

Socio-economic Impacts of Multi purposes Irrigation Project on

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Abstract

The paper focuses on Multi Irrigation Project, an unresolved issue of resettlement and rehabilitation and problems of the people faces by this project. Displacement is major problem across of the world. Dams have been built for thousands of years- to mange flood waters, to harness water as hydropower, to supply drinking water, to supply water for industry, to irrigate fields. The belief that dams, by increasing irrigation and hydroelectricity production, can cause development and reduced poverty led developing countries and international agencies such as the World Bank to undertake major investments in dam construction. Second side it creates lots of destruction in society as well hampered the ecosystem. Dams had displaced million of people from their ancestral habitat, where they played and grew up, and got emotionally attached to, will undergo unbearable pain and mental agony when they have to permanently depart with their house, lands, culture, livelihoods and the environment. This paper is based on qualitative and quantitative research method.

Introduction

Developmental projects Dams played an important role in socio- economic upliftment of humankind. Developmental projects take a huge amount of area to grow thus displacing a lot of people from their home. After independence Nehru regime impoverished Indian Society by constructing big dams and heavy industries, calling it the 'Modern Temple' which would contribute in national growth. Main aim was development through distributive justice. Several projects started after Independence such as heavy Industries, power and mining sector for

creating productive resources. Dams and reservoirs were built for boosting agriculture and most of these projects started between 1960s and 1970s for irrigation projects, some of them being:

- Hirakud Dam in Orissa,
- Koyna Dam in Maharashtra,
- Damodar Valley Project in Bihar now in Jharkhand,
- Ukai Dam in Gujarat,
- Rihand Dam in Uttar Pradesh,
- Upper Krishna Irrigation Project in Karnataka

Many other projects such as minor irrigation project, mining, Defense also displaced thousands of people. Nehru in his speech to the people displaced due to Hirakud dam project in 1948 said - *'If you suffer, you should suffer in the interest of the nation'*. This clearly indicated developmental projects existed for national growth and development.

Indian government, planning commission, owners of the large projects do not have a particular record of total number of people who are displaced due to this development projects till now starting from the time of independence. India comes third in the world for possessing highest number of Dams. Other ways in which dams displace people apart from the project itself are due to colonies of resettlement of peoples, due to canals, downstream impact, catchment area treatment, compensatory afforestation etc. Take for instance the case of Sardar Sarovar Project, the government estimated displacement of 41,000 families and a much large number of people got displaced due to making of canals which take up 186,000 ha of land compared to reservoir area 40,000 ha. More than ten thousand fisher folk families and individuals will lose their livelihood in downstream area due to complete stoppage of water flow in summer season. And about one thousand families have already been affected by the colonies.

World Bank review that an average of 13 thousand people are displaced by constructing new dams currently (Cernea 1996b). India's total displaced people account for over 39 million. And total 4,387,625 persons displaced across 140 large and medium dams in India.

India's has a huge population and majority of it is dependent on agriculture. After green revolution brought with itself intervention of technology in agriculture, HYV seeds, Machinery and Big canals emerged for irrigation. In the name of hydroelectricity, proposals came and construction of large, medium dams started. India is on a large-dam building spree, with more than 5 thousand dams already blocking almost all of these rivers, and more to come. These dams have had a profound negative impact on communities and river ecology both upstream and downstream. Benefits of these dams is one sided with more focus on generating electricity, strengthening irrigation capacity to farm land, and also for flood control. Certain communities are paying huge price in the name of development such as displacement, migration, loss of livelihood etc.

Primitive groups or tribal consider land as god and their culture is based on the source of spiritual power. Land is the place where they find food from, hunting and fishing, farms, building and tools materials, home etc. The core problem of displacement due to such developmental projects is people losing their livelihood and their potential impoverishment. Livelihood in which economy is dependent. Many jobs, much valuable land, trees and other income generation assets are lost. links between producers and their customers often are severed and local labor markets are disrupted. Place of prayers and ancestral graves, cremation center which are a link with people's identity gets lost.

1. Impacts on Women and Children

Developmental projects categories such as large dams has brought about a profound socio-cultural economic disruption of the displaced communities. Post-Independence there are many movement emerged and showed the picture of victimize displaced communities, Narmada Bachao Andolan, Tehri Bandh Virodhi Sngharsh Samiti brought into focus serious and raised voice against the violence. Gender as a specific category is need to recognize in the process this discourse. Displacement also has a gender dimension, Gender is specific refers to social roles in a family and other institutions; it has a social relation and practices. Gender plays an important role or central role in societies to manage resources.

Due to displacement family lost land, forest that leads to deprive women at the resources that met the family's food, water and other needs. Women in general experienced the natural environment as their household or livelihood supportive mechanism fuel, fooder, fertilizer,

organic manure, timber, medicine etc. these things played an important role to meet the basic needs in everyday in life. These subsistence economy is mostly non-monetized. These freely gather in the environment and nature. Women play a crucial role in a family to gather these non-monetised materials from the forest or common property resources. Family member shares a single roof of housing and in rural area farming in the subsistence economic for survival. Women have free access to use this resources and at certain time when the male members migrate to another cities for wage earning that time. Women play a crucial role to handle ownership of house.

2. Impacts on Environment

Developmental projects such as dams, mines creates social and environmental distraction, one side globally has demand of water, irrigation, energy that leads to increasing the numbers of dams and reservoirs to fulfillment of these demands, other side adverse impact of environment. Some dams in india related to accidents breakdown by the heavy water pressure. By the 1974, 40 dams in India faced these such kind of accident, the reason was inadequate spillway capacity, defective material used for and earthquakes. 1979 Machu Dam Gujrat, 1,419 people died this was the worst dam disaster in India, the earth and monsoon dam burst when the spillways gates jammed and heavy raining filled the total reservoir.

2.1 Flash floods

Reservoir and dams are always full of water for generating hydro electricity and water supply. Sometimes less water leave in the downstream area. In the monsoon or rainy season heavy water comes in the river. Consequentlydams have the make panic discharge of more water leads to the floods in the downstream area and affects human society. In 1973 in Gujarat Panchmahal district 42 tribals village in Shera and Lunawada talukas faces such kind of flood during monsoon heavy water release downstream of river Mahi's Kadana Dam.

2.1.1 Upstream Impacts

Dams or river is a kind of barriers that divides river into two parts one is upstream and another is downstream. Upstream is full of water as a reservoir. It becomes a barrier to movement of certain migratory river animals and fishes such as seolmen and trant.

Another problem is dams have ruined heavy forest in catchment areas. 490,000 ha of forest covered by the reservoir water between 1951 to 1976.

Reservoir Sediment:- most of the rivers carry sediment down their river beds and deposits that makes river deltas, oxbow lake, coastal shores,. These sediments build up in the reservoir and varies. It leads to the reduce capacity of water in reservoir due to cover the storage space of sediment also reduce the ability to produce hydroelectricity power, reduce availability of of water for irrigation.

2.1.2 Down Stream Impacts

Downstream is the lower part of dams. Water comes after releasing from spillway gate. Sometimes people lose access to clean water, grazing land, fuel wood, vegetables. All dams reduce sediment load downstream because lots of sediment collected in upstream catchment area.

2.2 Water pollution

In most of the cities drainage water pour into the river and that comes ultimately into the dams and reservoir. This polluted water pollutes the dams and reservoir that goes into downstream.

2.3 Health Impact

Dams and reservoir is helpful to human life but it has adverse impacts on human health. Reservoirs are the best places of breeding of vectors disease such as malaria, sanistomasis and Japanese encephalitis.

3. Impoverished risk

The most widespread effect of displacement due to developmental project is the impoverishment of considerable numbers of people. Such impoverishment, with its de-facto lack of social justice and equity, is manifest in numerous other countries throughout the developing world like India when involuntary resettlement occurs. A vast majority of people lost their livelihood. Development will continue, however, to require changes in land use and water use thus make degrees of population relocation. Yet, this does not mean benefits of development should bring unequal distribution. Cernea describes the major risks emerges after the displacement

3.1 Landlessness:-

People lose their supportive system where productive systems, commercial activities and livelihoods are constructed. Local habitats also lose subsistence, resources, cultural sites, social structure, network identity. After the loss of productive system directly impoverish the people. Some researchers have extensively studies the issue of landlessness. Rengali's report shows that percentage of landless families after relocation doubled from 4.6 to 10.9 percent. In Singaruli coal mines project the proportion of landless people increased after displacement from 20 percent to 72 percent.

3.2 Joblessness:-

there are higher risks to lose wage employment for those who are employed in enterprise, services and agriculture both in rural area and urban areas. Government face major problems in restructuring the employment. In urban areas, workers who work in different enterprises and organization lose jobs in industry and services. In rural areas, landless labors lose access to work on land owned by others and also lose the use of assets under common property resources. Self-employed people like small business, small producers, craftsman, shopkeepers lose their small business. A survey conducted in 5 tribal village in Orissa, Talcher (Pandey 1996) found that unemployment increased from 9 percent to 43.6%. Policies have provision for providing vocational training like skill development training to the targeted displaced people but necessarily jobs. Joblessness directly creates a bad impact on household income generation capacity.

3.3 Homelessness: -

Those people who get displaced due to such projects go through loss of shelter till the resettlement. Loss of family's individual home and loss of a group's cultural space tends to result in alienation and status of deprivation. According to reports from China's Danjiangkou reservoir project, about 20% of those relocated became homeless and destitute after resettlement. Resettlers often cannot incur the labour and financial costs of rebuilding a house quickly and are compelled to move into temporary shelters. Sometimes a violent destruction like condition emerges between the resettler and host communities for taking home-shed land. In the project of

Krishna irrigation in Maharashtra, 59% of the displaced families were found living in temporary/semi-permanent house even 10 to 15 years after their relocation (Joseph 1998).

3.4 Marginalization

This occurs due to increasing risk of homelessness, landlessness, joblessness. The entire displaced community reaches to the verge of lowest socio-economic status as compared to their local areas. Marginalization goes along with loss in self esteem especially when displaced people become outsiders and newcomer to other communities. Economic marginalization risk is accompanied by social and psychological marginalization, a manifestation of drop in social status, resettlers' loss of confidence in society and in themselves, a feeling of injustice therefore becomes more vulnerable. Marginalization is of multiple kinds. Sometimes resettled people feel as strangers and do not get opportunities. Marginalization also occurs through the loss of on farm as well as off farm income sources, as found in Nepal Kulekhani Hydroelectric project (Bjonnes 1983, Pockharel 1995).

3.5 Food security:-

Displacement affects people to move into the risk of chronic undernourishment, defined as a calorie-protein intake levels below the minimum necessary for normal growth and work. Inadequate resettlement leads to food insecurity and undernourishment. After displacement there are sudden drops in food crop availability and income.

3.6 Loss of Common Property Resources:-

Common property resources(pastures, forest, river etc) where families get alternate resources and sometimes it is a source of alternate livelihood. People lose access to common property resources. Fisher man communities whose livelihood totally depends on fishing from Common Property Resources are at a loss of livelihood. Typically there is no such kind of provision to compensate for common property resources. These resources are compounded by loss of access to some public services, such as school, PHC can be comes under this group of losses common property resources. Common property resources leads to poverty, and impoverishment. In india semi arid regions between 91 and 100 percent of firewoods, between 66 and 89 percent of domestic fuel, and between 69 and 80 percent of poor households' grazing land supplied by

CPRs land. A study of 7 projects in Orissa between 1950 and 1994 causing displacements has found that no compensation has been paid for CPR by any projects (Pandy and Associates 1998)

3.7 Social Disintegration:-

Displacement causes a profound unraveling of existing patterns of social organizations. This unraveling occurs at many levels. When people are forcibly moved, productive systems, life sustaining informal networks, trade linkages etc are dismantled.

Displacement projects brings prosperity and increase the buying power of the people but leads to an increase in the cost of living, which affects the poor displaced people. They lost alternate resources through Common property resources such as fuel etc. cost adds into their buying power.

Some vulnerable groups have higher degree of exposure to the risks of economic displacement or to the loss of their social support networks, others are more vulnerable to health risks.

7. Conclusion

Recent scenario developmental projects of multi purposes irrigation displaced millions of people. Through this projects lead to affect the people and make them impoverish. People lost shelter, livelihood, culture in the name of nation development. the major question arise is whether it would be just to displace the project affected persons for development projects, which do not helping them to improve their life well being, as has been in past. It destruct the family structure and socio economic conditions.

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