CHAPTER 1

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1.1 Introduction

Referring to the development strategy after the Second World War and economic growth as its indicator, all the countries both in developed and developing started to grow their economies. The availability of adequate infrastructure facilities is vital for the acceleration of the economic development of a country. Governments across the world have given high priority to investment in sectors such as railways, roads, power, telecommunications, ports, water supply, industries etc. Thus, dams are the outcomes of this process and symbols of development. It has multipurpose utility: such as production of electricity, irrigation and flood control and navigation that contribute at large to the growth of a nation. Half of the world’s dams were built exclusively for irrigation, and an estimated to 30 to 40% of the 268 million hectares of irrigated land worldwide rely on dams. Globally about 12% of large dams are designated as water supply dams. Hydropower currently provides 19% of the world’s total electricity supply and used in over 150 countries. About 13% of the large dams in the world in more than 75 countries have a flood management function (Joyce 1997: 1050-1055, Bandyopadhyay 2002: 4108, World Commission 2000: 12-13).

Energy is the most essential requirement for contributing to the growth of national economies. Among all types of economy, electric power is one of the most important infrastructure sectors of the national economy. Electricity is also a vital input for social development of our society. Besides its importance to the growth of the country’s economy, it plays a major role in the life of common people and has a direct impact on the quality of life. Out of all sources of power, hydropower is the cheapest and least expensive form of energy. Besides it, it is environmental friendly in comparison to fossil fuels and renewable in nature (Deudney 1981: 5-6).

Water resources exist in abundance in many of the world’s regions and hydropower generation remain high on the global development agenda. The oil price explosion that made traditional oil based economy unattainable for many of the countries underscores
the importance of indigenous water resources. Hydropower is a proven technology that can provide the large concentrated quantities of electricity needed to run factories and to light cities. It was during the nineteenth century that hydropower became a source of electricity as well as mechanical power. Its contribution was first made by the Developed World and later followed increasingly by the Third World countries, basically after the Second World War. The last century saw a rapid increase in large dam building. By 1949, about 5000 large dams have been constructed world wide, three quarters of them in industrialised countries. By the end of the 20th century, there were over 45000 large dams in over 140 countries (Deudney 1981: 6-19).

It is also true that hydropower development projects have already made substantial contributions to the economic wellbeing of some of the developing nations. With power from Aswan, Egypt has been able to electrify 99 percent of its villages and Northeast Brazil creates many new jobs in labour intensive local industries.

Many have benefited from the services large dams provide, but their construction has led to many significant social and human impacts, particularly in terms of displacement and the loss of livelihoods. Compulsory displacement that occur for development reasons, embody a perverse and intrinsic contraction in the context of development. They raise major ethical questions because they reflect an inequitable distribution of development’s benefits and losses. Nevertheless, the involuntary displacements caused by such programmes also create major impositions on some population segments. It restricts population rights by state- power intervention. This raises major issues of social justice and equity. The principle of the “greater good for the large numbers” rationalise the displacements and thus some people enjoy the gains of development and while others bears its pains (Cernea 2000: 3659).

Forced displacement refers to physical exclusion from a geographic territory and economic and social exclusion from a set of functioning social networks. Thus affected people face a broad range of impoverishment risks that include landlessness, joblessness, marginalisation, food security, increased morbidity, loss of common resources and
community disarticulation that result in a loss of social cultural resilience. Among these, the higher risks are the loss of livelihood and disruption of agricultural activity adversely affecting household food security, leading to under-nourishment and diseases.

Typically, governments do not compensate losses of common property assets. These losses are compounded by loss of access to some public services, such as school, hospital bank, club etc. Forced displacement tears apart the existing social fabric. It disperses and fragments communities, dismantles pattern of social organisation and interpersonal ties; kinship group became scattered as well. Life sustaining informal networks of reciprocal help, local voluntary associations and self-organised mutual services are disrupted. This is a net loss of valuable social capital and human capital. The coerciveness of displacement and the victimisation of resettlers tend to depreciate their self-image and they are often perceived by host communities as a socially degrading stigma. Thus, identity crisis is obvious in this context and it sometimes lead to ethnic conflicts and insurgency, which often dismantle the process of nation building.

The adverse impacts of dam construction are compounded when the affected people belong to indigenous groups that have close relationship to the lands on which they live. The land likely to be submerged behind a dam could be supporting distinct culture, with a language, customs and traditions that are unique to the area. In this context, resettlement of people from such locations is much more difficult. The first and foremost problems associated with the resettlement components of dam is the lack of thorough identification and involvement of key stakeholders in the decision making process. The inadequate planning process and surveys lead to the inadequate assessment of adverse impacts. It is relatively easy to survey those land, houses and other assets that are taken for the dam, but on the other hand using the river and its catchments for collecting forest products, seasonal fishing, grazing and similar activities, on which their livelihoods stake, are easy to miss. It is difficult to design and implement the effective resettlement programme without the involvement of key stakeholders. Key stakeholders in a resettlement programme are the affected people, their representatives, host populations, NGOs, local governments of the affected and resettlement areas, project contractors, funding agencies
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and consultants conducting various studies. Systematic stakeholder involvement acts like a self-correcting mechanism that enables timely identification of problems, and helps workable solutions for them. Dam resettlement is highly complex and institutional constrains are the one of the most important factors contributing the failure of the resettlement. Such institutional constrains are: (I) a multiple administrative jurisdictions spanned by a typical reservoir resettlement programme; (II) the frequent lack of commitment among project agencies to resettlement issues; (III) the complex interface between the project implementing agencies and local governments that typically have control over land and have the mandate to implement development programmes.

Compensation is given for land, only those who have the legal document. In reality, only the big and the medium farmer variety have legal documents of their land. The tribals who are the landless, have been depending on forests for their economy are exempted from the compensation. Sometimes, they get compensation in terms of money for lands that are not replicable costs in the market. In many cases both land based strategies and non-land based strategies are being implemented for income generation for the displaced people by many of the governments. In land based strategies ‘land for land’ is compensated instead of cash and providing economic opportunities for the displaced. These includes improved agricultural production, financing for land reclamation activities, irrigation scheme, tree crops development, fisheries, commercial or social forestry, fruit gardening and providing vocational training to promote rural artisans. But in these cases also the resettled poor people do not get any benefit due to the exploitation of the moneylenders and businessmen. To protect the newly settled farmers, in many cases the government introduce agricultural loans at a nominal rate of interest, but corrupt practices by some officials in the loan granting agencies discouraged the displaced from taking government loans. Hence, government initiatives towards new occupations and rehabilitation have produced indignation and bitterness rather than mitigating of displaced grievances. Non-land based strategies are also applied mostly in the situation of extreme land scarcity. These include the establishment of industrial and service sectors to improve the local and regional economy. But, in reality, it is not being implemented anywhere due to lack of government commitment. Claims have been made rehabilitating
them by giving those jobs, but most of these jobs are temporary in nature and little or no effort is made to train the displaced persons to fill more qualified posts in the new project. Thus, exodus of skilled labourer is obvious in this area. Although, the scheme of a job for an adult in a family is an improvement, it cannot really serve the purpose in the long run. Getting a regular job in the project remains the single most important factor influencing the whole process of rehabilitation (Cernea 2000: 3663-3674 & World Commission 2000a: 1-8 & 27-32).

There are clear parallels between refugee and displaced persons. Both groups lack the protection of their governments. The root causes of both are similar and solutions for one are often interlinked with the other. Yet, the fact that one group crosses the border and another does not or cannot makes a significant difference to their situation under the international law and United Nations in regard to response to their plight. For the refugees, there is the international protective mechanism under the UNHCR mandate and a specific body of law to address their needs. The needs of the internally displaced remain to be addressed largely with the general provisions of human rights law and humanitarian law, measures and mechanisms. Despite the intensity and scope of internal displacement, there is no adequate system of protection and assistance for the displaced people. No specific legal instrument covers the particular needs of the internally displaced and no specific institution is mandated to address these needs. With the perspective of international community, the crisis of internally displaced people is that they fall within the domestic jurisdiction of the state and therefore not covered by the protection normally accorded to the refugees, even though, the fundamental rights and human needs of internal displaced people for international protection and assistance appears to be greater.

International responses to emergencies involving the displaced have been undertaken by the UNHCR and, outside UN system, most prominently, by the International Committee of the Red Cross (ICRC). But in the absence of clear mandates, the international responses have been limited (Sen 1998: 183-207, Deng 1988).

The development induced displacement as a crisis multiplied when migrants cross the border. It particularly affects the host country in many ways. Migration has both positive
and negative impacts. Positive contribution could be the positive changes of economy of the host countries. On the other hand, negative consequences including trafficking of women and children over which many host governments have little control. These security concerns are magnified when host country failed to provide sufficient assistance to the large-scale migrants. Thus host states perceives protracted refugee situations as posing direct and indirect threat to their national security and regime survival. Sometimes, it also leads to bilateral, regional, political and diplomatic tensions (Loescher 2005: 30-34)

1.2. Selected Literature Review
1.2.1 Development
The study by Sovani M.V., Rath Nilakanth (1960), gives a description of economic conditions in the two regions, the Sambalpur zone and delta zone of Orissa, which are expected to receive benefit from the construction of Hirakud dam. The dam was constructed for the following mentioned purposes. These purposes are (1) Irrigation (2) Generation of power (3) Flood Control (4) Navigation. Flood and drought have scourged the three coastal districts of Orissa, Puri, Cuttack and Balasore since centuries. On the other hand, the rivers of this delta region have been rivers of sorrow for its teeming millions. Thus in 1945 attention was directed to the flood problem of the Mahanadi delta for its management. This second objective of the Hirakud dam project was irrigation both in the Sambalpur and coastal region. The third objective was for the generation of hydel power to provide electricity for both domestic and industrial use in and outside Orissa. Although, navigation was not a major objective of the project but the belief of such a function was expressed after the construction of dam. The Mahanadi as navigable water may open great possibilities for cheap transport of agricultural and industrial produce of the valley for local distribution. The Hirakud multi-purpose project was completed in 1957. Facilities for irrigation over one lakh of acres were made available and power is being supplied to the industrial establishments of Orissa. It contributed higher income and enormous employment opportunities.
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The study by Murty G.N., Mishra P.K. (1994), states that areas wise, India is seventh largest in the world. Agriculture being the primary source of livelihood of about 75% of its population, contributes 30% of GNP and 60% of employment. At the time of independence the country was far from self-sufficient in food grains, since most of its agriculture being mainly rain fed used to be subjected to vagaries of uncertain monsoon. Many a river valley projects involving storage reservoirs were taken up through successive five-year plans for the creation of much wanted irrigation facilities along with hydropower generation and flood control management. The author points the positive achievements of the Hirakud dam in a report on irrigation. It has more than met the targets set for irrigation for Kharif and Rabi crops. In relation to the power system planned in 1950s to meet the future demand of electricity, Hirakud system accomplished wholesomely for over last three decades and still plays an important role in the State Electricity Grid. Apart from this, it provides for water supply towards the domestic, municipal and industrial needs catering to the many parts of Orissa.

Gain Philip, (2000), states that since its independence, the Government of Pakistan also started to engage itself in development by building infrastructure. Among the infrastructural development process, constructing dam was one of the main agenda for mitigating the rising needs of energy, water and flood control. Frequent floods in East Pakistan were common every year, creating sorrow for the farmers. Agriculture, being a backbone of the country, checking floods was inevitable through constructing dams. Thus in this context, the Kaptai hydroelectric project was put in operation. Started in 1959, the US$100 million project was completed in 1963. The project was also intended to tame the turbulent Karrafully River, control flooding and assist the irrigation in the valleys round the year. The author states that the Kaptai dam proved to be a great achievement of the Pakistan Government, providing electricity to the provincial capital of Dhaka and Narayanaganj city. The electricity also became crucial to run the wheels of industry. The Kaptai project provided 78 megawatts of power, 0.5 percent of the country’s total energy supply and 3 percent of its commercial and industrial energy needs.
Baboo Balgovind (1991), states that economically Orissa is one of the one of the most backward states in India. This is proved in terms of several indicators of economic development over the last few years. Besides the socio-political factors natural factors also seem to be responsible for the backwardness. Terrible famines hit Orissa in the 14th, 15th and 16th century. In the famine of 1865-66, nearly a million people perished in the district of Cuttack alone. Since 1868 there have been as many or 34 floods in the Mahanadi delta, extending over 2,300 sq miles constituting nearly 70 percent of the central delta, the most fertile and densely populated tract in Orissa. Flood has been almost an annual feature in the three important rivers – Mahanadi, Brahmani and Baitarani. Such floods and droughts cause insecurity to life and property; have a demoralizing effect on the inhabitants and shatter their enthusiasm to improve land, home and village. Thus, several flood enquiry committees were appointed by the government of Orissa in 1928, 1938 and 1934-42 to suggest measures and recommendations for local relief. But later, construction of multi-purpose water reservoir was decided on the river Mahanadi. The Hirakud mutli-purpose project completed in 1957, facilitates the irrigation over 1 lakh acres of land. Power is being supplied to the industrial establishments and it became the forerunner of the industrial growth and overall development of the state.

Zaman M.Q. (1996), stares that soon after the Second World War and basically during post colonial period, all the Third World Countries of the world engaged themselves in building infrastructure for development. Among the infrastructural development process, construction of dam was one of the main agenda for its multiple uses, providing energy, water for irrigation and checking floods. In this context, the Kaptai hydroelectric project was started to construct in 1959 and completed in 1963 on the river Karnafully to tame its turbulent floods coming every year. The Kaptai dam proved to be a great achievement of Pakistan government, provided irrigation to the valleys round the year and electricity to many parts of the country to run the wheels of industries.

1.2.2 Displacement

Baboo Balgovind (1992), states that the worst effect of large dam construction is the social and cultural upheaval. Thus, thousands of people had to shift to some new and
unknown destinations, which is topographically and culturally vastly different from their own. In the context of Hirakud dam it affected 249 villages, 22,199 families, 18,432 houses and 112,038,59 acres of acculturated land. Although the gains of the project have been recorded by the government, the loss in terms of flora, fauna, natural resources and the displacement of human beings have not been properly evaluated. It also may be mentioned that, despite the increased irrigation facilities in parts of Orissa, the yield of food grains during the period 1967-68 and 1983-84 have shown negative tendency. Although the dam was intended to control the flood situation in Orissa, still Orissa has been facing a similar situation as before. Further, navigation in the reservoir, an important objective of the dam, has not materialized. The feasibility study underestimated the cost and overestimated the benefits and justified the construction of the dam. The dam, thus seen to be constructed primarily for political considerations, benefiting the contractors, industrialists and primarily the urban inhabitants, without concern for the displaced.

Viegas Philip (1992), argued that the displaced of Hirakud dam have not been the beneficiaries of its construction of the dam is quite clear from their reaction and present status 30 years later. Under the Land Acquisition Act, 1894 land for the Hirakud reservoir was acquired. Reduction to a state of near landlessness is a unmistakable sign of this. Where in the past each had an average holding of 15 to 20 acres of land, today they have no more than 1 to 3 acres. As a result, many have been reduced to the status of agricultural labourers from proud owner cultivators. Adapting to the new occupations and adjustment to a new socio-economic order has been bringing mental as well as psychological strains. Several families also migrated to other states like Madhya Pradesh, Uttar Pradesh and Rajasthan where they had relatives, in the hope that they would get some sympathetic support from them.

The study of Singh Sudhir Kumar and Kakkar Davinder S. (2003), in Sengupta Dipankar and Singh Sudhir Kumar (Ed), state that the origin of the present crisis in the CHT may be traced back to the establishment of the Kaptai hydroelectric dam in 1960, which marked the beginning of the resource appropriation from the Hill Tracts for the
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larger interests of the industrial economy of the country. The construction of the dam (1957-1962) caused tremendous devastation and loss to the local population inundating 400 square miles including 54,000 acres of cultivable land which is about 40 percent of the district total acerage. The land occupation of the tribals was naturally reduced due to the construction of the dam. Thus internal displacement (within the country) as well as external displacement (crossing the border) took place. The consequences of displacement at last led to the insurgency in the Chittagong Hill Tracts. The situation further deteriorated, when the CHT was militarized and the Bengali settlement programme was introduced during the 1980s. Although the 1997 CHT Peace Accord reduced the intensity of the crisis, still the Chakmas have not been able to gain their autonomy.

De Sibopada (2005), states that the exodus of Chakmas from CHT to North Eastern part of India may be traced back to the construction of development project (Kaptai hydroelectric project) during the 1960s. In 1964, about 40,000 people, mainly Chakmas were migrated from their traditional land in the CHT in order to settle themselves in North Eastern states of India mainly in Arunachal Pradesh, Tripura and Mizoram, the states which are nearer to them. Although the government of India started its rehabilitation package for the Chakmas in these states and the situation was good but later the native people protested due to the growing Chakmas population in the region. Further, the resource constraint and the ethnicity multiplied the crisis. As a result, it created national and regional security concern and distorted bilateral relations between host country and migration creating country.

Baboo Balgovind (1991), states that large dams are constructed without giving much thought to the tragedy of population displacement. The expenditure in irrigation and electrification, the saving in terms of flood protection and earning from the increased food production and electricity might not justify the construction of such expensive dam. Since the maximum benefits of the dam are going to the many of the industrialist and capitalists, using the water and power for their industries. On the other hand, there is closure of some industries due to power shortage. Further, the author maintains that far as the displacement is concerned, the poor and the landless are the worst victims of the
development. However, the upper class managed to resettle themselves in the nearby towns; villages and got compensation for land more than expected, hoodwinking the illiterate poor people. The majority poor people among the displaced became the wage labourer displaced from their source of livelihood.

Ashan Shed Aziz-al, Chakma Bhunitra (1989), state that the development and imbalanced modernization can accentuate displacement, discrimination of minorities, and increase their hostility towards the dominant group. The huge power development project in the Chittagong Hill Tracts had a similar effect upon the local people. Construction of Kaptai dam (1957-1962) caused tremendous devastation and loss to the local population, inundating 400 square miles including 54,000 acres of cultivable land, which is about 40% of the district total average. Ten thousand ploughing and 8,000 Jumiya (Shifing Cultivation) families comprising more than 100,000 persons were affected. Compared to the loss, the rehabilitation and compensation were minimal, and the situation worsened because of mismanagement in the process of implementation. Though the Karnafully power project revolutionized the industrialization of Bangladesh, the tribal people hardly benefited from it. A survey in 1979 found that 69% complained about insufficient compensation and corruption of government officials; 78% complained of having no opportunity for job in the hydroelectric project, and 93% said that before the Kaptai dam was constructed, their economic condition was better. At last, the frustrated Chakmas caused insurgency in the country.

1.2.3 Rehabilitation

Pattanaik S.K. Das B., Mishra A. (1989), state that a new department under the name of Hirakud Land Organization was set up by the state government for orderly evacuation and resettlement of the displaced persons. Although compensation for land was assessed on the basis of market value, only those farmers who had legal documents to prove possession of lands were entitled to compensation. This is also evident from the fact that a handful of literates belonging to the upper class filed their cases in the high court and some even pursued them to the Supreme Court and won a compensation of 300 to 400 percent over the original awarded to them by the government. Cash compensation was
also awarded for houses on the basis of the type: tiled (pucca) etc. But the process of disbursement was not only economically inadequate but also an utterly dehumanizing experience. It was found from the figure of evaluation in 1954-55 that about 11 percent of the owners from the submerged area settled on the government reclaimed land and rest made their own arrangement, because, they had no faith on the government. Around 7.5 percent resettled in the government settlement colony without any alternatives. Although, it was planned to disburse compensation worth rupees nine crores, interestingly by June 1956 all the people were displaced without compensation, rendering them homeless.

Ray Raja Devasish (1998), in Gain Philip (Ed), state that the creation of Kaptai dam uprooted about 100,000 people mostly Chakmas, which accounted for more than a quarter of the total population of the CHT and inundated more than 59,000 acres or 40 percent of the best plough land of the CHT. Thus, a large number of frustrated Chakma farmers migrated to India, where they still remain as stateless refugees. The displaced families got two acres of land on average in the new settlements, where previously the 10,000 ploughing families had an average six acres. People also complained of having no opportunity for jobs in the hydroelectric project. The government encouraged the displaced people to take up new occupations such as fishing and horticulture. But, these initiatives became failure due to large scale corruption at all the levels.

Baboo Balgovind (1991), states that the state of Orissa did not have any unified resettlement and rehabilitation policy for displaced persons until the execution of Rengali multipurpose project. However, at the time of construction of the Hirakud dam the policy of rehabilitation was full payment of compensation for all properties acquired by Orissa government which set up a ‘Hirakud Land Organisation’ to tackle the complicated and protected task of land acquisition and resettlement. The government settled down the people in the newly developed camps. But, most did not accept the government scheme and preferred to find their own alternative. It is estimated that only 11 percent resettled in the camps. Because, some felt that the camps were too far from their original village and some had no faith on the government’s scheme. Although the government was committed to resettlement, people did not get the exact compensation in terms of land and money.
Asian Syed Aziz-al, Chakma Bhumitra (1989), states that although the Karnaphully power project revolutionised the developmental process in Bangladesh, the dam created an artificial lake and inundated 50,000 acres of settled cultivable land which was about 40% of the districts cultivable area. Finally more than 100,000 persons, 40 percent of these Chakmas, were displaced and never adequately rehabilitated. According to tribal sources, the majority of them were badly affected. The rehabilitation and compensation was minimal. The government estimated that the compensation amounted to $59 million but only $2.6 million were actually provided.

Differences in the comparative studies are useful, where there exist both similarities as well as dissimilarities. The similarities: both the dams have been constructed during the 1960s and the number of displaced is approximately the same. The Kaptai dam displaced 100,000 people and Hirakud dam 22,199 families (approximately 110,995 people). Besides, both the dams have similar objectives (flood management, generation of electricity, irrigation and navigation). Among the dissimilarities: the Hirakud dam comes under the state government (Orissa) and the Kaptai dam under the central government. Since, India is a federal state and Bangladesh (formerly part of Pakistan) is a unitary one. In case of the nature of the government, Bangladesh, most of the time has been ruled by the military regimes. On the other hand, India has followed the path of democracy. Besides, the location of the Kaptai dam is predominantly the tribal area and where as the Hirakud dam is located partly in the tribal area. The last study on Hirakud dam (Balgovind Baboo: 1992) was in 1992. In case of Kaptai dam, (Subir Bhaumik, Meghana Guhathakurta, Sabyasachi Basu Ray Chaudhury: 1997) it was in 1997. Existing literature on the operation of dams brings out clearly the lack of comparative inter-state, cross cultural studies on the efficacy of large dams. Does the nature of governance lead to different outcomes in terms of benefit sharing and adjustment cost of the oustees? These are some questions that need to be questioned.

Although the literature review explained about the nature and extents of displacement, it has not mentioned about the rehabilitation policies of both the dams. The role of the
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concerned government as well as the international organisation has totally been absent in the literature review. The most important among the missing are the role of the different stakeholders. These includes: host populations, NGOs, contractors, funding agencies, consultants and local governments.

1.3 Scope of the Study

The scope of the study is limited to the two dams (Hirakud and Kaptai dam). It has covered the aspects on development, displacement and rehabilitation. The aspect of development highlights the four objectives (flood management, generation of electricity, irrigation and navigation) of the concerned dams. In terms of displacement, it would narrate both internal as well as external displacement and its implications. Finally, it has analysed the process of rehabilitation programme undertaken by the concerned governments. Besides it, the role of the different stakeholders has been studied. The various stakeholders include: the affected people, host populations, NGOs, contractors, funding agencies, consultants and the local government.

1.4 Objectives

1. To assess the projected benefits from the Hirakud and Kaptai dams
2. To make a comparative study of the nature and extent of the displacement and its consequences caused by the construction of the two dams.
3. To make a comparative study of the above mentioned dams in terms of resettlement and rehabilitation programme conducted by the concerned governments.
4. From cross country experience of the two dams being studied, to draw inferences as to how the costs of development induced displacement could be minimised.
1.5 Methodology

The study has adopted a historical and analytical method. It is based on primary and secondary published sources. The primary sources consist of government documents, records and reports. Field level investigation has also been conducted in the selected projects and evidence obtained from affected stakeholders using unstructured questionnaires. The secondary sources are consisting of books, articles, periodicals, newspapers and internet.

I had conducted two field surveys for the Hirakud and Kaptai Dams in India and Bangladesh respectively. I visited Sambalpur (Orissa, India) twice for the field study of Hirakud Dam. My first visit was on 5th November 2007 when I stayed for 20 days to collect the primary data on hydropower production, irrigation, flood management, water distribution, sedimentation and water level of Hirakud Dam. Besides it, I collected the data on displacement and rehabilitation of Hirakud Dam from the government sources. My second visit to Orissa was on 1st June 2008 when I surveyed for a month in order to collect the information regarding the livelihood condition, health status, gender and the overall status of the oustees. The choice of my sample for rehabilitated oustees was purposive, given my time and resource constraints. I selected two rehabilitation camps (Kadalipal & Nua-Barangmal) out of eighteen rehabilitation camps of Hirakud Dam. Among all the camps, the highest number of resettled families left from the Kadalipal rehabilitation camp. On the other hand Nua-Barangmal has the highest number of people resettled and not a single family has left the camp till now. The two contrasting pictures of rehabilitation camps of Kadalipal and Nua-Barangmal prompted me to take as case studies in order to know the loopholes of the resettlement and rehabilitation made by the government. These resettled oustees did not have to adjust with host communities. Further, I randomly selected other two resettled villages (Goudpali & Jammal) in order to survey the same. In these two villages however, the oustees had to settle with host communities. Since the Hirakud Dam is very old, there are very few oustees alive in the rehabilitation camps and resettled villages who actually experienced the displacement during that period. Therefore I consulted with many NGOs, activists, academicians and
many prominent persons of that region in order to gather information for the fulfilment of
the study of Hirakud Dam (See Appendix 4).

I visited Bangladesh on 4th May 2008 and stayed seventeen days in Dhaka for the field
survey of Kaptai Dam. Since the Kaptai Dam and the insurgency in that region has
become a very sensitive issue in Bangladesh, I was not permitted by the Government of
Bangladesh to survey to the adjacent areas of Kaptai Dam, where the displaced people
are staying. Even I was not given primary data available of Kaptai Dam due to the state
security reasons. There is also absence of primary data of Kaptai Dam since it was
constructed during the Pakistan military regime. The documentation of primary sources is
very poor in Bangladesh. Therefore I consulted many of the Professors of University of
Dhaka, Bangladesh University of Engineering and Technology, Dhaka and many Dhaka
based NGOs, Research Institutes, involved in research on different aspects of Kaptai
Dam and it contributed immense information for the fulfilment of the study of Kaptai
Dam. So far as the study of the Kaptai Dam is concerned, it is only limited to the
secondary published sources of books, articles, internet and interviews of many persons
of Bangladesh (See Appendix 4).

1.6 Hypotheses

1. The involuntary displacement caused by Kaptai dam is more repressive in
comparison to Hirakud dam primarily due to the dominance of one religion
(Bengali Muslim) over the other (Buddhist Chakmas).

2. Given the large area of land availability in India, the process of rehabilitation of
Hirakud dam oustees has been more satisfactory as compared to oustees of Kaptai
dam.

3. The democratic regime of India better addresses the displaced as compared to the
civil-military regimes of Bangladesh.
1.7 Chapters

1. **Introduction**: This chapter has brought out the review of literature on the subject as also highlight the scope, objectives, hypothesis and methodology of the study.

2. **Conceptual Framework**: This chapter has described about the need and rationale of development, displacement and rehabilitation with special reference to the construction of dams.

3. **Dynamic of Development**: This chapter has explained the need for the construction of the Hirakud and Kaptai dam and their contributions to development (hydropower, irrigation, flood management and navigation) for the concerned government.

4. **Consequences of Displacement**: This chapter has explained about the nature and extent of the displacement and its effects caused by both the dams, which has become a great concern, fragmenting the communities, tearing apart the existing social fabric, pattern of social organization.

5. **Political Economy of Rehabilitation**: This chapter has analysed the rehabilitation programme undertaken by the concerned governments and the role of the various stakeholders as well as the international agencies, explaining their prospects and retrospect.

6. **Conclusion**