding provision of employment as enunciated elsewhere in the Policy, the project authorities shall give preference in the matter of employment, both direct and indirect as well as through contractors employed by them, for execution, operation and maintenance of the project, to local persons as per the detailed guidelines issued by the State Government from time to time.

Chapter - V

IMPACT OF DEVELOPMENT PROJECTS AND DISPLACEMENT ON LIVELIHOOD RESTORATION: ANALYZING IRR MODEL

After analyzing the R & R Policy, its implementation pattern, strengths and weakness, an effort has been made in this chapter to study ad compare the socio-economic aspects of life of the oustees in the pre-displacement and post-displacement periods. Forced or induced displacement causes significant changes0 economic, social and cultural - in the lives of the PAPs. While social and cultural changes are the result of the relocation and resettlement of societies and communities within the project affected areas, the economic effects are the outcome of changes in the production system. Therefore, it is imperative to study the socio-cultural and economic life of the oustees in the pre and post-rehabilitation period. The present study has adopted a wide spectrum of indicators to assess the socio-economic condition of the people prior to and after displacement. For the assessment of social conditions, it depends on study of family structure, living pattern and housing pattern as indicators while land holding pattern, occupational pattern, cropping pattern, dependence on tree, forest, livestock, asset structure and various sources of income (both main and subsidiary) have been taken as indicators of economic condition.

To gather information regarding the perception of the socio-economic condition of displaced people, an interview schedule was prepared and stratified random sampling method was used to

The socio-economic profile of the sample households can be broadly classified in terms of the demographic profile, caste, gender, literacy level and age structure of the respondents. These socio-economic variables are important indicators in the study of displacement and rehabilitation because these variables help assess the impact of displacement on different sections and age groups.

5.1.1 Types of Households

The family structure in the pre-submergence period and the post-rehabilitation has been studied to assess the social aspect. The results of the study are depicted in table 5.2.

As per the information provided by the displaced people, they were either nuclear or joint families. The number of extended families was also quite high among displaced people. But the expectation of benefits in terms of money or employment has sounded the death knell of the joint family structure. . It can be observed from Table 5.2 that there has been a significant growth in the number of nuclear families in all displacement sites of all projects under study. In Harabhangi Irrigation Project, a staggering 97.60 per cent of the families have become nuclear. Next in the list is the Upper Kolab Project, where nuclear families constitute 80% of the population.

It is also found that in the pre-displacement period, 44.63 per cent of the families were nuclear while in the post-rehabilitation period, the percentage of such families has increased to 80.84 - a net growth of 36.21 per cent.

Table 5.2
Type of Family Before and After Displacement

Project	Tribal				Non-Tribal				Total			
	Before Displacement		After Displacement		Before Displacement		After Displacement		Before Displacement		After Displacement	
	Nuclear	Joint	Nuclear	Joint	Nuclear	Joint	Nuclear	Joint	Nuclear	Joint	Nuclear	Joint
MCL Ib Valley	34 (34.00)	36 (36.00)	52 (52.00)	18 (18.00)	6 (6.00)	24 (24.00)	22 (22.00)	8 (8.00)	40 (40.0)	60 (60.0)	74 (74.0)	26 (26.0)
Upper Kolap	47 (37.60)	53 (42.40)	84 (67.20)	16 (12.80)	6 (4.80)	19 (15.20)	16 (12.80)	9 (7.20)	53 (42.4)	72 (57.6)	100 (80.0)	25 (20.0)
HAL	50 (40.00)	50 (40.00)	70 (56.00)	30 (24.00)	4 (3.20)	21 (16.80)	18 (14.40)	7 (5.60)	54 (43.2)	71 (56.8)	88 (70.4)	37 (29.6)
Harabhangi	54 (43.20)	46 (36.80)	98 (78.40)	2 (1.60)	11 (8.80)	14 (11.20)	24 (19.20)	1 (0.80)	65 (52.0)	60 (48.0)	122 (97.6)	3 (2.4)
Total	185 (38.95)	185 (38.95)	304 (64.00)	66 (13.89)	27 (5.68)	78 (16.42)	80 (16.84)	25 (5.26)	212 (44.6)	263 (55.4)	384 (80.8)	91 (19.2)

NB: *Figures in parenthesis refer to percentage.*

Table - 5.3

Family Size of in the post-displacement period

Project	Tribal				Non-Tribal				Total			
	1-5 Member	5-9 Member	10 & above	Total	1-5 Member	5-9 Member	10 & above	Total	1-5 Member	5-9 Member	10 & above	Total
MCL Ib Valley	31 (31.0)	37 (37.0)	2 (2.0)	70 (70.0)	12 (12.0)	15 (15.0)	3 (3.0)	30 (30.0)	43 (43.0)	52 (52.0)	5 (5.0)	100 (100)
Upper Kolap	65 (52.0)	34 (27.2)	1 (0.8)	100 (80.0)	11 (8.8)	14 (11.2)	0 (0.0)	25 (20.0)	76 (60.8)	48 (38.4)	1 (0.8)	125 (100)
HAL	50 (40.0)	50 (40.0)	0 (0.0)	100 (80.0)	15 (12.0)	10 (8.0)	0 (0.0)	25 (20.0)	65 (52.0)	60 (48.0)	0 (0.0)	125 (100)
Harabhangi	54 (43.2)	45 (36.0)	1 (0.8)	100 (80.0)	14 (11.2)	11 (8.8)	0 (0.0)	25 (20.0)	68 (54.4)	56 (44.8)	1 (0.8)	125 (100)
Total	200 (42.1)	166 (35.0)	4 (0.8)	370 (77.89)	52 (11.0)	50 (10.5)	3 (0.63)	105 (22.1)	252 (53.1)	216 (45.5)	7 (1.5)	475 (100)

NB: *Figures in parenthesis refer to percentage.*

Table 5.3 reveals the size of the family in the post-displacement period. As can be seen from the table, 252 (53.1%) out of the 475 families surveyed have 1 to 5 members, 216 (45.5%) families have 5 to 9 members and 7 (1.5%) families have 10 or more members.

Comparison of tribal and non-tribal families reveals that 34.95 per cent tribal families have 5 to 9 members while the corresponding figure among non-Tribals is 10.53. This clearly indicates that the size of the average tribal family is larger than that of non-Tribals in the survey areas, which may be due to illiteracy, lack of awareness and foresight and absence of urbanization.

5.1.3 Age Structure of the Family Members

Table 5.4 explains the age composition of the displaced population under study. It is observed from the survey that there is a sharp contrast in the proportion of children in the age group of 0-14 years among Tribal and non-Tribal oustees. The percentage of children in this age group is 25.85 among Tribals while the corresponding figure stands at 8.10 among non-Tribals. This shows a high birth rate among tribal oustees, which is responsible for the large number of dependent children per adult. 61.65 per cent of the respondents are productive consumers in the survey areas while the rest 38.35 per cent are unproductive consumers or dependents.

Table 5.4
Age Structure of Surveyed Oustees

Project	Tribal					Non-Tribal					Total				
	0-5 Year	6-14 Year	15-60 Year	Above 60 Year	Total	0-5 Year	6-14 Year	15-60 Year	Above 60 Year	Total	0-5 Year	6-14 Year	15-60 Year	Above 60 Year	**Total**
MCL Ib Valley	24 (4.44)	90 (16.7)	229 (42.4)	14 (2.6)	357 (66.1)	12 (2.2)	40 (7.4)	116 (21.5)	15 (2.8)	183 (33.9)	36 (6.7)	130 (24.1)	345 (63.9)	29 (5.4)	540 (100)
Upper Kolab	34 (6.51)	87 (16.7)	261 (50.0)	18 (3.5)	400 (76.6)	18 (3.5)	25 (4.8)	74 (14.2)	5 (0.96)	122 (23.4)	52 (9.96)	112 (21.5)	335 (64.2)	23 (4.4)	522 (100)
HAL	39 (6.89)	100 (17.7)	294 (51.9)	19 (3.4)	452 (79.9)	20 (3.5)	20 (3.5)	66 (11.7)	8 (1.41)	114 (20.1)	59 (10.4)	120 (21.2)	360 (63.6)	27 (4.8)	566 (100)
Harabhangi	77 (13.8)	114 (20.5)	233 (41.8)	15 (2.7)	439 (78.8)	14 (2.5)	28 (5.0)	74 (13.3)	2 (0.36)	118 (21.2)	91 (16.3)	142 (25.5)	307 (55.1)	17 (3.1)	557 (100)
Total	**174 (7.96)**	**391 (17.9)**	**1017 (46.5)**	**66 (3.0)**	**1648 (75.4)**	**64 (2.9)**	**113 (5.2)**	**330 (15.1)**	**30 (1.37)**	**537 (24.6)**	**238 (24.6)**	**504 (23.1)**	**1347 (61.7)**	**96 (4.4)**	**2185 (100)**

NB: *Figures in parenthesis refer to percentage.*

Table 5.5
Marital Status of the Surveyed Oustee Households

Project	Tribal					Non-Tribal					Total				
	Married	Un-Married	Divorce/ Adopted	Widow/ Deserted	Total	Married	Un-Married	Divorce/ Adopted	Widow/ Deserted	Total	Married	Un-Married	Divorce/ Adopted	Widow/ Deserted	Total
MCL Ib Valley	132 (24.44)	187 (34.63)	2 (0.37)	36 (6.67)	357 (66.11)	77 (14.26)	93 (17.22)	0 (0.00)	13 (2.41)	106 (19.63)	209 (38.70)	280 (51.85)	2 (0.37)	49 (9.07)	540 (100)
Upper Kolab	202 (38.70)	170 (32.57)	2 (0.38)	26 (4.98)	400 (76.63)	58 (11.11)	57 (10.92)	2 (0.38)	5 (0.96)	64 (12.26)	260 (49.81)	227 (43.49)	4 (0.77)	31 (5.94)	522 (100)
HAL	207 (36.57)	217 (38.34)	1 (0.18)	27 (4.77)	452 (79.86)	52 (9.19)	52 (9.19)	0 (0.00)	10 (1.77)	62 (10.95)	259 (45.76)	269 (47.53)	1 (0.18)	37 (6.54)	566 (100)
Harabhangi	160 (28.73)	250 (44.88)	3 (0.54)	26 (4.67)	439 (78.82)	46 (8.26)	66 (11.85)	1 (0.18)	5 (0.90)	72 (12.93)	206 (36.98)	316 (56.73)	4 (0.72)	31 (5.57)	557 (100)
Total	**701 (32.08)**	**824 (37.71)**	**8 (0.37)**	**115 (5.26)**	**1648 (75.42)**	**233 (10.66)**	**268 (12.27)**	**3 (0.14)**	**33 (1.51)**	**304 (13.91)**	**934 (42.75)**	**1092 (49.98)**	**11 (0.50)**	**148 (6.77)**	**2185 (100)**

NB: *Figures in parenthesis refer to percentage.*

5.2 Socio-Cultural Profile

5.2.1 Sex ratio of persons in Surveyed Households

Table 5.6

Sex-wise distribution of persons in Surveyed Households

Project	Tribal			Non-Tribal			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
MCL Ib Valley	193 (35.7)	164 (30.4)	357 (66.1)	93 (17.2)	90 (16.7)	183 (33.9)	286 (53.0)	254 (47.0)	540 (100)
Upper Kolab	199 (38.1)	201 (38.5)	400 (76.6)	61 (11.7)	61 (11.7)	122 (23.4)	260 (49.8)	262 (50.2)	522 (100)
HAL	228 (40.3)	224 (39.6)	452 (79.9)	50 (8.8)	64 (11.3)	114 (20.1)	278 (49.1)	288 (50.9)	566 (100)
Hara-bhangi	225 (40.4)	214 (38.4)	439 (78.8)	59 (10.6)	59 (10.6)	118 (21.2)	284 (51.0)	273 (49.0)	557 (100)
Total	**845 (38.7)**	**803 (36.8)**	**1648 (75.4)**	**263 (12.4)**	**274 (12.5)**	**537 (24.6)**	**1108 (50.7)**	**1077 (49.3)**	**2185 (100)**

NB: *Figures in parenthesis refer to percentage.*

The survey covered a total of 2185 persons - 1077 (49.23%) of them female - from the four projects under the study. The highest percentage of females was found in the HAL project - 288 females comprising 50.88 per cent. MCL Ib Valley project reported the highest number of males - 286 (52.96%).

Tribals account for the vast majority (75.42%) while non-tribals constitute 24.58% among the 2185 persons under study. The highest percentage of tribals in the four projects – as can be seen in Table 5.6 – was found in the HAL project: 452 persons (79.86%) tribals as against 114 (20.14%) persons belonging to the non-tribal category. HAL is followed by the Upper Kolab project, which had 400 tribals (76.63%) and 122 (23.37) non-tribals. In the Harabhangi project,t 439 (78.8%) were tribals and 118 non-tribals (21.2%).

5.2.2 Marital Status

The marital status of the displaced population has been depicted in Table 5.5. It is observed from the table that 42.75 per cent of oustees are married while 49.98 per cent remain unmarried. This shows that marriage as a socio-religious institution is well appreciated by them.

5.2.3 Levels of Education and Skills

The socio-economic condition of the oustee population can be studied from its educational status and this has been analysed in Table 5.7. It is a very distressing fact that 46.95 per cent of tribal oustees are illiterate while the corresponding figure among non-tribal oustees is at 33.13. In Harabhangi Project, 61.13 per cent of tribal population is illiterate, which is the highest among the four projects under study. The lowest level of literacy among tribals (26.02%) is found in the MCL Ib Valley project.

5.2 Socio-Cultural Profile

5.2.1 Sex ratio of persons in Surveyed Households

Table 5.6

Sex-wise distribution of persons in Surveyed Households

Project	Tribal			Non-Tribal			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
MCL Ib Valley	193 (35.7)	164 (30.4)	357 (66.1)	93 (17.2)	90 (16.7)	183 (33.9)	286 (53.0)	254 (47.0)	540 (100)
Upper Kolab	199 (38.1)	201 (38.5)	400 (76.6)	61 (11.7)	61 (11.7)	122 (23.4)	260 (49.8)	262 (50.2)	522 (100)
HAL	228 (40.3)	224 (39.6)	452 (79.9)	50 (8.8)	64 (11.3)	114 (20.1)	278 (49.1)	288 (50.9)	566 (100)
Hara-bhangi	225 (40.4)	214 (38.4)	439 (78.8)	59 (10.6)	59 (10.6)	118 (21.2)	284 (51.0)	273 (49.0)	557 (100)
Total	**845 (38.7)**	**803 (36.8)**	**1648 (75.4)**	**263 (12.4)**	**274 (12.5)**	**537 (24.6)**	**1108 (50.7)**	**1077 (49.3)**	**2185 (100)**

NB: *Figures in parenthesis refer to percentage.*

Table 5.7
Educational Level of the Sample Oustee Population

Project	Tribal								
	Illiterate	Just Literate	Primary	Middle	Matri-culate	Inter-mediate	Graduate	Tech-nical	Total
MCL Ib Valley	89 (26.02)	65 (19.01)	70 (20.47)	79 (23.10)	30 (8.77)	4 (1.17)	5 (1.46)	0 (0.00)	342 (100)
Upper Kolab	208 (55.03)	49 (12.96)	89 (23.54)	17 (4.50)	13 (3.44)	1 (0.26)	1 (0.26)	0 (0.00)	378 (100)
HAL	186 (44.71)	46 (11.06)	79 (18.99)	51 (12.26)	41 (9.86)	7 (1.68)	3 (0.72)	3 (0.72)	416 (100)
Harabhangi	217 (61.13)	36 (10.14)	80 (22.54)	18 (5.07)	2 (0.56)	2 (0.56)	0 (0.00)	0 (0.00)	355 (100)
Total	**700 (46.95)**	**196 (13.15)**	**318 (21.33)**	**165 (11.07)**	**86 (5.77)**	**14 (0.94)**	**9 (0.60)**	**3 (0.20)**	**1491 (100)**

Contd...

Non-Tribal									
Project	**Illiterate**	**Just Literate**	**Primary**	**Middle**	**Matri-culate**	**Inter-mediate**	**Graduate**	**Tech-nical**	**Total**
MCL Ib Valley	22 (12.72)	17 (9.83)	46 (26.59)	37 (21.39)	34 (19.65)	13 (7.51)	3 (1.73)	1 (0.58)	173 (100)
Upper Kolab	39 (36.11)	21 (19.44)	33 (30.56)	13 (12.04)	1 (0.93)	0 (0.00)	1 (0.93)	0 (0.00)	108 (100)
HAL	45 (46.88)	8 (8.33)	25 (26.04)	5 (5.21)	9 (9.38)	1 (1.04)	3 (3.13)	0 (0.00)	96 (100)
Harabhangi	54 (50.94)	16 (15.09)	30 (28.30)	4 (3.77)	2 (1.89)	0 (0.00)	0 (0.00)	0 (0.00)	106 (100)
Total	**160 (33.13)**	**62 (12.84)**	**134 (27.74)**	**59 (12.22)**	**46 (9.52)**	**14 (2.90)**	**7 (1.45)**	**1 (0.21)**	**483 (100)**

Contd...

Total									
Project	**Illiterate**	**Just Literate**	**Primary**	**Middle**	**Matri-culate**	**Inter-mediate**	**Graduate**	**Tech-nical**	**Total**
MCL Ib Valley	111 (21.55)	82 (15.92)	116 (22.52)	116 (22.52)	64 (12.43)	17 (3.30)	8 (1.55)	1 (0.19)	515 (100)
Upper Kolab	247 (50.82)	70 (14.40)	122 (25.10)	30 (6.17)	14 (2.88)	1 (0.21)	2 (0.41)	0 (0.00)	486 (100)
HAL	231 (45.12)	54 (10.55)	104 (20.31)	56 (10.94)	50 (9.77)	8 (1.56)	6 (1.17)	3 (0.59)	512 (100)
Harabhangi	271 (58.79)	52 (11.28)	110 (23.86)	22 (4.77)	4 (0.87)	2 (0.43)	0 (0.00)	0 (0.00)	461 (100)
Total	**860 (43.57)**	**258 (13.07)**	**452 (22.90)**	**224 (11.35)**	**132 (6.69)**	**28 (1.42)**	**16 (0.81)**	**4 (0.20)**	**1974 (100)**

NB: *Figures in parenthesis refer to percentage.*

The percentage of tribal matriculates and non-tribal matriculates are 5.77 and 9.52 respectively in the study area. Only 0.60 per cent of the tribal people are graduates while the figure is 1.45% among non-tribals. The percentage of tribal population with technical education is 0.20 while the corresponding figure among non-tribals is 0.21. The low level of technical education among tribal youth deprives them of possible jobs in the developmental project.

In all four projects, it is found that 43.57 per cent of oustees are illiterate, 6.69 per cent are matriculates, 0.81 graduates, and 0.20 per cent have received technical education. The highest percentage of illiterates (58.79%) is found in the Harbhangi project. Together, these figures suggest a very poor standard of education, which makes it very hard to raise their skill and efficiency levels and thereby enhance their employability.

5.3 Economic Profile

The oustees in all the pre-submergence villages were a close-knit society with an integrated, self-sufficient and essentially non-monetised economy. Agriculture, cattle-rearing, forests and rivers were the main source of their sustenance. Keeping their economic condition in view in the pre-displacement period, this section includes an assessment of the economic condition of the oustees in the post-rehabilitation period.

5.3.1 Occupational Pattern

Since the project was set up in rural areas, it was predominantly the agricultural people who were displaced by the project. The study of the occupational pattern of the oustees shows that loss of agricultural land (which was not

compensated by a 'land for land' policy), has forced the oustees to shift to other sectors of employment. They are keen to continue with their agricultural and allied activities. But the compensation money and rehabilitation assistance that they received was too meager to give them the luxury of purchasing land, given the artificially induced increase in land prices in the neighbourhood. It is found that most of the displaced people could not buy more than 2 acres of agricultural land with the compensation money. On the other hand, compensation money appeared as a windfall for some displaced people. It was the first time they were in possession of a large amount of cash. In the absence of any guidance to help them to invest the money prudently, they squandered it away on meaningless consumption.

Usual Activity of the Surveyed Oustees

The oustees in the survey area are mostly workers. It is revealed from Table 5.8 that 46.22 per cent of oustees are workers, 5.67 per cent are unemployed, 16.16 per cent housewives, 3.99 per cent are aged persons. The highest percentage of workers (60.33%) are found in the Uppar Kolab Project and the lowest (26.27%) at MCL Ib Valley. The reason for this is the fact that the oustees of MCL had no agricultural land, unlike in the case of the Harbhangi irrigation project where a land based rehabilitation package was implemented.

Comparing the proportion of workers among tribals and non-tribals, it is observed that tribals constitute a higher proportion of workers i.e. 47.23 as against 43.07 per cent among non-tribals. It is also found that 7.84 per cent of population are unemployed in the MCL Ib Valley project. The lowest proportion of unemployed people (3.13%) are found in Upper Kolab.

Table 5.8

Usual Activity of the Surveyed Oustee Households

Project	Tribal								
	Worker	Un-employed	House Wife	Student	Old Age	School Age Children	Handi-capped	Others	Total
MCL Ib Valley	88 (26.04)	28 (8.28)	89 (26.33)	90 (26.63)	15 (4.44)	22 (6.51)	3 (0.89)	3 (0.89)	338 (100)
Upper Kolab	225 (60.32)	13 (3.49)	40 (9.65)	36 (9.65)	15 (4.02)	44 (11.80)	0 (0.00)	0 (0.00)	373 (100)
HAL	187 (45.28)	28 (6.78)	64 (20.10)	83 (20.10)	11 (2.66)	40 (9.69)	0 (0.00)	0 (0.00)	413 (100)
Harabhangi	199 (55.90)	14 (3.93)	42 (11.80)	61 (17.13)	8 (2.25)	31 (8.71)	1 (0.28)	0 (0.00)	356 (100)
Total	**699 (47.23)**	**83 (5.61)**	**235 (15.88)**	**270 (18.24)**	**49 (3.31)**	**137 (9.26)**	**4 (0.27)**	**3 (0.20)**	**1480 (100)**

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Non-Tribal									
Project	**Worker**	**Un-employed**	**House Wife**	**Student**	**Old Age**	**School Age Children**	**Handi-capped**	**Others**	**Total**
MCL Ib Valley	46 (26.74)	12 (6.98)	40 (23.26)	58 (33.72)	12 (6.98)	0 (0.00)	0 (0.00)	4 (2.33)	172 (100)
Upper Kolab	64 (60.38)	2 (1.89)	8 (7.55)	24 (22.64)	6 (5.66)	2 (1.89)	0 (0.00)	0 (0.00)	106 (100)
HAL	44 (47.83)	3 (3.26)	14 (15.22)	15 (16.30)	9 (9.78)	7 (7.61)	0 (0.00)	0 (0.00	92 (100)
Harabhangi	51 (48.11)	11 (10.38)	19 (17.92)	15 (14.15)	2 (1.89)	8 (7.55)	0 (0.00)	0 (0.00)	106 (100)
Total	**205 (43.07)**	**28 (5.88)**	**81 (17.02)**	**112 (23.53)**	**29 (6.09)**	**17 (3.57)**	**0 (0.00)**	**4 (0.84)**	**476 (100)**

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Total									
Project	**Worker**	**Un-employed**	**House Wife**	**Student**	**Old Age**	**School Age Children**	**Handi-capped**	**Others**	**Total**
MCL Ib Valley	134 (26.27)	40 (7.84)	129 (25.29)	148 (29.02)	27 (5.29)	22 (4.31)	3 (0.59)	7 (1.37)	510 (100)
Upper Kolab	289 (60.33)	15 (3.13)	48 (10.02)	60 (12.53)	21 (4.38)	46 (9.60)	0 (0.00)	0 (0.00)	479 (100)
HAL	231 (45.74)	31 (6.14)	78 (15.45)	98 (19.41)	20 (3.96)	47 (9.31)	0 (0.00)	0 (0.00)	505 (100)
Harabhangi	250 (54.11)	25 (5.41)	61 (13.20)	76 (16.45)	10 (2.16)	39 (8.44)	1 (0.22)	0 (0.00)	462 (100)
Total	**904 (46.22)**	**111 (5.67)**	**316 (16.16)**	**382 (19.53)**	**78 (3.99)**	**154 (7.87)**	**4 (0.20)**	**7 (0.36)**	**1956 (100)**

NB: *Figures in parenthesis refer to percentage.*

Type of Workers:

The workers are mainly grouped under two heads - main workers and marginal workers - in our study. Out of a total of 1031 workers, 798 are main workers comprising 77.40 per cent while 22.60 per cent belong to marginal workers.

Table 5.9
Type of Workers in the Survey Households

Project	Tribal			Non-Tribal			Total		
	Main	Marginal	Total	Main	Marginal	Total	Main	Marginal	Total
MCL Ib Valley	77 (58.33)	10 (7.58)	87 (65.91)	39 (29.55)	6 (4.55)	45 (34.09)	116 (87.88)	16 (12.12)	132 (100)
Upper Kolab	197 (60.62)	59 (18.15)	256 (78.77)	57 (17.54)	12 (3.69)	69 (21.23)	254 (78.15)	71 (21.85)	325 (100)
HAL	162 (60.90)	59 (22.18)	221 (83.08)	41 (15.41)	4 (1.50)	45 (16.92)	203 (76.32)	63 (23.68)	266 (100)
Harabhangi	179 (58.12)	61 (19.81)	240 (77.92)	46 (14.94)	22 (7.14)	68 (22.08)	225 (73.05)	83 (26.95)	308 (100)
Total	**615 (59.65)**	**189 (18.33)**	**804 (77.98)**	**183 (17.75)**	**44 (4.27)**	**227 (22.02)**	**798 (77.40)**	**233 (22.60)**	**1031 (100)**

NB: Figures in parenthesis refer to percentage.

It is noteworthy that there is higher proportion of main workers (59.65 per cent) among tribal oustees while the proportion of main workers among non-tribal oustees is only 17.75 per cent. The MCL Ib Valley Project has the highest percentage of main workers i.e. 87.88 per cent while Harabhangi Project has the highest percentage of marginal workers i.e. 26.95 per cent.

Occupational Pattern:

As all the projects are located in rural areas, the people affected by the projects are mainly cultivators. Besides agricultural activities, they are also engaged in other activities. Their occupational pattern can be broadly classified into two heads: main occupation and subsidiary occupation.

Main Occupation:

In the pre-submergence period, most of the oustees were engaged in agricultural activities. Most of them were working in big landowners' farms as daily wage agricultural labourers. Some of them were engaged in construction activities and others were daily wage labourers. In the post-rehabilitation period, the change in the landholding pattern has brought about a change in the occupational pattern too. The table below reflects the main occupational pattern and their engagement in various activities in a year.

It is observed that out of 475 sample households, 1046 persons have main occupation of different types. While 535 (51.15%) are engaged in agricultural activities, 14 (1.34%) are engaged in collection of forest produce, 63 (6.02) are agricultural labourers, 314 (30.02%) are non-agriculture labourers, 90 (8.60%) are engaged in service and 12 (1.15%) do small business.

Table 5.10
Main Occupation of the Surveyed Households

Project	Tribal									
	Agri-culture	Allied Activities	Forest Colle-ction	Agri. Labour	Non-Agri. Labour	Service	Profe-ssion	Busi-ness	Other	Total
MCL Ib Valley	18 (17.82)	0 (0.00)	0 (0.00)	0 (0.00)	57 (56.44)	20 (19.80)	2 (1.98)	2 (1.98)	2 (1.98)	101 (100)
Upper Kolab	222 (85.38)	0 (0.00)	0 (0.00)	12 (4.62)	22 (8.46)	3 (1.15)	0 (0.00)	0 (0.00)	1 (0.38)	260 (100)
HAL	44 (20.66)	0 (0.00)	2 (0.94)	18 (8.45)	107 (50.23)	37 (17.37)	1 (0.47)	2 (0.94)	2 (0.94)	213 (100)
Harabhangi	150 (62.76)	0 (0.00)	4 (1.67)	26 (10.88)	53 (22.18)	0 (0.00)	1 (0.42)	1 (0.42)	4 (1.67)	239 (100)
Total	**434 (53.38)**	**0 (0.00)**	**6 (0.74)**	**56 (6.89)**	**239 (29.40)**	**60 (7.38)**	**4 (0.49)**	**5 (0.62)**	**9 (1.11)**	**813 (100)**

Contd...

Total										
Project	**Agri-culture**	**Allied Activities**	**Forest Colle-ction**	**Agri. Labour**	**Non-Agri. Labour**	**Service**	**Profe-ssion**	**Busi-ness**	**Other**	**Total**
MCL Ib Valley	19 (12.75)	0 (0.00)	0 (0.00)	0 (0.00)	80 (53.69)	41 (27.52)	2 (1.34)	5 (3.36)	2 (1.34)	149 (100)
Upper Kolab	280 (83.58)	0 (0.00)	0 (0.00)	12 (3.58)	36 (10.75)	5 (1.49)	0 (0.00)	1 (0.30)	1 (0.30)	335 (100)
HAL	49 (19.22)	0 (0.00)	2 (0.78)	19 (7.45)	133 (52.16)	43 (16.86)	1 (0.39)	5 (1.96)	3 (1.18)	255 (100)
Harabhangi	187 (60.91)	0 (0.00)	12 (3.91)	32 (10.42)	65 (21.17)	1 (0.33)	3 (0.98)	1 (0.33)	6 (1.95)	307 (100)
Total	**535 (51.15)**	**0 (0.00)**	**14 (1.34)**	**63 (6.02)**	**314 (30.02)**	**90 (8.60)**	**6 (0.57)**	**12 (1.15)**	**12 (1.15)**	**1046 (100)**

NB: *Figures in parenthesis refer to percentage.*

Another point to be observed is that out of a total of 813 tribal persons, 434 (53.38%) are engaged in agricultural activities while the corresponding figure for non-tribal persons stands at 43.35 per cent. Secondly, while 7.38 per cent of tribals are engaged in service, the corresponding figure for non-tribals is 12.88 per cent. Thirdly, there is a higher percentage of agricultural labourers among tribals than among non-tribals.

Subsidiary Occupation:

Besides the main occupation, there are marginal workers who are engaged in different subsidiary activities which provide them additional income. This is called subsidiary occupation. Table 5.11 presents the households engaged in subsidiary occupation. As can be seen in the table, 760 persons in the 475 households surveyed have subsidiary occupation. Out of these 760 persons, 136 (17.9%) are engaged in agriculture, 373 (49.1%) are non-agriculture labourers, 111 (14.6%) are agricultural labourers and 101 (13.3%) are engaged in collection of forest produces. The oustees are mainly non-agricultural labourers engaged in road construction work.

Among tribals, there is a higher proportion of agricultural labourers (16.1%) as compared to non-tribal agricultural labourers (8.7%).

Table 5.11
Subsidiary Occupation of the Surveyed Households

Project	Tribal									
	Agri-culture	Allied Activities	Forest Colle-ction	Agri. Labour	Non-Agri. Labour	Service	Profe-ssion	Busi-ness	Other	Total
MCL Ib Valley	2 (10.0)	0 (0.00)	10 (50.0)	2 (10.0)	2 (10.0	0 (0.0)	4 (20.0)	0 (0.0)	0 (0.0)	20 (100)
Upper Kolab	17 (8.1)	2 (0.95)	0 (0.0)	41 (19.4)	149 (70.6)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.95)	211 (100)
HAL	32 (28.1)	0 (0.00)	0 (0.0)	43 (37.7)	36 (31.6)	0 (0.0)	0 (0.0)	0 (0.0)	3 (2.63)	114 (100)
Harabhangi	62 (23.4)	2 (0.75)	69 (26.04)	12 (4.5)	112 (42.3)	0 (0.0)	0 (0.0)	0 (0.0)	8 (3.02)	265 (100)
Total	**113 (18.5)**	**4 (0.66)**	**79 (12.95)**	**98 (16.1)**	**299 (49.0)**	**0 (0.0)**	**4 (0.66)**	**0 (0.0)**	**13 (2.13)**	**610 (100)**

Contd....

Project	Non-Tribal									
	Agri-culture	Allied Activities	Forest Colle-ction	Agri. Labour	Non-Agri. Labour	Service	Profe-ssion	Busi-ness	Other	Total
MCL Ib Valley	1 (16.7)	1 (16.7)	0 (0.0)	0 (0.0)	3 (50.0)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)	6 (100)
Upper Kolab	4 (8.2)	2 (4.1)	0 (0.0)	3 (6.1)	38 (77.55)	0 (0.0)	0 (0.0)	2 (4.1)	0 (0.0)	49 (100)
HAL	3 (30.0)	1 (10.0)	0 (0.0)	0 (0.0)	5 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (10.0)	10 (100)
Harabhangi	15 (17.7)	0 (0.0)	22 (25.9)	10 (11.8)	28 (32.9)	0 (0.0)	1 (1.2)	0 (0.0)	9 (10.6)	85 (100)
Total	**23 (15.3)**	**4 (2.7)**	**22 (14.7)**	**13 (8.7)**	**74 (49.3)**	**0 (0.0)**	**1 (0.7)**	**3 (2.0)**	**10 (6.7)**	**150 (100)**

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Project	Total									
	Agri-culture	Allied Activities	Forest Colle-ction	Agri. Labour	Non-Agri. Labour	Service	Profe-ssion	Busi-ness	Other	Total
MCL Ib Valley	3 (11.5)	1 (3.9)	10 (38.5)	2 (7.7)	5 (19.2)	0 (0.0)	4 (15.4)	1 (3.9)	0 (0.0)	26 (100)
Upper Kolab	21 (8.1)	4 (1.6)	0 (0.0)	44 (16.9)	187 (71.9)	0 (0.0)	0 (0.0)	2 (0.8)	2 (0.8)	260 (100)
HAL	35 (28.2)	1 (0.8)	0 (0.0)	43 (34.7)	41 (33.1)	0 (0.0)	0 (0.0)	0 (0.0)	4 (3.2)	124 (100)
Harabhangi	77 (22.0)	2 (0.6)	91 (26.0)	22 (6.3)	140 (40.0)	0 (0.0)	1 (0.3)	0 (0.0)	17 (4.9)	350 (100)
Total	**136 (17.9)**	**8 (1.1)**	**101 (13.3)**	**111 (14.6)**	**373 (49.1)**	**0 (0.0)**	**5 (0.7)**	**3 (0.4)**	**23 (3.0)**	**760 (100)**

NB: *Figures in parenthesis refer to percentage.*

5.3.2 Land Holding Pattern

Due to acquisition of their agricultural land, all the land owning displaced families became landless. Some non-tribal landed households could purchase agricultural land with the compensation money received against the acquisition of their land, but many simply squandered it away. But all the displaced families, including the landless ones, get an opportunity to purchase a patch of agricultural land from the rehabilitation assistance that is provided by the project authorities. This is an opportunity even for the landless to become landed. Thus it is imperative to find out whether all the families did purchase land.

Table 5.12

Average Land Holding Pattern of the Sample Households

Project	Tribal		
	Sample House-holds	Before Displace-ment	After Displace-ment
MCL Ib Valley	70	6.83	0.03
Upper Kolab	100	7.17	2.08
HAL	100	8.61	0.55
Harabhangi	100	6.91	0.18
Total	**370**	**7.42**	**0.77**
	Non-Tribal		
MCL Ib Valley	30	3.95	0.12
Upper Kolab	25	7.35	3.30
HAL	25	7.22	0.26
Harabhangi	25	5.57	0.34
Total	**105**	**5.92**	**0.82**
	Total		
MCL Ib Valley	100	5.97	0.06
Upper Kolab	125	7.21	2.32
HAL	125	8.33	0.44
Harabhangi	125	6.64	0.15
Total	**475**	**7.09**	**0.78**

Table 5.12 shows that the tribal households possessed an average of 7.42 acre of land while non-tribal households possessed an average of 5.92 acres in the pre-displacement period. But after displacement, the figure came down to 0.77 acres and 0.82 acres respectively. In comparison to the pre-displacement period, the average size of land in all categories of households has been reduced substantially in the post-rehabilitation period.

Several reasons could be attributed to the considerable reduction in the average land holding size and in the number of medium and large farmers in the post displacement period. Some of the reasons are cited below.

(i) When the agricultural land of the displaced people was submerged in the development projects, there was a huge gap not only between the date of issue of notification of land acquisition and the date of payment of compensation of money but also between the date of payment of compensation money and date of the physical shifting of the displaced people. As a result, the displaced people continued to cultivate their agricultural land in the submersible village and paid little attention to purchase of land in their new places of residence. By the time evacuation took place, most of the displaced people had spent the compensation money on luxury items and conspicuous consumption.

(ii) As per the R and R policy, the project authorities should provide land based resettlement. But the authorities could not provide the stipulated amount of agricultural land to the displaced people and had to hand out cash in lieu of land.

When cash payment was announced, the displaced people showed great enthusiasm. They were carried away by the prospect of possessing heavy cash. Permanent gain and asset building by way of land did not quite enthuse them the same way. As a result, they spent the rehabilitation assistance on liquor, purchase of

fashionable items like transistors, watches, dress materials etc. As a result, they could not purchase the amount of land prescribed in the R and R guidelines, i.e. 4 acres of un-irrigated land or 2 acres of irrigated land.

(iii) When the displaced people started spending their rehabilitation assistance on needless things rather than on purchase of land, the project authorities opened savings bank accounts in the name of each entitled displaced people and directed that money will be released if the displaced people purchased agricultural land and the amount will be dispersed at the time of the actual registration of land. This was an innovative idea. But instead of paying dividends, it acted other way round. Revenue Instructors (Inspectors?), officers-in-charge, middlemen and unscrupulous elements saw in it a great opportunity to make some quick money. Several fraudulent land transactions were made without proper verification and middlemen, Revenue Instructors (Inspectors?) and officers-in-charge took their cut from the money released to the displaced people. In some cases, the same patch of land was sold to different displaced people, but rehabilitation assistance was still released by the R and R Unit.

(iv) The rehabilitation assistance meant for purchase of agricultural land in the new village was too meagre in comparison to the market price of the land. When the people in the new village came to know that the displaced people would purchase land, they hiked the price of various categories of land overnight. This sudden artificial hike in land prices forced the displaced families to settle for a lesser amount of land than they could have otherwise purchased. The picture is almost identical among all caste groups, which clearly indicates that displacement has drastically affected the economic condition of the displaced people in terms of land holdings irrespective of caste divisons.

5.3.3 Cropping Pattern

Before displacement, a variety of crops such as paddy, pulses, ragi, millet, maize, various types of oilseeds, vegetables and tobacco were grown by the people in different categories of land such as plain land, hill slope land, low land and so on.

But in the post-displacement period, most of the displaced have been resettled in plain areas. The types of land under cultivation at present are thus totally different. The change in the variety of land under cultivation has been accompanied by a corresponding change in the cropping pattern in the post-rehabilitation period. The cropping pattern is now almost entirely monocrop with paddy as the principal crop. Production of other crops is minimal. As a result, there has been a drastic change in the cropping pattern and production of pulses, oilseeds and tobacco is almost nil. The table below shows the cropping pattern and production of different crops and their value in the post-rehabilitation period. The value of crops is estimated at the local market prices and yield of crops is based on the year 2007.

Table 5.13
Average output of different crops (in quintals) in post-rehabilitation period

Project	Total Agr. Land (in Acres)	Rice	Pulses	Oil Seeds	Tabacco and Veg.	Others	Total Output
MCL Ib Valley	6.05	25.41	0	0	0	0	25.41
Upper Kolab	290.5	1888.25	0	0	1.6	6.5	1896.35
HAL	55.3	320.74	0.85	0	0	0	321.59
Harabhangi	18.2	87.36	0.56	0	0	0.5	88.42
Total	370.05	2321.76	1.41	0	1.6	7.00	2331.77

Table 5.13 shows that rice has become the principal crop and production of other crops is very negligible. The table also shows

that agricultural production is the highest among all four projects in the Upper Kolab primarily due to the fact that it saw land based rehabilitation. But in case of the Harabhangi Irrigation Project, the oustees used to cultivate on forest land. So their production is significantly less than that of the Upper Kolab Project.

5.3.4 Household Income from different Sources

Household income of the oustees from different sources in the pre and post-rehabilitation period is given in the table below.

Table – 5.14 (A)
Average Income from different Sources of Surveyed Households (Before Displacement)

Project	Agri-culture	Animal Husban-dry	Services	Business	Labour	Other	Total
Tribal							
MCL Ib Valley	2407	66	14223	71	5386	249	22401
Upper Kolab	5176	80	400	0	9770	1199	16625
HAL	4824	140	0	0	240	383	5587
Harabhangi	5123	220	0	0	889	832	7064
Total	4543	131	2799	14	3965	699	12151
Non-Tribal							
MCL Ib Valley	7110	267	9600	0	2867	467	20310
Upper Kolab	13234	480	0	0	3280	720	17714
HAL	7603	0	0	0	767	567	8836
Harabhangi	10022	640	0	0	1120	840	12622
Total	**9712**	**343**	**2743**	**0**	**2086**	**667**	**15550**
Total							
MCL Ib Valley	3818	126	12836	50	4630	314	21774
Upper Kolab	6788	160	320	0	8472	1103	16843
HAL	5660	112	0	0	376	442	6590
Harabhangi	6103	304	0	0	935	834	8176
Total	**5685**	**178**	**2787**	**11**	**3549**	**692**	**12902**

Table – 5.14 (B)
Average Income from different Sources of Surveyed Households (After Displacement)

Project	Agriculture	Animal Husbandry	Services	Business	Labour	Other	Total
Tribal							
MCL Ib Valley	103	0	61777	429	7180	274	69763
Upper Kolab	4342	135	1860	460	4862	584	12243
HAL	1659	0	4200	0	4373	314	10546
Harabhangi	746	270	0	0	2791	1980	5787
Total	**1843**	**109**	**13325**	**205**	**4608**	**830**	**20921**
Non-Tribal							
MCL Ib Valley	426	0	28573	0	1967	1033	31999
Upper Kolab	9900	384	2400	0	5040	960	18684
HAL	650	600	0	0	5600	1200	8050
Harabhangi	1432	640	0	0	2480	3560	8112
Total	**3005**	**415**	**8735**	**0**	**3952**	**1714**	**17823**
Total							
MCL Ib Valley	200	0	51816	300	5616	502	58434
Upper Kolab	5454	185	1968	368	4897	659	13531
HAL	1483	144	3360	0	4842	539	10369
Harabhangi	883	344	0	0	2729	2296	6252
Total	**2100**	**177**	**12311**	**160**	**4463**	**1025**	**20236**

Table 5.14 (A) presents the household income of oustees before displacement period from various sources such as agriculture, animal husbandry, services, business, labour and others. The total annual income has been calculated as per the perception and occupation of the oustee.

Before displacement, the tribal people were earning an average annual income of Rs.12,151 while non-tribals were earning an average of Rs.15,550 per annum from different sources. Taking both tribal and non-tribal population, the average earning of a household per annum was Rs.12, 902. The average annual earning of a household in the MCL Ib Valley project, Upper Kolab project, Harabhangi project and the HAL project were Rs.21, 774, Rs.16,843, Rs.8176 and Rs.6590 respectively.

In the Upper Kolab project, people get most of their income from agriculture and labour work. In MCL Ib Valley project, the major share of income is derived from service i.e. Rs.12, 836 per annum at an average. Household income from business is nil in case of Upper Kolab, HAL and Harabhangi projects. In almost all the project areas, households get the lion's share of their income from agriculture, animal husbandry and labour earning.

After displacement, the average annual income of a tribal household is Rs.20, 921 while the corresponding figure for non-tribal households is Rs.17,823. When we take tribal and non-tribal households together, the average annual income of a household comes to Rs.20, 236 as presented in Table 5.14 (B).

Let us now compare the household income before and after displacement. While the average annual income was Rs.12, 902 before displacement, it leapfrogged to a healthy Rs.20, 236 after displacement, exhibiting a stunning 56.84 per cent growth rate in income. The following figures are noteworthy.

(i) The average annual income of a tribal household, which was Rs.12,151 before displacement, increased to Rs.20, 921 registering an impressive increase of 72.17 per cent.

(ii) In case of non-tribals, the average annual income which was Rs.15, 550 before displacement, increased to Rs.17, 823 after displacement showing an increase of 14.61 per cent.

(iii) The annual average income from agriculture was Rs.5685 before displacement. But after displacement, it dropped to Rs.2100 - a decline of 63.06 per cent. The reason for this is the fact that there was less agricultural land available in the post-rehabilitation period. This shows that agriculture was the main source of income for a majority of people before displacement. They were cultivating settled, unsettled or encroached land. Some of them were cultivating land on hill slopes and shifting cultivation was widespread. The economy was mostly based on land and people depended heavily on natural resources. Income from agriculture has fallen drastically after displacement because oustee families have lost a considerable amount of land and there is less dependence on forests, trees and livestock in the changed scenario.

(iv) An upward trend of income from services has been marked after displacement. It is observed from Table 5.14 (A) and 5.14 (B) that before displacement, the average annual income was Rs.2787. After displacement, the income shot up to Rs.12,311 - an increase of income to the extent of a staggering 341.72 per cent. This increase in income can be attributed to the fact that there has bee a considerable increase in engagement in non-agricultural activities after displacement.

(iv) Income from labour too has increased after displacement. Before displacement, the average annual

income of a labourer was Rs.3549, wich rose to Rs.4463 after displacement - an increase of 25.75 per cent. This increase is primarily due to the increase in the wage rate. At the time of group discussion with oustees, they said that there is no scope for non-agriculture work in this new resettlement area, which has seriously affected their economic condition.

5.3.5 Housing Pattern

The housing pattern of the displaced people was very simple in the pre-submergence period. They were mostly residing in double or single room *kutcha* houses made of mud, bamboo, thatch, straw etc. Now, they have constructed their houses on their own land. Table 5.15 (A) shows the housing pattern in the pre-displacement period.

Out of the 475 sample households, 402 (87.63%) were staying in *kutcha* houses in the pre-submergence period. 71 households used *kutcha* tile houses representing 14.95 per cent of the total. Only 2 households used pucca tile houses. There is no concrete house in any household in our sample.

Table – 5.15 (A)
Type of House of Surveyed Oustee Households
(Before Displacement)

Project	Tribal					Non-Tribal					Total				
	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total
MCL Ib Valley	26 (26.0)	44 (44.0)	0 (0.0)	0 (0.0)	70 (70.0)	6 (6.0)	22 (22.0)	2 (2.0)	0 (0.0)	30 (30.0)	32 (32.0)	66 (66.0)	2 (2.0)	0 (0.0)	100 (100)
Upper Kolab	97 (77.6)	3 (2.4)	0 (0.0)	0 (0.0)	100 (80.0)	24 (19.2)	1 (0.8)	0 (0.0)	0 (0.0)	25 (20.0)	121 (96.8)	4 (3.2)	0 (0.0)	0 (0.0)	125 (100)
HAL	99 (79.2)	1 (0.8)	0 (0.0)	0 (0.0)	100 (80.0)	25 (20.0)	0 (0.0)	0 (0.0)	0 (0.0)	25 (20.0)	124 (99.2)	1 (0.8)	0 (0.0)	0 (0.0)	125 (100)
Hara-bhangi	100 (80.0)	0 (0.0)	0 (0.0)	0 (0.0)	100 (80.0)	25 (20.0)	0 (0.0)	0 (0.0)	0 (0.0)	25 (20.0)	125 (100)	0 (0.0)	0 (0.0)	0 (0.0)	125 (100)
Total	**322 (67.8)**	**48 (10.1)**	**0 (0.0)**	**0 (0.0)**	**370 (77.9)**	**80 (16.8)**	**23 (4.8)**	**2 (0.4)**	**0 (0.0)**	**105 (22.1)**	**402 (84.6)**	**71 (15.0)**	**2 (0.4)**	**0 (0.0)**	**475 (100)**

NB: *Figures in parenthesis refer to percentage*

Table – 5.15 (B)
Type of House of Surveyed Oustee Households
(After Displacement)

Project	Tribal					Non-Tribal					Total				
	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total	Kutcha Thatched	Kutcha Tile	Pucca Tile	Pucca Concrete	Total
MCL Ib Valley	0 (0.0)	37 (37.0)	13 (13.0)	20 (20.0)	70 (70.0)	0 (0.0)	10 (10.0)	15 (15.0)	5 (5.0)	30 (30.0)	0 (0.0)	47 (47.0)	28 (28.0)	25 (25.0)	100 (100)
Upper Kolab	72 (57.6)	23 (18.4)	5 (4.0)	0 (0.0)	100 (80.0)	15 (12.0)	10 (8.0)	0 (0.0)	0 (0.0)	25 (20.0)	87 (69.6)	33 (26.4)	5 (4.0)	0 (0.0)	125 (100)
HAL	21 (16.8)	51 (40.8)	22 (17.6)	6 (1.8)	100 (80.0)	1 (0.8)	19 (15.2)	5 (4.0)	0 (0.0)	25 (20.0)	22 (17.6)	70 (56.0)	27 (21.6)	6 (4.8)	125 (100)
Hara-bhangi	20 (16.0)	5 (4.0)	74 (59.2)	1 (0.8)	100 (80.0)	20 (16.0)	1 (0.8)	3 (2.4)	1 (0.8)	25 (20.0)	40 (32.0)	6 (4.8)	77 (61.6)	2 (1.6)	125 (100)
Total	**113 (23.8)**	**116 (24.4)**	**114 (24.0)**	**27 (5.7)**	**370 (77.9)**	**36 (7.6)**	**40 (8.4)**	**23 (4.8)**	**6 (1.3)**	**105 (22.1)**	**149 (31.4)**	**156 (32.8)**	**137 (28.8)**	**33 (6.95)**	**475 (100)**

NB: *Figures in parenthesis refer to percentage.*

Table – 5.16 (A)
No. of Living Rooms of Surveyed Oustee Households
(Before Displacement)

Project	Tribal					Non-Tribal					Total				
	Single	Double	Three	Above Three	Total	Single	Double	Three	Above Three	Total	Single	Double	Three	Above Three	Total
MCL Ib Valley	1 (1.0)	17 (17.0)	25 (25.0)	27 (27.0)	70 (70.0)	3 (3.0)	3 (3.0)	10 (10.0)	14 (14.0)	30 (30.0)	4 (4.0)	20 (20.0)	35 (35.0)	41 (41.0)	100 (100)
Upper Kolab	1 (0.8)	65 (52.0)	16 (12.8)	18 (14.4)	100 (80.0)	0 (0.0)	15 (12.0)	7 (5.6)	3 (2.4)	25 (20.0)	1 (0.8)	80 (64.0)	23 (18.4)	21 (16.8)	125 (100)
HAL	2 (1.6)	57 (45.6)	28 (22.4)	13 (10.4)	100 (80.0)	1 (0.8)	22 (17.6)	1 (0.8)	1 (0.8)	25 (20.0)	3 (2.4)	79 (63.2)	29 (23.2)	14 (11.2)	125 (100)
Hara-bhangi	3 (2.4)	82 (65.6)	13 (10.4)	2 (1.6)	100 (80.0)	0 (0.0)	21 (16.8)	4 (3.2)	0 (0.0)	25 (20.0)	3 (2.4)	103 (82.4)	17 (13.6)	2 (1.6)	125 (100)
Total	**7 (1.5)**	**221 (46.5)**	**82 (17.3)**	**60 (12.6)**	**370 (77.9)**	**4 (0.8)**	**61 (12.8)**	**22 (4.6)**	**18 (3.8)**	**105 (22.1)**	**11 (2.3)**	**282 (59.4)**	**104 (21.9)**	**78 (16.4)**	**475 (100)**

NB: *Figures in parenthesis refer to percentage.*

Table – 5.16 (B)
No. of Living Rooms of Surveyed Oustee Households
(After Displacement)

Project	Tribal					Non-Tribal					Total				
	Single	Double	Three	Above Three	Total	Single	Double	Three	Above Three	Total	Single	Double	Three	Above Three	Total
MCL Ib Valley	1 (1.0)	17 (17.0)	25 (25.0)	27 (27.0)	70 (70.0)	3 (3.0)	3 (3.0)	10 (10.0)	14 (14.0)	30 (30.0)	4 (4.0)	20 (20.0)	35 (35.0)	41 (41.0)	100 (100)
Upper Kolab	1 (0.8)	65 (52.0)	16 (12.8)	18 (14.4)	100 (80.0)	0 (0.0)	15 (12.0)	7 (5.6)	3 (2.4)	25 (20.0)	1 (0.8)	80 (64.0)	23 (18.4)	21 (16.8)	125 (100)
HAL	2 (1.6)	57 (45.6)	28 (22.4)	13 (10.4)	100 (80.0)	1 (0.8)	22 (17.6)	1 (0.8)	1 (0.8)	25 (20.0)	3 (2.4)	79 (63.2)	29 (23.2)	14 (11.2)	125 (100)
Hara-bhangi	3 (2.4)	82 (65.6)	13 (10.4)	2 (1.6)	100 (80.0)	0 (0.0)	21 (16.8)	4 (3.2)	0 (0.0)	25 (20.0)	3 (2.4)	103 (82.4)	17 (13.6)	2 (1.6)	125 (100)
Total	**7 (1.5)**	**221 (46.5)**	**82 (17.3)**	**60 (12.6)**	**370 (77.9)**	**4 (0.8)**	**61 (12.8)**	**22 (4.6)**	**18 (3.8)**	**105 (22.1)**	**11 (2.3)**	**282 (59.4)**	**104 (21.9)**	**78 (16.4)**	**475 (100)**

NB: *Figures in parenthesis refer to percentage*

The housing patterns have been analysed to study the social aspect of the oustees and the findings have been presented in Table 5.15 (B). It is observed that out of 475 sample households, 149 (31.4%) households are residing in kutcha thatched houses, 156 (32.8%) are using kutcha tile houses, 137 (28.8) are dwelling in pucca tile houses and 33 (6.95%) are using pucca concrete houses after displacement.

In comparison to the pre-displacement period, the displaced people in all four projects are better off in the post-displacement period in respect of housing as there has been an increase in Pucca and Asbestos houses, except in case of UKP. This could be attributed to the rehabilitation assistance provided to all the displaced people giving them an opportunity to construct a better house of their own choice. The UKP was a case of land based rehabilitation with a low cash component. No wonder their houses are much worse compared to the other three projects.

Size of Houses:

The oustees were living in single, double or three-room kutcha houses before displacement. This has been depicted in Table 5.16 (A). So far as the size of the living room of the households is concerned, 11 out of the 475 sample households (2.32%) were staying in single-room houses, 282 (59.39%) were residing in double-room houses and 104 (21.89%) were living in three-room houses and the rest 78 (16.42%) were staying in houses with more than 3 rooms.

In the post-rehabilitation period, it is observed that 33 out of the 475 sample households (6.95%) are residing in single-room houses, 203 (63.58%) are staying in double-room houses, 90 (18.95%) are living in three-roomed houses and 50 (10.53%) households are residing in houses with more than three rooms.

In the post-rehabilitation period, it is found that the number of double-room and single-room houses has increased in case of both tribal and non-tribal households.

5.3.6 Asset Structure

In the pre-submergence period, the displaced people possessed various kinds of assets like agricultural land, homestead land, farm equipment, livestock, consumer durables etc. Hence, it is imperative to analyse the asset structure of the oustees in the pre and post-rehabilitation period.

Table 5.17 (A) depicts the assets structure and the average value of these assets.

It is observed that the oustee families possessed an average of 7.09 acres of land per household whose average value was Rs.1, 19,916/-. The average quantity of homestead land per household was 1.11 acre costing an average of Rs.38, 135. Each oustee household occupied livestock assets to the extent of Rs.3, 411/- on an average. The oustees possessed an average of Rs.1, 332 worth of consumer durables per household. The average value of assets that an oustee household occupied before displacement was Rs.5, 853.

Tribals had assets worth an average of Rs.5, 631/- per household in all four projects while non-tribals possessed assets amounting to an average of Rs.6,636/- per household. This shows that assets held by non-tribals was 17.84 per cent more than that of tribals.

Displacement not only brings changes in lifestyle and standards of living of the oustees but also changes in the asset structure. Shifting to a new location directly affects the movable as well as

Table – 5.17 (A)
Average Household Assets (Before Displacement)

Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Tribal									
MCL Ib Valley	6.83	136629	1.67	66629	360	3400	1400	900	209317
Upper Kolab	7.17	143400	0.94	37520	290	3100	1350	700	186360
HAL	8.61	86100	1.24	24740	220	3500	1100	650	116310
Hara-bhangi	6.91	138100	1.15	45960	340	3350	1290	675	189715
Total	7.42	125200	1.21	41854	298	3332	1276	718	172678

Contd....

Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Non-Tribal									
MCL Ib Valley	3.95	79000	0.62	24667	480	3900	1600	1100	110747
Upper Kolab	7.35	147040	0.69	27680	360	3500	1670	1050	181300
HAL	7.22	72240	0.86	17120	420	3600	1480	970	95830
Hara-bhangi	5.57	111360	0.77	30720	390	3700	1360	850	148380
Total	5.92	101295	0.73	25029	416	3686	1531	998	132954

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Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Total									
MCL Ib Valley	5.97	119340	1.35	54040	396	3550	1460	960	179746
Upper Kolab	7.21	144128	0.89	35552	304	3180	1414	770	185348
HAL	8.33	83328	1.16	23216	260	3520	1176	714	112214
Hara-bhangi	6.64	132752	1.07	42912	350	3420	1304	710	181448
Total	7.09	119916	1.11	38135	324	3411	1332	779	163897

immovable properties. In most cases, fewer people are likely to have land as an asset after displacement due to

i. Acquisition of their land forcing them to shift to other occupation.

ii. Prohibitive price of land elsewhere which they cannot pay because of inadequate compensation money they receive.

iii. The absence of 'land for land' principle in the rehabilitation policy.

There is of course an increase in the financial assets. The extent of livestock assets also changes as it depends on the availability of space for maintenance and fodder. In contrast to this, there is a possibility of increase in the possession of durable goods as the oustees, for the first time, not only have sizeable cash in their hands but also are exposed to the market.

The average quantity of agricultural land per oustee family is only 0.81 acre in the post-rehabilitation period. But in the - displacement period, the oustee family occupied 7.09 acres of agricultural land. It means a whopping 88.57 per cent decline in agricultural land. Similarly, there is a decline in the quantity of homestead land from 1.11 acre to 0.18 acre per family in the post-rehabilitation period. There is also a decline in the possession of livestock in the post-rehabilitation period. The average value of livestock declined from Rs.3, 411/- in the pre-displacement period to Rs.961/- per oustee family in the post-rehabilitation period. The 71.82 per cent decline can be attributed to the selling of livestock during the transit period or the death of some livestock for want of acute shortage of fodder and drinking water.

The substantial reduction in farm equipment like sickles, axes, spades, and wooden plough is primarily due to reduction in the size of agricultural land after rehabilitation. There is of course an

Table – 5.17 (B)
Average Household Assets (After Displacement)

Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Tribal									
MCL Ib Valley	0.03	1371	0.10	40000	120	160	3280	4600	49531
Upper Kolab	20.8	83200	0.50	100000	460	2370	1460	2400	189890
HAL	0.55	22120	0.00	0	110	380	2870	4200	29680
Hara-bhangi	0.18	7280	0.10	20000	380	450	1350	2300	31760
Total	**0.77**	**30692**	**0.18**	**40000**	**279**	**895**	**2156**	**3276**	**6607**

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Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Non-Tribal									
MCL Ib Valley	0.12	4867	0.10	40000	100	0	9600	7850	62417
Upper Kolab	3.30	132000	0.50	100000	840	3890	1890	3200	241820
HAL	0.26	10400	0	0	160	560	3220	1450	15790
Hara-bhangi	0.34	13760	0.10	20000	460	570	1680	2560	39030
Total	**0.96**	**38571**	**0.17**	**40000**	**376**	**1195**	**4360**	**3960**	**88462**

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Project	Agriculrural Land		Homestead Land		Farm Equipments (in Rs.)	Livestock (in Rs.)	Consumer Durables (in Rs.)	Others (in Rs.)	Total (in Rs.)
	Quantity (in Acre)	Value (in Rs.)	Quantity (in Acre)	Value (in Rs.)					
Total									
MCL Ib Valley	0.06	2420	0.10	40000	114	112	5176	5575	53397
Upper Kolab	2.32	92960	0.50	100000	536	2674	1546	2560	200276
HAL	0.49	19776	0.00	0	120	416	2940	3650	26902
Hara-bhangi	0.21	8576	0.10	20000	396	474	1416	2352	33214
Total	**0.81**	**32434**	**0.18**	**40000**	**301**	**961**	**2643**	**3427**	**79766**

increase in financial assets. The oustee families get cash compensation in lump sum and some of them deposit the money in financial institutions. An increase in consumer durables is also a noteworthy feature of displacement. The average value of consumer durables per oustee family increased from Rs.1, 332/- in the pre-displacement period to Rs.2, 643/- in the post-rehabilitation period, showing an increasing of as much as 98.42 per cent. The value of other assets like gold, silver, watch, bicycle, radio which was Rs.779/- on an average per family during the pre-displacement period, galloped to Rs.3427/- per family in the post-rehabilitation period, registering an increase of 339.92 per cent. This is due to the fact that displaced people received cash compensation in lump sum and purchased various household articles which they could not afford earlier.

5.3.7 Expenditure Pattern of Sample Households

The households spend their income towards the purchase of cereals, pulses, vegetables, education and others. The household expenditure pattern before displacement has been shown in Table 5.18 (A).

The average annual expenditure of an oustee tribal household before displacement was Rs.11, 057/- while the corresponding expenditure of non-tribal oustee household stood at Rs.14, 145/-. This indicates that before displacement a non-tribal household's expenditure was more than a tribal household to the extent of 27.92 per cent before displacement.

The break-up of the annual expenditure of Rs. 11, 057 incurred by a tribal family on various heads goes like this: Rs.6, 016 (51.4%) on cereals, Rs.722/- (6.52%) on pulses, Rs.1, 535/- (13.88%) on vegetables, Rs.408/- (3.68%) on education and the rest Rs.2, 376/- (21.48%) on others.

Table – 5.18 (A)
Average Annual Expenditure of Surveyed Oustee Households (Before Displacement)

Project	Expenditure					
	Cereal	Pulses	Vegetable	Education	Other	Total
Tribal						
MCL Ib Valley	8800	1100	3400	1300	4900	19500
Upper Kolab	8400	900	1800	400	3260	14760
HAL	3500	400	600	100	900	5500
Hara-bhangi	4200	600	900	100	1200	7000
Total	**6016**	**722**	**1535**	**408**	**2376**	**11057**
Non-Tribal						
MCL Ib Valley	9100	1600	3800	3400	2900	20800
Upper Kolab	8800	1200	2200	500	2400	15100
HAL	3900	800	1100	100	1900	7800
Hara-bhangi	7200	800	2100	150	1300	11550
Total	**7338**	**1124**	**2371**	**1150**	**2162**	**14145**
Total						
MCL Ib Valley	8890	1250	3520	1930	4300	19890
Upper Kolab	8480	960	1880	420	3088	14828
HAL	3580	480	700	100	1100	5960
Hara-bhangi	4800	640	1140	110	1220	7910
Total	**6308**	**811**	**1720**	**572**	**2328**	**11739**

A non-tribal household, on the other hand, spent an average of Rs.7, 338/- (51.87%) on cereals, Rs.1, 124/- (7.94%) on pulses, Rs.2,371 (16.76%) on vegetables, Rs.1, 150/- (8.13%) on education and Rs.2, 162/- (15.28%) on others in a year.

Taking both tribal and non-tribal oustee's expenditure, it was found that the average annual expenditure of an oustee was Rs.11,739/- out of which he spent Rs.6,308/- (53.73%) on cereals, Rs.811/- (6.90%) on pulses, Rs.1,720/- (14.65%) on vegetables, Rs.572/- (4.87%) on education and Rs.2,338/- (19.83%) on others.

The average annual expenditure of oustees after displacement has been depicted in Table 5.18 (B).

Table – 5.18 (B)
Average Annual Expenditure of Surveyed Oustee Households (After Displacement)

Project	Expenditure					
	Cereal	Pulses	Vegetable	Education	Other	Total
Tribal						
MCL Ib Valley	15800	2400	4400	2800	4000	29400
Upper Kolab	7600	800	1800	500	2000	12700
HAL	6400	700	1650	280	1900	10930
Hara-bhangi	3400	400	900	100	1500	6300
Total	**7692**	**968**	**2008**	**768**	**2216**	**13651**
Non-Tribal						
MCL Ib Valley	16700	2800	4800	3900	5000	33200
Upper Kolab	9700	1500	3200	1200	2500	18100
HAL	5200	800	1400	800	1260	9460
Hara-bhangi	5600	600	1200	600	1000	9000
Total	**9652**	**1490**	**2752**	**1733**	**2562**	**18190**
Total						
MCL Ib Valley	16070	2520	4520	3130	4300	30540
Upper Kolab	8020	940	2080	640	2100	13780
HAL	6160	720	1600	384	1772	10636
Hara-bhangi	3840	440	960	200	1400	6840
Total	**8125**	**1083**	**2173**	**981**	**2293**	**14655**

The average annual expenditure of a tribal household after displacement is Rs.13, 651/- as against Rs.11057/- in the pre-rehabilitation period. This shows a 23.46 per cent of increase in household expenditure after displacement.

Similarly it is observed that average annual expenditure of a non-tribal oustee is Rs.18, 190/- as against Rs.14, 145/- in the pre-rehabilitation period, showing an increase of 28.59 per cent after displacement.

Taking both tribal and non-tribal oustee households together, the average annual expenditure is Rs.14, 655/- after displacement as against Rs.11, 739/- n the pre-rehabilitation period - an increase of 24.84 per cent after displacement.

It is found that out of the total average annual expenditure of Rs.14, 655/- in the post-rehabilitation period, the expenditure on cereals is Rs.8, 125/- (55.44%), on pulses Rs.1, 083/- (7.38%), on vegetables Rs.2, 173/- (14.82%), on education Rs.981/- (6.69%) and on others Rs.2, 293/- (15.64%).

5.3.8 Savings:

The analysis of income, expenditure and asset position of the oustee households in the sample shows that very few among them are left with a substantial sum of money in the form of savings. Hardly 10 per cent among them save some money either on a monthly or yearly basis to meet unforeseen needs. It is found that households where the earners are employed in Government services or private establishments in the organized sector make regular savings for the welfare and development of family members. Many such families have retained their entire compensation money in the form of fixed savings and time deposits in nationalized banks and Post Offices. But the vast majority of the displaced live a hand-to-mouth existence and quite a few of them live in perpetual debt.

5.3.9 Indebtedness:

Although debt is a manifestation of negative savings and weak economic position of a household or nation at the macro level, debts and loans per se are not bad if these are utilized for productive investment or expansion of economic activities of a household or a nation. Under poverty alleviation programmes, especially after the nationalization of commercial banks, the Government has taken steps to advance loans to the weaker sections in order to enable them to earn a decent livelihood by investing the loan money in productive income generating activities and micro enterprises. These loans from formal financial institutions are made available to the poor at a very low interest rate with a sizeable subsidy component. Hence such loans do not necessarily increase the indebtedness of the poor. If anything, they often help them enhance their income through gainful occupations and activities.

However, it is found that despite the liberal terms and conditions under which such loans are advanced to the displaced people by banks and financial institutions, the people in the resettlement and cluster villages are often forced to default on repayment. This is because apart from the nationalized banks and other government institutions, they also borrow money from local money lenders at hefty interests rate ranging from anything between 60 to 120% per annum (depending on the collateral security offered by them to avail such loans) to meet their immediate consumption needs and expenditure on marriages, birth and death rituals, illness of family members and the like. In the absence of steady and certain income, they get sucked deeper and deeper into the debt trap.

5.3.10 Dwelling Condition:

As we have discussed earlier, the dwelling status of a person is often a fairly accurate indicator of his/her economic condition.

When we observed the dwelling units of the oustees in the resettlement colonies and cluster villages during the field study, we found them to be no better than any other poor rural house in the region. Due to the lack of capital, many of them they have failed to develop the homestead plot and construct their houses. The few houses that have been constructed are mostly hurriedly and haphazardly erected makeshift structures of mud, bamboo and straw rather than proper and durable houses. Since the cash compensation received for loss of house was very low in case of rural landless households, they failed to utilize the compensation money for construction of houses in their places of resettlement. Instead, they spent the compensation money on meeting their basic consumption needs in the process of their transition from the places of their original inhabitation to the resettlement colonies.

House Condition of ST household in Madhuban Nagar Resettlement Colony (MCL Ib Valley)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 A)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 A)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 A)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 A)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 B)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 B)

Dwelling Condition of Upper Kolab Resettlement Colony
(Colony No. 4 B)

Utilization of Compensation Money

A majority of the population in the project area belongs to scheduled tribes and other backward castes. While tribals generally stay away from the mainstream, scheduled castes mostly depend on wage employment and providing services required by the local village community. These backward communities, especially tribals, are relatively unexposed or under-exposed to monetary transactions since the rural economy in these parts has, for centuries, been based on the barter system. Handling the huge amount of cash compensation thus was really difficult for them. Realising this, the project authorities rightly deposited the money in post offices and local banks after opening accounts in the name of the displaced people. No wonder the PAPs were, in most cases, unable to utilize the compensation money and rehabilitation assistance properly for acquiring productive assets or for self-

employment purposes so as to minimize the effect of dislocation. Illiterate and without proper guidance as they were, they often squandered away the compensation money in unproductive expenditure. As a result, their living condition deteriorated steadily, affecting their future adversely. To understand the post-displacement living conditions of PAPs, therefore, it is necessary to study the pattern of utilization of compensation money as it reveals a lot of about their attitude towards monetary transaction. Table [Please insert the Table.] provides information about the pattern of utilization of the compensation money.

Utilization of Rehabilitation Assistance

To meet the crucial requirement to improve or at least restore the socio-economic status of the project oustees, there was a commitment from the R&R Unit to provide a package of different rehabilitation benefits to every displaced family to improve on or, at the very least, restore the pre-displacement socio-economic status of the oustees. As per the guidelines laid down in the rehabilitation policy, such benefits include rehabilitation assistance comprising of

(a) agricultural land, (b) homestead land, (c) house construction assistance and (d) maintenance allowance.

Other Impacts

Impact on Women

Changes caused by relocation do not have the same implication for the members of both the sexes. More often than not, it may result in greater inconvenience to women. Due to the dislocation of the production system and reduction in assets like land and livestock, women have to face the challenges of running a large household with limited income and resources in the changed scenario. This in turn, forces them as well as their

children to engage in additional work to supplement the household income. Besides, changes in environment and labour ratio as a result of developmental projects renders these women, earlier engaged in activities like agricultural labour or collection and sale of forest products, frequently find themselves unemployed and dependent. This section analyzes women's role in the economy of the household and their daily routine and social positioning in terms of their say in the decision-making at the household level.

In case of the projects under study, it was found that women have to spend more time and walk greater distances for fuel wood collection. Minor forest produces, which used to be a steady income supplement previously, are also not easy to get any longer as the forests are depleted due to the projects. The quantity of available food supplements from forests in the form of fruits and tubers also declines significantly for the same reason. For collecting water, women in the new settlements now have to walk 2-3 km. as the hand pumps provided by the project authorities are either inadequate or defunct. In the summer months, the ponds provided in the village also run dry and getting water becomes that much more difficult.

But the plight of women in settlements adjacent to existing villages is the worst. In such cases, the host community resents the increased competition for scarce natural resources like fuel, fodder and water. Women from the displaced communities thus are at a distinct and constant disadvantage, as the original inhabitants claim primary rights on Common Property Resources (CPR).

Festivals and Rituals

In tribal societies, religion has a prime importance in every walk of life. For them, it explains most of the complexities of nature and permeates every socio-cultural activity. In the primitive Paraja tribe, magico-religious functionaries like Jani-the religious head, Disari-the sorcerer and astrologer, Gurumai-the witch doctor

(female) and Beju-one more sorcerer, played very important roles in the socio-cultural life of the community. Even though these institutions continue to exist in the new settlements, they do not quite enjoy the same importance they did before.

Before displacement, members of the Kondh and Paraja tribes who whole-heartedly participated in various festivals such as Baliyatra, Diali parava, Magh parava, Chaitra parava, Ravi parava, Dasara parava, Kandula parava etc. But after displacement, the number and frequency of festivals has come down notably in the new clusters.

The temples and other community facilities in the new settlement do not hold the same significance for the oustees as they did before displacement. Interdependence between castes and tribes and exchange of services among kinsmen have now become rare. The number – and importance - of Tribal Gods and Goddesses is decreasing. Among the oustees, tribals are very traditional in their outlook. They value their traditions despite the hardships they face. They fondly remember their past and get nostalgic; the attachment they had with their tabernacles and sacred groves is emotional and cannot be recreated in the new resettlement site.

Political Life

The oustees effectively become second class citizens in the new resettlement sites. Given their lack of communication and articulation skills, the tribals in particular are unable to give voice to their aspirations. In any case, the numbers are loaded heavily in favour of the 'natives', who treat them as outsiders It is their voice and might that unfailingly prevails in all matters concerning the village community. The 'outsiders' have virtually no say in the decision making process of the community. No wonder their participation in Panchayat, Assembly and Lok-Sabha election is very

low. The problems of displacement and relocation issue are non-issues even in Panchayat elections. This indifference and apathy affects the new settlers in more ways than one.

Community Life

After displacement, displaced people have not been resettled en-block in the new location site. Instead, they were resettled in different clusters. As a result, their family ties have been broken and their kith and kin and relatives are not close to them. Because of this, the network of community relationships is not as strong in the new village as it was earlier. They seem to have developed a fear psychosis in the alien land and unfamiliar surroundings, if informal conversations with them are anything to go by.

Before displacement, tribal society was a cohesive and neatly integrated entity. The relationships and interactions with one another were more spontaneous and informal. It is difficult for them to interact with a large number of unfamiliar people in impersonal surroundings in the new village.

Even after 20 years of resettlement in the new villages, there still is a lack of social adjustment. The host community in the new village treats them as 'outsiders' or *budi anchal loka* (people from submerged areas). Neither they are totally assimilated into the mainstream of life in the resettled village nor can they recreate their lost community network for themselves in their new place of residence.

Cultural dissimilarity between the new settlers and the local population is another factor which further complicates the process of resettlement. The way of life of the new settlers does not go down well among the host community. In a multi- caste village, such cultural dissymmetry often ends up in major conflict and confrontation.

Risk Factor Analysis of Projects under study

Development-induced displacement has resulted in widespread and traumatic psychological, social and cultural consequences. These include dismantling of production systems, desecration of ancestral sacred zones or graves and temples, scattering of kinship groups and family systems, disorganization of informal social networks that offer mutual support, disruption of trade and market links, etc. There is also a loss of social relationships which provide avenues for representation, mediation and conflict resolution. The cultural identity of the community, as well as the individual within it, is disrupted causing immense physiological and psychological stress.

According to the World Bank (1988), rehabilitation policy should be designed in a way that avoids or minimizes displacement and, in cases where displacement is unavoidable, to *provide "people displaced by a project with the means to improve or at least restore their former living standards, earning capacity and production level through a process in which they participate through their own social and cultural institutions".* The stress on these minimum requirements assumes importance because the displaced persons nearly always face risk of impoverishment.

The rehabilitation policies adopted by various project authorities or State Governments have also laid emphasis on improvement of the quality of life of the oustees after their displacement. It is evident that impoverishment is the key issue in development-induced population displacement and resettlement. A research study conducted by Michael M. Cernea - celebrated Anthropologist, senior Advisor for Sociology and Social Policy of the Environment Department of World Bank - found that the worst consequences of displacement -impoverishment and violations of basic human

rights - occur most frequently when national resettlement policy guidelines are absent. Consequently, equitable action strategies for socio-economic reestablishment are not pursued and there is no independent professional monitoring and evaluation of outcomes (Cernea, 1996). The 'impoverishment risks' have been identified by Cernea for constructing a descriptive model based on "the analysis of the vast evidence coming up from numerous displacement and resettlement process that reveals patterns of recurrent characteristics. While each of these characteristics is distinct and irreducible to the others, they have a common denominator: all are dimensions of a multifaceted process of impoverishment. These characteristics may be linked into a coherent typology or descriptive model of impoverishment risks through displacement. Such a conceptualization or descriptive model of impoverishment is a tool usable in strategy formulation and device for practical planning, because it points to the key sets of likely ill-effects that projects must purposively avoid" (Cernea, 1994). The 'impoverishment risks' model captures not only the economic but also the social and cultural dimensions of impoverishment. It shows that during displacement the people lose: (i) natural capital, (ii) man-made (physical) capital, (iii) human capital, and (iv) social capital. The model is able to accurately predict future outcomes if the warnings are ignored. The risk model also provides a matrix directly useable for planning. It is a working tool for preparing resettlement plans and monitoring their impact. The conceptual construct of impoverishment through displacement contains in a nutshell the model for the socio-economic rehabilitation of the displaced.

The eight sub-processes of impoverishment listed below are by no means the only processes of economic and social deprivation, but rather the most important ones. They occur

with variable intensity in different locations. The eight dimensions of this impoverishment risks model are:

i. Landlessness,

ii. Marginalization,

iii. Joblessness,

iv. Homelessness,

v. Food Insecurity,

vi. Loss of Access to Common Property,

vii. Social Disarticulation, and

viii. Increased Morbidity and Mortality.

i) Landlessness

"Expropriation of land removes the main foundation upon which people's productive systems, commercial activities and livelihoods are constructed. This is the principal form of de-capitalization and pauperization of displaced people, as they lose both physical and man-made capital" (Cernea, 1995).

Unless this foundation is reconstructed elsewhere, or replaced with steady income-generating employment, landlessness sets in and the affected families are impoverished. Land in India is more than a resource base and there is more to it than just its market value. It has emotional association for those who inherit it from their ancestors. It enables them to grow food for subsistence and cash crops with which to obtain money to buy essentials. It is often considered to be sacred, a status symbol that provides a guarantee for easy access to loan and help in getting better marriage alliances and represents self-sufficiency and

independence in a society bound by feudal norms. Local religious beliefs, rituals and customs are closely associated with land.

Landlessness also implies loss of access to green vegetables, religious trees and other gifts of nature. The economic value of medicinal herbs and plants with multiple usages, which are accessible to the landed people, cannot really be estimated.

Further, landlessness has very serious social and economic implications not only for the owner of the land, but also for his family, children as well as for future generations as it provides hidden employment for every member of the family.

In all the projects covered in this study, the authorities paid compensation to those displaced people who possessed *pattas* (registered land deeds) to prevent the risk of landlessness after displacement and relocation. The compensation included "the market value" of the land and 30 per cent of that amount as solatium because of compulsory acquisition. Any delay in payment of compensation was compensated for by paying interest at an annual rate of 12 per cent.

As cash compensation alone is often inadequate to make up for the loss of land, the displaced persons were sometimes provided with land and/or job as part of the rehabilitation. In irrigation projects like Upper Kolab, 3 acres of agriculture land (irrigated) or 6 acres of un-irrigated land or cash equivalent of such amount of land were provided to the displaced families in addition to the cash compensation for their land as per the rehabilitation policy. Although "land for land" is the major principle followed in the rehabilitation policy for irrigation projects in Orissa, cash is also paid partly or sometimes fully in the event of unavailability of adequate land. In case of HAL, for example, no step had been taken to check landlessness, except providing

cash compensation for the acquired *patta* land in the absence of a well defined rehabilitation policy.

It is thus evident that most of the displaced persons have no land at all. It is only in the Upper Kolab Project, where 'land' based resettlement was partly carried out and the rest of the compensation was paid in cash to purchase land, that most of the oustees now possess land. It was observed that the compensation money was not adequate for the purchase of land of the same size as owned by the oustee in the past due to the rise in land prices in the locality in recent years. In some projects, the compensation money kept in the bank accounts was not released in time or in adequate installments when land was available for purchase. Thus, even the protective mechanism provided by the authorities often became an obstacle in the way of the oustees' attempts to buy land - thanks to the bureaucratic hurdles. The enactment of the Forest (Conservation) Act, 1980 has also restricted the use of forest land for non-forest purposes, thereby limiting the availability of land. In the Upper Kolab Project, the land given to the oustees has not been properly reclaimed. It is not of good quality and necessary irrigation facilities have not yet been provided to them. Hence the utilization of the land for cultivation purposes is remains low. In the case of tribals, the forest land cultivated by them on the basis of their traditional and customary rights was not recognized by the authorities as fit for compensation under the rehabilitation policy, as a result of which the they became landless overnight - as soon as the project authorities took over the forest land.

Landlessness has reduced the income level of the displaced persons in all these projects. The occupational pattern has also changed significantly, with the stress shifting from primary to secondary or tertiary activities. It has also rendered aged persons unemployable since they could not get jobs in the projects, while

they could have earned something from their agricultural land had they been in possession of it. They have also lost the advantages of herbal therapy with the loss of their land and the forests where medicinal plants they used for treatment used to grow. The loss of land has also forced them to spend more on green vegetables which they earlier grew in their own kitchen gardens.

In other words, jobs could never compensate for the land that they have lost. For them, land was a multipurpose asset which could have been of sustained use for future generations at numerous levels. In contrast, the jobs which have been provided to the oustees by the well-meaning authorities in the projects can satisfy the immediate needs of only the present generation which is employed. These jobs can never be considered as assets that would sustain future generations.

In view of the rise in the incidence of landlessness among project-affected oustees, certain measures should be taken by project authorities to overcome and counter the impoverishment risks of landlessness. The following are the measures suggested:

1. 'Land for land' should be the sole guiding principle in the rehabilitation of the displaced so as to prevent the emergence of landlessness.

2. In water resource development projects, the affected persons should have priority in getting land in the command area of the project.

3. The land provided to the oustees should be properly reclaimed and leveled so as to make it operationally productive.

4. Land allotted to the oustees should be in one lot so that operation on it is easy.

5. Care must be taken to provide land to the oustees near the resettlement site.

6. Replacement value should be paid for land so as to enable those who have lost land to purchase the same amount of land near their place of habitation.

Reasons for not overcoming the Risk Factor

There are many reasons which have landed the PDPs in the "landless" status. The major ones are:

i. They spend the compensation & R.A. money for unproductive purposes like daughter's marriage, merry making, drinking liquor and repayment of loans.

ii. The middlemen, in many cases, cheat the illiterate PDPs and take away a big chunk of their entitlement.

iii. The DPs invest the money on unsustainable, unviable projects which have no techno-economic entitlement.

ii) Marginalisation

Marginalization occurs when families lose economic power and slide downwards. Unlike the case of those reduced to total landlessness due to displacement, middle income farm households do not become landless, but descend to the status of small land holders, when displaced. Small shop keepers and craftsmen lose their clientele and slip below the poverty threshold after their displacement. Relative marginalization often begins long before the

actual displacement. For instance, when lands are designated for future submersion (under some dam project) and therefore become devalued, there is no likelihood of any fresh public and private investments in infrastructural facilities, or expansion of social services, in those areas (Cernea, 1995).

But it is not only the middle farmers or the shopkeepers and artisans (who may not be landless), but also the other segments of the ousted population which get marginalized by displacement. Marginalization is caused by the deprivation of land, employment and home, and indicates that loss of land, productive assets and livelihood has resulted in a 'downward mobility' among the oustees. Resettled families very often cannot fully restore the economic capacities that they possessed in their habitat prior to their displacement. For instance, if those who owned fertile land in the past are provided with unproductive and unleveled land in the new site by the project authorities, they invariably become marginalized among the landed people. Marginalization also occurs through the loss of income form extra-agricultural sources in the locality, which again are disrupted by the acquisition of the entire area (i.e. the village, or the neighbourhood) by the project authorities.

iii) Joblessness

Landless labourers, people working in some enterprise or service, workers, artisans and small businessmen lose their means of livelihood if they are displaced from their habitat. But creation of new jobs or alternative sources of income for them is difficult and requires substantial investments. The delay results in a long drawn-out period of unemployment or underemployment among the oustees after their physical displacement (Cernea, 1995).

Joblessness is a state of affairs where a person, who loses his/her only source of livelihood due to displacement, does not possess any skill to learn new methods of earning his/her

livelihood. In the development projects which we have studied, the overwhelming majority of the oustees were traditional cultivators who did not have the skills for any other occupation. All the members of the agricultural family - men, women and children - used to contribute to the family income by working in the fields or by doing odd agriculture-related jobs. But in the monetary market that they were exposed to after their resettlement, it was the male member of the household who became the sole bread-earner as jobs in the projects were given to men only. Their money power prevailed over the voices of the other members of the family - particularly women, who were rendered powerless and became totally dependent on the menfolk. In the tribal areas, in particular, joblessness can be deciphered in terms of loss of income-earning opportunities - especially for women, who earlier used to earn by collecting and selling minor forest produce. In other words, those who were owners of the means of production before their displacement have now become daily wage earners in a situation of uncertain employment opportunities amounting to a state of joblessness.

Out of the four projects surveyed by us, there was no rehabilitation policy whatsoever in the HAL project. As a result, all those who were ousted by HAL lost their old sources of income, but did not get any alternative means of livelihood as none among them was provided either with a job in the project or land for cultivation. In Upper Kolab Project, oustees who had owned land were benefited by the rehabilitation policy. But artisans, share-croppers, landless labourers, those employed in services, and small businessmen, who lost their occupations and means of livelihood because of displacement, were not recognized as displaced persons eligible for rehabilitation benefits under the resettlement and rehabilitation policy of the project authorities. In Harabhangi Irrigation Project, oustees who had owned land

were benefited by the rehabilitation policy only by way of cash compensation and not jobs.

In Ib Valley coal mining projects, the MCL authorities have followed the policy of providing a job to each displaced family. This meant employment for only one member of a displaced family, while the other members remained jobless. Besides, this policy discriminated against the landless labourers among the outstees, since jobs were provided only to those who could produce *pattas* for their lands that they had lost to the projects. Landless labourers, artisans, share croppers, and petty business among others, were left out from the scope of job opportunities in the rehabilitation programme of the MCL.

iv) Homelessness

Loss of house and shelter may be only temporary during the transition period for most of the displaced. But for some, homelessness remains a permanent feature. In a broader cultural sense, homelessness is also placelessness, loss of a group's cultural space and identity, or cultural impoverishment, as argued by Downing (1994) and by students of "place attachment" (Low, et al, 1992). And in a socio-spatial sense, as argued by Chris de Wet (1995), placelessness is often perceived, albeit at a lower intensity, by populations subjected to compulsory villagisation schemes (Cernea, 1995). If resettlement policies do not explicitly provide improvement in housing conditions, or if compensation for demolished shelters is paid at assessed value rather than replacement value, the risk of homelessness increases.

A home facilitates the living together of the family members. It gives a sense of belonging, social and psychological security and an assurance of togetherness in times of difficulty. A home offers a psychological and a spiritual attachment with ancestors. It also provides familiar equipment for living and meeting the

environmental and cultural demands. Homelessness is caused not just by displacement; it is also caused by the splits in the family that frequently take place during displacement. The alternative house in the resettlement colony is given to the family, but because of the split in the family, the outgoing members become homeless.

In all the 4 projects under study, compensation was paid for the house which was by no means the replacement value, the oustees complained. In HAL, the displaced persons have encroached on government land to build houses on their own in the absence of any rehabilitation policy. They have no private homestead land. The quality of these houses is far from satisfactory. As no viable alternative sources of earning were provided to the displaced persons of HAL, they had little money to be able to build better houses. The only houses that are in good condition invariably belong to those who have got jobs in HAL or the state government. But all these houses are built on encroachment land. In Ib Valley coal mining project and Harabhangi Irrigation Project, only homestead plots have been provided by the project authorities and the displaced persons have themselves built their houses in the resettlement colony. In Upper Kolab Project, the displaced persons were provided with sizeable homestead plots where they have built their houses on their own.

In Ib Valley coal mining project, housing facilities have been provided to each family, but not to each adult member. Hence, whenever a split occurs in a family, those who leave the family become homeless. Decrease in income levels has also affected the quality of the building materials used for their houses.

v) Food Insecurity

Forced uprooting increases the risk of chronic food insecurity defined as calorie-protein intake level below the minimum necessary for normal growth and work. Sudden drops in food

crops availability and/or incomes are inevitable during physical relocation and hunger or undernourishment tend to linger as long-term effects (Cernea, 1995).

In our agrarian society, crops are grown to provide food to the family for the entire year. Vegetables are grown almost throughout the year in kitchen gardens. The crops and vegetables grown primarily to take care of the food needs of the family while the surplus is sold in the market. Hence, *in years of good harvest, the cultivators are usually self-sufficient and do not depend on the market as far food is concerned. But land acquisition in the project areas has destroyed this self-sufficiency. After displacement, they now have to spend money to procure foodgrains and vegetables. They also have to cope with the high prices of essential commodities.*

In HAL, no rehabilitation measures have been taken to restore their livelihood. Joblessness has been the single biggest reason for their food insecurity. In UKP, the land provided to the displaced persons was not properly reclaimed and leveled. As a result, the yield is meager and, consequently, food insecurity greater. In the Harabhangi irrigation project, the displaced persons have no agricultural land and very little scope for wage labour. They are doing shifting cultivation on a small patch of forest land. But income from such cultivation is hardly enough to take care of their food needs throughout the year. In Ib Valley coal mining project, displaced families have to buy everything, including food items, from the market with the money they earn from their jobs in MCL in the absence of any other avenues of income. But only one person from the family gets a job under the rehabilitation policy implemented by the project authorities and the salary earned by the sole earner is by no means sufficient to buy everything. Besides, a sizeable part of the salary goes towards newly acquired fads like to electronic gadgets like transistors, TV and VCR sets

and motor cycles. Alcohol also accounts for high expenditure among the tribal oustee families in the all four projects areas. Expenditure under these heads naturally eats into the food bill of the family.

vi) Loss of Access to Common Property

For poor people, particularly for the landless and otherwise assetless people, loss of access to common property assets belonging to communities that are relocated (forest lands, water bodies, grazing land, etc.) leads to a major deterioration in their income and livelihood levels. Such lost resources are never compensated for by the government in the relocation schemes anywhere, China being one of the rare positive exceptions (Cernea, 1995).

In tribal areas, almost all the people use forest land for *podu* (shifting) cultivation and also depend on it for minor forest produces. The forest land or the village common land, though not owned by any particular family, belongs customarily to the village clans or lineage group. These common property resources are used or occupied on the basis of usufruct or similar occupation-based tenure. As the project-affected persons did not have any *patta* to show their rights over these lands, they were not compensated for by the project authorities.

No compensation has been provided under the Land Acquisition Act, 1994 for such common properties in any of the four projects. In the absence of any policy measure, the displaced persons of HAL did not get any replacement for the common property they lost. In the resettlement colonies of UKP, Ib Valley coal mining and Harabhangi Irrigation Project, some provisions were made for the common property resources. But no resettlement colony has been provided with common land like burial grounds or grazing land. The colonies are also located far away from the forest, as a result of which the oustees do not have any access to fuel wood and other

minor forest produces which they used to collect from the forest in their old habitat. Forest produces, including fuel wood, used to ensure a reasonable income for them. But in the absence of these resources in their new dwelling places, the displaced people tend to encroach on reserved forests or use the common property resources of the host population, leading to environmental deterioration and social tensions. In UKP, the host population does not allow itsr grazing land to be used by the oustees. In the resettlement colonies at Dumiguda and Kantahur (Bebiri) of Harabhangi Irrigation Project, there are frequent conflicts between the host population and new settlers over the use of forest land for *podu* cultivation.

vii) Social Disintegration

Forced displacement tears apart the social fabric and the existing patterns of social organization. Production systems are dismantled, kinship groups and family systems are often scattered, local labour markets disrupted and the cultural identity of the people is under threat. Informal, life sustaining social networks of mutual help among people, voluntary local associations, self-organised service arrangements, etc. are dispersed and rendered inactive in the changed scenario. All this implies the loss of unquantified and uncompensated facilities. Such a disintegration process undermines livelihoods in ways not accounted for by planners (Cernea, 1995). It is hard to rebuild the forms of social organization that mobilize people for actions of common interest and for meeting pressing needs, once they are dismantled (Cernea, 1996).

Social and community networks help people to cope with poverty through informal loans, exchange of food, clothing and durable goods, mutual help with farming, building houses and caring for children (Cox, et al, 1990). Social and kinship

relations enable a group of people to remain a community, because they provide the bond that helps to tide over many economic and social problems. They also provide 'mutual help arrangement', labour exchange relationships, production oriented informal organization etc. All of this is irreversibly affected and lost in the process of displacement. The loss also affects the ability of the community to manage its socio-economic and even cultural affairs because of the weakening of traditional authority, leadership and social control.

Social disintegration also takes place because of the lack of linkages with others and the loss of economic status. The payment of compensation and rehabilitation cash assistance to major sons encouraged the latter to play a domineering role in family affairs, frequently leading to splits in joint families and loss of family support to the vulnerable members of the family (like old parents or grand-parents or widows). Similar problems surface when job is provided to only one member in the family. This breeds conflict among brothers. The old emotional bond is snapped as individual survival overshadows all other concerns, and money power becomes the be-all and end-all of life.

Social disintegration has been a major impoverishment risk in all the projects studied. In UKP, the displaced persons are resettled about 65 km. away from their old habitat dismantling social networks, kinship and social relationships in the process. Although the displaced persons are rehabilitated in resettlement colonies in the Harabhangi Irrigation Project and the Ib Valley of Coal Mining Project, the mutual help arrangement, labour exchange relationships, production oriented informal organizations etc. and other socio-economic relationships have been totally disrupted.

viii) Increased Morbidity and Mortality

The social stress, insecurity and psychological trauma caused by displacement often leads to serious diseases. Relocation-related diseases, particularly parasitic and vector-born diseases (malaria, schisto-somiasis, diarrhea, dysentery etc) break out - frequently assuming the proportions of an epidemic - because of unsafe water and poor sewerage systems in the resettlement sites. The weakest segments of the demographic spectrum - infants, children and the elderly - are the most vulnerable to these diseases (Cernea, 1995).

Displacement also leads to psychological stress that emerges out of the fear of relocation. An additional cause of stress is the fear of abandoning places of worship which the oustees fear may invite the wrath of the gods and goddesses. The result of all this is a rise in the incidence of mental and physical ailments and even death. The emotional stress is aggravated by a feeling of helplessness as no amount of argument; plea or revolt can prevent their inevitable forced evacuation. Lack of food, unhygienic living and environmental degradation in the new place have a serious adverse impact on the health of the displaced.

In Ib Valley Coal Mining Project, pollution caused by coal dust and frequent blasting result in skin diseases, diarrhea, eye irritation, gastric disorders etc. HAL oustees also live close to the reservoir of UKP, which causes similar diseases. But there is no report of such diseases from the UKP and the Harabhangi Irrigation Project. Medical centres have been set up in the resettlement colonies of Ib Valley and UKP. But in the absence of doctors, they are dysfunctional.

The findings of our household survey and direct observation of the resettlement areas lead us to the conclusion that the

general socio-economic condition of the oustee has deteriorated significantly after displacement. Socio-economic inequalities among the oustee households are widespread due to the unavailability of remunerative and well-paid occupations in the place of resettlement and the virtual collapse of the traditional agrarian economy. Only a few relatively affluent and well-to-do households among the oustees have managed to cope with the problem of involuntary displacement by migrating to urban areas or by shifting their traditional occupation from agriculture to Government service or formal tertiary sector employment.

The cropping pattern has changed drastically after displacement. It is fast becoming a mono-crop one, with rice as the principal crop. The production of other crops like pulses, cash crops, including oil seeds, and tobacco is very minimal. This change in cropping pattern has bee accompanied by a considerable fall in the yield and income from different crops.

Dependence on forest was quite high in the pre-submergence period. Collection of fuel wood, fodder, timber and other forest product was a major component in the family income. But at present, it has come down as most of the displaced people have resettled in plain areas. They now have to purchase the same minor forest products, which they used to collect free of cost from the jungles earlier. Dependence on trees and livestock too has reduced substantially in the post-rehabilitation period.

The study of the occupational pattern of the oustees shows that the oustees have shifted to other sectors of employment due to displacement and loss of agricultural land (which was not fully replaced by a 'land for land' policy). More and more households are found to be engaged in agricultural labour and

non-agricultural labour activities. There has been a notable reduction in average mandays of engagement in primary and secondary occupations. Due to the loss of agricultural land, decrease in the dependence on forest, trees, livestock, the total household income of oustee has come down significantly.

The family composition of the oustees shows an increasing trend towards nuclear family. In comparison to the pre-displacement period, three-fourths of the families have become nuclear in the post-rehabilitation period. The number of joint and extended families has reduced substantially. The disruption of the network of kinship ties has forced them to live a marginal life.

Chapter - VI

CRITICAL AREAS OF CONCERN

Our analysis in the previous chapter of the socio-economic conditions of the oustee households in selected resettlement colonies and cluster villages clearly reveals that the vast majority of them now live a life of penury and hardships. It is, of course, well known that Orissa is one of the most backward and poor states in India. Among the below-poverty-line (BPL) households, its position is next only to Bihar (Government of Orissa, 1999). Since the 1960s, its economic position vis-à-vis many other states of the country has deteriorated much faster (Meher, 1999). However, it is important to note that involuntary displacement is a painful process and it takes years for the oustee households to regain their lost socio-economic status in their place of rehabilitation and resettlement as the R&R policy of the government rarely takes care of the general and individual needs of the displaced people. Previous studies (eg. Baboo: 1992) relating to the effects of displacement clearly show that the majority of the oustee households mourn their life in the place of their original habitation years after their resettlement.

Migration of human population from one place to another is nothing new. Since time immemorial, man has moved from place to place, country to country and continent to continent in search of a better livelihood. Such displacement is deliberately planned by individuals or social groups for a better living. Involuntary displacement of people from their hearths and homes, however, is a different ball game altogether. It is always a painful process, notwithstanding the best possible rehabilitation measures and attractive compensation

packages offered by the Government. Such relocation causes profound economic and cultural disruption for the people affected by it and the social fabric of the communities of the area also gets affected (Behura, 1990). Further, different segments of the population are affected in varying degrees. The negative impact of development projects on the oustee population also varies form project to project depending upon its nature and category. For example, a river dam project would have a different impact on the surrounding population as compared to an industrial or mining project.

In the following sections, we make an attempt to analyze the difficulties faced by the displaced households by collecting necessary information from the selected sample households on their household economy, demographic structure, social and community life, common property resources, ecological attributes of the original villages, land holding pattern, class-caste relationship, non-farm economic activities of the landless families and the like. Development related displacement and resettlement of human population in a new locality has multiple effects such as economic, sociological, cultural, psychological, ecological and above all spread and backwash effects in the centre and periphery. Unfortunately, such effect assessment studies rarely find a place in the traditional cost-benefit analysis of the development projects done by the economists and technocrats.

6.1 Lack of Basic Amenities

It is well recognized that access to basic amenities must be an integral part of any strategy not only for alleviating poverty but also for improving the quality of life of the displaced people. Improvement in the socio-economic condition constitutes development whereas the availability of basic amenities facilitates the process of growth. Under the R & R policy, various steps have been initiated to provide minimum basic amenities to the people. And yet, much more needs to be done to provide a quality life to the displaced. Some of the measures needed are:

i) Provision of safe drinking water in both rural and urban areas.

ii) Efficient primary health care for every resettlement colony.

iii) Adequate arrangements for universal and compulsory education.

iv) Connectivity to all colonies by providing all-weather roads.

v) Streamlining of public distribution system with special focus on the poorest people.

Resettlement colonies in Harabhangi and Upper Kolab projecst face an acute problem of drinking water. During summer, the Upper Kolab oustees are forced to use pond water for drinking purpose. Many people depend upon a nearby village, which is at a distance of 3 to 4 kilometers from the resettlement colonies.

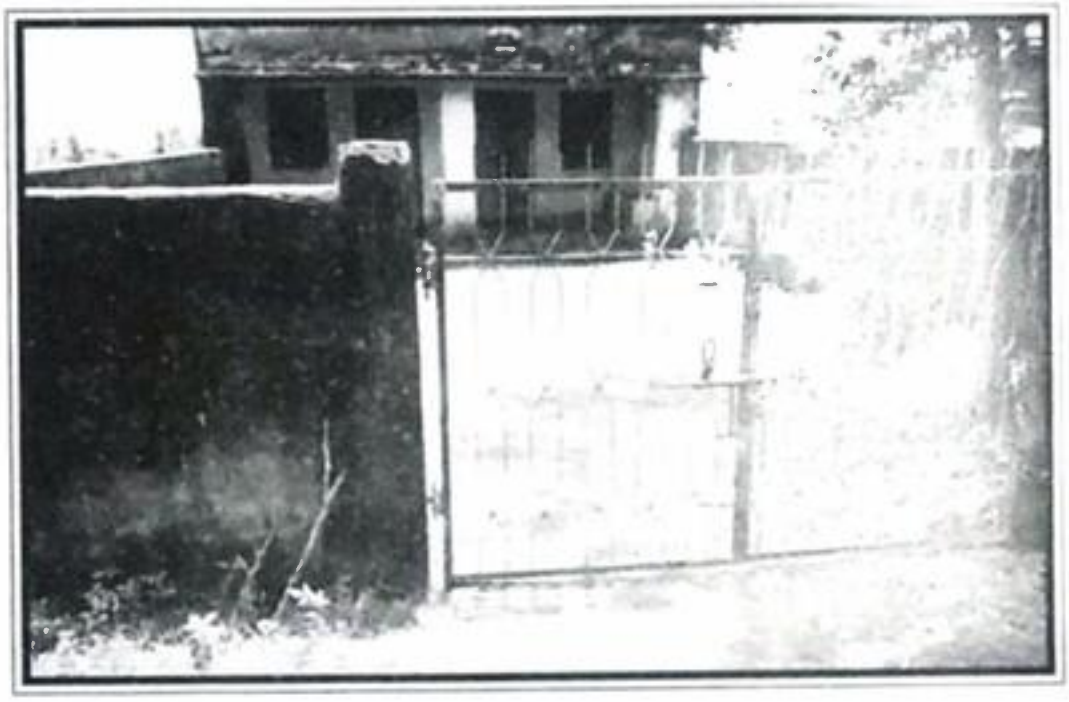
Except in Madhuban Nagar MCL Ib Valley resettlement colony, there is no provision of primary healthcare facilities in the projects under study. Even the primary health centre (PHC) at Madhuban Nagar MCL resettlement colony is of no use for the oustees due to the absence of a doctor.

MCL Ib Valley has provided a school building in the Madhuban Nagar resettlement colony. But since the school is run privately, the Government does not provide the usual facilities it provides in other Government School. No wonder the parents of this colony prefer to send their children to the school in a nearby village.

In Colony No. 4B, there are no educational facilities - either Government or private. There are no schools within 2-3 km of this school either. As a result, a majority of the children in this colony are illiterate.

Dispensary provided by MCL Ib Valley in Madhuban Nagar Resettlement Colony.

Manoranjan Kendra Provided by MCL Ib Valley in Madhuban Resettlement Colony.



Anganwadi Centre house provided by MCL Ib Valley in Madhuban Nagar Resettlement Colony

School building provided by MCL Ib Valley in Madhuban Nagar Resettlement Colony.

6.2 Non-availability of Wage Work

Avenues of wage work are severely restricted in the resettlement colonies, forcing many oustees to migrate to places outside the district and even the state. Some oustees of Upper Kolab Colony have actually returned to their original places due to the non-availability of wage work in the resettlement colony.

6.3 Non-availability of Herbal Medicines

Due to the loss of access to forests, tribal oustees can no longer obtain medicinal herbs which they could collect earlier. The coal mining project in the Ib Valley has destroyed the forests that once covered the site whereas the UKP has submerged the old forests. Access to forest resources has declined in other project areas too. As a result, the oustee families today have to spend a lot on buying medicines, which they used to get gratis from the forest in the past.

6.4 Dangers of Blasting

Blasting in the coal mines of the Ib Valley creates cracks in the walls of the houses of those resettled in the rehabilitation site. Such blasts pose a constant danger for the women and children, who stay back in their homes while their men-folk work outside.

6.5 Decline in the Role of Women and Relationships in the Family

Women play a vital role in the family, community and society. Due to their ability to earn independently (either as farm labourers, as peddlers of goods or as livestock-keepers), they had a major say in the decision-making process of the family. But after displacement, their income has either dwindled or has come to a halt altogether. Their total dependence on their husbands/sons for household expenditure has reduced their powers and diminished their role and status in the family. They are seldom involved in decision-making.

Relationships among family members were generally cordial and intimate before land acquisition and displacement. But the loss of agricultural land in the projects, disruption of the sources of earning, decrease in family income and increase in the number of family members have created conflicts and bitterness among them. Sometimes, such conflicts take violent forms.

6.6 Problems Stemming from Cash Payment

The mode of paying compensation through cash has made money readily available to the male members of the family. This makes it difficult for the women to control their spendthrift husbands. The men spend a large amount of the compensation money and their wages on consumer durables and liquor. Whenever the women try to dissuade them from doing so, they are battered by their husbands or sons. The women are also in constant fear of their husbands and sons, as the drunkenness of the latter quite often leads to accidents or violent conflicts. The women do not dare report such matters to the police for fear of physical abuse or corporal punishment of their men-folk by the police. Many women complained about the harmful effects of alcoholism and domestic conflicts on the children in the family. Increased alcoholism has led to a rise in crimes like rape, molestation, child abuse, etc. in these areas.

6.7 Increasing difficulties in arranging Marriage for Daughters

Women oustees now face great difficulty in getting married because of the demand for more dowry, the denial of job facilities to sons-in-law by some project authorities and the loss of their traditional sources of earning (e.g. from forest resources, cottage industries, crafts, etc.). The cash compensation the oustee families received towards acquisition of their land, house and other assets has increased the demand for dowry manifold. As a result, a sizeable chunk of the compensation money parents of girls received now goes towards dowry and other expenses for the marriage of their

daughters, leaving the family totally pauperized. Such cases have been reported from all the projects.

In the Coal Mining Project of Ib Valley, sons-in-law nominated by the family heads of the oustee families were earlier entitled to get jobs under the project as part of their R&R benefits. But the facility has now been withdrawn by the MCL. As a result, parents of some newly married daughters are not allowing them to join their husbands, since they are no longer eligible for jobs under the new policy – presumably rendering them incapable of running a family.

Chapter - VII

CRITICAL ISSUES TO BE LOOKED AT WHILE SETTING UP A DEVELOPMENTAL PROJECT

(With Special Emphasis on the Tribals)

Developmental projects do much more than displace people. Apart from severing the umbilical link of the indigenous people with the nature, they replace their simple, cocooned and contended lifestyle with an alien, complicated and competitive way of life they find extremely difficult to cope with. It strikes at the root of their cultural moorings and ushers in the value system of the big, bad world that they are completely unfamiliar with. But governments and companies seldom take these apparently intangible factors into consideration while planning the so-called Reconstruction and Rehabilitation (R & R) package for them. They are just content to provide adequate compensation for the land or property acquired. This precisely is the reason mining projects in India often evoke extreme reactions from the indigenous people and run into rough weather because of it.

This chapter seeks to identify some such issues that need to be factored in while planning developmental projects so as to ensure that they go on smoothly without incurring the wrath of the indigenous community.

7.1 Indigenous People & Development Projects:

Developmental projects are generally sold to the indigenous people as a godsend for the speedy socio-economic development of the region. The people, who stand to be

uprooted from their home and hearth, are rarely consulted while planning and executing such projects. The displaced people are expected to be content with the one-time compensation package given to them and are not expected to ask for a share of the benefits accruing from the project.

7.2 Some core issues:

- There are three factors that need to be given top priority while planning developmental projects, whether by governments or companies, to ensure that they are executed in a socially and culturally compatible manner without posing a major threat to the livelihood and lifestyle of the people uprooted by them. They are:
- *I. Building Rights:* Recognition of the human rights of the indigenous people is the first step towards the formulation of a sustainable development agenda that seeks to establish a relationship of trust and harmony between the indigenous peoples and developmental projects.
- *II. Building Capacities:* The capacity of the indigenous community needs to be enhanced to give them a bigger say and equitable participation in planning and execution of the projects.
- *III. Building Relationships:* Project authorities must think beyond their legal obligations on the issue of human rights and seek to build a relationship of trust and understanding with the community that is mutually beneficial to both sides.
- The world over, the local people have been at the receiving end of the adverse effects of developmental projects, irrespective of their location and type. But in the Indian context, the tribals are affected in far greater measure than their non-tribal counterparts. This is so because of the dependence of the tribals on forests, the absence of legal rights over their land and their low level of education.

- There are various factors which are responsible for the adverse effects caused by irrigation and industrial projects, most of which can be avoided if a proper risk avoidance mechanism is adopted by the executing agencies. In this exercise, some such factors have been discussed at length and possible remedies suggested to ensure an improved livelihood for all categories of impacted people, including tribals.

I. Capacities to sustain or resist:

The most important dimension is the indigenous community's capacity to sustain or resist a prolonged engagement with the interests of the project authorities and their allies. A stakeholder's capacity to sustain or resist a negotiation is determined by knowledge, organization, resources and the time needed to reach a consensus or agreement on a plan of action. Non-tribal stakeholders hold considerable advantages over tribals in this regard. This includes not only access to capital but also knowledge of the potential market value of tribal resources and legal implications and political influence. In contrast, tribal people are rarely trained in the culture and economics of the other stakeholders they meet during an encounter. How long a tribal group can resist or sustain the risks arising out of developmental projects depends not only on the internal capacity of the group but also on the ability of the project authorities to forge strategic alliances with the government and other non-tribal stakeholders. Conversely, tribal people are largely dependent on NGOs and other sympathetic interest communities such as religious, labour, academic and environmental organizations for restoration of their sustainable livelihood, minimization of risks and sharing of profits. *Hence it is necessary to enhance the capacity of the affected people, particularly the tribals, through an informed participation before setting up a project in a given area.* This will have a definite positive bearing on both the impacted people

and the project; the former can improve their livelihood while the latter can set up the projects without time and cost overruns due to resistance of the local population.

II. Sustainability risks:

Socio-economic and environmental risks may also threaten the sustainability of the local people, particularly the tribals. These risks strike at the people's ability to accumulate, maintain, enhance and transfer wealth to future generations. With the opening of roads and the movement of machinery, animals and people are frequently injured and on occasion killed. Avoiding and preventing these potential risks is a necessary first step for any project in an area inhabited by tribal people.

The degradation of vegetation cover, soil fertility, water quality and quantity and loss of bio-diversity often takes away the livelihoods of the impacted community, particularly in case of the tribal community. The consequences of environmental changes are usually not immediately discernible and manifest themselves over a long period. Hence, it is only natural that the consequences are not anticipated or understood by the impacted communities or even by the project authorities and governments. The projects under the study are no different. *Therefore, it is necessary to adopt risk control mechanisms in and around areas where projects are to be set up in consultation with the impacted community much before work on the project starts.*

III. Indigenous wealth and impoverishment risks:

Those unfamiliar with indigenous/tribal culture may mistakenly believe that irrigation and industrial projects pose minimal risks since tribal people have little income or wealth to lose and stand to get high unemployment. Such projects are sought to be justified on the ground that income generated from it would break the

unending chain of poverty and unemployment that plague the indigenous community. Both industry and the government feel they have fulfilled their obligations once they compensate the affected community by way of the market value of lost land, material goods and public facilities.

As a matter of fact, earned income represents only a small portion of tribal wealth. The wealth that supports the sustainability of their culture and identity is found in institutions and social support systems that include access to common resources, local prestige, culturally appropriate housing and food security. Tribal people invest vast amounts of time and resources to perpetuate their culture, institutions and social support systems.

Tribal people have flourished for generations, often in highly marginal environments that are ill equipped to sustain non-indigenous ways of life without substantial injections of external capital, energy and technology. Besides, the sustainability of the indigenous people hinges on protecting environmental and resource endowments. Tribals protect their resources and draw on the fruits of the land, much like one draws interest on an account without touching the principal.

The risks to sustainability from impacts of infrastructure projects on the tribal include landlessness, homelessness, loss of income (from traditional sources), loss of access to communal resources vital to their survival, cultural destabilization, food insecurity, health degradation, marginalization, corrosion of sovereignty, disruption of social organization and traditional leadership, spiritual uncertainty, restriction of civil and human rights, limitation of the capacity to participate in the broader society and threats from environmental disasters.

Developmental projects affect indigenous wealth in eight different ways. First, they may break the flow of social and

economic life. Second, the encounter may make excessive demands on the time and capacity of the local people and their traditional leaders. Third, it disrupts educational activities, both traditional and formal. Fourth, it may exacerbate factionalism resulting from inadequate consultation. Fifth, it may also disrupt the leadership structure or improper legitimization of individuals as 'authorities.' Sixth, it may undermine civil rights and traditional decision-making by ignoring prior, informed consent. Finally, symbolic structures that define the essence of indigenous/tribal culture run into the danger of being desecrated by project operations.

Therefore, restoration of indigenous/tribal wealth is a more realistic parameter than mere compensation for land to judge benefits to indigenous communities. Such restoration means full compensation to cover the market values of lost wealth, including lost social and environmental services. Restorative action should include a long-term sequence of non-monetary steps, institution building, training, environmental restoration and extended financial arrangements to ensure that people retain or regain their ability to accumulate wealth. The effectiveness of these efforts, judged from the perspective of indigenous sustainability, rests on whether the project leads to an accumulation of indigenous wealth – within the broader definition of wealth. The effectiveness of all restorative and mitigating action, in the end, will be judged by the key question: do the indigenous peoples give more than they receive? If yes, they are subsidizing the project – which is morally and economically unacceptable. In view of this, there has to be a mechanism to ensure that the tribal people are not alienated from their traditional/indigenous wealth. In case it is unavoidable, they should be provided access to such wealth in the post-rehabilitation period so that the possible impoverishment can be avoided.

IV. Development-induced displacement and resettlement:

It has been seen that displacement and resettlement due to infrastructural projects significantly increase the risks of impoverishing local populations, threatening their livelihoods and truncating their chances for sustainable development or even survival (Cernea 1999, 2000, 2001; Pandey 1998; Fernandez 1994; Downing 1996 and 2002; Government of India 1993). Societies that have endured for hundreds, if not thousands, of years can quickly disintegrate under the pressures of forced displacement. Avoidance of this catastrophic outcome demands detailed planning and allocation of adequate financial and human resources. Integral to any successful resettlement is the use of skilled development-induced resettlement specialists. Extensive development knowledge and scientific research show that rehabilitation and restoration (R&R) of livelihoods is more likely when all potential impoverishment risks are identified early and arrangements are made to mitigate or avoid them. Informed, timely, widespread and active participation of the project-affected people is an essential prerequisite of an effective R&R policy. Involuntary resettlement is a socio-economic, not an engineering issue. The chances of risk mitigation and restoration are greater when stand-alone financing is provided for displacement, since this removes the conflict of interest that makes the authorities view resettlement and rehabilitation as an unnecessary social service rather than a necessary cost. *To ensure an improved living condition for the impacted people in general and the tribals in particular, the authorities should take appropriate steps in consultation with the impacted community, identify the possible impoverishment risks from a very early stage of the project and take risk mitigation measures for sustainable R&R.*

V. Loss of sovereignty:

One of the primary causes for the resistance of tribal people to infrastructural projects is the potential loss of sovereignty, which has been corroborated by the findings of the present study. Sovereignty refers to an acknowledgement by the government of the collective rights of tribal people to their traditional territories and heritage. As in the case of non-tribal people, sovereignty is a sacred concept among tribals too. It refers not only to land and common property rights but also to political and economic self-reliance and the right to determine the extent of cultural distinctiveness (d'Erico 1998). Threats to sovereignty may come in many ways, the most common being the loss of human and civil rights and the capacity to pass along a culture, including its wealth, to subsequent generations. Developmental projects frequently disrupt indigenous ways of life and institutions, threatening people's sovereignty. The people's relationship with land is fundamental to 'indigenous sovereignty' struggles. The loss of this symbiotic relationship is often the major reason for the stiff resistance to irrigation and industrial projects in Orissa and elsewhere in the country. *In order to protect the sovereignty of the indigenous people, all safeguards should be put in place so that the affected persons continue to live with dignity. This will result in reduced resistance by the tribal people.*

VI. Stakeholder Strategies and Tactics:

The chances of the preservation of the distinctive culture of the indigenous people increase, if impoverishment and sovereignty risks are avoided or at least mitigated. Likewise, stakeholder costs and conflicts are reduced when tribal issues are addressed strategically early in the project preparation.

This section enlists the various strategies that need to be adopted by governments, companies, international financial

intermediaries, NGOs and indigenous people as stakeholders when a project is set up in an area – particularly in a tribal area.

√ ***Government Strategies and Tactics:***

National legal frameworks define the rights and obligations of stakeholders during an encounter. The relevant legal frameworks pertain to eminent domain, the rights of indigenous people, mining provisions and environmental protection laws. These frameworks frequently run counter to each other, paving the way for appeals and political arrangements.

It is seen that in most of the cases, the government reserves the right to transfer sub-surface or other natural resources or take land under the doctrine of eminent domain. This poses a big problem for tribal people – especially those with unsettled claims to land. Vacant and encroached lands are usually not recognized as eligible for compensation. Besides, compensation is restricted to the value of the land – which is always difficult to determine given that land markets are weakly developed among tribal communities and that access to impartial justice for those who dispute government/company valuations are not available. The doctrine of eminent domain incorrectly assumes the elasticity of land, ignoring its spiritual and emotional value to a tribal community.

√ ***Company Strategies and Tactics:***

Strategies and tactics for dealing with tribal people usually rank low on the agenda of project authorities. The willingness of governments/companies to deal with social (including indigenous policy) issues too leaves a lot to be desired. The survey found that the authorities are

reluctant to set up a compensation system for the affected communities or to negotiate with communities over land rights issues beyond their legal compulsions. They have maintained a safe distance from the impacted people. There is no consultation/interface with the impacted community in general and the tribals in particular on issues like acquisition of land, resettlement, the needs of the people, the adverse effects of mining activity and their possible solutions.

√ ***Non-governmental organization strategies and tactics:***

Indigenous people have found a sympathetic ear in NGOs. NGOs have shown great diversity of objectives and organizational capacities. Some local organizations focus on particular projects. Others assume broader, global policy objectives by forming strategic alliances among themselves. Their positions range from militant resistance to uncritical promotion of industrial/mining interests.

NGOs also deploy a wide range of strategies and tactics, including national and international lobbying, civil disobedience, serving as information clearing houses, coalition building and community outreach. Other options include referrals to other support groups, meetings with the institutional financiers of mining, hosting conferences, organizing resistance campaigns and subcontracting to assist in indigenous development or cross-cultural brokerage to interested stakeholders. While setting up mining projects, executing agencies and the government should allow NGO involvement among the affected persons. They should see them as useful intermediaries rather than as adversaries and refrain from unleashing repressive measures on them.

√ *Indigenous People's Strategies and Tactics:*

The current empirical study corroborates the findings of earlier studies that the impacted tribal people have limited strategic and tactical options. Laws are ill defined and often skewed against them. In any case, they lack the resources to carry out a prolonged legal battle against the project authorities. An apathetic bureaucracy seldom has the time or the inclination for their pleas.

In the circumstances, the tribal people usually are left with only two options: resistance or acquiescence. Resistance strategies and tactics include violence, civil disobedience, appeals to NGOs, religious groups or to any other organization that is likely to listen. While such groups may lend their sympathetic support, they may be guided by considerations other than the cultural survival of the affected people. They may exaggerate or downplay the possible impacts of a project depending on their primary interest and motivation. On the other hand, acquiescence means acceptance of any arrangement the company and/or governments may bring to the table.

Project authorities should include in their plans at least nine components for protecting the interests of the impacted indigenous people. They are:

1. Examination and explanation of the project's economic and legal aspects to the community in a way they will understand;

2. Full and honest assessment of the project's risks, including threats to sustainable livelihood, employment loss, disruption of productive systems, environmental and health risks and socio-cultural effects;

3. Budgeting and organization of actions to mitigate each risk;

4. Determination, by the people, of how the project fits into their cultural vision;

5. Institutional and financial steps to ensure that the project's benefits are opportunely and transparently allocated to the tribal people;

6. Equitable distribution of benefits and costs through a common community-defined process;

7. Development of new alternative resources to provide a sustainable livelihoods to replace the ones lost;

8. Preparation of strategies for negotiating with project promoters, financiers, government and other key stakeholders on benefit-sharing arrangements over and above risk mitigation; and

9. Formalisation of negotiated arrangements with legally binding instruments.

VII. Legal and regulatory frameworks:

There are a number of regulatory frameworks with provisions to protect persons affected by developmental projects. But not many of them have specific provisions to deal exclusively with issues affecting tribals, though a large proportion of the affected persons are invariably tribals. As a result, not only are the affected tribals not able to restore their erstwhile livelihood standards. More often than not, they are actually worse off than before. Secondly, even if there are some preventive and protective regulatory frameworks, a majority of them are not complied with by the respective departments. This also contributes to the non-mitigation

of the adverse effects of infrastructural projects on the impacted persons, including the tribals. In view of this, governments/ companies should envisage in their plans provisions, which are beyond the legal framework but will be able to mitigate the negative effects of the projects on the tribal. Thirdly, it should also be the prime concern of the government/company to ensure that the provisions embodied in the existing legal framework are complied with in letter and spirit. These steps will go a long way in minimizing the adverse effects caused by irrigation and mining projects on the people in general and the tribal people in particular.

VIII. Lack of harmonization:

Indigenous people and project authorities are locked in prolonged legal battles in the studied areas because mining, tribal, environmental and land tenure laws are not yet harmonized.

A possible first step to avoid these prolonged legal conflicts is necessary changes in existing laws that recognize and ensure the rights of tribal people. This proactive step might lead to a harmonization of laws and do away with conflicts between the affected people and the project authorities.

IX. Corporate belly-flopping:

Most irrigation and mining projects in the state have adopted a strategy of not doing anything till they are forced to do so on account of people's resistance. Companies refer to this strategy as 'flying below the radar'. It is also known as the 'corporate belly-flop' strategy. Companies tend to hide behind excuses and vague generalizations such as 'people always get harmed when development takes place', 'cultures disappear anyway' or 'the company is only responsible for direct impacts' (with 'direct' being self-defined to avoid obligations) to shirk their moral and ethical responsibilities. This approach prolongs confrontations, increases

risks and leads to cost and time overruns. Keeping these things in view, *it is crucially important for the companies to prepare a mitigation plan in consultation with the affected people after assessing the felt needs of the people so that the activities envisaged in the plan address the risks to the impacted people in general and the tribal people in particular.*

X. Contract a broker:

Mining companies, governments and other non-tribal stakeholders seek consultants to help them with technical and environmental issues. But they don't feel the need to hire the services of professionals when it comes to dealing with issues affecting tribals. None of the four projects under the present study has employed social scientists to deal with such issues even though all four of them are in tribal areas.

Companies and project authorities in India have generally tried to deal with tribals on their own, often with disastrous results. Given the suspicion and mistrust with which most of them are viewed by the indigenous people, such attempts by companies tend to harden feelings on the other side – frequently leading to delay and, in some extreme cases, even abandonment of the project altogether. Hence, it is wise for companies to avoid the inherent conflict of interest in the negotiation process and get an intermediary to broker a deal with the affected people. For centuries, specialists termed as 'cultural brokers' by anthropologists have been roped in to bridge the cultural gaps between tribal people and outsiders. Alternatively, companies can also turn to NGOs, assuming they have the capacity to communicate with tribal people. A third option under the 'contract a broker' strategy is to hire a consultancy firm to broker a deal with tribal people. The aforementioned three options of hiring/engaging a broker have yielded rich dividends for companies in many countries, not only in arriving at a mutually

agreed strategy for the welfare and livelihood of the impacted people, but also avoiding resistance to mining projects. *It is high time project authorities in India too chose one of the three options for smooth, unhindered progress of projects, especially if they are located in tribal areas.*

XI. Benefit-sharing arrangements:

In recent times, it has been observed worldwide that benefit-sharing arrangements (BSAs) have emerged as an increasingly popular approach in dealing with the impact of projects on tribal people. BSAs might include training programs, with or without employment opportunities; support for the development of small business enterprises primarily as subcontractors with the company or the project; formation of benevolent or development foundations - some controlled by the authorities and others by tribal people. BSA might also include indirect transfers to tribal people whereby a negotiated percentage of profits flows back into the indigenous communities.

It is difficult to secure the support of the indigenous people in the absence of a benefit sharing arrangement with them. In fact, this precisely is the reason for several projects getting stalled in Orissa. But the government and companies have not yet woken up to the need for a BSA to ensure hassle-free operations. The utmost they are willing to do is to take measures to mitigate the adverse effects of mining or irrigation projects on the people and the surroundings. It is about time they realised that mitigation of adverse effects is only compensation for damages inflicted on the indigenous people, not a benefit as such. Unless people see tangible benefits for themselves, they are highly unlikely to support a the harmful effects of which are all too well known.

In all the projects covered under the present study, it was observed that there is neither any special treatment for the

tribals among the affected nor any provision whatsoever for sharing of the benefits of the project with them.

It is thus absolutely vital to put in place a proper benefit sharing arrangement with the impacted people to ensure the smooth running of the projects and to avoid cost and time overruns.

XII. Localized services to impacted communities:

NGOs can offer the affected communities, including tribals, a wide range of services to ensure that they get a fair deal from companies/governments. Some such services are fund-raising, on-the-ground research, legal representation, monitoring of environmental and social compliance and capacity building. They can, for instance, train the indigenous people in negotiating skills or organizational management and advise them on possible risks like threats to health and environment. Governments/ companies should engage NGOs with such expertise to play the role indicated above. This will be a positive capacity building measure with a long-term beneficial effect on the impacted community.

XIII. Global Policy advocacy:

An NGO may pull together a cluster of strategies into a campaign, which is a coordinated set of actions designed to influence policy or change the course of a particular encounter. This is true of many of the projects launched in Orissa.

Global NGOs are attempting to change the due diligence policies used by financiers when they invest in mining and other infrastructural projects. Oxfam, the Centre for International Environmental Law and the Bank Information Centre, for example, are attempting to lay down a global standard in their dialogues with the World Bank and regional development banks. Such standards go beyond issues like displacement and compensation

and move into areas like human rights, tribal sensitivities and cultural sustainability. Of particular note are the UN instrumentalities and conventions to protect the Earth's biological, linguistic and cultural diversity. A recurring concern has been the promotion of consultation, self-determination, group rights and protection of indigenous cultural patrimony. In the absence of any action on the part of the industry, Community Aid Abroad in Australia has established its own ombudsman code of conduct for mining companies working with tribal communities (Oxfam 2001). In 2001, it provided a detailed review of the overseas operations of seven mining companies in the Asia-Pacific region. There have also been demands for standards, benchmarks and fixing of accountability on mining companies within their home countries for the overseas treatment of tribal people.

XIV. Trends and counter-trends:

The rules of the game change from place to place – even within the same country. There are no industry-wide social standards and little concern for risk assessment, social development or tribal cultures. International, national and regional legal frameworks are routinely ignored. The study also reveals that indigenous peoples are not treated as legitimate 'stakeholders' in an encounter, in the true sense of the term.

It has been seen that in most of the mines and other development projects, a strategy for dealing with tribal people ranks low on the priorities of non-tribal stakeholders. They feel they are not obliged to take any proactive steps to help tribal people. The little that they are forced to do is often because of the difficulty in securing finance from certain lenders or the need to protect the image and reputation of the government/ company than out of any genuine concern for the affected people. It is, therefore, of paramount importance that indigenous people develop strategies to articulate – and finally

reduce - the known threats that developmental projects pose to the sustainability of tribal people.

XV. Precautionary Principle for Mining near Indigenous/ tribal Lands:

Ignoring tribal issues greatly increases the risk of human rights complaints or costly downstream litigation. A few decades ago, it would perhaps have been possible to hoodwink the tribals about the effects of mining and other developmental projects. But now, even remote tribal groups are fully aware of the risks to sustainability posed by mines near or on their lands thanks to increased literacy, high-speed communication and active NGOs. They are beginning to challenge the attempts of companies to buy their acquiescence with a few unskilled and menial jobs.

The international community has placed empowerment high on the agenda. In the emerging scenario, empowerment has come to mean that the tribal people gain the capacity and the ability to control the impact of a mining/irrigation project on their culture and livelihood. This empowerment stands over and above compensation for damages. Empowerment is not training people for non-existing employment. It is not something to be given away as a gift either. Instead, empowerment begins with tolerance and compassion. From the perspective of sustainable development, empowerment means that indigenous people do not lose but rather improve their livelihoods and enhance their cultures.

The empirical study conducted in the 4 projects reveals that the tribal people have been the victims of 'development' in more ways than one. They have neither been adequately compensated for parting with their land nor are able to depend on the natural and forest resources, around which their life and living once revolved. A majority of them have been further impoverished. Some of them have migrated out of their home and hearth in

search of a livelihood. Those who still continue to stay in and around the area are leading a miserable, poverty-stricken life.

In view of the factors discussed above, it is necessary to create conditions for empowering the impacted people, especially those belonging to the tribal community, with a view to increasing their income on a sustainable basis. The following 8 measures must be given top priority in the action plan by every company or government, as the case may be:

1. Meaningful, informed consultation with the impacted people/community

2. Securing of rights and access to indigenous land and nature

3. A full and timely disclosure by the stakeholders on the plans, agreements, and financial arrangements of the project for the benefit of the impacted people in their language and in a culturally appropriate manner.

4. Identification and disclosure of all the risks of a proposed project by the stakeholders. While assessing risks, the full range of anticipated social, economic and environmental impacts should be taken into consideration rather than just the threat posed by loss of land.

5. Prompt and unambiguous institutional and financial arrangements to mitigate each risk.

6. Graduation from compensation for damages to a benefit sharing arrangement

7. Vesting in local Self Governance Institutions the right to approve, reject, or modify decisions affecting the livelihoods, resources and cultural futures of the indigenous people.

8. Protection of basic human and civil rights as specified in the laws of the land and international conventions (like ILO 169, UDHR, MDG etc.) to which our country is a signatory.

To safeguard the interests of the tribals and to save them from impoverishment, it is necessary not only to identify, avoid and mitigate risks but also to focus on benefits over and above compensation and rehabilitation for damages. A prudent approach, it goes without saying, demands long-term commitments, innovative solutions, financial and institutional guarantees and the use of professionals experienced in dealing with issues of social development and indigenous people. It also requires continuous monitoring by technically competent, independent observers of these indicators, providing all stakeholders with opportunities to take corrective actions.

Chapter – VIII

SUMMARY AND CONCLUSION

With a view to accelerating the process of economic development and also to promoting balanced development of regions, by initiating the process of industrialization in backward areas and pockets, the Government of independent India has launched many mega development projects. Such as multipurpose river dams, large open cast mines, heavy industries, infrastructural projects and many others. However, the unintended consequences of all such development are involuntary displacement human population leading to marginalization and pauperization of most of the oustees, loss of forest and agricultural lands and above all ecological and environmental disorder. Since proper rehabilitation and resettlement of the displaced human population have now become the crux issue of all development projects implemented in different parts of the world and more so, this has become more acute and most inhuman problem in the case of projects carried out in the developing countries.

Development paradigm of the modern day aims at unlimited economic growth and affluence of the human population by making extensive use of modern science and technology. To realize this goal countries in different parts of the world plan and implement many mega development projects which cause massive involuntary displacement of human population in both the developing as well as developed countries and in the absence suitable R & R policy measures the poor and weaker among them become the worst victims. The magnitude and size of involuntary displacement of

human population is observed to be increasing year after year. Further, out of this, the displacement effects of multipurpose river dams are observed to be much higher and of wide nature and the R & R packages hardly help them to restore their previous state of livings in their new places of resettlement. In most of the cases, even the actual rehabilitation and compensation offered to the people are found to be much less than the actual numbers of displacement and projects affected persons.

However, following the foot steps of the developed countries, the developing and populations countries like India has always pinned its hopes on the positive multiple effects of the development projects to generate rapid socio-economic transformations by eradicating mass poverty. Nearly 21.3 million people in the backward regions of India have been involuntarily displaced by the various development projects such as river dams, mines, industries, wild life sanctuaries and others. Further, at the state level, when we look at the development projects and the concomitant displacement problems of human population, it is found that the backward and underdeveloped state like Orissa has suffered more. After independence, many development projects were commissioned and promoted in backward Tribals areas of Orissa. The establishment of these projects although primarily intended to accelerate the process of economic development at the national level as well as social and economic transformation of the backward regions, they could not be made totally free from many types of unintended negative effects at the local level. The immediate adverse effects of these projects were massive displacement and dislocation of human population and the associated socio-cultural as well as the economic problems. More so, in tribal areas as many among the scheduled tribe oustee families did not possess proper land ownership rights over the land used by them, this could lead to massive displacement and dislocation of the tribal habitats without any compensation benefits for resettlement elsewhere. Since there was no proper R & R

Policy, displacement generated more chaos and confusion and the development projects became curse for the poor and hapless. Roughly 1.32 per cent of the state population has been victims to development displacement problem and around 4 pre cent of the total land area in the state has been acquired for the development projects. In this situation, it is observed that in the absence of a proper R & R policy, the resettlement and rehabilitation of the displaced people in a poor and backward state like Orissa has remained far from satisfactory. Not only in Orissa, throughout the world, it is found that the resettlement efforts of the countries to rehabilitate the displaced people in proper and integrated manner have remained far from satisfactory.

Displacement Effects

Analysis of the field data collected through our sample survey of displaced families in selected resettlement colonies, clearly show that the oustees in general lead a life of miseries and poverty. Although people residing in the resettlement colony was given land based rehabilitation benefit in the form of six acres of un-irrigated land or three acres of irrigated land or some people has surplus land or used by government land, 51.15 per cent of the households report that cultivation is their principal means of livelihood. On the other hand, 30.02 per cent of the total working populations now earn their livelihood by doing non-agricultural wage work as the land allotted to them or used government land by them hardly yields anything to earn their subsistence. Because of poverty and uncertainty of earning, there has been a marked increase in the number of earners in the displaced households.

The findings of the study based on the sample survey of the households in different resettlement colonies show that after more than a decade of their stay in the resettlement areas, the displaced households in general have failed to restore their previous socio-economic conditions. Owing to lack of equal access to

remunerative and well paid occupations in the place of resettlement, socio-economic inequality among the displaced households has increased to a great deal. Only a few affluent households among the oustees have managed to cope with the problem of involuntary displacement by migrating to urban areas on their own or by shifting their traditional occupations from agriculture and allied activities to Government service or formal tertiary sector employment. There is a marked decline in the value of assets owned by the oustees due to lack of agriculture land in their place of resettlement. It is found that while the average value of assets of the sample families was Rs.1,63,897 during pre-displacement period, this came down to Rs.79,766 during post-displacement period. This means, the assets value has declined at the rate of 48.67 per cent.

Apart from the deteriorating economic condition due to the loss of occupations and disruption of the stable subsistence agriculture, the displaced families have faced many types of sociological and psychological problems. Their community life has been affected to a great deal. They have become alien in their place of resettlement due to horizontal expansion of their kinship territory and often they carry the stigma of displaced people wherever they go. Due to cultural and linguistic (dialect) differences, many of them feel psychologically inferior and the host people do not like their resettlement at the cost of depletion of the common property resources. Often ecological pressure on the existing resources leads to conflict between the resettlers and the host population. Displacement has generated more social insecurity in the new resettlement colonies and clusters.

The development scenario of basic infrastructure and services in the resettlement colonies and clusters is observed to be highly unsatisfactory as compared to the old existing villages of the region. Some among them have failed to get recognition as revenue villages even after more than 15 to 20 years of

resettlement. Some of the resettlement colonies do not have primary school. Although the resettlement areas are found to be malaria prone, primary health care facilities at the village level are highly unsatisfactory. It seems after shifting the people to the resettlement sites in haste the authority remained cool and indifferent towards development of basic infrastructure and amenities.

The findings of the present study and other displacement related studies clearly show that cash compensation according to the recorded market rate of land and house properties rarely compensates the losses borne by the displaced people. It is a fact to recognize that the sale and transfer of landed properties are usually undervalued by both the buyers and sellers to avoid stamp duties and tax liabilities. The purchase and acquisition of such properties in their place of resettlement becomes almost double of the compensation received by the displaced families to restore their previous economic status. So, the cash compensation should be worked out or fixed at double of the prevailing market price.

It is seen that the oustees usually spend major portion of their cash compensation on the construction of the house in their place of resettlement. It is a fact that the first and foremost requirement of all displaced families is house or shelter and this they cannot avoid under any circumstances. So, at least for poor and landless minimum acceptable form of fire and cyclone proof houses should be built by the Government by reducing the cash compensation package. Also, it is necessary for the project authority or the Government to develop the resettlement colonies and clusters with all sorts of amenities at least one year before the submergence of the original village.

It is also necessary that in order to cause minimum damage to the existing social fabric and community life in the displaced village, all the displace families should be given opportunities to reside in one colony or cluster and the neighbourhood settings

may be planned according to the old village. As far as possible, the colonies should be developed in the immediate hinterland of same eco-cultural region, so that the oustees will feel minimum pain of displacement and socio-psychological problem of alienation. It has been the practice to resettle the oustees in remote forest areas by clearing forest and felling trees. This not only leads to deforestation and ecological disorder, but also disruption of ht social and economic life of the oustees. So, as far as possible rehabilitation of the displaced families should be made in the non-forest and easily accessible areas.

In the present day world, it is next to impossible to think of economic development without mega core sector projects relating to hydropower and irrigation dams, basic industries like iron, and steel, aluminum, open cast mines to explore minerals and metals, roads and railways to develop rapid transport and communication systems and so on. So, the development projects cannot be stopped where those necessary to develop the economy. However, it is well under the control of the government to make rehabilitation less painful for the displaced and this is feasible by designing and evolving spatial and people specific (R & R) policy from project to project and also a consensual R & R policy measures for all projects affected persons at the macro level.

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