CHAPTER 2

Conceptual Framework
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CONCEPTUAL FRAMEWORK

2.1 Introduction

The term development may mean different things to different people. Generally people believe development means annual increase in Gross National Product (GNP) or Gross Domestic Product. Conventional Economics equates development with economic development with large scale industrialization. It measures the pace of development in terms of rate of growth of national income. To put it clearly, development means the ability of a nation to expand its output at a faster than the growth of population (Kapila 2005: 25-30).

Immediately after the post-Second World War, various Afro-Asian countries got their independence and put economic development on their agenda. As the increase in per capita income was considered by the traditional economists to be a good indicator for development, many countries decided to accord a very high priority programme, which could realize the maximum possible growth rates. The basic thrust of these plans was invariably on sustained increase in GNP and per capita income. It was assumed that once economic growth was accomplished, other objectives, such as elimination of employment, income inequalities and poverty would be realized automatically (Kuznets 1995: 1-28).

Countries insisted more on development because of their colonial exploitation. The nationalist movements that have won the fight for independence, have always believed that the colonial system responsible for the poverty of their peoples. Now after the achievement of independence, the people expect their conditions to be improved and the new governments urgently need a programme which must be programme of economic development (Tinbergen 1967: 12-32).

The term economic development as stated above is far more comprehensive. It implies progressive changes in the socio-economic structure of a country. Viewed in this way, economic development involves a steady decline in agriculture’s share in the GNP and a
Conceptual Framework

continuous increase in the shares of industries, trade, banking, construction and services. This change in production structure is inevitable accompanied by a change in occupational structure of the working population and improvement in the skill and productivity of labour. Further economic growth merely refers to a rise in output, whereas development implies changes in technological and institutional organization of production as well as distributive pattern of income. Hence compared to the objective of development, economic growth is easy to realize. By a larger mobilization of resources and raising their productivity, output level is increasingly raised. The process of development is far more extensive. Apart from a rise in output, it involves changes in the composition of output, shift in the allocation of productive resources, and elimination or reductions of poverty, inequalities and unemployment. It is quite probable that the country merely manages to raise the output of the same types of the goods and services to keep up with the growing population, while the basic structure of the economy remains intact (Singer 1979: 31). The institutional set up of the country remained almost intact and the benefits of the growth did not trickle down the poor. Thus in spite of economic progress in terms of GNP or per capita income, the vast majority of the population remained in destitution. Thus Clower calls “Growth without Development” (Clower 1966).

Development strategies based on the conventional view of development inevitably results in an elitist form of development. It only benefited the rich minority. The majority of the people remain below the poverty line. It led quantitative improvement but failed to bring qualitative upliftment. There is a measurable improvement in the quantity of capital equipment and material goods but results in enormous environmental degradation. The scenic beauty of the nature is destroyed, uprooted the whole tribal populations, depleted non-renewable resources and polluted air, water, soil and food. It undervalued the ecology in the wake of mega developmental projects and multi-purpose dams. The high growth rate of national income neglected the essential non-developmental expenditures such as health, education, housing and social welfare. As a result, there is high rate of illiteracy, infant mortality and high incidence of diseases (Cholera, Tuberculosis, Malaria and Leprosy) (Charles 1990:177-181).
Conceptual Framework

Thus development traditionally considered by economists an increase in per capita income to be a good indicator for development proved to be insufficient for development in the 1970s. The weakness of income growth as an indicator masks the real changes in the welfare for large parts of the poor population. Improvement in meeting the basic needs for food, education, health care, equality of opportunity, civil liberties and environmental protection are not captured by statistics on income growth. Therefore World Development Report (1991) asserted that development is defined as a sustainable increase in living standard that encompasses material consumption, education, health and environmental protection. Development in a broader sense is understood to include other important and related attributes as well, notably more equality of opportunity, political freedom and civil liberties. The overall goal of development is therefore to increase the economic, political and civil rights of all people across gender, ethnic groups, religion, races regions and countries (World Bank 1991: 31-32).

The achievement of sustained and equitable development however remains the greatest challenge facing the human race. Despite good progress over the past generation, more than one billion people still live in acute poverty and suffer grossly inadequate access to resources- education, health, services, infrastructure and land to give them better chance for better life. In this context, the World Development Report (1992) explores a two way relationship between development and environment. It primarily focuses on the environmental problems affecting the process of development. Unsafe water, inadequate sanitation, soil depletion, deforestation, loss of bio-diversity, climate change, depletion of ozone layer, acid rain are of great concern for human beings. Apart from this, focus has also been made on the poor, who extract their livelihoods from unmarketed environmental resources: common grazing lands or forests where food, fuel and building materials have traditionally been gathered. The loss of such particular resources may particularly harm the poorest. Thus, this report has emphasized to give adequate attention to the environmental problems that damage the health and productivity of the largest number of people, especially the poor (World Bank 1992: 1-9).
Further the UNDP Human Development Report (1994) reiterated the objective of improving conditions of people. Such development enables all individuals to enlarge their human capabilities to their best use in all fields—economic, social, cultural and political. Sustainable Human Development addresses both inter-generational and intra-generational equity enabling all generations, present and future to make the best use of their potential capabilities. In the final analysis, sustainable human development is pro-people, pro-jobs and pro-nature. It gives the highest priority to poverty reduction, productive unemployment, social integration and environmental regeneration (World Bank 1999: 1-11).

2.2 Dams as Development
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 economy. Thus, the availability of adequate infrastructure facilities is vital for the acceleration of economic development of a country. Governments across the world have given high priority to investment in sectors such as railways, roads, power, telecommunications, ports and industries etc. Thus, dams are the outcomes of this process and symbols of development. It has multipurpose utility: such as generation of electricity, irrigation, flood control and navigation that contribute at large to the growth of a nation. Indian Prime Minister Pandit Jawaharlal Nehru said “Dams are the temples of development” monuments to a nationalistic vision of modernization and economic growth (Joyce 1997: 1050-1055, Bandyopadhyay 2002: 4108).

River basins are known as cradles of civilization and cultural heritage. During the ancient period modern communities were dependent on rivers for their livelihood and commerce. The ruin of irrigation channels over eight thousand years old in Mesopotamia is the earliest evidence of river engineering. Water storage dams found in Jordan, Egypt and other parts of Middle East dates back to at least 3000 BC. The historical records that witnessed the use of dams for irrigation and water supply became more wide spread about a thousand years later. The Dujiang irrigation project, which supplied 800,000 hectares in China is 2,200 year old. Even, dams built for diverting water to large
community rivers can still be found in Sri-lanka and Isreal. But the first use of dams for hydro powers generation was around in 1890. By 1900, several hundred large dams had been built in different parts of the world, mostly for the water supply and irrigation (World Commission on Dams 2000: 8).

Falling water is the source of one-quarter of the world’s electricity today. Despite the billions of dollar spent on nuclear power, hydro power provides a great deal of electricity on a world wide basis. Given the myriad economic and environmental problems facing the nuclear power, hydro power maintains a substantial lead over nuclear energy. Compared with other sources of electricity- oil, coal and nuclear, hydro power has environmental advantages. In a world suffering from inflation and fossil fuel depletion, hydro-power offers stable prices and permanence. Hydropower complexes will be producing power long after the oil wells run dry and coal fields are exhausted, if properly managed (Deudney1981: 5-6).

It was during the nineteenth century that hydropower became a source of electricity as well as of mechanical power. In 1820 the French engineer Benoit Foumayron invented the Turbine. In 1882 water power was first used to produce electricity and it steadily increased the world’s electricity supply. In 1980 hydro power produced 23 percent of the of the world’s electricity. Since the 1930s hydro power has been from major dams with reservoirs in the United States and the Soviet Union. Since World War Second, efforts to construct large dams have shifted increasingly to the Third World and to remote regions where most of the major untapped water major dam sites are located. The success of large dams in the developed countries has drawn many Third World leaders to this energy source. Large dams are highly visible symbols of progress that facilitate the growth of heavy industry and enhance the prestige and value in developing countries. Successful hydroelectric development projects have already made substantial contributions to the economic wellbeing of some developing countries. The power generated from Aswan, Egypt has been electrifying ninety nine percent of its villages and creating many new jobs in labour intensive local industries. In fact the existence of abundant water resources in many of the world’s poor regions and the oil price explosion in the international market
underscored the importance of indigenous water resources and hydropower in the global developmental agenda (Deudney 1981: 6-19).

There was rapid increase in large dam building during the last century. The growing spread of dam buildings is clearly a 20th century phenomenon. In 1900, there were only 600 big dams in existence and many of them were built in Asia and Africa. It grew about 5,000 big dams by 1949. By the end of the 20th century over 45,000 large dams were built over 140 countries. Thus, over 90 percent of big dams were built over the last forty years. Gradually the dam construction spread from the big river to small rivers across the world. Great Britain had more than the half of the world’s large dams in the last century. The British Authorities constructed the low Aswan Dam on the Nile River. Soviet Union built Desprostoi Dam on the River Dnieper, which was the world’s first major and most powerful hydropower at the time. United States Bureau of Reclamation (BuRec) had built over 50 large dam projects by 1930s and the establishment of Tennessee Valley Authority (TVA), constructed 38 big dams by the end of 1945. Similar efforts were undertaken in other countries around the world (Khagram 2004: 5-6).

The big dam projects increasingly became more popular and contributed to the formation of various informal international big dam regimes. A group of engineers, builders and bureaucrats established a transnational professional association called as International Commission on Large Dams (ICOLD) to collect information and exchange of knowledge about big dam building around the world in 1929. In the beginning of 1930s and 1940s, big dam building bureaucracies including national and international agencies like RuRec or the Soviet Union’s Hydrological Planning Agency and river valley organizations like the TVA proliferated around the world. The wave of decolonization and state formation contributed to the spread of these institutions in other part of the world and especially in the third world. The World Bank which soon began to emerge as the premier multilateral development agency, supported the big dams buildings across the world. The growth of private dam industry and other developmental aid and credit agencies further contributed to the spread, growth and legitimacy of big dam building across the third world. Such prominent transnational Corporations are Asea Brown Boveri, Siemens, GES Alsthom,
Kvaerner, Bechtel, Acres and other expanded rapidly during the 1950 and 1960s. Other multilateral organizations besides World Bank are the specialized wing of United Nations, especially the Food and Agricultural Organization, UN Development programme, Inter-American and Asian Development Bank (ADB) and bilateral aid and credit agencies like the British Overseas Development Administration (ODA), the United States Export Import Bank increasingly funded for dam buildings in developing countries (Khagram 2004: 6-7).

The rapid economic growth after the Second World War accelerated the global dam construction rate, lasting well into the 1970s and 1980s. At its peak, nearly 5000 dams were built world wide in the period from 1970 to 1975. The top five dam-building countries accounts for nearly 80% of all large dams worldwide. China alone built around 22,000 large dams or close to half of the world’s total number. Before 1949, it had only 22 large dams. Other countries among the top five dam building nations include the United States with over 6,390 large dams; India with 4,000; and Spain and Japan with between 1000 and 1200 large dams each. Estimation shows 1,700 large dams have been under construction in other parts of the world in the last five years. Of this, a total 40% are reportedly being built in India (World Commission on Dams 2000: 8-10).

But the dam construction gradually declined to 75 percent in 1990s as compared to its peak period of 1970s, even if there is growing scarcity of water and hydropower across the world. There are four reasons (technical, financial, economic and political) of such puzzling trend. The technical factor argues the decreasing availability of sites contributed to the decline of big dam buildings. Shortage of available funds is one of the financial and economic factors for the decline of big dam buildings. Many of the third world countries faced economic crisis in the context of oil crisis of 1973 and 1979. The foreign lenders shifted their strategy towards privatization and it contributed to the decreasing availability of public and international financing for these projects. The other alternative source of energy like thermal power plant, gas power plant also detracted the dam construction. But the technical, economic and financial factors are not the sufficient factors in explaining the whole story. The political factor or the mounting public protests
against big dams became a major hurdle in building dams. The negative environmental impacts and the intensity of displacement additionally argued against dam buildings other than economic and financial factors. However the technical argument of site depletion led to political opposition of big dams. The growing loss of free flowing rivers caused by dams sparked mobilization of various domestic conservation groups and contributed to the growth of national environmental movements in numerous countries in the 1950s and 1960s. The declining trend of dam buildings in the first world in the 1960s and the transnational corporations shifted their activities to the developing countries and therefore approximately two-third of the big dams built in the 1980s and three-quarters under construction during the 1990s were in the third world. Since the 1970s, the spread of big dams halted due to the growing united struggles and campaigns waged by various environmental non-governmental organizations, indigenous people, human rights groups and the affected people from the local to international level (Khagram 2004: 8-10).

2.2.1 Hydropower

Electricity generation is an important reason for building large dams in many countries either as the primary purpose or as additional functions for other purposes. Hydropower currently provides 19% of the total supply over 150 countries. It represents 90% of the total national electricity supply in 24 countries and over 50% in 63 countries. One third of the countries in the world currently depend on hydropower for more than half of their electricity needs. Among them Canada, United States, Brazil, China and Russia account for more than half of the world’s hydropower generation. Between 1973 to 1996 hydropower generation in non-OECD countries grew from 29 to 50% in the world

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1 Historically hydropower developed in the early 1900s as a local activity with small projects providing local communities and industries for the benefits of local communities. As dams grew in size and electricity networks developed, hydropower dams began serving regional and national interests and often detrimental to the local communities. Many dams particularly providing hydropower generate direct monetary revenues. These revenues belong to the dam or power plant owner, whether a private, public or cooperative company. Some of these revenues are usually transferred to the various levels of governments in the form of taxes, royalties and other mechanisms. Dams also provide access to irrigation for agriculture by storing water in times of surplus and dispensing in terms of scarcity. It protects arable land from being destroyed by flood and adjusts the water distribution in different seasons to meet the pattern of demand of irrigated agriculture. Dams effectively regulate the flood water and release it later slowly to the flooding downstream. It also promotes aquaculture and fisheries development in river basin. Dam also provides non-agricultural activities, such as eco-tourism, recreation and inland navigation.

The World Commission on Dams (WCD) had taken 63 large dams as samples from different parts of the world for Cross Check Survey to examine their hydropower performances. Large hydropower dams according to the WCD Report can be represented into two groups. At first a number of projects that have greatly exceeded their targets and a few notable under-performers. On average almost half of the samples exceeded the set targets for power generation – with about 15% exceeding targets by a significant amount. Around one fifth of the projects in the sample also achieved less than 75% percent of the planned power targets. A number of projects have far exceeded their technical, financial and economic targets, while others have fallen well short. Delivery of services and benefits are examined by assessing performance to targets for installed capacity and delivery of power. The Cross Check Survey of WCD states that higher than expected output of hydropower generation depends primarily on the extra installed capacity prior to the commissioning. One quarter of the large dams with higher than expected output had installed more than 100% of the capacity planned in the feasibility study (World Commission on Dams 2000: 49-50).

For example the Tucurui dam (Tocintans Rivers, Brazil) increased its installed capacity from 2700 to 4000 MW. Tarbela, (Indus River Basin, Pakistan) Grand Coulee (Columbia River Basin, USA), and Kariba (Zambezi River, Zimbabwe) dams have all seen subsequent installations of additional capacity that were not foreseen at feasibility. But the increase in generation of hydropower does not always depend on the extra installed capacity rather sometimes on normal variations in weather, river flows and demand supply factors and thus keep fluctuating in output from year to year. Apart From this, adding additional powerhouses, upgrading existing turbines and generation equipments are the additional factors in improving performances. In case of Grand Coulee the hydropower production is always higher than the prediction, where as in case of Kariba the production keeps fluctuating from year to year. Hydropower production of Tarbela has always been less than the prediction. The WCD Case Studies shows three different
pattern of hydropower production of the three dams even if their structural changes (extra installations capacities) are similar (World Commission on Dams 2000: 50-53).

2.2.2 Irrigation

Agriculture plays a greater role in the economic and social development of all developing countries. Even developed countries with industrial base play an important role in agricultural production. Irrigation\(^2\) is vital to agriculture in many regions of the world particularly in the tropics, where rainfall is seasonal and unevenly distributed. Irrigation is seen as a vehicle for development, poverty alleviation, rural development and solution for food insecurity.\(^3\) About one fifth of the world’s agricultural land is irrigated and it accounts for about 40% of the world’s agricultural production. Many countries including China, India, Egypt, Indonesia and Pakistan rely on irrigated land for more than half of their domestic production. The area of irrigated land expanded dramatically during the first years of the green revolution in the 1960s. This led to significant yields and brought down food prices. Half the world’s large dams were built exclusively for irrigation and it is estimated 40% of the 268 million hectares of irrigated lands worldwide rely on dams. Dams are estimated to contribute to 12-16% percent of world food production. Four countries- China India, United States and Pakistan account for more than 50% of the world’s total irrigated area. The scale and significance of irrigation of large dams for irrigation varies significantly from country to country. Dams supply the water for almost 100% of irrigated production in Egypt – most coming from Aswan High Dam – while in Nepal and Bangladesh dams provide only 1% of the irrigation water. India and China has

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\(^2\) Irrigation is essentially the intervention by humans to modify the spatial and temporal distribution of water to improve agricultural productivity. It entails village-level activity in harvesting rainwater from a few hectares to grow crops in a fraction of that area. It equally entails country-level activity in harnessing water from large rivers to grow crops hundreds of kilometers away from those rivers. Irrigation development dangles promise as a technical solution to meeting food needs. It transform desert into something green and fertile with more potentials for agricultural output. It has been proved that the irrigated area has more output per acre than the rain fed area.

\(^3\) FAO (Food and Agricultural Organization) defines food security as a situation where households have both physical and economic access to adequate food for all members and, in addition, are not at risk of losing such access. Food security is about people and their ability to produce food or develop the capacity to buy food for themselves. Sometimes these two concepts – ‘Food Security’ and ‘Food Availability’ are confused. To be clear here food availability does not imply food security but food security implies food availability. If there is enough availability of food in the world and the prices are high, everyone in the world wouldn’t be able to access. Thus food security prevails.
the largest irrigated areas in the world supply approximately 30 to 35% of irrigation water (Sanmuganathan 2000: 22-57, Gritzinger 1987, 14-15).

The performances of irrigation projects of large dams depend primarily on three factors:

- Physical Performance on water delivery and area irrigated
- Cropping patterns, intensity and yields as well as the value of production
- Net financial and economic benefits

But here my explanation would be limited to the first one. The WCD has taken 52 dams as sub-sample in its Cross Check Survey to check the performance of irrigation. The Cross Check Survey demonstrate that many of the dams have fallen short of physical targets, failed to recover their costs, and have been less profitable in economic terms than expected. Almost half of among those have fallen short of the planned targets. Poor performance is most noticeable during the early periods of the project life. One quarters of the projects achieved less than 35% of their target irrigation areas during the first five years. Less than half of the projects in the sub-sample consistently achieve or exceed planned intensities and the remaining 20% achieved less than three quarters of targets and the remaining achieved 40% achieved between 70 to 100% (Sanmuganathan 2000: 53).

The WCD Case Study here displays the results with respect to irrigated area and cropping intensity targets. The Grand Coulee dam was commissioned in 1941, but only half of the predicted area in the Columbia Basin Project was eventually developed. The same can be repeated in the case of Gariep dam on the Orange River in South Africa. However the case of Tarbela dam is different, it has exceeded predictions by 20% over its 25- year life. This is mainly due to lower than expected rate of reservoir sedimentation. In Turkey cropping intensity has increased from 89% to 134% of the target, but such figures masks a return to growing wheat, a crop that require little irrigation. The underachievement of targets for irrigated area development from large dams has a number of causes. Institutional failures have often been the primary causes, including inadequate distribution of channels, over centralization systems of canals administration, inadequate attention to drainage. Sometimes over optimistic projections of cropping patterns, yields and irrigation efficiencies, the late realization that of some areas were not economically
viable and mismatch between the static assumptions of the planning agency and the actual farmer behavior are the major factors responsible for non-fulfillments of targets (Sanmuganathan 2000: 53 & World Commission on Dams 2000: 44).

2.2.3 Flood Management

Flood plain areas are ecologically important wetlands and had competitive advantage for human settlement in the past. But “flood hazard”\(^4\) is a threat to life and property, health, livelihoods and other valued resources presented by a body of water, which might rise and flow over land that is not normally submerged (Green, C.H., Parker, D.J., Tunstall, S.M. 2000: 2).

Flood disasters are among the world's most frequent and damaging types of disaster. During the later half of the 20\(^{th}\) century floods were the most common type of geophysical disaster, generating over 30% of all disasters “between” 1945 to 1986. Globally flood disasters are about the third most harmful form of geophysical disaster in terms of loss of life. Earthquakes and tropical cyclone kill more people than any other geophysical disaster, but in the 1986-1995 period floods appear to have caused more deaths than any other geophysical disaster. 55% (367,000 people) of the deaths were caused by the floods alone. The estimation of deaths caused by flooding in 1999 was 55,360 and among them 20,000 had died only in Venezuela alone caused by mud floods and landslides. In terms of regional significance, flood related economic losses in Asia exceeded those in North America and Europe between 1987 and 1996. Thus flood hazard management\(^5\) is one of the most essential for protecting the human being for protecting himself from such calamities (Green, C.H., Parker, D.J., Tunstall, S.M. 2000: 2-4).

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\(^4\) Defining flood hazard, there is a crucial interface between floods and people. A flood is not hazardous unless humans are somehow affected. Further it states that a hazard refers to the potential damage that exists only in the presence of vulnerable population. Thus the concept of “vulnerability” is central to understanding of flood hazards.

\(^5\) There are four generations of Flood Hazard Management which historically succeeded from one generation to another. The first one is the ‘Indigenous Flood Adaptations’ refers to the communities preoccupied with flood prone areas for many generations have typically developed local adaptation to make them more resilient to flood hazards and disasters. For example in Malaysia and many parts of the world river’s side houses are constructed on stilts to raise them above anticipated flood levels and use of small boats. People were also cultivating the flood tolerant rice crops as well as other crops for their agricultural economy. Boats were the main vehicle instead of roads and bridges for the people to protect themselves.
About 13% of all large dams in the world – in more than 75 countries – have flood management functions. For centuries societies have built levees and embankments along riverbanks to contain and control floods. The purpose has been to occupy floodplains for agricultural, urban and industrial uses and to reduce any resulting threat to lives and property. Large dams are used to control floods by storing all or a portion of the flood waters in the reservoir and then releasing the water slowly over time. Indicators of the benefits derived from flood control include reductions in the area flooded and prevention of any consequent loss of life, social disruption, health impacts, property and economic losses. The Aswan dam is an example of a dam that stores the flood. It can store 1.5 times the average annual flow of the Nile River and has provided a high degree of protection to the lower Nile retaining the whole flood. Four of the WCD Case Studies provide other additional examples of flood control, although none of these dams were built primarily for this purpose. The Tarbela dam regulates about 16% of the annual flow of the Indus from the floods. The indigenous approaches are often relatively effective in rural areas as long as exceptional floods are not encountered. Flood embankments were part of these indigenous approaches, constructing dyke systems in order to convert the water from wetlands to arable lands by the indigenous communities. The second generation approach is primarily based on scientifically rational approach or otherwise known as river engineering during the 19th and the 20th century. It was marked by the state promotion of structural measures undertaken by the provincial as well as the local governments. The emphasis in this approach was to control the river and to prevent flood water entering communities located in flood prone areas and make rivers the efficient servants of human purposes. The history of flood mitigation goes to the United States during the 19th and 20th century armed by the US Corps of Engineers struggled to control great rivers such as Mississippi. The lagging economies of the Tennessee River basin and the process of modernization inspired them to construct a large number of dams to control the river flooding and soil erosion as well as other benefits such as generating electricity. But the structural approaches have numerous disadvantages, including adverse environmental consequences and perverse impact on the downstream areas. Thus the third generation of ‘Non-Structural approaches’ emerged in the later stage of the 20th century against the structural approaches. It came to be offered as an alternative to the traditional engineering solutions. They defined rivers as problem and the solution lies to public keep away themselves from the river, basically from the flood prone areas. Even if they insisted to stay in the flood prone areas, they should bear the consequences of their choice. Non-Structural approaches include small scale ‘structural’ modification of the buildings in order to easy come out from the home during the flood. It also lays stress on improved flood forecasting and warning system to allow people and property to evacuate before the floods come. But this approach also failed to address the problems holistically, because it is quite impossible for the people in all the cases to keep away themselves from their home and lands and their livelihoods. The fourth generation is known as ‘Holistic Approaches’ critical of the non-structural approaches. The emerging approach talks in terms of ‘flood alleviation’ and ‘flood mitigation’ rather than ‘flood control’ and ‘flood hazard management’ or ‘flood risk management’. The concept of ‘sustainable development’ is the driving force of this approach in particular and the requirement to think about the catchments as a whole emphasizing on the inter-relationship between land and water. It involves not just economic development but also human development including increasing public involvement in decision making, emphasizing on inter-generational and intra-generational equity. But this approach is also more critical and less optimistic than either of the two previous waves.
River and the flood peak is reduced to 20%. Similarly the same experience is being experienced in case of Glomma and Laagen basin (Norway) and Grand Coulee in Columbia basin (USA) have been contributing in checking floods. Japan is one of the top five dam building countries in the world, and flood control is the major purpose for many dams in Japan. An estimated 50% of the Japan’s population lives in flood-prone areas and floods have affected 50% of the municipalities and dams have the major role in protecting the people from floods (World Commission on Dams 2000: 15, 58-59). But it is also true that dams always unable to control flood due to the reducing water storage capacity of the reservoir. It happens due to over silting or deposition of sedimentation than the expectation at the time of feasibility study of dam.

There are certain problems associated with dams in controlling floods. The most important among them is the vulnerability of the downstream communities to floods and loss of their source of livelihoods. Downstream impacts can extend for many hundreds of kilometers and well beyond the confines of river channel. After the completion of dam, the downstream communities face serious implications generally of the livelihood crisis due to changed hydrological regime. It adversely affects the floodplains that support local livelihoods through flood recession-agriculture, fishing, herding and gathering floodplain forest products. Thus livelihood crisis in the downstream areas lead to massive migration and depend on informal wage labour in the urban areas. In northwestern Nigeria, the Bakolori dam on the Sokoto River reduced average flood levels by 50%, leading to fall in cropped area of 53% and one quarter of the households dropping dry-season cultivation as a component of their livelihoods strategy. Similarly significant impacts on floodplain agriculture are seen in Niger, Chad, Nigeria, Sudan, Senegal Mali etc. In case of Manantali dam on the Senegal River between 500 000 and 800 000 people suffered from loss of access to productive floodplains that provided most or part of their means of their livelihoods. The WCD Case Study also reveals that the Tarabela and Kotri barrage has affected the grazing activities of pastoral communities in Pakistan. (Adam 2000: 1-16) They also face severe damage when the reservoirs have not been operated properly in time of emergency and at critical times. There have been the cases of such incident. One such serious incident was reported in Nigeria where a delay in warning inhabitants led to
a flood that overran approximately 200 communities, submerging 1,500 houses and killing over 1,000 people. It also affects the downstream aquatic ecosystem and biodiversity. Storage dams altered the natural distribution and timing stream flow. They comprise the dynamic aspects of rivers that are fundamental to maintaining the character of aquatic system. Natural rivers and their habitats and species are a function of the flow. The degree of impacts will also depend on the amount of water is extracted or diverted for consumption, or left on-stream. The establishment of new dynamic has positive effects on some species and negative effects on others. Flow regimes are the key driving variable for downstream aquatic ecosystem. For example, the construction of Glen Canyon Dam on the Colorado River in United States reduced daily average flows during the September peak from about 2,000 m³/sec to 700 m³/sec due to dam releases for electricity generation. These changes in flow dramatically altered the riverine environment, creating constantly cold temperatures due to release of water from the bottom of the reservoir. Thus decline in native fish abundance in the Colorado River is attributed specifically to the cold water release from the large dam there. Flood timing, frequency and duration are all critical for the survival of communities of plants living downstream. Such floods transport nutrients both for the plant and aquatic kingdom of downstream. It also helps to migrate the aquatic species from one place to other places. Thus reduction of sediments and nutrients transport in rivers downstream of dams has impact on channel, flood plain and coastal delta morphology and causes the loss of aquatic habitat for fish and another species. River dwelling species have several migratory patterns. Migratory species require different environments for the main phases of their life cycle: reproduction and production of juveniles, growth and sexual maturation. The WCD Cross Check- Survey in North America indicates that dam construction is one of the major causes of freshwater fish extinction. It suggested that the loss of free flowing river habitat due to reservoirs had led to 55% of the human induced species loss and 19% was caused by dams acting as barriers to fish migration (World Commission on Dams 2000: 77-93, Joyce 1997: 1052-1055, Maan 2000: 716-719, Cernea 1997: 3-4).
2.3 Displacement

While many have benefited from the services dams provide, but their construction has led to many significant social and human impact, particularly in terms of displacement and loss of livelihoods. Compulsory displacement\(^6\) that occurs for development reasons, embody a perverse and intrinsic contradiction 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 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 principles of “greater good for the larger numbers” rationalize the displacements and thus some people enjoy the gains of development and while other bears its pain (Cerneea 2000: 3659).

2.3.1 The Institutional and Political Context of Displacement

2.3.1.1 Land Acquisition: Law and Policy

The most important factor that displaces the people is the prevailing Land Acquisition Act (LAA) in different countries, which is unchallengeable in the court. In India the Land Acquisition Act of 1894 (LAA) empower the state to enjoy unlimited power over land within its territory. It follows that the state has the right to invoke this right for ‘public good’\(^7\) and the consequent compulsory acquisition of the land can not legally be challenged resisted by a person or community (Baxi 1989: 164-171). The doctrine of ‘eminent domain’\(^8\) in India enjoys the power for the acquisition of land (Hemadri 1999:

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\(^6\) Displacement is defined here as referring to the both ‘physical displacement’ and ‘livelihood displacement’ (or deprivation). In the narrow sense displacement results in the physical displacement of people living in the reservoir or other project area. This occurs not only from the inundation of reservoirs but from the installation of project facilities and associated infrastructure. Compulsory displacement is otherwise known as involuntary displacement forced by the state/non-state actors for the sake of national interest or public interest.

\(^7\) Defining ‘public purpose’ is very difficult and its determination totally rests on the state. The subsequent amendments of the LAA and the new draft of the new Land Acquisition (Amendment) Bill 1998 currently under consideration by the Government of India, do not undermine either the eminent domain of the state nor the unassailable power of the state to determine what constitutes ‘public purpose’.

\(^8\) In India the power of ‘eminent domain’ was recognized on the principle that the sovereign state always can acquire property of a citizen for public purpose without the owner’s consent, which is made by the framers of the Indian constitution to the people of India. The power of eminent domain conflicts most with the Constitutional imperatives contained in the part XVI of the constitution of India, designed to protect
xxxii-xxxiv, Fernandes 1999, Bartolome 2000: 9, Ramanathan Usha 1995, Sharma 2003: 907-910). The same is the case with the Ghanaian State Lands Act of 1962 and its subsequent amendments that provided for the acquisition of the land in the national interest (Bartolome 2000: 9). The Public Interest Appropriation Law was used in Argentina to acquire land with just monetary compensation without any provision of resettlement or other kind of compensations and mitigation measures. Although Article 41 of the new Argentinean Constitution (1994) establishes the need to protect the environment and the obligations of mitigating the anthropic impacts, the article yet has not developed into specific norms and it is open to diverse interpretations (Dankalmair 1999: 1).

2.3.1.2 International Finance and Role of the World Bank

There are number of international institutions that have financed the building of dams worldwide which include:

- Multilateral banks: such as the World Bank, Asian Development Bank, Inter-American Development Bank
- Bilateral aid agencies: CIDA (Canada), SIDA/BITS (Sweden), USAID (United States), JICA/OECF (Japan), DFID/CDC (United Kingdom) and NORAD (Norway)
- Export credit agencies: Exim Bank (United States), Jexim (Japan)
- UN agencies: UNDP (Bartolome 2000: 9-10).

Among them, the World Bank is the most influential funders of dams across the world. The complexity and the adverse effects of the involuntary displacement along with the constant focus of wide international debate and engaging governmental and nongovernmental organization, public opinion groups, parliamentarians, developmental agencies and the media forced the World Bank to direct a decision to make a policy on involuntary displacement for resettlement. The Bank was the first development agency to respond to the complexity of the involuntary displacement, adopted a formal policy on resettlement in 1980. This policy is both meant for developed and developing countries.

Scheduled Tribes. Most state legislatures have passed elaborate statutes to protect tribal land owners from alienation of their lands, but paradoxically no protection is extended to tribals for loss of lands.
The World Bank has directed several operational directives (now in the process of being reviewed) includes mandatory policies, operational guidelines and the resettlement issues relating to compensation, restoration of livelihoods and incomes. Despite the good initiatives has been taking by the World Bank for resettlement, it has failed to address the same. It basically happens in the developing countries, because the huge population growth, growing scarcity for land to land compensation and the already poor people living in the project area compounds the problems. Vulnerable economic condition of a country, improper institutional apparatus, lack of legal framework, weak commitment, non-performance of the borrower countries are the major causes of non-satisfactory resettlement (World Bank 1996: 75-108). It is clear from the experience with World Bank funded projects that the degree of the capacity to enforce its policy is linked to the regime of power, the strength of economic and political interests behind the regime, the nature and countervailing pressure of organizations of the affected people as well as the Bank's own structural incapability. Other than the World Bank, major multilateral and bilateral agencies also have recently issued the guideline for resettlement similar to the World Bank's- for instance the Inter-American Development Bank (IADB) in 1990 and the Asian Development Bank now considering the same guidelines (Bartolome 2000: 10).

2.3.1.3 Privatization and the Market
Privatization and the market forces is another critical institutional factor extending the degree of displacement. The growing presence of private capital in the large development and infrastructure projects is of direct relevance to the issue of displacement. The most significant questions centre on the relationship between private capital, public interest and social costs. It is feared that the increasing privatization may undermine the institutional and people participations in governance especially in the democratic process. In the context of conflicts between the private capital and public interest are well illustrated in Mexico. The Huites multipurpose dam on Sinaloa, Sonora and Chihuahua state boundaries in northwest Mexico is first privately financed mega dam in the Mexican history. This project was begun in tandem with the 1992 reforms to Electrical Sector and Water Resources Laws permitting private capital joint ventures for the first time since the revolution of 1910. The Huites project, under the provision of the Central Water
Commission (CWA), called for selling of water to farmers on 70,000 hectares of the arid coastal plain of Sinaloa, Sonora states. The important issue here is the resettlement of the indigenous Mayo people. There is no effective legal framework guaranteeing the rights of the Mayo, nor the accountability of the project officials under the new rules of private sector investments. The cases of Huites imply the absence of institutional, legal and policy framework for the displaced. This may well be the emerging context in Mexico and elsewhere in Latin America: a state legacy of impunity in the process of rampant privatization, ignoring the rights, human and environmental concerns, those affected by the energy infrastructure projects (Robinson 1999:1-9).

2.3.2. Social Context of Displacement

2.3.2.1 Displacement of People and Livelihoods

Large dams have significantly altered many of the world’s river basins with involuntary impacts on the livelihoods and socio-economic foundation of ten millions of people living in this region. The livelihood impacts on people- both above and below the dam are particularly devastating in Asia, Africa and Latin America. In the eight WCD Case Studies, only one dam has no physical displacement, built in the Glomma and Laagan basin. In the Cross-Check Survey, physical displacement is reported in 68 of the 123 dams (56%). Of the dam in the sample 52 out of 68 dams are in Latin America, Asia and Sub-Saharan Africa, the most populated regions of the world. The scale and extent of impacts will vary depending on location, size and other dam characteristics such as inundated area and population density in the river basin (World Commission on Dams 2000: 102-104, Sharma 2003: 907-908, Bharati 1999: 1374-1375). The number of people deriving their livelihood directly from the river and its ecosystem, and the overall population density in the river basin, gives an indication of the potential impacts. Therefore, China and India are the two most populous countries in the world accounts for largest number of displaced and have constructed around 57% of the world’s large dams. In China, large dams are estimated to have displaced an estimated 27% of all people displaced by development projects (the total includes people displaced by urban expansion, roads and bridges), while in India, it figures 77% (this total excludes people displaced by urban development). Although China is highly populated country and has
constructed large number of dams in comparison to India, the later exceeds the number of displaced than the former. Here the population density inhibited in the river basins is the main factor determining the large number of displacements. Contextualizing this, India figures 374 persons per square kilometer whereas as 224 persons per square kilometer in China (World Commission on Dams 2000:16-17).

According to Cemea's 'Impoverishment Risks and Reconstruction model', displacement leads to the social exclusion of certain social groups of people. It culminates in 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 includes landlessness\(^9\), joblessness\(^{10}\), homelessness\(^{11}\), marginalization\(^{12}\), food insecurity\(^{13}\), increased morbidity\(^{14}\), loss of common resources\(^{15}\) and social

\(^9\) Expropriation of land removes the main foundation upon which people's productive system, commercial activities and livelihoods are constructed. This is a principal form of de-capitalization and pauperization of displaced people as they lose both natural and man made capital.

\(^{10}\) Losing wage employment is very high both in rural and urban displacements for those employed in enterprises, services or agriculture. Getting a new job either of the sector in either of the place is a difficult task and it needs substantial investments. Unemployment or underemployment persists even after the physical relocation has been completed. Evidence from several dam projects shows that the 'employment boom' created by new construction temporarily absorbs some resettles, but severely drops towards the end of the project. This compounds the incidence of chronic or temporary joblessness among the displaced.

\(^{11}\) Loss of shelter tends to be only temporary for many resettles; but for some, homelessness or worsening in their housing standards remains a lingering condition. In a broader cultural sense loss of family's individual home and the loss of group's cultural space tend to result in alienation and status deprivation. Resettlers often can not incur the labour and financial costs of rebuilding house quickly and are compelled to move 'temporary' shelters - such as refugee camps, emergency housing centers or temporary relocation camps.

\(^{12}\) Marginalization occurs when families lose economic power and spiral on a 'downward mobility' path. Middle-income farm households do not become landless, they become small landholders, small shopkeepers and craftsman downsize and slip below poverty thresholds. Many individuals can not use their earlier acquired skills at the new locations; human capital is lost or rendered inactive or obsolete. Economic marginalization is often accompanied by social and psychological marginalization, expressed in a drop in social status, in resettlers loss of confidence in society and in themselves a feeling of injustice, and deepened vulnerability. The coerciveness of displacement and the victimization of resettlers tend to depreciate resettlers self-image and they are often perceived by host communities as a socially degrading stigma.

\(^{13}\) Forced uprooting increases the risk that people will fall into temporary or chronic undernourishment, defined as calorie-protein intake levels below the minimum necessary for normal growth and work. It further reinforces morbidity and mortality risks.

\(^{14}\) Massive population displacement threatens to cause serious declines in health condition. It sometimes lead to psychological trauma accompanied by the outbreak of relocation-related illness, particularly parasitic and vector-born diseases such as Malaria. Unsafe water supply and improvised sewage system increase vulnerability to epidemics and chronic diarrhea, dysentery etc. The weakest segments of the demographic spectrum - infants, children and the elderly - are affected most strongly.
disarticulation\textsuperscript{16} that result in a loss of socio-cultural resilience (Cernea 2000:3663-3666, Cernea 1995: 266-267).

2.3.2.2 Indigenous People

Among the oustees, indigenous people or the tribals (ethnic minorities) are the most victims in the whole episode of displacement. In the Philippines almost all the larger dams those have been built or proposed were on the land of country's 6-7 million indigenous people. Similarly in India 40 to 50% of those displaced by development projects were tribal people, who accounts for just 8% of the 1 billion people (World Commission on Dams 2000:110). The identity of many of these communities is closely tied to the land and has significant spiritual and emotional attachment. They primarily depend on the forests and forests land for their livelihoods (fodder, fuel wood, fiber and fruits) and rely on number of activities, including hunting, fishing, gathering and shifting cultivation. The quality of livelihood and their living standard depend on the adequate availability of the forest products closer to them. They also cultivate their ethnic agricultural products in the forests land suited to their climatic conditions. Indigenous people also tend to be more vulnerable than other sections of the society as they often lack formal rights to the area on which they depend for their subsistence. In case of resettlement and rehabilitation the tribals do not generally get compensation, because they don't have legal title to the land. Thus it is evident for the tribals face difficulties in keeping up their livelihood. It became too complex for them to sustain, while shifting their 'forest economy' to non forest economy (Shylendra 2002: 3289-3290, Mahapatra 1991: 272-273, Jena 1998: 822). The indigenous people living in the rural areas, often do not have formal education and may face language barrier, cultural obstacles and racial prejudice as well as lack financial resources and social and political contacts to influence the decisions that are made in the national and regional capitals (Inter-American

\textsuperscript{15} Loss of Access to common property and services for the poor people, particularly for the landless and asset less means non access to pastures, forestlands, water bodies, burial grounds etc. Typically, losses of common property resources are not compensated by the governments. These losses are compounded by the loss of access to some public services, such as school, hospital and banks etc.

\textsuperscript{16} Forced displacement tears apart the existing social fabric. It disperses and fragments communities, dismantles the pattern of social organization and inter-personal ties; kingship groups become scattered as well. Life sustaining informal networks of reciprocal help, local voluntary associations and self organized mutual services are disrupted. This is a net loss of valuable 'social capital'.
Development Bank 1998: 26-27). They remain deprived of justice due to negligence and incapacity to fight for their rights. Structural inequalities, cultural dissonance, discrimination and economic and political marginalization are the main factors responsible for their marginalization (World Commission on Dams 2000:110).

There are many cases of development induced landlessness and marginalized indigenous people across the world. Kisan\textsuperscript{17} tribe of eastern India is one of the good examples of landlessness, caused by loss of livelihoods due to construction of Mandira dam near to Rourkela of Orissa. The Kisan tribes were displaced from their traditional environment in the post-colonial period as part of the Nehruvian thrust towards development and self-reliance. The Mandira dam was the part of Rourkela Steel Plant Project (built by German assistance) the river Sankh to provide water requirements to the steel plant. Nearly 100,000 people were affected in this operation with too less compensation and no concern for land for land rehabilitation (Nayak 2000: 79-108). Indigenous people of industrial countries also face the similar situations in the era of building large dams, not very different from that of the developing countries. 142,000 hectares of the best land belonging to the indigenous people including number of burial and other sacred sites was submerged by dam in the Missouri River Basin of the United States during the 1950s and 1960s. Thus it can be stated that the rights of the indigenous people and the ethnic minorities are poorly defined or enshrined in the national legal framework, and lack effective protection (World Commission on Dams 2000:111).

2.3.2.3 Human Health

Environmental change and social disruption caused by large dam associated infrastructure developments can have significant adverse health outcomes for displaced communities. The issue of equity- in terms of pre-existing nutritional and health conditions of the populations and the capacity to resist new health problems is at the root of the adverse health impacts of dams (World Commission on Dams 2000:118). The

\textsuperscript{17} The Kisan are a tribe settled in the four Indian states of Orissa, Bihar, West-Bengal and Madhya Pradesh. According to 1981 census the population of Kisan in Orissa was 227,992 (the data of Kisan population is not available in 1991 census) accounting for 90 percent of the total kisan population.
health issues associated with displaced can be both communicable\textsuperscript{18} as well as non-communicable\textsuperscript{19} diseases. There is regional variation in the prevalence rate of health hazards. It depends primarily on ecological factors such as the presence of insect vectors, types of vegetation and rainfall. Hot tropical climates and cooler climate is also the determinant factor of different health conditions\textsuperscript{20} (World Health Organization 1999: 4-11).

Massive population displacement threatens to cause serious declines in health condition. It sometimes leads to psychological trauma accompanied by the outbreak of relocation-related illness, particularly parasitic and vector-born diseases such as Malaria. Unsafe water supply and improvised sewage system increase vulnerability to epidemics and chronic diarrhea, dysentery etc. The weakest segments of the demographic spectrum—infants, children and the elderly—are affected most strongly. Socio-cultural disruption inherent in the involuntary displacement was highlighted as various consequences across age, gender, marital and occupational status (Cernea 2000: 3665). The Kariba Case Study reports on the strong emotional response of the Gwembe Valley Tonga to their involuntary resettlement. When 50 people died a mysterious and sudden death in 1959 in the Lisitu area, those relocated attributed to these deaths, together with deaths from dysentery and measles that occurred in the earlier year (World Commission on Dams 2000:119).

2.3.2.4 Gender

Gender is the vital element, while understanding the impacts of dam. Gender is increasingly recognized as a powerful social and cultural construct determining the ways in which social relations are structured between men and women. It constitutes the entire

\textsuperscript{18} The communicable diseases include the vector borne, water borne, sexually transmitted, zoonoses and other parasitic diseases.

\textsuperscript{19} The non-communicable diseases include poisoning by minerals, biological toxins, pesticides residues, and industrial effluents.

\textsuperscript{20} Communicable diseases such as yellow fever, rift valley fever, onchocerciasis, trypanosomiasis are not found in Asia but has wide distribution in Africa and tropical America. Communicable diseases such as Japanese encephalitis and dengue fever are found in Asia region. Opisthorchiasis is an example of a parasitic disease that is most common in South East Asia. But it is restricted to the belt of China, Philipines, a valley in Sulawesi and small section of the Mekong River.
domain of relations that govern the social, cultural and economic exchanges between men and women in different arena from the household to the community, state and multilateral agencies. Gender has vital role in societies in assigning roles, responsibilities, resources and rights between men and women. Gender always does not focus on women but also look at the ways in which men and women interact with men and women and accomplish their given roles. However, gender is not a social function that exists in vacuum. Caste, class and ethnicity impinge on gender and form a complex matrix (Adams 1999: 14-15).

When displacement occurs, it not only results in terms of loss and destructions of goods and property, but also alters the people’s lives and their social fabric. The displaced coming to the new environment loses their former support structure and it affects the social roles and responsibilities of men and women. Both men and women are forced into the restricted mobility, living with new regulations and entering into a new social life, which challenge old ties and kingship. Displacement has different consequences for women and girls than men and boys (Gururaja 2000: 13).

Women are generally engaged in informal sector- gathering forests produce, working in the fields and selling their products. Women’s economic activity has major role for the contributions of maintaining household livelihoods. Dislocation results in loss of livelihoods and adds extra economic burdens to women. Gender disparities that already exists in society and within family further aggravate the situations of women, children and especially to girl children. Women being less mobile and restricted in the universe have less alternatives and limited ability to cope with new situations and environments. Such situations also promote alcoholism; prostitutions and gambling, affect the lives and status of women. They also sometimes face physical and sexual violence (Asian Development Bank 2003: 1-6). The Cross Check Survey of WCD states that women suffered more than men in case of Tarbela dam, while separating from their ancestral land and their relations from water, forests and natural resources. Similar experiences were also faced by the displaced women in case of Pak Mun dam of Thailand and Akosombo dam of Ghana. Increased alcoholism and domestic violence were rampant in
the resettlement sites of Sardar Sarovar dam of India, Kariba dam in Zimbabwe (World Commission on Dams 2000:115).

In the post displacement scenario, women are denied of compensations, property rights and access to land. Traditionally, in patriarchal society land and property are passed to male head to male heir. In most part of Asia, women have only the user rights over land and forest to inherit the land. Land and property are mainly registered in male names. Thus women excluded from the compensations of land and property due to lack of legal title. In such conditions the widows, divorced women, elderly and unmarried are more victim to the cause (Asian Development Bank 2003: 1-6). In case of Mahewali dam of Sri-Lanka, Sardar Sarovar Project of India, only the sons were nominated for land compensations. It has been prevailing since the British colonial period. Kariba dam constructed during the colonial yoke recognized only man as land owners and women lose their land without compensation during resettlement and rehabilitation (World Commission on Dams 2000:114).

2.3.2.5 Cultural Heritage

Large dams are invariable constructed in the river basins where people have lived a long period of time, often from prehistoric period to present time. Large dams also impact very large areas that may encompass one or more cultural regions and tribal or indigenous groups. Construction of dams also led to incalculable destruction and loss of cultural resources ranging from shrines of local communities to the world heritage monuments (Brandt 2000: 2). Large dams have had significant adverse effects on this heritage through the loss of local cultural resources and the submergence and degradation of archaeological resources. The assessment of lost or buried cultural heritage resources is very difficult to estimate. The difficulty lies in the fact that no investigation of cultural resources for cultural heritage can be defined and classified into three categories. The first one is 'Cultural Resources of Living Populations' includes (their mode of subsistence, social organization, religion, ideology, political organization, language and the material expressions of their ideas and practices which range from sacred elements of natural landscapes to artifacts and buildings). The second one is 'Archeological Resources' includes (artifacts, plant and animal remains associated with human activities, burial and architectural elements). The third one is 'Cultural Landscapes' (consist of landforms and biotic as well as non-biotic features of the land resulting from cultural practices over historical or even pre-historic times. These resources constitute the cultural heritage of a people, a nation and of humanity.)
and archaeological resources has taken place as part of the planning process of most dams.

The Grand Coulee Case Study records the submergence of Native American burial sites by the dam waters. The tribes used to funds provided by the authorities and their own means, to relocate burial sites exposed by receding reservoir waters. The risk of submerging ancestral graves is one of the main reasons the Himba people in Namibia oppose the planned Epupa dam. In 1998 in India, reconnaissance surveys in 93 of the 254 villages to be submerged in the Narmada Sagar dam submerged hundreds of archaeological sites ranging from lower Palaeolithic to historic temples and iron smelting sites. Similar experience was being experienced in terms of Three George project in China.

There are also some cases of restoration of monuments of the dam site by various international organizations and international NGOs. The monuments of Sudan and Egypt were best protected from the submergence of Aswan High dam by UNESCO from their inundation. Projects like Narmada Sagar, Tungabhadra and Nagarjuna Sagar in India also have paid some attentions to protect major temples, places of worship and cultural heritage. Despite the established potential for significant cultural heritage management, still it is not considered properly in the planning process. For example in Turkey, only 25 of 298 existing dam projects have been surveyed for cultural heritage and of these only 5 have had systematic rescue work conducted. In Argentina, despite the updated legislation for cultural heritage management, cultural resources management activities related to large dams were either poorly done or not at all. The major problems behind this are the time constraints, under-budgeting and a shortage of qualified personals (Brandt 2000: 25-43, 52-58, World Commission on Dams 2000:117-118).

2.3.2.6 Displaced and Host Communities

Although the risks to the hosts are not identical with the risks to displaced, they become the major actor while rehabilitating the displaced. The inflows of the oustees increase the pressure on the resources and they become the competitor of host communities in terms
of the sources of livelihood and for employment. It increases the local prices of the commodities and welcome health hazards in the host areas. The inclusion of non-homogeneous group (caste, religion, ethnicity and community) creates cultural clashes, social tensions, political problems and demographic imbalance. Sometimes the problems become so severe and lead to caste conflicts and communal riots. It hurts both the hosts and displaced communities (Cernea 2000:3666-3667, Hemadri 1999: xx-xxi).

2.3.3. International Context of Displacement

The development induced displacement sometimes become more complex, when they cross borders in order to accommodate themselves or searching for their livelihoods. It has both positive and negative implications.

Positive contribution could be the positive changes of economy of the host countries. On the other hand, negative consequences including arms trafficking, drug smuggling, the 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 perceive protracted refugee situations as posing direct and indirect threat to their national security and regime survival.

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22 Security is a relative concept. It is much easier to apply things than to people. Security for individuals however can not be defined so easily. The aspect of individual security which we need to pursue here relates to social threats those arising from human environment with unavoidable social, economic and political consequences. Thus, it needs here to link security and social threats in a variety of forms. These area basically of four types: physical threat (pain, injury and death), economic threats (seizure or destruction of property, denial of access to work or resources), threat to right (imprisonment, denial of normal civil liberties), and threat to position or status. Since the state is composed of individuals and when the individuals are insecure, obviously the state also face insecurity and these lead to national security threat. But, it is also argued that individuals and state do not always go together and harmony between the two. For this purpose we can divide these views into two general models: minimal and maximal conception of the state. The minimal state arises out of John Locke's concept of social contract which views state on the consent of its citizens to be governed, and therefore the state should not be more than the sum of its parts and serious clashes should be avoided between citizens and state. On the other hand, maximal state views, the state should be considered more than the sum of its parts for their own interest. In this context, these interests might derive from number of sources. Marxist interpret them as the interest of the dominant elite who use the state to advance their own cause. Realists have the making of a transcendent state purpose in the imperative of the struggle for power. These minimal and maximal views of the state based on their distance from the notion of the state but they simply instrumental to their ends. (Buzan Berry, People State and Fear: The National Security Problem in International Relations, WHEATSHEAF Books LTD, Britan, 1983, pp. 1-30)
The direct causes of insecurity for both host states and regional or extra regional actors stemming from chronic forced migration are best understood within the context of so-called failed states, as in Somalia and Liberia. In such situations, refugee camps are used as bases for guerrilla, insurgent or terrorist activities. Their illicit activities range from prostitution, smuggling, trade in small arms and narcotics etc. Such activities are prominent characteristics commonly associated with the longstanding Burmese population in Thailand and the Liberian refugees throughout West Africa. Thus, consequences of such activities for host states and regional actors are obvious. They include cross-border attacks on both host states and countries of origin, attacks on humanitarian personnel, refugees and civilian populations. Direct security concern can also lead to serious bilateral and regional political and diplomatic tensions. Finally, the activities of armed elements among refugee populations not only violate refugee protection and human rights principle, but may constitute a threat to international peace and security. For example, the training and arming of the Taliban in the refugee camps in Pakistan's during the 1980s and 1990s underscores the potential threat to regional and international security posed by refugee warriors (Loescher 2005: 30-32).

Indirect threats may arise when the presence of refugees causes grievances among local populations. All the root of such problems often is the failure of international solidarity and burden sharing with host countries. Local and national grievances are particularly heightened when refugees compete with local populations for resources, jobs and social services including health care, education and housing. Refugees are sometimes seen as a privileged group in terms of social and welfare provisions, especially when such services are not available to the local populations. The mass arrival and prolonged presence of refugee may also exacerbate inter-communal tensions in the host country and shift the balance of power between communities within a host state. This concern was explicit in Macedonia's reluctance to accept cutover Albanian refugees in 1999; because they
threatened to destabilize Macedonia’s ethnic balance’. Other examples include the arrival of Iraqi Kurds in Turkey, Afghan Sunni Muslims in Shia dominated Pakistan.

However, not all refugees are seen as threats. In this sense, the importance of ethnic and religious affinity cannot be overstated. If host community perceives the incoming refugee as ‘one of us’ then positive and generous conception of distributive justice will apply. Conversely, if refugees are seen as members of an ‘out group’ they are likely to receive a hostile reception. In this cases, there is a threat to the balanced multiethnic societies and also destabilize the political balance of power (Loescher 2005: 32-34).

2.3.3.1 Refugees and International Organizations

In such circumstances exiled communities and other uprooted populations are particularly vulnerable to statelessness, especially when their displacement is followed or accompanied by redrawing of territorial boundaries. Statelessness is not only a source of human insecurity and cause of forced displacement, but may also pose a threat to national and regional stability. Absence of citizenship\(^{23}\) is one of the important features of statelessness, generating tensions and even violence between different states and communities. The Universal Declaration of Human Rights unequivocally states that “everyone has the right to nationality” and that “no one shall be arbitrarily deprived of his nationality. Thus Humanitarian organizations play a vital role in averting such situations (UNHCR 1997-98: 225).

The problem of statelessness was generally regarded as a minor problem during the Cold War. Although history has demonstrated the problems of statelessness, attention was paid neither by the governments nor by the humanitarian organizations, because almost all the countries of the world were driven by Cold War. Since the end of 1980s, serious situations of statelessness have arisen in almost every part of the world with primary

\(^{23}\) Citizenship is a fundamental element of human security. It provides people with a sense of belonging and identity. It also entitles the individual to the protection of the state and provides a legal basis for the exercise of many civil and political rights. People who lack nationality may find it difficult or impossible to engage in range of activities that citizens take for granted. In many situations, nationality also enables people to find employment, to take use of public services, to participate in the political processes and to have access to judicial system.
exceptions of America. For analytical purposes, such situations can be divided into two
broad categories those involving ethnic or minority groups which do not enjoy full or
undisputed citizenship of the countries where they live\textsuperscript{24}. The second category associated
with the dissolution of multinational or multiethnic federal states and the formation of
new political entities\textsuperscript{25} (UNHCR 1997:227-229).

The situations of statelessness and disputed citizenship which can be placed in first of
these two categories are generally to be found in fewer developing countries. For
example 120,000 Nepali-speaking southern Bhutanese who are living as refugees in
Nepal and India, and whose claim to Bhutanese citizenship is rejected by the authorities
of the country. Around 90,000 people are accommodated in UNHCR refugees camps in
Nepal. The Rohingya people of western Myanmar, a largely Muslim minority groups
consisting of some two million people, a small proportion of are accommodated in
refugee camps in Bangladesh. Around 60,000 black Africans from Mauritania living as
refugee in the neighboring country of Senegal and whose claim to citizenship has been
challenged by the Mauritanian authorities and are assisted by UNHCR (UNHCR

The situations of statelessness and disputed citizenship which can be placed in second of
these two categories are generally to be found in highly developed countries. For
example, the Soviet Union disintegrated during 1990s and it emerged 15 new countries.
287 million people were deprived of Soviet citizenship and migrated to central Asia and
Baltic states. The same situation had been experienced in case of the disintegration of the

\textsuperscript{24} This involves minority groups, clearly distinguished from the rest of the country’s population as a result
of their race, religion or ethnic origin. They often involve within the communities which are regarded as a
threat to the ruling elite or the majority population, either due to of their numbers or as a consequence of
their perceived disloyalty to the state. Such situations normally arise in countries which lack a pluralistic
political culture. Recognizing this link, the UN High Commissioner for Refugees has observed “on the
plane of rights, the prevention and reduction of statelessness is an important aspect of securing minority
rights”\textsuperscript{25}

\textsuperscript{25} This category identifies earlier problems of statelessness associated with the break up of multiethnic
federal states – relates primarily to more developed regions of the world, and specially to areas which are
emerging from long periods of communists or socialist rule: the Commonwealth of Independent States
(CIS), The Baltic States, former Yugoslavia and Czech and Slovak republics. The end of the Cold War and
the disintegration of the communist bloc brought insecurity and uncertain citizenship status to substantial
numbers of people.
Soviet Federal Republic of Yugoslavia (SFRY) at the beginning of 1990s. Such are the problems of statelessness addressed by UNHCR to promote the right of nationality (UNHCR 1997:233-241).

2.4 Resettlement and Rehabilitation
There is considerable confusion while using the terms ‘compensation’, ‘reparation’, ‘resettlement’ and ‘rehabilitation’. People often use these terms interchangeably. It is due to lack of academic precision. To be clear here ‘compensation’ understands as packages cash or kind either directly or indirectly for the displaced by the development projects. ‘Reparation’ refers to the acknowledged losses not only of assets but also of livelihoods and common resources, shelter and habitats. ‘Resettlement’ is understood as the packages and processes provided in new resettlement sites in addition to the compensations. Finally ‘rehabilitation’ is seen as packages and processes provided in addition to those for compensation and resettlement in order to ensure the relocates better standard of living. The three concepts can be best understood in terms of series of concentric circles. Thus rehabilitation is inclusive of compensation and resettlement (Hemadri 1999: xlii).
2.4.1 Objectives
The main objective of the resettlement is based on collective negotiations with the affected people and planned and implemented as a development project, and an attempt to restore pre-project income and living standards. Resettlement can not be reduced to the physical relocation. It aims to improve the quality of life by raising living standards beyond the pre-project levels. Resettlement is planned and implemented as a development project over a minimum of two generations and include not only protective measures, but also the provision of new rights, resources and strategies. It refers to sustainable improvement of both subjective and objective indices. Successful resettlement results from effective participation of the relocates in the decision making process relating to the development project (particularly refer to the resettlement component) (Bartolome 2000: 27). The resettlement plan minimizes the impact of the affected communities and if possible, will allow them to benefit from the project or the development of its area of influence. The resettlement plan could be seen as an opportunity for social and economic development. This implies compensation for lost assets and income sources and restoration of group’s ability to function as a social and economic unit (World Bank 1998: 28).

2.4.2 Strategies
Two strategies can be pursued for the socio-economic re-establishment for the relocates. Such are ‘land based strategy’ and ‘non-land based strategy’.

2.4.2.1 Land for Land
Land based strategy includes the adequate financial compensation for lost property and providing economic opportunities to re-establish their agricultural based livelihood sources. It is encouraged basically in Asia, Africa and Latin America, where most of the people are dependent on land for livelihood (Bartolome 2000: 31). The strategy of land for land is particularly more important options for the indigenous people and especially for women, for whom land is the only sustainable resource base. Land is the integral part
for them and its separation can be traumatic. It almost provides the original habitat, and protection against land alienation and land grabbing. The land based strategy includes initiating and financing land reclamation activities, irrigation schemes, tree crops development, commercial or social forestry, vocational training, off-farm employment, and other kinds of lasting income generating activities (Cernea 1998: 184). Compensation can take place in the form of cash or kind for the replacement of housing, land and other assets. In many cases giving compensation to the displaced become more problematic. It often poses legal, social, political and economic problems and raises many questions. Most regulatory frameworks are inadequate to deal with compensation for customary rights or loss of opportunities for employment. In many cases the narrow definitions of property rights become obstacles to recognition of assets. Majority of the people affected by the development projects are from the poorest sections of the community and often have no legal title to the land or premises they occupy. The displaced generally the indigenous or tribal people and particularly the sharecroppers, agricultural labourers and workers lose their main sources of income (World Bank 1998: 30, Fernandes 1989: 86-87). Legalizing customary and land tenure is most needed for successful land for land resettlement, which prevent alienation and consolidate rights. In Uganda it has been legalized under the Land Act no. 16 of 1998. It set a legal framework for gender equity in access to land rights over land. Article 237 has empowered the Ugandan citizens for legal title over their customary land (Bartolome 2000: 32). The land based strategy also even encourages unfavorable procedures for the indigenous or tribal people in regard to land as compensation. They own community ownership of land known as customary rights and thus lack legal rights over land (Fernandes 1989: 86-87). In this context in India, it has been estimated that around 25 million people displaced during the period 1950-2000. Among them majority are the tribal or indigenous people those who are landless, asset less and enjoy customary rights over land. According to the rules made by the Indian government people who enjoy customary rights over land are exempted from compensation. Although the Fundamental Rights under Article 21 clearly enumerated “every person is entitled to a quality of life consistent with his human personality. The right to live with human dignity is the fundamental right of every Indian citizen”. The worst victims in the process of land based strategy of resettlement are the women and the
unmarried girls (Mahapatra 2000:121-134). In many projects women are exempted from compensation of land. Most parts of Asia and Pacific are patriarchy society dominated by male. The payment of compensation to those legal titles is intrinsically gender biased. Because land and property are mainly registered in the name of male, women are usually excluded from receiving compensation (Asian Development Bank 2003: 3). Even if some people get compensation those who have legal title of their land do not get fair compensation. They get less amount of compensation, which is much below the market value. Agricultural development is the primary goal of land for land resettlement. But it has not been impressive in many parts of the world. For example in Africa, government efforts to create large scale irrigation through intensification of irrigation projects have uniformly met with failure. The integration of peasant cultivators into large or less registered settlement has been unsuccessful anywhere in Africa. This failure has been primarily due to lack of cleared land; lack of time, resources, marketing linkups, managerial capacity; poor water distribution and heavy cost of dry land reclamation. Akasombo and Nangbeto dams are clear cases of resettlement agriculture falling foul of such downturns (Wet 1999: 9-11). Sometimes the resettled poor people do not get any benefit from the land based strategy of resettlement 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.

However the reconstruction of land based resettlement and its productive potential also primarily depends on the availability of lands. The experience in many reservoir projects is not very encouraging. The main reason behind this is the unavailability and scarcity of land due to the huge population growth. Sometimes poor project planning, lack of effort to identify land reserves and lack of political will of governments for providing land are the major causes of unsuccessful resettlement (Cernea 1998: 184).
Conceptual Framework

2.4.1.2 Non-Land Based Strategy

Land based strategy is the important source of both livelihoods and food security for millions, while non-land based strategy is the diversification of the livelihood sources to other activities. The increasing pressure of land due to population growth and the increasing costs of agriculture, coupled with the rapid acceleration of economic activities compel another alternative to grab new economic opportunities. It includes job creation for relocates through creation of industrial and service sectors and give them vocational training of different skills (Bartolome 2000: 32). Among them promoting fishing in the newly created reservoir is one of the most productive resources for the displaced. For example an innovative and successful approach was taken at the Saguline Lake in Indonesia through the promotion of floating net aqua-culture as a productive activity for displaced families who lost their rice lands to the reservoir. It was estimated that about 1500 families got benefit from this options with in five years after reservoir impounding (Cernea 1998: 185). The case of Xiaolangdi dam in China is another example can be cited here. In order to protect the livelihood of 180,000 resettlers displaced by the dam, China developed and irrigated 11,110 hectares of new land, relocated 252 small industries and mines and established 84 new industries with 25,500 new jobs. Such expenses are created by the separate World Bank facility, distinct from other dam projects and loans, to ensure a high level of attention. The China plan clearly underlines the importance of an integrated strategy of non-land based strategy in order to protect and ensure livelihoods (Jing 1999: 16). But most resettlement programmes have not laid emphasis on the creation of non-land based economic avenues. Even Claims have been made rehabilitating the displaced by giving 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. This is simply due to lack of governments commitment to do so (Sharma 2003: 910-911).
2.4.3 Resettlement Experiences of Various Countries

The experiences of involuntary resettlement in many of the countries are mixed. Some of the projects have successful implementation of resettlement primarily due to the intervention of the World Bank since 1980s. On the other hand many of the projects have failed to resettle the displaced largely owing to the absence of rehabilitation policies of those countries (Asian Development Bank 1995: 4). For example in India the absence of statutory rehabilitation law or even a national policy, there is no legal imperative for state governments or project authorities to integrate comprehensive rehabilitation planning into the planning of a project. In India it has been pointed out that it is the responsibility of the state to resettle the displaced and also the duty to make rehabilitation policies. In case Ukai dam, 20 different resolutions had been passed for the rehabilitation policies for the displaced by the various departments of Gujarat state governments within a period of five years. The Andhra Pradesh government in the early 1960s had a project rehabilitation policy. In case of Nagarjuna Sagar Project in 1960, the state government declared its willingness to take the responsibility for the full rehabilitation of the displaced. However, by 1965 this concern for full rehabilitation had been considerably eroded. In case of Pochampad in 1965 and Srisailam in1977, the Andhra Pradesh government did away with practice of an elaborate rehabilitation policy. In India different state governments has their different rehabilitation policies and it changes according to the time and situations (Hemadri 1999: x). However there are few experiences of improved resettlement in India primarily due to the World Bank’s introduction of new resettlement guidelines. Among those two dams can be cited here in upper Krishna of Karnataka displaced a total of 40,000 households and 240,000 people were successfully resettled by the operation of the World Bank. There are also mixed response resettlements in case of China. The Shuikou dam in China completed in 1992 resettled 200,000 displaced. The local government officers aggressively developed the reservoir fisheries, fruits and timber trees, and township and village enterprises and even recruited the foreign investors to establish factories to employ resettlers. The incomes of the displaced increasingly increased 44 percent by 1996. The same experience has also been experienced in case of Yantan dam. Here it is inevitable to mention, the above explained project was funded by the World Bank and the resettlement was made according to its
Conceptual Framework

guidelines (World Bank 2000: 1-4). On the other hand there are also various evidences of failure of resettlement of dam displaced and people’s resentments in China. One among those is the Three Gorges Dam (1994-2009), which is under construction on the Yangtze River in Central China, one of the largest dam developments in human history. It is uprooting 1.2 million people and it has become a difficult task for the government to have proper rehabilitation (Heming 2001: 195 -204). The dam will affect 1,380 industrial enterprises and relocating those industrial enterprises has created a number of problems (Jing 1999: 21).

It can be stated that, public agencies are typically limited in their capacity to handle resettlement. In most of the study’s cases, public sector agencies mishandled or ignored resettlement. Frequently the public agencies have a technical mandate unrelated to resettlement. There has been the improvement of resettlement in various countries across the world primarily due to the intervention of the World Bank. China is now fully committed in doing proper resettlement and restoring resettlers income and livelihood, while India has begun to gain acceptance. Sometimes the governments at the higher level are committed to good resettlement, but it is relatively less at the ground (resettlement officer) level. Thus the indifference between higher level and field level officials frustrates the resettlement process. There are also the cases of discrepancy within the government owing to their forms and structures. For example in Brazil, although the implementing agencies intended to provide the infrastructure and services resettlers needed, often the federal government did not or could not allocate the funds needed to do so. Similarly in Indonesia implementation started without knowledge of the large number of affected villagers, who refused to move because local governments were not responsible for reporting on their migration (World Bank 2000: 1-2).

2.5 Role of the World Bank
The adverse effect of the population displacement caused by development projects has become the focus of a wide international debate since the 1980s. The debate as well as the critique of the governments, non-governmental organizations, public opinion groups, parliamentarians, development agencies and the media influenced the funding agencies to
engage in the process of resettlement and rehabilitation programme. Thus the World Bank fully shares the concerns of the critics who deplore bad resettlement operations. Criticism by NGOs and other groups of poor resettlement operations, including failures under Bank assisted projects, has helped the Bank improve its policies and operations. The Bank has become increasingly receptive to their specific signals and constructive signals. It regards their concern for the welfare and livelihood of the displaced populations as justified and germane to the Bank’s own mandate and policies (World Bank 1996: 75-79).

The Bank policy on involuntary resettlement was first prepared in 1979 and issued in early 1980\(^2\). During the 1960s and 1970s the policy on involuntary resettlement was adopted on a case-by-case basis. That was entirely left to borrowing agencies with little assistance of any Bank. The lack of explicit norms, procedures and adequate resources for handling resettlement resulted in serious negative effects on the people displaced and the host communities at the relocation sites. By issuing resettlement policy guidelines and the procedures the Bank become the first multilateral institution to enact a policy framework for displacement and to provide landmark thinking about resettlement (World Bank 1996: 81).

2.5.1 Objectives

The fundamental goal of the Bank’s policy is to improve the former living standards and earning capacities of displaced persons or at least to restore them. Bank’s policy calls for transforming people’s involuntary resettlement into an opportunity for development and for enhancing their prior living standards by enabling resettlers to share in the benefits of the development project that causes their displacement (see Box 1.1). The Bank’s resettlement policy raises a major challenge for both borrowers and the Bank. Attaining this objective often requires changes in the policies, legal frameworks, institutional capacities and current practices of many borrowing countries and it became a new challenge in every single project that entails displacement (World Bank 1996: 81).

\(^2\) The development of the Bank’s resettlement policy has evolved steadily improved since 1980s through several key steps in 1986, 1988 and 1990.
Box 1.1 The Bank’s Resettlement Policy

The development of the Bank’s resettlement policy has evolved steadily improved since 1980s through several key steps in 1986, 1988 and 1990.

The basic elements of the Bank’s resettlement policy are:

- Involuntary displacement should be avoided or minimized whatever feasible, because of its disruptive and impoverishing effects.

- Where displacement is unavoidable, the objective of the Bank policy is to assist displaced persons in their efforts to improve, or at least restore, former living standards and earning capacity. The means to achieve this objective of preparation and execution by Borrower of resettlement plans as development programs. These resettlement plans are integral parts of project designs.

- Displaced persons should be (i) compensated for their losses at replacement cost, (ii) given opportunities to share in the project benefits, and (iii) assisted in the transfer and transition period at the relocation sites.

- Moving people in groups can mitigate disruptions. Minimizing the distance between departure and relocation sites can facilitate the resettlers adaptations to the new socio-cultural and natural environments. The tradeoffs between distance and economic opportunities must be balanced carefully.

- Resettlers and hosts participation in planning resettlement should be promoted. The existing social and cultural institutions of resettlers and their hosts should be relied upon in conducting the transfer and reestablishment process.

- New communities of resettlers should be designed as viable settlement systems equipped with infrastructure and services, able to integrate in the regional socio-economic context.

- Host communities that receive resettlers should be assisted to overcome possible adverse social and environmental effects from increased population density.

- Indigenous people, ethnic minorities, pastoralists and other groups that may have informal customary rights to the land or other resources taken for the project, must be provided with adequate land, infrastructure and other compensations. The absence of legal title to the land should not be grounds for denying such groups compensation and rehabilitation.

2.5.2 Responsibility

The responsibility for resettlement rests with the borrower, but it is codified by the legal agreements between Borrowers and the Bank. The resettlement policy defines clearly the Bank's role as well: (i) assistance in designing and assessing resettlement policy, strategies, laws and regulations; (ii) financing technical assistance to strengthen the capacity of agencies responsible for resettlement; (iii) direct financing of investment costs of resettlement. Bank staffs are accountable for making the rehabilitation policy effective (World Bank 1996: 84).

Pursuing adequate resettlement is a very difficult task for developing country governments, who face competing needs, resource limitations and many institutional constraints. The Bank works with the Borrower governments for the effective implementation of the resettlement policies. Bank recognizes its responsibility on a wide front to help its Borrowers primarily through its financial and operational assistance to make the resettlement policy successful and extend it to full sectors in the national context (World Bank 1996: 84).

2.5.3 The Bank's Impact on Resettlement (National) Policies

Enacting policy frameworks for resettlement is pivotal for expanding Borrowers institutional capacity. This process is intensified by the Bank primarily after 1986, in working with the Borrower countries in expanding the adoption of policy principles regarding resettlement. The national laws do not provide an adequate framework for development oriented resettlement. New legislation often must be introduced or the existing law must be modified in order to carry out the resettlement policy effective. Therefore the Bank has recommended policy reform in this all area to all Borrowers whose projects entail involuntary resettlement. To encourage the policy reform the Bank has made several policy dialogue as well as the negotiations on resettlement strategy and legal issues with some Borrower countries. Several developing countries have recently adopted explicit policy or legal frameworks defining their own commitment to income restoration, resettlers eligibility for compensation and other entitlements of the affected people. These changes are the result of Bank's policy influence, as well as the

Many of the countries have influenced by the Bank’s policy and its guidelines. Brazil has developed its resettlement policy, very similar to Bank’s guidelines since 1990s especially with displacement made by the power sector. The Bank involvement also improved significantly in Chinese policy guidelines, legal provisions, planning practices and resettlement performances since mid-1980s. Colombia and Turkey have been following the same since 1990s. In 1993 India also followed the resettlement guidelines especially displacement caused by National Thermal Power Corporation (NTPC) (World Bank 1996: 99-100).

2.5.4 Impact on Other International Funding Agencies

The changes in domestic policies by the influence of World Bank policies and guidelines simultaneously influenced other international funding agencies at the international level. Many of the bilateral and multilateral agencies have adopted or on the way to resettlement guidelines similar to Bank’s guidelines.

- The Inter-American Development Bank adopted an internal set of resettlement guidelines in 1990s.
- The Overseas Development Administration (UK) and Japan’s International Cooperation Agencies have adopted the same guidelines of the Bank.
2.5.5 Consequences of Policy Reform

The case of China witnesses a thriving achievement in the last decades by changing its national policies as per the guidelines of the World Bank. The Bank’s lending to China has been greatly facilitated by China’s reform of its policy framework. During the 1960s and 1970s vast number of displacement was caused by high dams in China resulted in disastrous impoverishment of many people and in serious social and political instability. The Sanmenxia and Danjiangkou Dams resulted tragic displacement during that period. By that time China lacked legal or policy framework for resettlement. To rectify it, the series of regulations were made by the World Bank in 1979, 1982, 1985, 1988, 1999 and 1992 tailored to specific investment sectors such as water, transport, industry and urban. These regulations are now applicable to all type of resettlement projects to protect the living standards of the affected and affirm the principles of "resettlement with development". Chinese law and regulations generally converge with the Bank’s policy directives on resettlement. Now China policy and legal framework has improved in resettlement performances compared to the past (World Bank 1996: 102). In this context the constructed Shuikou Hydropower Dam during the 1990s on the Min River is unquestionably appreciated in terms of resettlement, guidelines followed and assisted by the World Bank (World Bank 1996: 79-81).

2.5.6 Difficulties in Policy Reforms

There are few experiences of successful implementation of resettlement and rehabilitation according to the Bank guidelines such as one among those is China. But there are many difficult experiences faced by the Bank to execute the same. The absence of policy of a number of borrowing countries has meant that the guidelines of displacement have not strictly been adopted. Sometime they assume there is no need of such policy for resettlement and should not be done differently from the past. Some Borrowing countries prefer to maintain a policy vacuum free from binding norms in order to make them more operational flexibility in the short term and at the expense of higher long term costs to the displaced. Such practices are effectively opposed and unacceptable especially for projects which are assisted by the Bank. It is also true that the Borrowing countries are also subject to various domestic factors – including financial, institutional
Conceptual Framework

and land scarcity while instituting policy. Thus many of the Borrower countries are still to meet the whole guidelines rather they implement part of the guidelines (World Bank 1996: 100-102).

For example, Indonesia issued a new decree on land acquisition in 1993, emphasizing consultations with affected people, but restoration of living standards is not one of the goals of living standards in the new decree. The same thing has also happened in case of Korea. Similarly in the South Asia region the absence of national resettlement policies in countries like Pakistan, Nepal, India and Bangladesh has been a key factor in preventing a coordinated approach to resettlement planning. Many of the resettlement operations in India both in Bank and non-Bank assisted projects have failed to rehabilitate a proportion of the displaced people. No federal legislation or policy statement defines the country’s general resettlement norms. Resettlement is regarded as state responsibility not a federal matter; therefore most Indian states still lack state-level resettlement policies. They use expropriation laws, which provide for compensation only but not for socio-economic rehabilitation. In Africa also no one country has a resettlement policy or legal framework for resettlement (World Bank 1996: 103-105).

2.5.7 Internal Displaced People (IDPs) and International Organizations

There are clear parallels between refugees 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 mechanism (Sen 1998: 182-183).

Internally displaced persons are entitled to enjoy full equality, the same rights and freedoms under domestic and international law as do the rest of the country’s citizens.
But in practice they rarely enjoy such rights and freedoms. Although the displaced are frequently forced to flee their homes for the same reasons as do refugees, they remain within national territory and come under the jurisdiction of their government. The government primarily bears the responsibility to protect them and giving them essential needs. However the governments are unwilling or unable to guarantee the basic rights and meet the basic needs of their internally displaced citizens. Sometimes intergovernmental organizations, their specialized agencies and non-governmental organizations assume the role on an ad hoc basis (Deng 1998: 3-4).

It is well established that all individuals are endowed with basic human rights which are inherent attributes of human dignity and are recognized by the international law to protect them. States, in turn are obliged to ensure respect for those universally recognized human rights which are essential to their survival, dignity and well-being of all persons subject to their jurisdiction. There are three sources of international legal standards: human rights law, which is applicable to all situations; humanitarian law, which is applicable in all situations of armed conflict; and refugee law generally applicable to the refugees but little chance of application to international displaced persons (Deng 1998: 3-5).

Refugee law provides rules for the legal status and treatment of refugees in host countries. It is not directly applicable to the internally displaced people, because unlike refugee the internally displaced people have not crossed an international border. (Deng 1998: 8) 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 internal 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).

However, UNHCR in certain situation assist to the international displaced persons. UNHCR worked with international displaced persons include its returnee program, if a special request is made by the United Nations General Assembly or United Nations Secretary-General to provide humanitarian and development assistance to internal displaced persons in a particular region. UNHCR also addresses the internal displaced people when there is a significant risk of cross-border movement of some or all of the internally displaced (Deng 1998: 8-10). Thus development induced displacement, especially related to dam rarely comes under this situation and the internal displaced people remain under the jurisdiction of their government.

2.5.8 Protest and Insurgency

Opposition to big dams has a long history since its beginning of construction in the ancient times. But in recent years this has come to command wider attention. In medieval England, boat owners opposed millers blocking rivers to create millponds to turn their water wheels. Populations affected or threatened by dams have fiercely resisted dams building throughout the last century. As dams building excelled especially after the 1950s, opposition to dams has become more widespread. Conservationists in northern countries, especially in United States led the first notable successes for campaigns against large dams. They stopped the 175 meter-high Echo Park on a tributary on the Colorado River in the 1950s and two dams planned for the main stem of the Colorado River in the Grand Canyon in the following year (World Commission on Dams 2000: 18-19). Following this, it has resulted vigorous and coordinated oppositions to big dams. Such are the Hirakud dam, Pong dam, Koel Karo, Tehri, Sardar Sarovar are the few examples of opposition and stiff resistance to dams in India (Centre for Science and Environment 1999: 133-137). There are also other instances of opposition to dams such as Kariba dam in Pakistan, Arun III in Nepal, Three Georges dams in China, Pak Mun in Thailand, Ilisu in Tukey, Ralco in Chile, Epupa in Nambibia etc (World Commission on Dams 2000: 18-20).
The coalition of both northern and southern countries strengthened the oppositions and it had a major impact on the planning and policy making of an individual dams. Until the 1970s the opposition to dam was confined to concerns of government agencies, engineers and economists. But in the late 1980s environmentalists and sociologists played a greater role to influence the planning process and by the mid-1990s the involvement of affected people and NGOs in the process became more significant. The last few decades have also seen a number of significant policy steps in response to civil society demands and changing values. The World Bank offers a good illustration. As it is one of the first and single largest financer of the large dams it has adopted several guidelines on resettlement and environmental assessment since 1980, which I have earlier explained. This allows citizens adversely affected by Bank funded projects to file claims regarding violations of its policies, procedures and loan agreements. At the same time the Bank promoted more flexible approaches to information disclosure. Other important milestones include the World Bank’s withdrawal from the Sardar Sarovar Project in India in 1993 (Centre for Science and Environment 1999:137) and Arun III in Nepal in 1995 due to the impacts of resistance from affected groups and international NGOs campaigns around individual projects (World Commission on Dams 2000: 19).

Conventional political theory generally looks at protest and participation as distinct and contradictory forms of action. Yet they can be complementary in a democracy and protest movements may contribute to the legitimacy of democratic governance. Protest reflects the key aspect of political life- the relationship between the rulers and the ruled. Protest movements are the part of political participation, and they put pressure on the state authority to resolve the crisis faced by the ruled. Protests primarily originated due to the disagreement over any specific issue as opposition to the particular government policies. The type or the form of government in a country affects the number and intensity of the protests. Protest and movements in democratic form of government are more extensive and less deadly than than autocratic form of government. The structure and ethos of democratic regime better address and respond to the protests, armed rebellion or insurgency than the autocratic form of government (Swain 1997: 830-832).