 CHAPTER-III

DEVELOPMENT PROJECTS IN ORISSA: A CASE STUDY OF UPPER INDRAVATI HYDRO-ELECTRIC PROJECT

The last sixty years of Indian planning have witnessed an ever accelerating trend in building infrastructural projects under the aegis of the central and state government. In view of the widespread poverty, unemployment, inequality, poor social overhead capitals and regional imbalance, establishment of development projects is considered as a vital economic necessity. While the centre and states are proactively engaged in creating investment opportunities in resource development, the local people in resource-bearing states are concerned that the authorities may overlook local environmental and social responsibilities. The neo-liberal policies and liberalized investment rules are attracting foreign and Indian capital resources to most of the states in India (Baxi, 2008). Given their financial and development problems, most of the Indian states see the resources-minerals, oils, natural gas and hydropower-as key revenue and are demanding a greater share of the economic benefits of their development. The development projects proposed by the investors are considered as the perennial source of economic development. Most of the development activities projected as instruments of economic progress of the nation often proves to be painful for a section of the people.

Orissa, in eastern part of India, is a resource-rich state, known for its abundant mineral, forest, hydrologic and other resources. It has attracted large development projects from the beginning of the planning era in the early 1950s. The Hirakud Dam and Rourkela Steel Plant located in Orissa were among the first major projects undertaken in the early years of independent India. The state since then has witnessed a series of rapid development projects. Under the influence of globalization and because of its rich natural resources, Orissa is now fast becoming an attractive destination for gigantic corporations, Indian as well as multinationals, looking for investment opportunities. However, these projects have not benefited the local population as planned which has sizeable tribal segment. On the contrary, development interventions in tribal areas have cost these people heavily. People have lost their lands, habitats, livelihoods and in some cases displaced repeatedly (Mathur, 2008).
The displaced persons face several difficulties in adjusting their lives to an entirely new environment. Rehabilitation and resettlement of the displaced persons require special plans and emphasis on the part of the government to completely equip them with the opportunities they were enjoying and to eliminate the trauma of displacement. This chapter highlights the fact that with the growing pace of development under liberalization in Orissa how the intensity of displacement has also increased. The chapter makes an attempt to understand the politics of development and displacement in Orissa and then examined the impact of Upper Indravati Hydro-Electric Projects in Orissa. It focuses on aspects like displacement; resettlement and rehabilitation and experience of project-affected people due to Upper Indravati Hydro-Electric Projects in Orissa. It makes a comparative analysis of the pre and post-displacement conditions of displaced persons and assesses the extent of impact on social capital, natural capital, human capital, physical capital and financial capital and reconstruction of livelihood of displaced persons.

3. Politics of Development in Orissa

The state of Orissa in the east coast of Indian sub-continent, comprises of 4.74 per cent of the total land mass, and has an area about 155, 707 Sq Km². Orissa extends from 17° 49 N to 22° 34 N latitude and from 81° 29E to 87° 29E longitude on the eastern coast of India. It is bounded by West Bengal in the north-east, Chhattisgarh in the west, Jharkhand in the north, Andhra Pradesh in the south and the Bay of Bengal in the east. While more than two-thirds of the area is comprised of hilly forest, it has a coastline of 480 Kms. The state was formed in 1936 as a single linguistic entity with 13 districts, presently there are 30 districts in the state with the city of Bhubaneswar as its capital. Orissa is divided into three revenue divisions: Central, Southern and Northern. According to the 2001 Census records the total population of Orissa was 368, 05 lakh which constitute 3.58 per cent of the total population of the country. Orissa is one of the most backward states in India with a diverse composition. Orissa has been suffering from regional disparities and inequality despite many development projects and programmes. Even more than six decades after independence, some of the regions of this state are very backward and constitutes the largest proportion of poor in the country. The challenges rose by intra-regional disparities and their compounding implications on living conditions and governance are enormous. Orissa is marked as much
by disparities within the state, as by absolute deprivation. The regional disparities are substantial, appear mostly multi-dimensional, and have shown little signs of being reduced.

The overall economy in Orissa remains backward through it is rich in natural resource potential. The apparent reasons of underdevelopment in Orissa are conditioned historically. Prior to 1930s the Oriya speaking population was scattered under different presidencies, and it was only in 1936 a separate Orissa province came into being. The British Orissa constituted the conquered coastal belt (Mugalbandis) and 18 Tributary Mahals (Garjats). The former was under the direct control of British while the later was under feudatory chiefs. The British did not interfere with chiefs, rather protected them from foreign invasions. In return the chiefs maintained a huge British army by taxing the peasants. However, the province witnessed a series of an uprising, as the tribal people could not adjust with Muthadari system loaded with taxes. Consequently, the British were forced to amend the settlements and Zamindari system was introduced, which paid rent to the British directly. Thus, present Orissa political economy of development reflects its historicity. Further, there are untapped resources, widespread share copping, unemployment, feudal strongholds, indebtedness, etc., cumulatively contributing to the underdevelopment in the state.

Nearly 85 percent of population of Orissa lives in rural areas and depends mostly on agriculture for their livelihood, whereas, urban population constitutes 15 per cent. Agriculture being the source of income and employment for 85 per cent of its people has never got priority. Officially, only about 34 per cent of the irrigable land benefits from irrigation facilities. Hence, in hill forested tracts, rain fed agriculture and forest collection are the primary source of livelihood. About 45 per cent of the total area in the state is declared as Scheduled Area under the Fifth Schedule of the Constitution. The forest area in the state is 9963, 30 sq.km constituting 38 percent of the total area. The cultivable land in Orissa has declined. In between 1980-2000, 26,500 hectares of forest land were destroyed for mines and industries. In 1980s, 63 lakh hectares of land used for cultivation declined to 57 lakh hectares in 2005. In the same year, the cattle herding community (gochar) land

30 The districts of Sundergarh, Mayurbhanj, Koraput and Rayagada, five entire subdivisions, viz., Keonjhar Sadar, Champua, Phulabani, Baliguda and Kuchinda, one full tehsil, i.e., R.Udaigiri, part of Suruda tehsil and five community development blocks, namely, Nilagiri, Thuamul, Lanjigarh, Gumma and Kashipur comprise the Scheduled Areas in Orissa.
declined from 8 lakh hectares to 4 lakh hectares (Samal, 2006). The annual monthly income of the majority of tribal households was between Rs. 4,000-6,000 while the official poverty line was 11,000 according to 1992 below poverty survey (BPL). The problem of economic backwardness of the state has assumed serious proportions. Besides, out of the total land of 79,339 hectares allotted for mining leases as on 31 December 2005, more than 50% is in forest area.

As per the 2001 Census data, 38.79 per cent of the total state population constitutes workers. The percentage of main workers and marginal workers are respectively 67.2 per cent and 32.8 per cent of the total workers. Women still lag behind their male counterparts in respect of working population. The proportion of male workers to female population in 2001 Censuses stood at 53 per cent and 25 per cent respectively. Pressure on agriculture still continues to be high in Orissa as revealed from the category-wise working population figures of 2001 Censuses. Out of the total workers 24.1 per cent are cultivators, 14.7 per cent is agricultural labourers, and 2.8 per cent engaged in household industries, and 25.6 per cent was other workers. However, there is a wide disparity among the districts in the state in respect of major demographic sections. Orissa has one of the lowest wage rates in the country. Between 1993-94 and 2003-04 unskilled wage increased by around 7.51 per cent per annum, while the skilled wage went up by 7.68 per cent (PRAXIS, 2002).

The economy of Orissa has been lagging behind the national economy by several decades. The long term growth rate of the state’s economy during the period from 1985 to 1995 has been around 2.7 per cent, which substantially lower than the growth rate of the national economy. The industrial dimension in Orissa is still bleak. The manufacturing sector employs only 7 per cent of workforce and less than 3 per cent of workers are in non-household industrial sector. Its per capita net state domestic product, a measure of average income, stood at Rs.20, 200. For 2006-07 which falls behind the national average by about 35 per cent. Moreover, the gross domestic product of the state grew by a considerable lower rate than many other states for a long time despite its high growth potential. The per capita income of Rs.200 of the state during the year 1951-52 at current prices has gone up to Rs. 9,162 during 1999-2000. In 2001, Orissa’s revenue deficit reached the staggering figure of Rs, 2, 573.87 crores or 6.5 percent of the gross state domestic product (GSDP). Currently,
the state does not have funds to meet its salary, pension and interest payment and repayment liabilities since its total liabilities (Rs. 7,733 crores in 2001-2002) exceed its revenue receipts (Rs. 7,511 crores). The state’s debt stock as of March 2001 stood at Rs. 21,072 crores or 51 per cent of the GSDP. Almost 73 per cent of Orissa’s revenues went to the servicing declined from 40 percent of total state expenditures in 2000 to 24 per cent in 2004 (Haan and Dubey, 2005).

The regional disparities in poverty between Coastal and Non-coastal Orissa, shows that Southern districts have an extreme high level of poverty. State level income poverty data reveals that in 1999-2000 Orissa has become India’s poorest state, suppressing Bihar that was still the worst in 1993-1994 but showed a substantial decline in poverty during the late 1990s. Orissa’s poverty headcount stagnated around 48-49 per cent “between 1993-94 and 1999-2000”, while at all India levels the headcount declined markedly. However, it has declined to 46 per cent in 2004. While rural poverty in coastal Orissa was 32 per cent, it was 50 per cent in northern Orissa, and a staggering 87 per cent in southern Orissa. It is estimated that poverty headcount in Puri district as 22 per cent, while in Koraput district it is almost four times as high (80 per cent). Orissa’s poverty trend seems closely associated with the lack of economic growth in the state. The annual per capita state domestic product grew by 2.3 per cent between 1993-1994 and 1999-2000, higher than Bihar and Assam, but well below the Indian average of about 3.5 percent. The BPL households in 1983 were 65 percent, which has declined to 46 per cent in 2004; highest in India. On the other hand, the total BPL population was 1.54 crores in 1983, which increased to 1.78 crores in 2004 (ibid, 2005). Moreover, though a bit of poverty reduction might have taken place in coastal Orissa, there is no such reduction in northern Orissa-where several large scale manufacturing units have been set up in more recent years-and southern Orissa. The benefits of whatever poverty reduction might have been taken place have not been equitably distributed among the different social groups of a region (Panda, 2002).

Disparities between social groups, scheduled castes (SC) and scheduled tribes (ST) are as large as elsewhere in India, and the combination of regional and collective disadvantages make tribal people in southern districts of Orissa, particularly poor, arguably falling increasingly far behind the rest of the state and country’s population, due to an overlapping
set of disadvantages (ibid, 2002). However, the situation in tribal areas has not changed even after 60 years of the implementation of community development projects. There is also high an incidence of poverty prevails among the ST and SC population in the state. The head count ration is as high as 76 per cent among the ST population and 50per cent among the SC population in comparison to 37 per cent for OBC group and 23 per cent for others in 2004-05. The ST and SC population account for 60 percent of the number of poor in the state as a whole while their share in total population is STs and SCs respectively. What is more important is the fact that proportion of ST remaining below the poverty line has increased from 71 per cent in 1993 to 76 per cent in 2004. There is no change in poverty percentage among SC population between 1993 and 2004 (Government of India, 2004).

The average literacy rate in Orissa is 63.08 per cent during 2001, as against all India averages of 64.8 per cent. Male literacy rate is 75.95 per cent and female literacy rate is 50.51 per cent during 2001. According to National Family Health Survey-2 (NFHS), 82 percent of the female tribal population, 73 per cent of the scheduled caste women and 56 percent of other backward caste women and 34 per cent of other women were illiterate. The literacy level in the Southern districts remained around 30-35 per cent and female literacy below 25 per cent, while the districts like Cuttack, Puri and Khordha around 80 per cent. As per the 2001 Census, the rural population in Orissa is 31,287,422 (14.99 per cent) and urban population is 5,517,238 (85.01 per cent). As per the 2001 Census, the Scheduled Tribe (ST) and Scheduled Caste (SC) population constitute 22.13 per cent and 16.53 per cent of the state population. This is comparatively higher than all India figures of 16.20 per cent SC and 8.19 per cent ST population. However, it is interesting to note that although the percentage of SC population in the state has been increasing since 1981, that of ST population though marginally has been declining. The ST population which constituted 22.43 per cent of the state population in 1981 fell to 22.21 per cent in 1991 and further to 22.13 per cent as per the 2001 census. Considering the heavy concentration of ST and SC population in as many as 13 districts of the state a total 69613.80 Sq. Km² area which constitutes 44.70 per cent of the total state area has been declared as Scheduled Area of the state. Disparities between social groups similarly are not being reduced significantly. Adivasi suffers from accumulation of disadvantages related to the location and social group, and dalits face the kinds of discrimination that has been well-documented for other parts of state. The fact is that the
disparities have become more pronounced during the 1990s, with the processes of liberalization of economy, accompanied by structural adjustment (Currie, 2000).

As in any developing economy, the economy of Orissa has been going through structural changes away from agriculture in favor of industry and services. In the pursuit of growth based on a neo-liberal development paradigm in an era of heightened economic globalization, the Orissa state government has favored increased foreign direct investment in the development project and has relied significantly on the exploitation of natural resources for export—at the expense of environmental and local communities. The state is endowed with huge water and mineral resources having about a third of the country’s iron-ore reserves, large bauxite, chromate, coal and dolomite (Somayaji, 2008). Thus, the state government has emphasized strongly on industrialization of the state to eradicate poverty, to open up employment opportunities to be educated and un-skilled labour, besides enhancing the state’s revenue. The elites of Orissa, mainly politicians, higher caste land owners, traders and the urban middle class have always taken a pro-industry stand for rapid industrialization. In the general elections, both national and regional, political parties of the state have been giving false promises to provide jobs to growing number of unemployed educated youths. It may be recalled in early 1980s when the first case of child sale due to hunger and starvation was reported from Kalahandi, the then Chief Minister of Orissa announced 1000 industries in 1000 days to be set up. The public sector mega Aluminum plants were set up in Anugul and Koraput districts in the early 1990s. These two industries displaced more people than jobs provided. The displaced families got promises of employment but only of a few got lower grade jobs. The local political lobby recruits people of their choice, not the local displaced people (Das, 2003).

The state’s new industrial policy 2001 is committed to radical reforms in the laws and rules guiding labour and employment, creation of employment opportunities, establishment of globally-competitive industry, restructuring of industry in line with changing market conditions and deter investment. The state's endeavours aimed at encouraging private investment at any cost have been vigorous. During the last five years, the state government has signed 43 memorandums of understanding (MoUs). Notable among them are international and Indian corporate giants, namely POSCO (Korea), Vedanta Aluminum
(UK), Rio Tinto (UK), BHP Billiton (UK-Australia), Alcan (Canada), Hindalco, Jindal, Tata and Sterlite. Mining projects worth 3,000 billion rupees have already been launched and projects worth a further 11,000 billion rupees are in the pipeline. The state also proposes to build two more ports in Dhamara and Gopalpur to provide investors with a gateway to international trade. The state has given lease 18 rivers and reservoirs for exclusive use by industry for its water intensive activities. Thus, Orissa is fast emerging as a major site of foreign direct investment and multinational development projects, which violates the rights of the indigenous population in the hill districts and mineral reserves areas of Orissa. (Sahoo, 2005).

In spite of huge investment in the state, agriculture has not changed. The exports of agriculture and forest products from the state fell by an average of around 20 per cent a year during 1993-94 to 2003-04, mineral and metallurgical export went up annually by around 14 per cent to 17 per cent each and Orissa’s traditional handloom and handicrafts sector has been falling annually by an average rate of 26.6 per cent. Between 1993-94 and 2003-04, the number of workers employed by mining industry fell across all districts except the industrial districts, which along with the non-industrial districts showed a higher average annual increase in output are concerned. The average annual increase of 57.49 per cent for non-industrial districts is far higher than those for mining and industrial districts. A study conducted by the World Bank revealed that 470-odd projects in Orissa in 2007 would entail an investment of Rs. 5,60,000 crore and were expected to generate, in six years, an income of Rs. 1,40,000 crore and employment of 1.2 million persons (Panda, 2002).

The corporate houses claim that they will share the responsibility of livelihood and social security of the displaced people but this has not happened. It is estimated that some 3 to 5 million people have been displaced since 1950 in Orissa on account of various development projects, of which more than 50 per cent are tribal’s, and the expected displacement in the coming decades also is expected to affect tribal’s disproportionally. The process of development has reduced them to ecological refugees, victims of strategy growth and the promise of employment and prosperity has remained elusive (Kothari, 2006). The continuing disparities between social groups also appear the result of social practices of discrimination, and that development has not reached remote areas and tribal groups. The
history of displacement and lack of adequate resettlement and rehabilitation similarly illustrates that deprivation has been the result of exploitative social and economic processes. The following section explores how displacement has become a major phenomenon of development activities in India in general and in Orissa in particular.

3.1. Politics of Displacement in Orissa

Displacement is not politically neutral. It arises out of a clash of ideologies, on one side, the value systems of traditional cultures, where relationships with land and community are important than money, another side, an ideology of industrialization-as-development, in which market forces and swift financial profit override other values (Padel and Das, 2008). It has been argued that state has always served the interests of industrial capital. Modern state has been an instrument of large scale industrialization that has alienated the people from their own natural resources. The system of state monopoly over natural resources prevalent in Orissa is considered by activists as a shining example of both the capitalist and socialist models of development. The market forces used state control over resources to favor an elite class that dominates the over the rest of society.

The State of Orissa occupies unique place among the under-developed States in India due to large concentration of tribal population. In spite of being a relatively backward state in economic development, Orissa possesses a vast quantity of mineral, water and forest resources. The development activities in Orissa began in the late 1940s; it got momentum in the early 50s with the introduction of the Paradeep Port plan. The major development projects which induced large scale displacement in the state are the industrial project, such as the Rourkela Steel Plant, the Hindustan Aeronautics Limited (HAL) and the National Aluminum Company (NALCO); multipurpose dam projects like Hirakud, Rengali; Upper Kolab, Upper Indravati, Balimela, thermal projects like Talcher Thermal Power Station, Ib Thermal Power Project and Talcher Super Thermal Power Project, and the coal mining projects in the Talcher and Ib valley coal mining areas; etc. Thus, the state is being overwhelmed by all kinds of development projects in the last century (Somayaji, 2008).

The State of Orissa in the process of development has been experiencing the grim truth of displacement due to development projects. As a consequence of these developmental
activities thousands of acres of agricultural, common and forest land were submerged, dug or destroyed and a large number of people were displaced. A glaring revelation of displacement in the state is that a significant number among the displaced people is the tribals, and other economically marginalized rural people, who had depended upon the natural resources for their livelihood. The total number of displaced people in Orissa during 1951 to 1995 on account of various projects is approximately 5, 46,794 out of whom 3, 25,000 accounts for dam projects only. It has been estimated that in Orissa some 14 lakh people, most of them adivasis, have been displaced by the development projects so far (Pandey, 2008). One of the major dam projects in India, i.e. Hirakud, built during 1950s caused the largest displacement in Orissa. The total number of displaced and rehabilitation from 1951 to 1991 in Orissa is given in the following table:

Table.3. Displacement and Rehabilitation Situation in Orissa, 1951-1991

<table>
<thead>
<tr>
<th>Category</th>
<th>Displaced</th>
<th>Resettled</th>
<th>Percentage</th>
<th>Backlog of settled</th>
<th>Backlog in Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dams</td>
<td>3,25,000</td>
<td>90,000</td>
<td>27.69</td>
<td>2,35,000</td>
<td>72.31</td>
</tr>
<tr>
<td>Industries</td>
<td>71,794</td>
<td>27,300</td>
<td>38.03</td>
<td>44,494</td>
<td>61.97</td>
</tr>
<tr>
<td>Mines</td>
<td>1,00,000</td>
<td>60,000</td>
<td>60.00</td>
<td>40,000</td>
<td>40.00</td>
</tr>
<tr>
<td>Misc.</td>
<td>50,000</td>
<td>15,540</td>
<td>31.08</td>
<td>34.60</td>
<td>68.92</td>
</tr>
<tr>
<td>Total</td>
<td>5,46,794</td>
<td>1,92,840</td>
<td>35.27</td>
<td>3,53,955</td>
<td>64.73</td>
</tr>
</tbody>
</table>


3.1.1. Dam and Displacement in Orissa

Dams in India have been built in the last fifty years as a part of its ‘modernization’ drive. Without big dams, India would have been a thirsty and hungry land, a dark land ravaged with floods and droughts every year. Big dams like Bhakra-Nangal, Hirakud, Nagarjunsagar, Narmada, and Damodar have been catalysts of India’s economic and social progress. These dams, Jawaharlal Nehru called them the ‘Temples of modern India’ (Cullet, 2001). Given the impact of dams in India, they have become synonymous with submergence and displacement of people. Over the last 60 years since independence, high dams in India have become more and more socially unjust, economically non-viable and environmentally
disastrous. India is one of the largest dams building nations in the world. There are presently 4291 dams in India, 3596 have been built and 695 are under construction (World Bank, 2000). One of the appealing facts about dam building in India is the absence of database on the performance and impacts of large dams. Major and medium irrigation projects have consumed almost all the irrigation budget of independent India, which is over Rs. 80,000 cores (Kothari & Thakkar, 1998).

Hydroelectric and irrigation projects are the largest source of displacement and destruction of habitat. Big dams lead to displacement of population under the rising water reservoir. Those displaced persons indeed pay a heavy cost by being uprooted from their permanent habitats. It has been pointed out that a large majority of those displaced belongs to poor and deprived classes. Almost 40 per cent of those displaced by dams belong to the Scheduled Tribes (Kothari, 1995), and another 20 per cent belong to Scheduled Castes (Fernandes & Chaterji, 1995).

Immediately, after independence, Orissa experienced population displacement with Hirakud Dam (1952). Construction of Hirakud dam opened a new age in the socio-economic history of Orissa, with enormous displacement of people, large scale submergence of residential villages, fertile cultivable land and rich forest (Baboo, 1992). Since then, a series of mega projects has been initiated. The construction of the Hirakud dam in the western part of Orissa, affected 285 villages, 22,144 families, 18,432 houses and 112,038.59 acres of cultivated land, which were submerged in the Hirakud reservoir. Several studies have found that 20 lakh people are affected by different projects in Orissa until 2000 out of which, 5 lakh people are disrupted physically from their habitats. About 70 medium and major irrigation dam projects, either completed or ongoing in Orissa, have displaced about 3.5 lakh (70 per cent) people so far (Ota, 2001). It is apparent, that dam projects are the biggest cause responsible for population displacement. The most serious consequence of displacement for the tribal people has been the dispossession of land, both agricultural and homestead, along with the loss of their traditional occupation. The tribal in most cases have been deprived compensation and rehabilitation benefits as per the LAA of 1984, because they often do not possess legal documents to prove their ownership rights on their land, they occupied and earned their livelihood for centuries together.
Table 3.1. Human displacement due to multipurpose and other projects in Orissa

<table>
<thead>
<tr>
<th>Name of the project</th>
<th>General</th>
<th>SC</th>
<th>ST</th>
<th>Total Families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirakud</td>
<td>N.A</td>
<td>N.A</td>
<td>N.A</td>
<td>21,144</td>
</tr>
<tr>
<td>Balimela</td>
<td>N.A</td>
<td>N.A</td>
<td>N.A</td>
<td>1,200</td>
</tr>
<tr>
<td>Salandi</td>
<td>32</td>
<td>5</td>
<td>352</td>
<td>389</td>
</tr>
<tr>
<td>Rengali</td>
<td>8015</td>
<td>1710</td>
<td>1172</td>
<td>10,897</td>
</tr>
<tr>
<td>Upper Indravati</td>
<td>1,557</td>
<td>338</td>
<td>1,630</td>
<td>3,525</td>
</tr>
<tr>
<td>Upper Kolab</td>
<td>1,308</td>
<td>442</td>
<td>1,421</td>
<td>3,171</td>
</tr>
<tr>
<td>Total</td>
<td>10,912</td>
<td>2,495</td>
<td>4,575</td>
<td>41,326</td>
</tr>
</tbody>
</table>


The magnitude of displacement mentioned in the above table shows the seriousness of displacement in Orissa and thus draws a special attention.

3.2. Upper Indravati Hydro-Electric Project: An Overview

In 1950, during the rule of Gajapati Princely States, the King (Raja) and Ruling Chief of Kalahandi State in Orissa contemplated a project on the Indravati but this could not materialize due to limited resources of the state. After the formation of Orissa as a state, the Government of Orissa took up the question, and systematic investigation was started in the year 1959. In May 1960, the master plan of this project was considered and was planned to start in 1973 and to be completed in 1981. The project was given the present shape in the 1969 report, which was presented before the Krishna Godavari Commission, an inter-state river water dispute commission. This Commission was set up to consider the river water distribution between the states of Orissa, Andhra Pradesh, Madhya Pradesh and Maharashtra. The Upper Indravati Project got the approval of the Planning Commission in 1978 and in 1979 the State Government cleared it. In 1983-84, the project started with financial assistance from the World Bank.

The Upper Indravati Hydroelectric Project of Orissa was initiated by the Government of Orissa with the financial assistance from the World Bank. It is the first major scheme taken up in perennially draught affected Kalahandi district of KBK region of Orissa. The Upper Indravati hydroelectric project is located in southern Orissa state on the tri-junction of
Koraput, Nawarangpur and Kalahandi districts. It lies between 18°5 N and 20°0 N latitude and 82°30 E and 83°10 E longitude. The total reservoir area is about 12,865 hectares. The catchment's area of the project is 2630 sq.kms. The Upper Indravati multi-purpose project consists of (1) an irrigated reservoir system with a gross storage capacity of 2300 Million Cubic Meter (2) Hydro power generation system with 600 MW to generate 1,972 MU and electricity annually (3) an irrigation net work for 1, 28 lakhs hectares of agriculture land in the Dharmagarh subdivision of Kalahandi district. The estimated cost of the multi-purpose project is total of Rs. 1588.06 cores. While the reservoir has been formed in the valleys of river Indravati and three of its tributaries in Godavari basin, water is diverted to a barrage on Hati in Mahanadi basin for irrigation purpose. The project comprises of three main canal systems, four dams, eight dykes and two link channels. When it completed, the composite reservoir with an area of 110 km² will come up due to the construction of two earthen dams across the Podaguda and Kapur rivers, with 1500 Million Cubic Meter live storage and 800 Million Cubic Meter dead storage. The reservoir has a maximum depth of 71m and an average depth of 21m. The reservoir is approximately 43 Kms long in the NNE-SSW direction and 9 Km wide at its widest point.

3.2.1. Displacement and Rehabilitation in the UIHE Project

A composite reservoir, with an area of about 110 Sq Km, is planned after the completion of two concrete dams across the Indravati and Muran rivers and two earthen dams across Pedagad and Kapur rivers, eight dykes and two link channels. Due to construction of the dams and formation of a reservoir, a total of 5463 families displaced from 74 villages, i.e. 18 from Nawarangpur, 13 from Koraput and 43 villages from Kalahndi, covering population of 18,500 and the total numbers of Project Affected villages are 105. Both agricultural land and homestead lands of these villages have been acquired and compensation paid to the affected persons. A land area of 32, 530, 87 acres have been acquired from the two districts. The reservoir of this project not only caused displacement, but also caused disturbance to the communication structure and to a few small-scale industries. Most of the displacement persons are the illiterate tribals living in the forests. The displacement of these affected persons in the project was done in four phases: first phase in 1989, second phase in 1990, third phase in 1991 and fourth phase in 1992.
An area of 4,971 acres was identified for the establishment of rehabilitation colonies of Upper Indravati Project in Sasahandi area in Jeypore sub-division coming under ayacut of Upper Kolab Project. The infrastructure works were taken up in three camps as per government rules. Another patch of more than 300 acres was identified in Talajaring area under the proposed ayacut (submerge area) of the Upper Indravati Project in Kalahandi district. Since displaced persons did not opt to avail themselves of the resettlement in government sponsored colonies, the idea of establishing colonies in these two places was abandoned. However, two small patches were identified to resettle twenty-eight displaced families who were interested in it. Others were given cash compensation as they opted for it and preferred individual resettlement. A total of 5463 displaced families have been settled in 560 cluster villages of various sizes in twenty blocks of five districts, viz. Kalahandi, Koraput, Nawrangpur, Rayagada and Malkangiri. The R&R Unit provided people absolute freedom to choose their place for resettlement. Since the process of evacuation and resettlement of the displaced families in this project has been most orderly and successful one, it can be considered one of the models for emulation for resettlement.

3.2.2. Displacement and Land Acquisition in UIHEP

The Land Acquisition Act of 1994 forms the basis for acquiring land and other immovable properties required by the state for a public cause. This has aroused significant amount of public debate and the victims of the project had questioned the intensity of the eminent domain theory of the state. As per Section 4(1) of this Act, notification was published in official Gazette and in two of the local daily newspapers. Concerned villagers were also notified by attaching notices in public places. The procedures adhered to be stipulated in the LAA. The Act stipulated payment of all compensations by cash only and hence this was followed in UIHEP. The land value was assessed on the basis of value of land for the previous three years. Another cost of 30 per cent was added to it. An annual interest of 12 per cent was given for the period of delay in payment of compensation commencing from the date of publication of notification under section 4(1). And an additional interest of 6 per cent per annum was paid for further delay after the Land Acquisition officer had taken possession of land. Besides the agricultural land, acquisition of homestead land, house, trees, wells and tube wells have also been compensated. In addition to private land and other
immovable properties, revenue land, forest land and village common land were also acquired by the Government by the principle of “Alienation of Government Land”.

3.3. Profile of Displaced People by UIHE Projects

The State of Orissa occupies unique place among the under-developed States in India due to large concentration of Scheduled Tribes and Scheduled Caste population. The entire area of Koraput, Nawarangpur and Kalahandi district of UIHE Project is predominantly inhabited by these populations. These districts are declared as a Scheduled Area, and constitute 40 per cent of the total Schedules Areas of the State. The displaced people in the UIHE project data showed that, out of 151 heads of the households interviewed, 55 per cent were Scheduled caste and 45 per cent were Scheduled tribes. The groups genuinely tribal region has been most affected by the process of development are the Kandhos and Santhals.

<table>
<thead>
<tr>
<th>Caste</th>
<th>UIHEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>54.96</td>
</tr>
<tr>
<td>ST</td>
<td>45.04</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(151)

3.3.1. Sex Status

In the UIHE Project region, as a whole the proportion of women to men is low. This is due to higher level of female mortality during child birth and the harsh treatment accorded to girl children, which is no different from that to be seen elsewhere in other parts of Orissa. Out of 151 heads of the households interviewed, 82 per cent were male and 18 per cent were female. Though the percentage of the female head of the households is very low in the sample, but analyzing the Indian conditions where maximum households are male dominated, i.e.; patriarchal, this figure seems to be reasonable.
Table 3.3. Sex status of the respondent of rehabilitated families of UIHEP

<table>
<thead>
<tr>
<th>Sex</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>81.0</td>
<td>91.17</td>
<td>82.72</td>
</tr>
<tr>
<td>Female</td>
<td>19.0</td>
<td>8.82</td>
<td>17.28</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: 83 SC Resettled Household Respondents, 68 ST Resettled Household Respondents, Total-151 Resettled Respondents.

3.3.2. Marital Status

The following table 3.4 shows that, near about 85 per cent were married in the UIHE Project area and remaining 14 per cent were unmarried. Though there is not much change observed during the whole interval of displacement, a close look at the date collected from the field reveals that the number of unmarried persons has slightly increased in the UIHE Project after resettlement. In other words, we can say that the rate of marriage has decreased after inception of the project, may be due to break up in joint family values and ideas.

Table 3.4. Marital status of the rehabilitated respondent of UIHEP

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>81.0</td>
<td>80.0</td>
<td>85.43</td>
</tr>
<tr>
<td>Un-married</td>
<td>19.0</td>
<td>20.0</td>
<td>14.57</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

3.3.3. Literacy Status

If we compare the education level of the family members, we find that it has improved a lot. In the UIHE Project area, near about 66 per cent were illiterate, 31 per cent had education of ‘below class 5th’ and only 3 per cent had studied up to intermediate. After resettlement the
education level has increased in these regions, with the facilitation of education in the resettlement areas.

Table 3.5. Educational status of the respondent of rehabilitated families of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Status</td>
<td>Illiterate</td>
<td>55.32</td>
<td>80.0</td>
</tr>
<tr>
<td></td>
<td>Up to V</td>
<td>39.68</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Up to X</td>
<td>5.0</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>Degree &amp; Professional</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

3.4. Resettlement and Livelihood Assets in UIHE Project

Displacement and resettlement cause serious economic, social and cultural disruption. However, the process of resettlement in any projects is always associated with pains and pleasures of the affected people. It will incur both benefits and losses, though in many cases the initial harms and stresses and strains experienced by people evicted and resettled by different development projects. It de-capitalizes the affected population, imposing opportunity costs in the form of loss of natural capital, loss of manmade physical capital, loss of human capital and loss of social capital. As long as these capitals are not fully returned, cost externalization, the bane of sound development economics, occurs on a vast societal scale. The improvement in the conditions of living and working environment of displaced families calls for the creation of social amenities and revival of economic activities. In this context, various aspects related to resettlement such as, consequences of leaving the ancestral villages, problems in new places, satisfaction with rehabilitation measures, satisfaction with follow-up service, satisfaction with infrastructural facilities, change in economy and occupation, changes in intra-family relations, etc. need to be examined for understanding the effectiveness of the programmers taken up by Upper Indravati Hydro-Electric Project.
3.4.1. Resettlement and Impact on Physical Capital

Physical capital comprises the basic infrastructure that needs to support livelihoods. The important components of infrastructure, which are usually essential for sustainable livelihood, are affordable transport, secured shelter and building, adequate water supply and sanitation, clean low-cost energy and access to information. The prime objective of rehabilitation has been to replace lost assets.

3.4.2. Satisfaction with Rates of Compensation

Payment of compensation to the affected people is one of the important aspects of rehabilitation. Many studies have focused on inappropriate payment of compensation by the project authorities and subsequent wastage of the compensation money by the oustees. The UIHEP recipients of compensation have generally no complain about the under valuation of their assets, like depreciating land values. The analysis of the compensation amount received shows that 151 household or 100 per cent of total sample households received cash compensation. Each project affected families whose house has been acquired were allotted a site free of cost but only the families below the poverty line (BPL) has been given a one-time fixed grant of Rs 25, 000 for house reconstruction. Land losers have been given one-time grant of Rs 10, 000 per ha for land development and Rs 6000 per family for agricultural production. Each rural artisan, small trader and self-employed project affected families (PAFs) got financial assistance of Rs 10, 000 for construction of shops or working sheds and small scale business. As regards, satisfaction with the rates of compensation, the opinion is divided. The opinion of the respondents at the level of satisfaction is presented in the following table:

<table>
<thead>
<tr>
<th>Table 3.6. Level of satisfaction with compensation money</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Status</strong></td>
</tr>
<tr>
<td><strong>SC</strong></td>
</tr>
<tr>
<td>Satisfied</td>
</tr>
<tr>
<td>Un-Satisfied</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
Private land owners were compensated for their houses, trees, wells, ponds, etc. in cash. For a fair assessment of the assets acquired, a particular asset was classified into different types, and the compensation was calculated based on their market values. Recipients of compensation of UIHE Project showed that more than half (60 per cent) expressed satisfaction, while the other 40 per cent expressed dissatisfaction. In fact, they felt that the rates determined according to the market value, and that’s why most of the oustees after displacement could buy the required lands for agriculture, and thus it helped them to be as an average land holder after displacement.

3.4.3. Utilization of Compensation

For various reasons, like scarcity of irrigated land, the land for land could not be adopted, and cash compensation was paid for acquired properties. A majority of the population in the project area belongs to Scheduled Tribes and Other Backward Castes. While the tribes generally stay away from the mainstream, SCs and OBCs mostly depend on wage employment and providing services as required by the local village community. These backward communities, especially the tribal people are relatively unexposed or under exposed to monetary transactions. Further since the greater part of the rural economy was based on the barter system, people were not well accustomed to managing cash. The most important question that arises; here is whether the displaced persons could use their compensation properly by acquiring productive assets and/or for self employment purposes. Such utilization expected to minimize the effect of dislocation as their economic living. Quite often project outsees, particularly from among the scheduled population and other poorer sections tend to squander away compensation money. As a result, their economic condition deteriorates bringing negative consequences on their future living.

Therefore, to understand the post-rehabilitation assistance period and post-displacement living conditions of displaced persons it is necessary to study the utilization of compensation as shows their attitude towards monetary transactions and will also provide indicators for future course of action required for their proper resettlement and rehabilitation. The compensation amount received by the families was deposited either in the post offices or in the banks. Most of the people had taken the compensation, and they were satisfied with the
amount given. The amount was spent for buying or developing agriculture land, purchasing daily necessities, repayment of old debts, purchasing household items, etc. Here, UIHE Project has a mixed impact on Physical assets.

The following table on utilization of compensation shows that with the proper guidance by the UIHE Project officers and local NGO Agragamme, about 44 per cent resettled people has purchased agriculture land to continue cultivation as a livelihood asset. This reflects their attitude to acquire more immovable property by investing the compensation amount to restore the sustainable livelihood. The percentage of purchasing household items is near about 26 and rest on 13 per cent displaced people used the compensation money in own consumption and 15 percent spent on other social functions.

Table 3.7. Utilization of compensation money by the respondents of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Way of spending Compensation</td>
<td>SC</td>
</tr>
<tr>
<td>Purchase of agriculture land</td>
<td>36.14</td>
</tr>
<tr>
<td>Purchase of household items</td>
<td>26.50</td>
</tr>
<tr>
<td>Own consumption</td>
<td>14.45</td>
</tr>
<tr>
<td>Deposited in Bank</td>
<td>NA</td>
</tr>
<tr>
<td>Repayment of loans</td>
<td>7.22</td>
</tr>
<tr>
<td>Social function</td>
<td>15.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
</tr>
</tbody>
</table>

3.4.3. Satisfaction with the Utilization of Compensation

Regarding the opinion about the way of spending compensation money, it is found that around 70 per cent of the recipients in UIHE Project area are satisfied, while it is only (29 per cent) people are not satisfied with the utilization. Thus, the analysis of satisfaction regarding spending of compensation money reveals that the UIHE Project affected people are relatively more satisfied with their way of spending because of good follow-up service was provided by the project.
3.4.4. Quality of Houses

In the resettlement colonies, PAPs had to build new houses to reinitiate their life. Questions were asked to evaluate their quality of the house and also whether it was better what they had earlier in the village. The observed data shows that before displacement, 63 per cent the major house type was kutcha in the UIHE Project area and after displacement it has reduced to 37 per cent because most of the resettled people used house construction compensation money in constructing pucca house. Before displacement only 4 percent and 14 per cent people had pucca and semi-pucca house but after resettlement near about 20 per cent and 32 per cent displaced people have pucca and semi-pucca house. The data shows that the quality of the house has developed after the resettlement. Through joint ownership of houses has also been considerably reduced after displacement, and this indicates that the displaced persons prefer a nuclear family to a joint family.

Table 3.8. Satisfaction level regarding the way of spending compensation

<table>
<thead>
<tr>
<th>Project</th>
<th>SC (%)</th>
<th>ST (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>71.09</td>
<td>67.65</td>
<td>70.53</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>28.91</td>
<td>32.35</td>
<td>29.47</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>(83)</td>
<td>(68)</td>
<td>(151)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.9. Quality of house of displaced persons of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>SC (%)</th>
<th>ST (%)</th>
<th>Total (%)</th>
<th>SC (%)</th>
<th>ST (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Displacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kutcha</td>
<td>66.65</td>
<td>58.01</td>
<td>63.17</td>
<td>34.34</td>
<td>39.70</td>
<td>37.74</td>
</tr>
<tr>
<td>Thatched</td>
<td>14.35</td>
<td>26.11</td>
<td>16.25</td>
<td>7.63</td>
<td>10.29</td>
<td>10.0</td>
</tr>
<tr>
<td>Pucca</td>
<td>8.23</td>
<td>4.31</td>
<td>6.32</td>
<td>24.81</td>
<td>17.17</td>
<td>19.86</td>
</tr>
<tr>
<td>Semi-pucca</td>
<td>16.77</td>
<td>11.57</td>
<td>14.36</td>
<td>33.22</td>
<td>33.84</td>
<td>32.40</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>(83)</td>
<td>(68)</td>
<td>(151)</td>
<td></td>
<td>(83)</td>
<td>(68)</td>
<td>(151)</td>
</tr>
</tbody>
</table>
3.4.5. Landholding and Property status

Land is another important physical asset in rural areas. Agriculture is the main source of livelihood and possession of land and other immovable assets of a person residing in the village also reflect his prosperity. The following table 3.10 shows that the prime assets have drastically increased in the territory after displacement. In the UIHE Project before displacement 41 per cent respondent had an only house. After displacement, it has increased up to 46 per cent and before displacement 43 per cent families had land, less than five acres, which has gone up to 50 per cent after displacement, because most of the people utilized their compensation money in buying, land to restore their occupation of cultivation.

Table 3.10. Property status of the respondent rehabilitated families of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP Before Displacement</th>
<th>UIHEP After Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC</td>
<td>ST</td>
</tr>
<tr>
<td>Only House</td>
<td>54.64</td>
<td>36.13</td>
</tr>
<tr>
<td>1 to 4.9 acre</td>
<td>40.55</td>
<td>45.0</td>
</tr>
<tr>
<td>5 to 9.9 acre</td>
<td>4.81</td>
<td>12.30</td>
</tr>
<tr>
<td>10 to 14.9 acre</td>
<td>----</td>
<td>6.57</td>
</tr>
<tr>
<td>15 and above acre</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
<td>100.0 (68)</td>
</tr>
</tbody>
</table>

3.5. Resettlement and Impact on Financial capital

The most common aspects of development projects are generation of employment opportunities, increase in levels of production, rise in income and consumption levels, and development of infrastructural facilities and prosperity of the nation as well as a good relation with the local host communities, on whose land the project is constructed. In the eyes of the planners, the adverse impact of displacement in a host population becomes negligible because it benefits the society on a far greater level. The social cost of development mostly bears with it the economic price also. Social and economic aspects of society are so much interwoven that economic prosperity is extensively considered as the
social upheaval and, on the other hand, if a community is progressing on the social ladder, it is equated with the economic advancement.

An attempt has been made in the following section to study the measures taken by the UIHE Project towards economic rehabilitation. It analyses whether the economic aspects move ahead the social aspects on the development scale and pose financial betterment for the displaced families. The following table has highlighted the occupation status of the project affected people before-displacement and after-displacement period. Before displacement (53 per cent) people were worked as wage labours in others own land and after displacement it has decreased to 24 per cent. The occupational rehabilitation under UIHE Project has been realized by land development. Land development is an expensive affair and the amount to be spent on this activity depends upon the nature of land and with the help of project officers, there is slightly decrease in this occupation basically among the scheduled castes because most of the resettlers invested compensation money in business.

However, in the case scheduled tribe before displacement only 36 per cent were cultivators and after displacement it has increased to 47 per cent. The efforts were made to motivate landless displaced persons to start various self-employment programmes like the leaf plate making, pottery, and small petty business. As a result, before displacement only 5 per cent had some small business, which after displacement has increased near about (28 per cent) particularly non-tribal showed a courageous response. Many of them, due to lack of skill have found unskilled jobs, which include bearers, sweepers, attendants, and mazdoors and about 8 percent got different jobs in the project area.
### Table 3.11. Occupational status of the respondent rehabilitated families of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP Before Displacement</th>
<th>UIHEP After Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation Status</td>
<td>SC</td>
<td>ST</td>
</tr>
<tr>
<td>Wage Labour</td>
<td>50.60</td>
<td>60.70</td>
</tr>
<tr>
<td>Cultivator</td>
<td>42.18</td>
<td>36.30</td>
</tr>
<tr>
<td>Business</td>
<td>7.22</td>
<td>3.0</td>
</tr>
<tr>
<td>Service</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
<td>100.0 (68)</td>
</tr>
</tbody>
</table>

### 3.5.1. Household Income pattern

A marked difference could be observed in the average annual’s income of the displaced persons during pre and post-displacement periods. The income level also differed according to the economic and social status of the household. A comparison was made between the two periods by grouping households. This has been done by grouping household into various income groups and caste categories. This gives a clear picture of the impact of displacement on these people. Table 3.12 shows the improvement in distribution of income in the post period over the pre period displacement.

### Table 3.12. Income status of the respondent rehabilitated families of UIHEP

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP Before Displacement</th>
<th>UIHEP After Displacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Status</td>
<td>SC</td>
<td>ST</td>
</tr>
<tr>
<td>500 to 1000</td>
<td>20.49</td>
<td>29.43</td>
</tr>
<tr>
<td>1000 to 5000</td>
<td>30.12</td>
<td>17.64</td>
</tr>
<tr>
<td>5000 to 10,000</td>
<td>36.14</td>
<td>42.64</td>
</tr>
<tr>
<td>10,000 to 25,000</td>
<td>13.25</td>
<td>10.29</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
<td>100.0 (68)</td>
</tr>
</tbody>
</table>
The above table points out that in UIHE Projects the proportion of families below the poverty line has been reduced from the pre to post displacement periods, at the same time a higher proportion of the families is now coming under a higher income slab in comparison to the pre-displacement periods. In UIHE Project near about 57 per cent families’ income has gone up from 5000 to 10,000 in the post-displacement period and about 22 per cent families income has raised from 10,000 to 25,000/-. The increase in income may be attributed to the fact that displaced persons are not only practicing cultivation on newly purchased land but also on the acquired land which is yet to submerge. It is also observed that due to construction activities in the project, service in project area, employment as laborers is plentifully available, which was not so frequently available in the pre-displacement period. Apart from these two, another reason could be interests received from the compensation and rehabilitation assistance money, which is in fixed deposits in most cases.

3.5.2. Consumption Pattern

The studies of the expenditure on daily necessities, as well as periodic requirements of the displaced persons are essential for an assessment of their economic status as affected by the development projects. Household budgets are an important criterion in this context, as every fluctuation in it indicates the changes in the economic and social priorities of the affected families. In the case of the tribal population, for instance, before displacement they were used to an economy based on barter, while in the present situation, they have been exposed to the temptations of the market economy, and they spend lavishly on conspicuous consumption. The same is also true for other castes too. Now they have to buy their essential from the market, unlike the past, where they could get most of it free from their rural environment. Often without a permanent source of income or meager income, it becomes increasingly difficult for them to meet the daily needs of the family. Consumer expenditure is one of the important indicators for measuring the living standards of a population. The high consumer expenditure signifies economic prosperity. It is already pointed out that the income of the affected people in UIHE Project area has shown a substantial increase. The rise in income has caused changes in the consumption level. The analysis shows two extreme changes in consumption levels. While a majority 68 per cent in UIHE project area
has increased overall consumption level and only 12 per cent respondent expressed the decrease of consumption level after resettlement. The change has been measured here in terms of intake of six important items, viz., rice, wheat, vegetables, fruits, milk and meat/eggs.

Table 3.13. Changes in consumption level of respondent of UIHEP

<table>
<thead>
<tr>
<th>Project After Displacement</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased</td>
<td>68.69</td>
<td>67.66</td>
<td>68.22</td>
</tr>
<tr>
<td>More or less same</td>
<td>19.27</td>
<td>19.11</td>
<td>19.20</td>
</tr>
<tr>
<td>Decreased</td>
<td>12.04</td>
<td>13.23</td>
<td>12.58</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
<td>100.0 (68)</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>

3.6. Resettlement and Impact on Social Capital

In the sustainable livelihood framework, social capital is taken to mean the resources which people have drawn upon in pursuit of their livelihood objectives. The next step is quantification of the social and cultural losses of DPs/PAPs suffer. This takes us back to what we have stated about land in general and common property resources (CPR) in particular—that these are not merely material assets of the rural poor, particularly tribal and other backward communities. As a result, their loss results in the breakup of family and community institution and changed lifestyles. It has no ambiguity that the displaced persons face a traumatic situation from being uprooted from their native laces. Therefore, their adaptability to the resettled environment has utmost importance. Equally important is the reciprocation of the hosted population to the adaptability of the displaced persons. The survey, both through quantitative and qualitative data/information gathering, tried to capture the reasons for opting the resettled cluster and the perception of both the displaced persons and the host population regarding the relationship with each other’s and because of their co-operating and facilitating each other in agriculture mode of production. Most of the displaced people of UIHE Project chose their own location area, which helped them to cope with all these problems combined together.
3.6.1. Relation with Host Population

More than 96 percent households of UIHE Project mentioned that they had opted for the cluster on their own. The major reasons cited by the respondents were: (a) Relatives are staying in the cluster; (b) Easy accessibility to forest for collection of minor forest produce; (c) Access of agricultural land; (d) Influenced by the selection of the fellow displacement persons and (e) Nearer to the submerged village. The remaining respondents mentioned that the reason like “proximity to the market”, more employment opportunities of wage labour, “and availability of health facilities”, “better irrigation facilities” and “better educational facilities” are important aspects in the resettlement area. The project area wise data shows that among UIHEP resettlers, about 82 per cent expressed satisfaction in friendliness and extent of help from the host community. Whereas near about 77 per cent resettlers expressed that they are equally using the CPR and have cordial relation in bed and good times and participation in social function has been increased up to 93 per cent, which helped to overcome the trauma of alienation. It has also been reported that during the initial stages of their stay in the clusters, more friends and relatives used to visit them for extending help and assisting in various helps.

Table.3.14. Perceived relationship of displaced persons with host population

<table>
<thead>
<tr>
<th>Perception</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equally observing social function</td>
<td>82.12</td>
<td>17.88</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Using CPRs equally</td>
<td>76.82</td>
<td>23.17</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Helping in bad and good times</td>
<td>86.09</td>
<td>13.90</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Participation in marriage and funerals</td>
<td>92.71</td>
<td>7.28</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Caste and Religion feeling</td>
<td>74.17</td>
<td>25.82</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>
3.6.2. Secure at Relocation area

Security signifies a state where there is no threat of outside invasion and the residents of the locality feel comfortable in the presence of the acknowledged surroundings. Peace and ease of mind always take place in the presence of friendly environment and with the co-operation of the neighbors. Generally, in closed knit places like villages, those living in close proximity are supposed to be relatives, even though not attached with blood ties. However, forced relocation tore apart the social and economic base of the self-dependent and self-reliant village community, and people had to face various problems in the new setup. From the following table, it is apparent about 86 per cent respondent of UIHE Project felt very secure because those living in close proximity are supposed to be relatives of the residents relocated in the resettlement colonies are happy with the scenario presently available for there.

**Table 3.15. Respondents view on secure at relocation site**

<table>
<thead>
<tr>
<th>Feeling</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>86.74</td>
<td>86.77</td>
<td>86.75</td>
</tr>
<tr>
<td>No</td>
<td>13.26</td>
<td>13.23</td>
<td>13.25</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(83) (68) (151)

3.6.3. Intra-Family Relationship

The inter-family relationship also started changing after they moved to the resettlement colonies. Near about 65 per cent of the sample respondents of UIHE Project stated that the inter-family relations did not change much, while about 18 per cent expressed that such relations improved in the new settlements because of the agricultural and house building activities requiring division labour and co-operation among the family members in carrying out the work. In most of the families, the relationships were said to be the cordial and only 15 per cent respondent replied to that their inter-family relationships suffered from more strains in the new places.
Table 3.16. Intra-Family relationship after displacement

<table>
<thead>
<tr>
<th>Project</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved</td>
<td>19.27</td>
<td>17.64</td>
<td>18.54</td>
</tr>
<tr>
<td>Same as before</td>
<td>62.65</td>
<td>69.11</td>
<td>65.56</td>
</tr>
<tr>
<td>Strained</td>
<td>18.07</td>
<td>13.23</td>
<td>15.89</td>
</tr>
<tr>
<td>Total</td>
<td>100.0(83)</td>
<td>100.0(68)</td>
<td>100.0(151)</td>
</tr>
</tbody>
</table>

3.6.4. Impact on Women

In agronomy society women has been ample of work attached to the land and house. They are feeding their cattle, picking wood from the forest, working in the agricultural land and had been other allied with household activities. They are working at shoulder to shoulder with their husbands and assisting them in all their requirements. In a way, women are pillars of strength for the house as well as for the men folk living in the society. However, in the new economic system, due to acquisition of agriculture land and the destruction of the village set up, women had no work to do. Women have become idle and dependent. This led to sharp decline in the status conferred on the women, from what they enjoyed earlier. However, the following table shows that the present household status is showing a very dismal picture of activities associated with women. Near about 58 per cent respondents of UIHE Project had mentioned that the forced displacement has not impacted on women health. There were 67.54 per cent families of UIHE Project reported that there is no serious problem of space and sanitation in the new relocation area and about 61 per cent resettlers expressed the increase of employment. With the rising level of education and increasing standard of living in the area, the aspirations of women for independent income have gone high. This has inflicted in them desire for taking up jobs in projects and other self-organizations. Due to continuous interaction with people from outside, the dress pattern among the women has also changed to a significant extent.
Table 3.17. Respondents view regarding impact on women after rehabilitation

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on Women</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
</tr>
<tr>
<td>Health Problem</td>
<td>41.72</td>
<td>58.27</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Space and Sanitation</td>
<td>32.45</td>
<td>67.54</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Poverty and Un-employment</td>
<td>39.07</td>
<td>60.92</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Drug and Liquor</td>
<td>14.56</td>
<td>85.43</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>

3.7. Resettlement and Impact on Human Capital

In the reconstruction livelihood framework, human capital is taken as a livelihood asset, or as a means of achieving livelihood outcomes. It represents the skills, knowledge, and ability to work and good health that together enables people to pursue different livelihood strategies and achieve their livelihood objectives. The execution of development projects in any region demands the improvement of infrastructures and community facilities like transport network, educational institutions, health centre, banks, power and water, etc. Infrastructure plays a pivotal role in enhancing productivity and ensuring quality of life of the people. While livelihood support facilities directly help the production process, the service-oriented infrastructures indirectly help the production process by developing efficient productive human resources. After studying the dynamics of the relocation process, it becomes imperative to study whether all the new resettlement colonies are provided with the basic infrastructure or not and whether such amenities are in good and usable conditions or not. UIHE Project developed health facilities for employees and the resettled families. There is no major health problem in the resettle location. The free medical facilities provided by UIHE Project are available to all resettled communities in their blocks. People with low income can afford these facilities provided by the project and state government.
3.7.1. Community Infrastructure Facility

The following table gives an account of the available resources in the resettlement colonies. Through personal interview and interaction with the project affected people, the study has captured the perception of the displaced persons regarding their problems in the resettlement colonies. It is found that near about 20 per cent respondent expressed the working of Panchayat Bhawan has increased in the UIHE Project area and 63 per cent expressed as remains the same. About half of the respondent of UIHE Project (57 per cent) revealed that the education facilities have increased in the new resettlement clusters.

Table 3.18. Community infrastructure facilities in the R&R colony of UIHEP

<table>
<thead>
<tr>
<th>Items</th>
<th>Panchayat Bhawan</th>
<th>School</th>
<th>Electricity</th>
<th>Pond</th>
<th>Well</th>
<th>Cremation ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>21.86</td>
<td>57.63</td>
<td>68.22</td>
<td>45.04</td>
<td>48.36</td>
<td>20.54</td>
</tr>
<tr>
<td>Remains the same</td>
<td>63.03</td>
<td>31.12</td>
<td>19.20</td>
<td>33.77</td>
<td>37.08</td>
<td>68.21</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (151)</td>
<td>100.0 (151)</td>
<td>100.0 (151)</td>
<td>100.0 (151)</td>
<td>100.0 (151)</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>

Electricity is one of the basic modern day’s necessities. The UIHE Project and R&R policy guidelines say that all resettled colonies should be electrified. While discussing with the project authority and with displaced people, it is found that the electricity facility has increased up to 68.21 per cent. The UIHE Project authority has provided a good number of hand pumps and open well to the new cluster, helped the local people to get safe drinking water. About 68 per cent respondent of UIHE Project viewed that the cremation ground is available in the resettlement cluster, and the host populations are also allowed to use the cremation ground. Other amenities have been provided either by the project or by other line departments of state government.

3.7.2. Market and Communication Facilities

The following table highlights about the market facilities in the resettlement area. In the UIHE project the resettlement colonies, daily and weekly markets run which are confined to vegetables and grocery. There is a good facility of wholesale market, grain market and
marketing cooperatives. About 89 per cent respondents are satisfied with the weekly market. In the case of miscellaneous shopping PAPs generally go to the nearby towns. Banks are not available in the premises of the resettlement colonies as the PAPs are poor and do not require such big money transactions. For communication about 82 per cent respondent of the UIHE Project told that they have bus stand facility available on the main road, just little bit far from their main colony. Through direct observation it is found that bus stand and tempo stands are in the close vicinity of the UIHE Project area. And about 90 per cent respondents satisfied with the weekly market availability to get their basic needs. The market availability and better transport facilities after displacement has created a scope for better health and education support to DPs. Improved transportation has also enabled outsees to explore employment in nearby areas. Service-oriented facilities have been reestablished in all projects. Special ST/SC development programmes of the government also supported the DPs of UIHEP for reconstruction of service facilities.

**Table 3.19. Market and Communication facilities available at R & R colony of UIHEP**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily market</td>
<td>69.0</td>
<td>31.0</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Weekly market</td>
<td>89.40</td>
<td>11.60</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Grain mandi</td>
<td>41.72</td>
<td>72.18</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Bus stand</td>
<td>82.11</td>
<td>17.88</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>Post-office</td>
<td>57.0</td>
<td>43.0</td>
<td>100.0 (151)</td>
</tr>
<tr>
<td>P.C.O</td>
<td>54.30</td>
<td>45.70</td>
<td>100.0 (151)</td>
</tr>
</tbody>
</table>

3.7.3. Awareness about the Project

Education with knowledge is the chariot of awareness. Literary activity thrusts worldly knowledge into the human being. However, those completely outside the purview of erudite activities have less wisdom to interpret and understand the forthcoming problems. The people, who had nothing to do with basic literacy, found it hard to understand the meaning of section 4 notification of the LAA, concerning the inevitable nature of land acquisition in
the interest of the national goal. The notice was earlier confined to public places, which did not draw attention of the residents and by the time individual notices were served, it was too late. Even then, illiteracy came in their way and most of the residents were not able to read and understand the meaning of the piece of paper served to them. Those very few, who could read, were unaware about the proceeding of the Land Acquisition Act of India. With the help of local NGOs and government organization, near about 80 per cent respondent of UIHE Project got information about the project set up, and they were mentally prepared to face the problem without completely dependent on others.

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP</th>
<th>Aware</th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>83.13</td>
<td>76.50</td>
<td>80.13</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>16.17</td>
<td>23.50</td>
<td>19.17</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

3.7.4. Attitude towards officials

Whenever any rehabilitation program is undertaken, it is necessary for the evicted people to perceive the efforts made by the officials; otherwise, it may result in an indifferent attitude towards the officials and their plan. In this context, the help received from the project and government officials play a very important role for creating a favorable attitude among the resettlers towards the process of rehabilitation. The respondents from the resettlement colonies were asked to state, whether the officials were helpful or not. Considering the total sample respondents, the data shows that more than 60 per cent of UIHE Project asserted that the resettlers received help from the officials. However, some of the resettlers of UIHEP reported that they were assisted by government officials to receive various kinds of loans under IRDP for starting small scale business, purchasing animals, etc.
Table 3.21. Respondent’s view on the attitude of Project Officials help

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude of the officials</td>
<td>SC</td>
</tr>
<tr>
<td>Helpful</td>
<td>69.87</td>
</tr>
<tr>
<td>Not-helpful</td>
<td>30.13</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
</tr>
</tbody>
</table>

3.7.5. Support Provided by Follow-up services

The resettlers’ level of satisfaction with the condition of living depends upon the extent of fulfillment of various promises made before displacement. Follow-up services are a part of the rehabilitation program, as they minimize difficulties and hardships and provide satisfaction in living. The project area wise data indicates that the UIHEP respondent showed 63 per cent, higher rate of satisfaction with the follow-up services provided by the project authorities. This may be because of UIHE Project’s interest to provide guidance in the purchase of land and starting of small business and also provided various facilities, including the regular visits of mobile medical vans to the resettlement clusters. This confirms that the follow-up services were relatively better in UIHE Project clusters.

Table 3.22. Level of satisfaction with Follow-up services and Resettlement activities

<table>
<thead>
<tr>
<th>Project</th>
<th>UIHEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with follow-up service</td>
<td>SC</td>
</tr>
<tr>
<td>Satisfied</td>
<td>62.66</td>
</tr>
<tr>
<td>Un-satisfied</td>
<td>37.34</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
</tr>
<tr>
<td>(b) Satisfaction with resettlement activity</td>
<td>SC</td>
</tr>
<tr>
<td>Satisfied</td>
<td>71.08</td>
</tr>
<tr>
<td>Un-satisfied</td>
<td>28.92</td>
</tr>
<tr>
<td>Total</td>
<td>100.0 (83)</td>
</tr>
</tbody>
</table>
3.7.6. Cooperation of NGOs

The role of NGOs in pre and post-displacement periods are an important aspect of the resettlement process in the UIHE Project. There are few NGOs, who have been actively involved in order to facilitate the project affected people to overcome their difficulties. An attempt was made to evaluate the sense of feelings of understanding of the victims to scale down the level of apathy towards NGOs. The involvement of NGOs in the project not only makes people more loyal to the state/existing order but also help them rediscover their faith in the system. A well known NGO named Agragamee associated with the project from zero dates. They assessed the needs of the DPs & PAPs, the choice of R&R package, the selection of relocation sites, purchase of lands, construction of houses by the DPs, motivated the DPs to evacuate in right time, etc. The local NGOs organized innovative programmes for the DPs and particularly women and children, grain banks for food security of DP households, low cost night schools, and public distribution of essential commodities through participatory means and organize groups into different income generating avocations, etc. The following table shows that as per the response received; more than half around 57 per cent of UIHE Project affected were satisfied with the co-operation of NGOs.

Table 3.23. Respondents view regarding Co-operation of NGOs

<table>
<thead>
<tr>
<th></th>
<th>SC</th>
<th>ST</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opinion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>59.04</td>
<td>55.89</td>
<td>57.62</td>
</tr>
<tr>
<td>Un-satisfied</td>
<td>32.53</td>
<td>26.47</td>
<td>29.80</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8.43</td>
<td>17.64</td>
<td>12.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td><em>(83)</em></td>
<td><em>(68)</em></td>
<td><em>(151)</em></td>
<td></td>
</tr>
</tbody>
</table>

3.8. Resettlement as Development in UIHE Project

When planned and implemented diligently, reservoir resettlement programmes can be effective vehicles for substantial social and economic development for the affected people. Resettlement programmes help to provide better economic resources, renewed civic infrastructure, and increased access to new markets. Successful resettlement programmes that build upon the social capital of affected communities by facilitating their relocation in pre-existing groups have resulted in improving literacy and health indicators, increased
incomes and standards of living as defined by the affected people themselves, and enhanced access to economic opportunities, all of which may have been difficult to achieve without the resettlement programmes. Effective resettlement design taps the development potential in the project area and builds upon the opportunities generated by the project. Economic rehabilitation activities based on careful analysis of resettlers’ aptitudes and the patterns of demand and supply of commodities and service have helped affected people benefit from the economic growth in the area.

This study reveals that the survival needs and essential service facilities have been improved in UIHE Project. Many reasons explain this phenomenon. These include: (a) the Upper Indravati Project resettlement process has been welcomed by majority of resettlers due to the location they had selected their own place for resettlement, which has helped them to live with their relatives and thus led to social and cultural progress of the community life, (b) R & R polices are periodically monitored and effectively implemented, (c) fishing as a new occupation is adopted, (d) community homogeneity is restored, (d) different welfare schemes of central and state governments for STs are executed, (e) outreach efforts of non-governmental organizations for tribal communities are implemented, (f) social forestry has been created to fill the CPR loss (g) the resilient tribal communities have quickly adopted to the changing physical, social and economic set-up in relocation sites, (h) with the help of local NGOs and project official they were able to by agricultural land with the compensation money, which helped them to restore their traditional social status of people, (i) the rise of income of the affected people in UIHEP area has shown substantial increase. This rise in income has caused changes in consumption level, (j) establishment of projects as well as townships have created a huge demand for agricultural commodities such as food grains, pulses, vegetables, fruits, milk, eggs, meats, etc. This has resulted in the commercialization of agriculture in the villages around the projects. A large number of people from neighbouring villages come to the townships in the weekly market to sell vegetables, cereals and other agricultural products.

Nevertheless, the project has created several negative impacts. The impacts are mostly social and physical in nature. It is found that most land near construction sites is not fit for growing crops. Many problems result from perennial irrigation; for example, water logging cause
water seepage from irrigation canals into the subsoil. This raises the level of the water table, which in turn creates a higher salt content that damages the root zone, prohibits plant growth, and inhibits the successful use of food production. While it is true that certain diseases are commonly associated with wetlands, it is also clear that locations around the dam construction that previously had not experienced many problems begin seeing a greatly increased incidence of such as illness. Following the construction of the UIHE Project, the resettlers complained of multiple symptoms related to waterborne diseases, such as dengue, hookworm, cholera, yellow fever, diarrhea, disfigurement, fatigue and other water-related diseases spread by mosquitoes. Since dam construction results in a large number of people living in close proximity, a lack of proper food and housing and undesirable working conditions, the prognosis for reducing the spread of disease is not optimistic. Migrants already carrying the disease many infect others when seeking work at the dam construction area.

3.9. Conclusion

Development projects have been projected as the benefit for the society and economy of the nation and the state. Whenever development projects are undertaken, the people living in the project area of whose lands are acquired for the project have to pay an extra price, in terms of loss of their lands of livelihood. There is an attempt to justify it as a cost of development, and to project it as an opportunity to improve the living condition of the indigenous people.

However, the state government’s support for different development projects has created inequities, social unrest and instability in the society. In a democratic context, the systematic dispossession of tribal people’s rights through officially ordained force is totally undemocratic and unacceptable. The state is a duty bound under the Directive Principles to ensure that at the end of each stage on the long march towards the goal of development, a more equitable social and economic order is attained. The uses of force or coercion against economically backward people in Niyamgiri, Kalingnagar, or Kashipur unwilling to change have to be discarded. The benefits which may accrue in an area pursuant to change and establishment of a project shall be deemed to be due to the larger community rather than individuals, groups or corporate bodies. The development induced displacement should be
minimized and if possible avoided. If at all there is a displacement, the displaced people need to be provided with a thorough resettlement and rehabilitation measures with an aim to upgrade their socio-economic condition instead of just trying to restore their pre-displaced status. The fruits of economic development should not go to the privileged beneficiaries only; all the affected people should be given every possible opportunity to be a part of the project benefits.

Most of the Dam projects in India; the displaced are deprived of irrigation facilities of the project which displaced them. The provision of compensation land and building as per the local market value need to be replaced by a facility to establish them-selves at-least in the periphery of the project, otherwise compensation will remain a consolation for the displaced people. Besides these, to determine just compensation, the future returns of acquired land at-least for a period of five years need to be calculated. This will balance the calculation of the benefits-cost ratio of the project; otherwise, the project benefit is over-weighed. Resettlement and rehabilitation measures should be a participatory one so that all stakeholders are involved in the process of resettlement. This job of resettlement and rehabilitation should be completed within a reasonable time-frame in order to prevent their sufferings of economic and social degradation. Let the R&R policy reflect the means of sustainable development of displaced community and its surroundings, not only as a mission statement but as a tangible living tradition also. The next chapter makes an attempt to understand the industrial development project and its impact and how the resettlement issue has been dealt with.