

CHAPTER 3

LITERATURES ON DEVELOPMENT INDUCED DISPLACEMENT AND REHABILITATION IN INDIA: AN OVERVIEW

3.1 INTRODUCTION-CONUNDRUM OF DEVELOPMENT:

“I am most unhappy that development projects displace tribal people from their habitat, especially as project authorities do not always take care to properly rehabilitate the affected population. But sometimes there is no alternative and we have to go ahead in the larger interest.”

-----Indira Gandhi.¹

The concept of ‘development’ is one of the most debated concepts in the history of social science, because approaches to look at development have been changed from time to time.

Till 1960s people viewed ‘development’ as one-dimensional concept. The ‘economic growth’ was the mere goal of development and this single goal was supposed to be measured through the mechanisms of per capita income and GDP. W.A. Lewis in his work ‘The Theory of Economic Growth’ (1955) clearly stated that their emphasis is on ‘growth’ rather than ‘distribution’ but this one dimensional development has been facing serious criticisms since 1960s as inequality, poverty, illiteracy, hunger, epidemic as well as unemployment remained higher in many countries in spite of high rate of economic growth. This situation has been defined by Clower as ‘growth without development’. The one dimensional concept of development is very much inclusive in nature. It excluded vast majority of the population from its ambit on the basis of their caste, class,

¹ Prime Minister Indira Gandhi in a letter to one of India’s most respected social workers, Baba Amte.

race, gender, ethnicity as well as socio-religious affiliations. This development has led to environmental degradation, depletion of non renewable natural resources, pollution of air, water & soil as well as displacement of indigenous tribal people from their ancestral land. Over emphasis on 'national income' undermined non development expenditures such as health, education and social welfare.² This practical realization has made people to question the earlier view of development. People tend to look at development as a multi-dimensional concept. The social scientists started to associate development with economic growth, social justice, environmental protection, gender equity, human development, freedom, capability to choice and so on and so forth.

Therefore, focus has been shifted to 'growth with equity' (GWE) and 'growth with justice' (GWJ). The 'Economic and Social Council' also suggested that there should be a 'balance' between 'economic growth' and 'social development' in 1962.

In the 1980s, the issue of dams and development was brought into front by the World Commission on Environment and Development (WCED). It came up with a report entitled '*Our Common Future*' in 1987 to reconcile the goals of economic development and environmental protection. The world communities become aware of the fact that development occurs only in a healthy and sustainable environment and without development environmental protection has no meaning.

The 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. The overall goal of development is

² Charles, K.J. (1990) 'What is Development?' Gandhi Marg, pp: 177-181

therefore to increase the economic, political and civil rights of all people across gender, ethnic groups, religion, races, regions and countries.”³

Nobel laureate economist Amartya Sen has interpreted development as a “process of expanding the real freedoms that people enjoy”. He pointed out that “development requires the removal of major sources of unfreedom: poverty as well as tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or over activity of repressive states.”⁴ Amartya Sen has pioneered the concept of ‘freedom of choice’ as an essential attribute of people’s development, because through it people can freely choose those things which leads them towards a worth and dignified life. Moreover, he has equated ‘development’ with ‘human capabilities’. According to this approach, it is the people’s capability which judges a society’s standard of living rather than an average level of income. Commodities should be seen as way of enhancing such capabilities such as health, knowledge, self respect and the ability to participate in community life.⁵

The United Nations Development Programme (UNDP) has been publishing a Human Development Report (HDR) annually since 1990. Each and every HDR provides a new insight towards development. It considers that the overall development of a nation cannot be measured on the basis of per capita income only. Hence, UNDP has introduced several new indicators of development like Human Development Index (HDI), Inequality-adjusted Development Index, and Multidimensional Poverty Index (MPI) and so on and so forth. The introduction of such several indicators has implied that apart

³ World Bank (1991) ‘World Development Report’ Oxford University Press, Washington, D.C., pp: 31-32.

⁴Dutta, AkhilRanjan(2011), ‘*Political Theory: Issues, Concepts and Debates*’ (edited), ArunPrakashan, Guwahati, P. 228.

⁵UNDP(1996) ‘Human Development Report’, Oxford University Press, New York, p. 47.

from economic angle, development has environmental, social, cultural as well as gender angles.⁶

The whole discourse of development has remained incomplete unless and until referring it to gender justice because development does not take place by keeping one section of the population in the state of ignorance, exploitation as well as suppression. Realizing the significance of gender discourse four World Conferences on Women were held at Mexico (1975), Copenhagen (1980), Nairobi (1985) and Beijing (1995).

3.1.2 Approaches to Development: The Indian Experience-The Indian state was confronted by two different versions of reconstruction: the Gandhian project of reviving the village economy as the basis of development and the Nehruvian plan for prosperity through modernization and industrialization.⁷ After independence Indian state has adopted the Nehru-Mahalanobis⁸ model of development. This model has developed in the context of heavy industrialization and urbanization. This model was a mixed model- a joint venture of public and private sector. But keeping the socio-economic condition of India in mind Pt. Nehru deliberately emphasized on public sectors and confined the role of the private sectors to complementary one. Actually the first Prime Minister of India, who is also known as ‘maker of modern India’ core heartily believed that economic growth model measured by heavy industrialization, modernization and urbanization are the means for reviving fragmented economy of a newly independent country like India. It was believed that rapid economic growth could take place and the cumulative gains from the growth of GNP would automatically trickle down to the poor in the form of

⁶Dutta, AkhilRanjan(2011), ‘*Political Theory: Issues, Concepts and Debates*’ (edited), ArunPrakashan, Guwahati, P. 228.

⁷Baviskar, Amita(1995), ‘*In the Belly of the River*’, Oxford University Press, New Delhi. P. 16.

⁸P.C.Mahalanobis was the chief architect of the second five year plan (1956-61) as well as a key advisor to Nehru.

increased employment and income opportunities.⁹ But in practice, the benefits of the economic growth have not percolated down to the vast majority of the people resulting forced displacement of millions of people. Despite large scale displacement, the resettlement and rehabilitation of project affected people has been minimal.¹⁰

The tragedy with “development” is that it is not an absolute concept. One man’s development does not necessarily mean the development of another. In fact, in many instances development of the former may be at the cost of the later. This relativity has made development a conundrum or riddle-development for whom? Who pays the price? Who gets the benefits?

This is not what Pt Jawaharlal Nehru dreamt for. Nehru cannot be condemned for the failure of his ‘development model’. It is the ‘corrupted system’ which leads to inadequate rehabilitation and resettlement plan, improper environmental assessment and hence makes ‘development’ a ‘burden’ on poor and marginalized sections of the society.

3.2 DAMS AND DEVELOPMENT:

Pandit Jawaharlal Nehru considered dams as ‘temples of development’. Dams have multipurpose utilities- to generate electricity, flood control mechanism, to provide irrigation facility to drought prone regions as well as to boost navigation.

The first and foremost purpose for constructing dams is to generate hydroelectricity. Hydro power became a source of electricity as well as of mechanical power from 19th century onwards. The water power was used to produce electricity for the first time in 1882. Since then it increased world’s electricity supply gradually.¹¹ Till the first half of

⁹Wingaraja, P (1993), *‘New Social Movements in South: Empowering Poor’*, Vikas, New Delhi, P. 28.

¹⁰Seabrook, J(1993) *‘Victims of Development-Resistance and Alternatives’*, Veocso, London.P.39.

¹¹Deudney, Danial (1981), *‘Rivers of Energy: Hydropower Potential’*, World watch Paper 44, June. P. 6.

the 20th century dams were mostly built on western developed countries, especially United States and erstwhile USSR. But the focus has been shifted to the developing third world countries after the World War II. Actually it was the period where most of the countries of Asia, Africa and Latin America were decolonized from centuries of colonial dominance and the main challenge before these newly independent countries was- revitalizing their ‘fragmented economic structure’ through ‘westernized model of development’ based on industrialization, modernization as well as urbanization.¹² The significant contribution of hydro electric dams to ‘national development’ in the western countries encourages many third world leaders for constructing large dams in their respective regions.

Hydropower presently contributes 19% of the total supply of electricity over 150 countries. One third of the countries in the world currently depend on hydropower for more than half of their electricity needs. Hydro power is much more environment friendly in compared to other sources of electricity like oil, coal and nuclear. Hydro power provides stability to the world against fossil fuel depletion. It is the cheapest and least expensive form of energy.¹³ Hydropower can generate large quantities of electricity and help the economy grow at rapid pace. Subsequently, it facilitates for industrialization, which will generate livelihood opportunities for the skilled as well as for the unskilled workers.¹⁴

Another important reason for dam construction in the third world countries is to provide irrigation to the agricultural land specially to the drought prone regions. The third world

¹²Kuznets, Simon, (1995) “Economic Growth and Income Inequality”, *American Economic Review, March*, pp: 1-28.

¹³Deudney, Danial (1981), ‘*Rivers of Energy: Hydropower Potential*’, World watch Paper 44, June. P. 6.

¹⁴Dutta, AkhilRanjan(2011), ‘*Political Theory: Issues, Concepts and Debates*’ (edited), ArunPrakashan, Guwahati, P. 226.

countries are basically based on agrarian rural economy. Irrigation is vital to agriculture, especially to the tropical regions where rainfall is seasonal and unevenly disturbed. Half of the world's dams were built exclusively for irrigation, and an estimated 30 to 40% of the 268 million hectares of irrigated land worldwide rely on dams. Globally about 12% of large dams are designated as water supply dams. The four countries namely, China, India, United States and Pakistan have more than 50% of the world's total irrigated area. But the intensity to project irrigation component to the dams varies from country to country on the basis of their national requirements. Hence, while on the one hand Egypt gets 100% of irrigation from its Aswan Dam, on the other hand dams in Bangladesh and Nepal provide only 1% of irrigated production.¹⁵

Dams are the 'last resort' for the flood prone areas of the third world countries. Flood disasters bring threat towards the entire existence of human civilization. About 13% of the large dams of the world in over 75 countries have flood control mechanisms.¹⁶

Although dam construction has a prolonged history yet it is more or less a 20th century phenomenon. This is why over 45,000 large dams were built over 140 countries by the end of the 20th century. China had only 22 large dams before 1949 but till date China alone built around 22,000 large dams. According to the report of World Commission on Dam (2000), the top five dam building nation includes- China(22,000 dams), United States (6,390 dams), India (4000 dams), Japan (1200) and Spain (1000)¹⁷ but the dam construction gradually declined to 75 percent in 1990s as compared to its peak period of 1970s. According to the dam expert Khagram, there are four factors which leads to decline of the large dams. These are- *technical, financial, economic* as well as *political*.

¹⁵Sanmuganathan. K (2000), 'Assessment of Irrigation Options', Thematic Review, IV.2, Prepared for the World Commission on Dams, pp: 22-25.

¹⁶ Report of World Commission on Dam (2000), pp: 12-13.

¹⁷ *ibid*, pp: 8-10.

According to his opinion, we can prepare a list of the reasons behind declining graph of dam building in 1990s as follows:

Table 3.1: Reasons for declining dam construction in 1990s

FACTORS	ARGUMENTS
Technical	Decreasing availability of sites
Financial	Shortage of available funds
Economic	Failed to generate targeted amount of power
Political	Displacement
Source: Report of World Commission on Dam, 2000.	

3.3 DAMS, DISPLACEMENT AND REHABILITATION: NATIONAL SCENERIO

In the name of ‘national development’ dams have uprooted indigenous tribal people from their ancestral land which have transformed Nehru’s ‘temples of development’ to ‘burning ghats’ or ‘cremation grounds’ for the indigenous people. In many cases, displacement may not be in physical terms; but may be displacement from existing lifestyles and sources of livelihood without alternatives. Persons who are uprooted from their home ground and rehabilitated in another place have to undergo an entire process of resocialization and adjustment in an unfamiliar environment. Break down of social relations and community networks leads to physical and psychological stress. It also leads to economic disruption often resulting in impoverishment and insecurity. If the displaced people find host population hostile, it only makes matters worse.

If we look at the composition of the displaced population closely we find that the displaced people mostly belong to the poor and backward section of the society, largely

tribal people. According to the report of World Commission on Dam 2000, in India 40 to 50% of those displaced by development projects were tribal people, who accounts for just 8% of the 1 billion people.¹⁸

The disaster of displacement is not a recent phenomenon in our country. Rather it has entered into the discourse of public debates few decades back. Being the ‘biggest agent of development’ the construction of dams has faced enormous public protests from all parts of the globe. In India the first recorded mass protest against dam was witnessed in 1920 against the construction of Mulshi Peta Dam near Pune with the collaboration of Tata Hydroelectric Power Company.¹⁹ The dam was going to submerge 48 villages either fully or partially. According to the definition, partially submerged villages are those villages in which the total area of the land will not be submerged. Even if a very small portion of land falls above the submergence level, such affected villages will be termed as partially submerged. But this does not imply that the total population will not be displaced. However, villagers of these 48 villages, along with the leaders of the Indian National Congress, started satyagraha against the project. From 1920 the struggle continued till December, 1924. However the mass movement failed due to constant support of the British Government for the Tata Hydroelectric Power Company.²⁰

In the post independence era all major dams of India like Hirakud, Bhakra, Nagarjunasagar, Damodar Valley, Pong all became symbols of economic progress. Though lands were acquired and people got displaced, those affected were convinced that they were sacrificing in the interest of the nation. But with the passage of time and

¹⁸Fernandes, Walter (2004) *Dams and Displacement Woes*, The Statesman, 15th July 2004.

¹⁹Bharali, Gita(2004)“*Development Induced Displacement: The Struggle Behind it*”, Paper presented in International Conference on Development and Displacement: Afro- Asian Perspective, Hyderabad, on 27-28 Nov., 2004, p. 3.

²⁰Vora, R (2009)*The World's First Anti- Dam Movement: The Mulshi Satyagraha*, p.3

experience the perspective underwent a change. People were no longer as unquestioning and willing to pay the price of progress.²¹

3.3.1 THE HIRAKUD DAM: The construction of India's first major river valley project, i.e. Hirakud Dam on the river Mahanadi was started in 1948 and completed in 1956. It was inaugurated by Pt. Jawaharlal Nehru, the first Prime Minister of India, on 13 January, 1957. The dam managed floods in coastal Odisha as well as provided irrigation facilities to the drought prone regions to a great extent. The supply of hydro power helped in flourishing industries and mining activities in the region. But the number of displaced people and submergence of land was much high than estimated in the feasibility report.²² The following table shows the details.

Table 3.2: Proposed Estimation in 1947 and Actual in 1957 after the Completion of the Hirakud Dam

Categories	Proposed (1947)	Actual (1957)
Submergence of total land	1,35,000 acres	1,83,000 acres
Submergence of cultivable land	70,000 acres	1,23,000 acres
Number of families displaced	-----	26,501
Number of villages submerged	168	325
Number of police stations submerged	8	9
Source: Government of India (1947) <i>Mahanadi Valley Development: The Hirakud Dam Project</i> and Government of Orissa (2007) <i>Hirakud Cell Status Report</i>		

²¹Thukral, EnakshiGanguli and Singh, Mridula (1995), 'Dams and Displaced in India' published in the book "Development, Displacement and Resettlement: Focus on Asian Experiences", Vikas Publishing House Pvt Ltd, New Delhi, P. 94.

²²Nayak, ArunKumar(2013) 'Development, Displacement and Justice in India: Study of Hirakud Dam', Sage Publication, New Delhi, pp: 407-408, DOI: 10.1177/0049085713494299.

Out of the total displaced people, only 8.46% i.e. 2243 persons rehabilitated by the government which was much less than the government's estimated rehabilitation of 50% people in the feasibility report. The actual compensation rate was much less than the proposed compensation rate.²³ The following table shows the picture clearly:

Table 3.3: Estimate and Actual Compensation Rate

Categories	Proposed Compensation Rate (in Rs.)	Actual Compensation Rate (in Rs.)
Land	50-1000	200-600
Houses	250-3000	250-3000
Temples	1000 (pucca) 3000 (katcha)	0
Schools & tanks	1000	0
Wells	250 (masonry) 60 (katcha)	250 (masonry) 60 (katcha)
Trees	10-30 (fruit bearing) 10 (timber producing)	0
Source: Government of India (1947) <i>Mahanadi Valley Development: The Hirakud Dam Project</i> and Government of Orissa (2007) <i>Hirakud Cell Status Report</i>		

3.3.2 THE SARDAR SAROVAR DAM: One of the controversial projects is Narmada Valley Project which includes the construction of 30 major dams, 10 on the Narmada River and 20 on its tributaries. In addition to these, 135 medium and 3000 minor dams are planned. Since the river Narmada flows through three states- Madhya Pradesh, Maharashtra and Gujarat, there is disagreement between them over issues like the

²³ Ibid, P. 410.

sharing of water. But the tragedy is that these series of dam projects have been submerged large tracts of land and displaced a large population from their parental land. Of all the dams on Narmada, the Sardar Sarovar Dam in Gujarat has generated maximum controversy. It will affect 19 villages in Gujarat, 193 in Madhya Pradesh and 36 villages in Maharashtra. The project designers have done necessary technical surveys like topographical survey, hydro metallurgical data collection, geo technological investigation etc, but they do not even bother to conduct baseline socio economic survey carefully because the statistics of land acquisition and displaced person vary from estimate to estimate. There is a statistics of 66,675 directly affected people according to the report of the Narmada Control Authority (henceforth NCA). According to the National Institute of Urban Affairs (NIUA) 1,80,118 people will be affected by the project. The Vice-Chairman and Managing Director of Sardar Sarovar Nigam Ltd. estimates that about 1,00,000 persons will be displaced. Again various informal sources have their own figures. These figures do not include those who will be displaced by canals, compensatory afforestation, sanctuaries and secondary displacement. Like all other development projects tribals are the worst victims of the Sardar Sarovar Project too. According to the NCA's report, 11,082 persons from Maharashtra, 10,227 persons from Gujarat and 2,340 persons from Madhya Pradesh are tribals. The project implementing agency or concerned authority has no ethical responsibility towards the oustees. The potential displacees are ignorant about the dam or amount of lands to be submerged. The situation improved slightly after the movement against the dam under the banner of the '*Narmada Bachao Andolan*' gained momentum. As the movement started the oustees had gathered some information from speeches by anti-dam activists at *dharnas*, rallies and *melas*. But they were not aware of the policy as a whole. However, no information is better than misinformation. But the affected people of the Sardar

Sarovar Dam will be misinformed by the concerned authority. The oustees were being given the impression that they will be rehabilitated only if they agree to shift to Gujarat. As per the Award, the oustees have the right to make a choice which has been violated completely. Being the main beneficiary of the project, Gujarat is trying their best to get the project done by hook or by crook. Therefore they are making promises to locate land for the project uprooted people. Whether Gujarat has enough land and resources available to relocate all the uprooted people of three states- Maharashtra, Madhya Pradesh and Gujarat itself-is a different question altogether. The government tried to convince the people that the Sardar Sarovar Dam will pull them out from their chronic drought situation. The government of Gujarat has decided to entitle a minimum of 5 acres (2 hectare) of land to all uprooted people-landed, landless as well as encroachers. Moreover, 5 acres of agricultural land has been allotted to all major sons (on or above 18 years of age on the cut off year of 1980).²⁴

Since the other two states- Madhya Pradesh and Maharashtra will not get huge benefit as that of Gujarat, they have not implemented the provisions of the Award so generously. The government of Maharashtra allots 5 acres (2 hectare) of land to the landholders and encroachers uprooted people but the landless are allotted with only 1 acre of land and that too if they wish to move with the rest of the oustees to the same centre.

The government of Madhya Pradesh showed 'minimum responsibility' to rehabilitate the displaced people. The landholders, encroachers and landless uprooted people have been entitled with 2 hectares (5 acres), 1 hectare and no land respectively by the Government of the Madhya Pradesh.²⁵

²⁴ Thukral, Enakshi Ganguly & Singh Mridula(1995) 'Dams and the Displaced in India' published in the book "Development, Displacement and Resettlement: Focus on Asian Experiences" edited by Hari Mohan Mathur in collaboration of Michael Cernea, Vikas Publishing House Pvt Ltd,pp:96-99.

²⁵ ibid

Regarding the relocation site the oustees have showed two divergence attitudes. The one section of the uprooted people have showed their willingness to go to Gujarat, many of them have even started to resettle there already. The other section of the uprooted people completely rejects the proposal to resettle in Gujarat. The oustees of Madhya Pradesh have visited one relocation site in Gujarat, i.e *Gutal* and they found the land very uncultivable. But some oustees of Madhya Pradesh have showed their apprehension towards their own state government. Since the Government of Madhya Pradesh have adopted no resettlement plan for their project uprooted people, the oustees find the Government of Gujarat comparatively more trustworthy. According to a report published by the NIUA in 1984, in spite of having enough cultivable land in all *tehsils* the Government of Madhya Pradesh demanded the Government of Gujarat to release 2500 hectare of land every year for its oustees rather than showing its own available land. Although the oustees get very little compensation yet they are not in a position to fight for their justice. The social scientists Enakshi Ganguly Thukral and Mridula Singh have interacted with the oustees of the Sardar Sarovar Project and in their interaction the oustees told them: *“If we spend our time in the struggle for increasing compensation, who will cultivate our land? What will we eat?”*²⁶

There are some other sides of the displacement syndrome. Some oustees have lost their land but their houses remain unsubmerged. It becomes a trauma for the uprooted people where their source of livelihood is gone but their dwellings remain intact. Again there are some project affected people whose total lands have not been submerged but the surrounding area has! The situation has pushed the affected people to live in an island like condition. As enormous protests have been raised by various NGOs and civil society organizations for such situation, the governments of Gujarat and Maharashtra, in 1991,

²⁶ Ibid. P. 100.

have showed their positive reaction and ensured the acquisition of those lands too which are going to become islands but as like the previous cases the Government of Madhya Pradesh has showed no response.

The another problem has started as the government increased the cut off year for major sons from 1980 to 1987 by which land has been promised to all oustees who are 18 years and above, with 1987 as the cut off year. Since many families had already been displaced before 1987, their sons will find it difficult to find lands in the same area or close to where the family has already been resettled. This would lead to disintegration of families. Again the project takes another 30 years to complete by which time many more boys have turned 'major' and they are not being accorded the same status is bound to give rise to discontent.²⁷ The Sardar Sarovar Dam has witnessed organized mass protest for the first time under the leadership of Medha Patkar and under the banner of 'Narmada Bachao Andolan'(henceforth NBA). The movement was based on purely Gandhian nonviolence ideology. In 1985, after hearing about the Sardar Sarovar Dam, Medha Patkar and her colleagues visited the project site and noticed that the people who were going to be affected by the construction of the dam were not given any compensation for their displacement and no steps were taken by the government for their rehabilitation. The environmentalists reported that the project will submerge about 1,30,482 hectares of land, of which 55,681 hectares is prime agricultural land and 56,066 hectares is forests. In this backdrop the 'Narmada Bachao Andolan' was started. Baba Amte, Arundhati Roy and many other noted individuals also joined the movement. As a Gandhian protest of non-cooperation and civil disobedience the protesters refused to cooperate with the project authorities at any cost and blocked the all paths to the construction site and denied completely to leave their villages. Within this chaotic environment the World

²⁷ Ibid

Bank had to step back from funding the project in 1990 and ultimately cancelled its participation in 1995. The Union Government have bound to come in a negotiation with the NBA for the first time. However, the Supreme Court of India allowed continuing the construction of the dam in 2000 with the rule that the height of the dam could be raised to 90 metres.²⁸ The project is inaugurated by the Prime Minister of India Narendra Modi on 17 September, 2017.

3.3.3 THE NAGARJUNASAGAR DAM: Another hydro electric project i.e. construction of Nagarjunasagar Project started in 1955 across the river Krishna at Nalgonda District in the state of Telengana. It is the largest and tallest Masonry dam²⁹ in the world. The project has a power generation capacity of 815.6 MW. The baseline socio economic surveys were conducted after 1957 which were supposed to conduct prior to the construction of the dam and continued till 1965. Prior to the completion of the survey the displacement started in 1959.

3.3.4 THE TEHRI DAM: The Tehri Project, located at Tehri Garhwal district of Uttarakhand state in 1969, expected to affect about 13,413 persons but subsequently the Working Group for the Environment Appraisal of Tehri Dam published its report in 1979 which explored the expected number of displacement of people as 85,600. According to the 1995 report of Tehri Dam Project Organization (TDPO), out of 135 villages, 37 would be fully submerged once the dam is completed. The total land affected by the project is 13000 hectare.³⁰

²⁸ Borbora, Bondita (2013) '*Social Movements in India*' published in Politics in India: Issues, Institutions, Processes; edited by Akhil Ranjan Dutta, Arun Prakashan, Guwahati, P. 385.

²⁹ Masonry dams are the dams made out of masonry-mainly stone and brick and sometimes joined with mortar. They are either the gravity or arch gravity type.

³⁰ Maldonado, J. K. (2008) '*Putting a Price- tag on Humanity: Development- forced Displaced Communities Fight for More than just Compensation*', P. 15

3.3.5 THE BHAKRA DAM: It was one of the ‘dream projects’ of Pt Jawaharlal Nehru. The construction of the dam began in 1948 on the river Sutlej in the state of Himachal Pradesh. On 17th November, 1955, Pt. Jawaharlal Nehru poured the first bucket of concrete into the foundation of the Bhakra dam. On that occasion, he addressed the huge gathering of around 10,000 people as “This is a gift to the people of India and to the future generations from the workers who built this dam”. He also added “We have yet to reach many stages in our long journey towards the goal of a progressive and prosperous India. In fact there is no final end to the journey in the life of a nation. How far we, the people of India are able to go in this journey, will depend on the strength of our hands and feet.” Due to Nehru’s hope and expectation from the project Mr. Bhimsen Sachar requested Pt. Nehru to name the Bhakra dam after him but Nehru rejected the proposal of naming Bhakra dam as ‘Nehru Dam’³¹. The dam was completed on 22nd October, 1963. This 225.55 m concrete wall created a lake called Govind Sagar spread over 168 square km with the water a storage capacity of 9340 million cubic meters. But this ‘new temple of resurgent India’ submerged 44,440 acres of land as well as displaced 36,000 people from 375 villages-256 from erstwhile Bilashpur Province, 110 from erstwhile Kangra Province and five from Mandi; and pushed them to live in the adjacent hills.³² They were resettled in various districts of Punjab, Haryana and Himachal Pradesh. The scattered relocation of the villagers collapsed socio-cultural ties leading to psychological trauma. Nand Lal Sharma who was the president of the ‘Gramin Bhakra Visthapit Sudar Sammitee’ told the Times of India that they feel cheated as no proper rehabilitation and resettlement package has been given to them after 50 years of the dam. Majority of the oustees were forced to settle in the sanctuaries and forest areas but no ownership right

³¹ The Indian Express (1995) ‘Nehru Opens Work on Bhakra Dam’, 18 November, 1995, vol. XXIV, No 41 p.1. Retrieved 25 August 2017.

³² Maldonado, J.K. (2008) ‘Putting a Price-tag on Humanity: Development-forced Displacement Communities Fight for More than just Compensation’, p.9.

over these areas has been bestowed to them by the government till date. Nand Lal Sharma said, “I was only a class VII student when 71 bighas of land in Bilaspur District of Himachal Pradesh owned by my family has been acquired for the construction of dam. In return we were given 2.5 bighas of land. Today I am 70 years old, waiting for the promised resettlement share by the dam authority.”According to the NGOs like Manshi Ashar which has been working for the rights of the affected people of the Bhakra Project explored that the landless oustees have received compensation of Rs.1000/acre for agricultural land and Rs.250/acre for uncultivable land. But the landless oustees received only Rs. 200 as an overall compensation. The lack of official data for agricultural labourers and landless people further multiplies the plight of the uprooted people. ³³

3.3.6 THE PONG DAM: It is also known as Beas Dam as it is located on the river Beas in the state of Himachal Pradesh. Its construction work has been started in 1961 and completed in 1974. The dam has submerged 28,271 hectares of land. It has displaced around 30,000 families consisting of about 2,00,000 people scattered in 339 revenue land. The reservoir submerged the rail track between Jawanwalal Shehar and railway station on Pathankot- Joginder Nagar section. When the oustees arrived at the relocation sites in 1970-71 they found the condition of resettlement sites very pathetic-no water supply, no road, no electricity, no school, no hospital, no grazing land, no sanitation, no place of worship as well as no burial grounds.³⁴

The acquisition of land was done under the provision of Land Acquisition Act, 1894 till 2013. The act was introduced by the British Government in order to control, oppress and exploit Indian masses in the name of ‘public domain’. By using the concept of ‘public

³³ The Times of India (2013) ‘50 Years on, Bhakra Dam Oustees Wait for Rehabilitation’, dated on October 22, 2013. P.4.

³⁴ Singh, K (1988) ‘Woes of the Oustees of the Pong’, Lokayan Bulletin. pp: 53-59.

domain' the British were able to theorize and legitimize their control over the land, which was most fundamental resource for people's survival. Millions of people have been displaced by the legislation. The act allows the government to acquire land in the national interest for water reservoirs, canals, plants, transmission lines and highways.³⁵ However, this brutal Land Acquisition Act, 1894 has been replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (henceforth Land Acquisition Act, 2013). The act came into force from 1st January, 2014.

3.4 IMPOVERISHMENT RISK AND RECONSTRUCION MODEL (IRR) IN HYDROELECTRIC PROJECTS: INDIAN PERSPECTIVE

In the above analysis we have tried to look at implications of IRR model developed by Michael Cernea in Indian context. From the above discussion we can draw a conclusion that IRR model has limited applicability in India as neither the governments nor the project implementing agencies take the matter of displacement, rehabilitation and resettlement of the project uprooted people seriously. Since the concerned authority deal the whole issue from a purely mechanical or technical angle they do not even bother to adopt the reconstructive means as prescribed by Michael Cernea like land based resettlement, generating reemployment, providing skill based training, reconstruction of houses, wells, tanks, schools, hospitals with all modern equipments, places of worship, graveyards, cowsheds, stables, common grazing land for cattle, access to adequate nutrition as well as reconstruction of community linkages destroyed by the displacement from the ancestral land. In the absence of reconstructive means the impoverishment risks turned into reality and pushed people into the state of poverty and destitution. The

³⁵ Ibid

intensity of the impoverishment risk varies on the basis of the geographical location, class structure of the project affected people and the management. In case of the Mahi Bajaj Sagar Project in Southern Rajasthan, the oustees were promised to provide a wide range of basic public services, such as, schools, clinics, street lights, public taps for drinking water, village-to-city transport bus service, and so on. But on arrival in resettlement colonies, they discover to their dismay that the basic services promised to them before the move just do not exist. They may get those services eventually, but nobody knows when. Many services remain beyond their reach, almost forever. The new colonies have schools and dispensary buildings but usually no teachers and doctors. This loss of basic public services contributes to their continuing impoverishment.³⁶

In country like India where the richest 10% own 85% of the nation's GDP, the intensity of economic and social inequality is much higher. In the above mentioned Mahi Bajaj Sagar Project in Southern Rajasthan, where on the one hand people with influence were relocated in a flourishing town i.e. Kandu Colony with fully operational civic amenities on the other hand the poor tribal Bhils were resettled in the camps too far away from their original habitat with no or very limited civic amenities. Again, most of the Bhil tribal people had no legal title to their ancestral land and hence deprived of government compensation. Only some of them managed to get compensation through their legal documents. Moreover due to scarcity of land, the Rajasthan government provided cash compensation and that too at its market value instead of replacement value which makes the indigenous tribal Bhils landlessness. Thus, Mahi Bajaj Sagar is a perfect example of becoming the impoverishment risks into reality due to lack of reconstruction model.³⁷

³⁶ Mathur, Hari Mohan (1998) "*The Impoverishment Risk Model and its Use as a Planning Tool*" published in the book 'Development Projects and Impoverishment Risks: Resettling Projects-Affected People in India, edited by Hari Mohan Mathur and David Marsden, Oxford University Press, Delhi, P. 70.

³⁷ Ibid, pp: 71-72.

Again in case of Hirakud Dam, India's first major river valley project, also pushed a huge number of indigenous people into the state of acute poverty due to its inadequate and unplanned rehabilitation and resettlement policy. The rehabilitation camps were poorly equipped- full of jungles and wild animals, devoid of basic amenities of life as well as located in the densely forested area. Again these camps were located so far away to the original villages of the oustees which prevented them to resettle there.³⁸ The distance factors have two implications- *one*, the oustees found difficulties in shifting their luggage like tile, bricks, wood and cattle to those rehabilitation camps. *Two*, too far away from ancestral villages aggravated their apprehension of losing community life styles as well as belief systems in a totally new unfamiliar environment.

In case of the Pong Dam oustees they do not have faith in the government's scheme as well as they were uncertain about the new location site. Hence, most of the oustees of the Pong Dam found their own resettlement. Due to the submergence of land the condition of non farming communities (barbers, carpenters and blacksmiths), village persists and village guards become much more pathetic as they have to loss their clients, occupations as well as livelihoods with the displacement. The case of village persists and village guards is somehow unique. They have a sufficient amount of land gifted by the villagers as a matter of love, affection and respect. But these lands have no legal sanction, hence deprived of compensation.

We can see non applicability of the IRR model in case of Sardar Sarovar Dam too. In a report published by the Planning Commission of India in 1998 entitled *Dams, Displacement, Policy and Law in India*, the plight of the Sardar Sarovar Dam's oustees have been described through the narratives of *Nanhe Ram*, a 60 year project uprooted

³⁸Nayak, ArunKumar(2013) 'Development, Displacement and Justice in India: Study of Hirakud Dam', Sage Publication, New Delhi, P 410, DOI: 10.1177/0049085713494299.

people. Displacement left him with no land and no cattle. His ageing wife work all throughout the day in the fields of the big farmers of the village to keep their fire burning in the kitchen. Like *Nanhe*, the dam has uprooted 2721 families of 59 villages without any consultation with them. Amongst them 85% were tribals or dalits. The haunted memory remained afresh in the minds of *Nanhe Ram* and other uprooted people. In 1977, they were informed about the submergence of their villages just few months before the actual displacement and they were given Rs. 540.00 as compensation in the first installment. The compensation money was too less to be utilized. Instead of taking the responsibility to resettle the displaced people, the concerned authority advised the oustees to go to their relatives' home. *Nanhe Ram* left with no choice but to worry. First he worried about his beloved cow which he had to give to an Ahir cowherd at the cost of Rs 150.00 each year in order to look after his cow. They were displaced just a day before the monsoon. Most of the uprooted families like *Nanhe Ram* had to spend the first monsoon under big trees. The remaining installments of compensation i.e. a sum of Rs. 2000.00 were given in 1992, completely 15 years later. Again the resettlement villages were located at the periphery of the dam, connected by earth roads that get submerged after the rains each year. In such a remote environment, access to schools, hospitals, sanitation and employment were unthinkable which made most of the uprooted people to migrate into city slums.³⁹

Although we have a lot of experiences of non-applicability of IRR model in the preparation of Rehabilitation and Resettlement (R&R) Plan, social scientist Sam Thangaraj reported two World Bank funded projects, in Odisha and Tamil Nadu, to be used the IRR model in the preparation of R&R action plans. He also reported the use of this model has been recommended to other project managers and consultants involved in

³⁹ Planning Commission of India's report (1998) 'Dams, Displacement, Policy and Law in India', pp: 1-2.

R&R operations, and expects it to become a regular feature of R&R in future.⁴⁰ The state of Odisha seriously attempted to implement the land-for-land option and provided either irrigated or unirrigated land of various sizes to displaced persons. In the upper Indravati Project, each of the displaced persons has been provided with either 1.25 acres of irrigated land or 2.5 acres of unirrigated land as the minimum resource base by the government of Karnataka. Again the government of Tamil Nadu initiated a provision to reconveyance of unwanted lands to the original owners. In order to tackle impoverishment risk of joblessness, the provision of training and other income generating mechanisms have been provided by the concerned authorities in projects like Upper Indravati Project in Odisha, Maharashtra Composite Irrigation Project etc with special reference to women and their organizations such as Development of Women and Children in Rural Areas (DWACRA) and various self help groups.⁴¹

The government of Karnataka approved of Rs. 28,000 to each project affected people for the construction of a house. The government of Maharashtra has also decided to provide Rs 15,000 to the oustees who are agriculturalists and Rs 10,000 to the oustees who are non-agriculturalists as housing grants in the Maharashtra Composite Irrigation Project. The government of Odisha also provided a housing grant of Rs. 17,000 to each oustees. The provision of providing housing grant helps in improving the quality of housing of the displaced.⁴²

⁴⁰Mathur, Hari Mohan (1998) “*The Impoverishment Risk Model and its Use as a Planning Tool*” published in the book ‘Development Projects and Impoverishment Risks: Resettling Projects-Affected People in India, edited by Hari Mohan Mathur and David Marsden, Oxford University Press, Delhi, P. 73.

⁴¹Thangraj, Sam (1998) “*Addressing Impoverishment Risks: Some Examples from World Bank-assisted Projects*”, published in the book ‘Development Projects and Impoverishment Risks: Resettling Projects-Affected People in India, edited by Hari Mohan Mathur and David Marsden, Oxford University Press, Delhi, pp: 83-85.

⁴² Ibid, P. 86.

The R&R action plan of the Upper Indravati Hydroelectric Project organized ‘Udyogi Mahila Sanghas’ in association with NGOs such as *Aragamee and the Council of Professional Social Workers* for the development of micro-enterprises for women. The R&R action plan initiated social forestry programmes as part of the Cluster Based and Family Oriented Rehabilitation Action Plan (henceforth CBFORAP) in order to ensure oustees’ access to non-timber produce. CBFORAP also provided irrigation, productive assets and linkages with other sources of funds to the uprooted people. Again in the Maharashtra Composite Irrigation Project, as a part of the ‘retrofit’, the government of Maharashtra provided financial assistance up to Rs 35,000 for digging and construction of wells, Rs. 20,000 for their electrification as well as Rs 18,000 for income generating activities to the landless displaced.⁴³ Through these initiatives, the risk of marginalization has been tried to overcome or minimize.

In the whole discourse of displacement, the loss for common property resources, such as, forested land, water bodies, burial grounds etc do not take into consideration for compensation as these are not owned by families but customarily by village clans or the lineage group. On the one hand the displaced families do not get compensation for the lost common property resources and on the other hand they do not have access to common property resources in their relocation site. The appropriate R&R action plan in the Upper Indravati Project provided access to common property resources to oustees. The government of Odisha resettled them in the command area of the project so that they could enjoy the benefits of irrigation. As a result of proper R&R action plan through social forestry programme, 91% have access to fuelwood, 71% to fodder, 63% to timber and 56% to non timber produce. It is easy to measure quantitative losses like loss to land, house, job etc. but it is equally difficult to measure qualitative losses like loss to

⁴³ Ibid, pp: 88-89.

community life style, age old beliefs as well as bonding but in the Upper Indravati Project, it is the displaced themselves who were given opportunity to choose their own clusters on the basis of their social relations, relatives and friends in the relocation site. As part of CBFORAP, the R&R unit was also further integrating the displaced women with those in host villages by including them in micro-enterprise groups. The R&R unit was also involving NGOs such as *Aragamee*, which had already been working with the displaced, to form community groups in all resettlement clusters. In this way the project helped the uprooted people to regain their sense of community leadership and mutual help arrangements so that they are socially integrated.⁴⁴

3.5 CONCLUSION:

It would be seen from above discussion that whole paradigm of development has been changed with the changing dimension of time as well as society. The ‘economy’ based development has transformed to multidimensional concept-human centric, environment centric as well as gender centric. In this backdrop, Pt Jawaharlal Nehru’s ‘temples of development’ has been viewed from social and environmental point of view along with economic point of view. In the name of ‘national development’ dams have been displaced a vast majority of indigenous people from their ancestral land. The so called ‘national development’ do not care about indigenous people’s losses to home, land, their beloved cattle, employment, food security, sanitation, health crisis as well as age long community life style, beliefs, customs and cultures. In the Assamese feature film ‘*Saagoroloy Bohu Dur*’, the renowned film producer Jahnu Baruah explored how the construction of a concrete bridge over a river as a symbol of ‘national development’ brought threat upon the lives of boatmen. As a result of threat, apprehension and uncertainty towards future, one of the boatmen namely, *Powal*, started to destroy the

⁴⁴ Ibid, pp: 89-90.

foundation of the concrete bridge on a rainy midnight because the river was the mere source of livelihood for them for generations after generations. But that does not mean that we go back to the primitive age with no dam, no industry, no electricity, no vehicle and no modern equipments. Meanwhile we also do not want development of an elite section at the cost of the downtrodden majority. Here lies the significance of the 'Impoverishment Risk and Reconstruction Model' provided by Michael Cernea. He identified eight risks of impoverishment i.e. landlessness, joblessness, homelessness, marginalization, food security, increased morbidity, loss of access to common property resources and community disarticulation which are bound to occur if they are not detected in time and no corrective measure is taken for their containment. In order to prevent these potential risks from becoming actual impoverishment disasters M. Cernea also suggested eight reconstructive mechanisms against each risk. This model is not limited to cognitive purpose alone, but has operational implications as well. It is an effective tool for preparing, planning and managing the implementation of development projects that involve resettlement, in a manner that will avoid or mitigate the poverty risks. From the above discussion we can see non applicability of IRR model in the R&R action plans of most of the major dams of India like the Hirakud Dam, Sardar Sarovar Dam, Bhakra & Nangal Dam, Pong Dam, Damodar Valley Project, etc., but there are few hydroelectric projects in which we can see serious application of IRR model in their R&R action plan due to their proper risk analysis, adequate plan with anticipated risks, involving affected people to the project, a well formulated research methodology, baseline socio economic survey, use of information gained from risk analysis and socio economic survey as a monitoring and evaluation tool, proper estimation of cost with special emphasis to resettlement and rehabilitation budget, provision of staff training and last but not the least to strength institutional capacity. In every instance 'greater good of

the greater number' cannot rationalize displacement, because Mahatma Gandhi said,
*"Recall the face of the poorest and weakest man you have seen, and ask yourself if this
step you contemplate is going to be any use to him."*⁴⁵

⁴⁵Gandhi, M.K. (1910) 'Indian Home Rule', The International Printing Press, Phenix, Natal, P. 24.