



Impact of Dam-Induced Displacement and Resettlement: A Case Study of Indira Sagar Project Polavaram

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KEYWORDS

development projects, dam construction, displacement, community resettlement, Andhra Pradesh

ABSTRACT

Involuntary displacement from one's land and habitat carries with it the risk of the migrant becoming poorer than before displacement, since a significant number of migrants do not receive adequate compensation for loss of their assets nor effective assistance to re-establish them and make them productive. Unless the local government puts special attention to proper rehabilitation and resettlement of displaced families, especially tribes, they will continue to be victims of such programs and be drawn into pathetic situations. In this backdrop, the present study has made an attempt to find out the impact of involuntary displacement and rehabilitation of Indira Sagar Project on the tribal community in the State of Andhra Pradesh. An ethnographic method has been adopted to carry out this study. The fieldwork of research was conducted in December 2015. To collect primary data anthropological tools and techniques were used to study the various aspects of displacement, and rehabilitation. Secondary data has been collected from books, articles, reports and available literature. The study finds that the impact of dam-induced displacement and resettlement brought change among the families resettled in the rehabilitation colony.

Introduction

Economic development tends to the creation of new infrastructures in order to cater to the increasing needs of a growing population. It often involves the acquisition of land and other assets, which can adversely affect the socioeconomic well being of the people as well as the communities they live in. The impacts of development projects include physical relocation, disruption of livelihood and potential breakdown of communities (WB, 2004). The number of people displaced by development programs and projects intended to promote national, regional, and local development are substantial, accounting for nearly 10 million people per year throughout the world; over the last 20 years this would mean 200 million people already displaced (McDowell 1996, Cernea 2000, Mathur, H.M 2006).

In India it is largely the tribal groups that are paying for the development of the nation. Because most of the development projects are being constructed in mountain valleys, forest and remote areas where many of the tribal groups have been living for generations together for their survival and sustenance. Many tribal pockets are crammed with natural resources such as minerals, making tribals vulnerable to displacement.

Involuntary displacement from one's land and habitat carries with it the risk of the migrant becoming poorer than before displacement, since a significant number of migrants do not receive

adequate compensation for the loss of their assets nor an effective assistance to re-establish them and make them productive. Unless the local government puts special attention to proper rehabilitation and resettlement of displaced families, especially tribes, they will continue to be victims of such programs and be drawn into pathetic situations. Due to large development projects in tribal areas, millions of tribal people have been uprooted from their lands and homes. Thus, affected people face a broad range of impoverishment risks (Cernea, 2000). In this backdrop, the present study has made an attempt to find out the impact of involuntary displacement and rehabilitation of Indira Sagar Project on the tribal community in the State of Andhra Pradesh.

Anthropology of Displacement

Studies of development-induced displacement had already emerged in the mid-fifties and early sixties, in the context of development projects such as the Great Dam of Aswan, the Kariba Dam on the Zambezi and the Akosombo Dam on Lake Volta in Ghana. Research on displacement and rehabilitation in the anthropological domain began in the 1950s, that is, post World War II, after mass population was displaced after country borders were redrawn. This was studied in 1945 by Alexander Leightons in his popular monograph 'The governing of men: general principles and recommendation based on experiences at Japanese Refugee camp (Smith 2009). Anthropologists Colson & Scudder in 1982 studied the psycho-social impact on the people displaced by the construction of the Kariba dam, which later caught the attention of anthropologists living in other parts of the world as well.

In India the studies on displacement and rehabilitation began in the early 1960s. Anthropologist Roy Burman (1961) studied the displacement of tribes due to Rourkela Steel Plant. He highlighted various factors affecting the process of displacement. Another study by Karve and Nimbker in 1969 of the Koyna Dam Project dealt with the impact of displacement and rehabilitation on the family and kinship system of the uprooted communities of Maharashtra. The concern of anthropological studies after the 1970s and the early 1980s was the issue of economic versus social cost, the antagonism towards big dam, the state policies on displacement and rehabilitation, and a macro-level evaluation of large dams in India.

Major research studies in the areas of involuntary displacement and resettlement has started in early 1970s by anthropologists and researchers from diverse academic disciplines. These studies developed theoretical models on displacement to explain the complex and dynamic processes involved in displacement. Chamber (Chambers, 1969) in his study in Africa developed three stage-general model in the evolution of land settlement schemes in Africa:

1. recruitment,
2. transition
3. development

Soon after, Nelson confirmed this pattern in a synthesis of many experiences with new land settlements in Latin America. Both Chambers' and Nelson's models generalized the experiences of voluntary settlers and conceptualized the institutional or organizational dimensions of managed land settlement programs (Colson, 1999; Cernea, 2000).

Scudder's four-stage framework, initially formulated in the late 1970s and refined in subsequent years, represents one of the earliest attempts in social science to formulate a coherent analytical framework for involuntary resettlement (Scudder 1981, 1991, 1993, 1997; Scudder and Colson 1982). Scudder

and Colsons (1982) in their model focused on the settlers stress and specific behavioral reactions to various stages post-displacement and resettlement. This framework considers how the majority of re-settlers can be expected to behave during a successful resettlement process. Scudder defined success as development that was environmentally, economically, institutionally and culturally sustainable into the second generation. Scudder (2005) divided the process of resettlement into four graded stages:

1. planning and recruitment,
2. adjustment and coping,
3. community formulation and economic development, and
4. handing over and incorporation.

Scudder and Colson's theory has greatly affected resettlement theory and policy across many countries. Their theory emphasizes two different but interrelated factors: stress and process. And this theory says that the displacement of relocation, whether voluntary or involuntary is a stressful experience. This theory deals with how re-settlers will respond to the actions of project authorities. This framework is very instructive, enabling resettlement institutions to work out objectives and to plan resettlement with a temporal dimension. However, as Scudder (2005) recognized, some concerns have been raised when it is applied to the real-world cases of development. One key concern is the impact and role of gender in the resettlement process (De Wet 1993).

Development-induced displacement studies flourished dynamically in the 1980s and 1990s. This was the result of large and controversial development projects undertaken in China (the Three Gorges Dam) and India (the Sardar Sarovar dam on the Narmada River). The research report entitled *Putting People First: Sociological Variables in Rural Development* (edited by Cernea), published by the World Bank in 1985, is considered one of the first attempts to conceptualize the issues of development, displacement and resettlement (Terminski, Bogumil, 2013). The study published by Cernea & Guggenheim (1993) through what they called 'anthropological approaches to resettlement'. This volume comprises of various case studies and offers some theoretical insights to resettlement. It focuses on development-induced displacement whereby the authors pointed out the important differences between displacement caused by development projects and other categories of population movement. Involuntary resettlement due to civil strife is unplanned and people can still return to their homelands when the conflict is resolved. On the contrary, resettlement due to development projects is a result of planned political decision embedded in national ideologies which makes the displacement permanent.

Cernea (1993) pointed out that these differences also induced the emergence of two branches in social science research on resettlement, one dealing with development-induced resettlement and the other with conflict-induced resettlement. He deplored that "the two bodies of social science research do not speak to each other" (p.375). Therefore, the author pleaded for more collaboration between researchers involved in involuntary resettlement as they can help each other and share some common tools.

Many anthropological and sociological field studies have documented the qualitative consequences of forced displacement in vivid detail (Scudder 1966, 1994; Guggenheim 1989; Baboo, 1992; Mathur, 1994; Fernandes 1989, 1991; Salem-Murdock, 1989). These consequences vary with local circumstances, but there are basic features these cases share. Comparing the empirical findings of many field monographs, Cernea found that the common factor underlying the broad spectrum of reported displacement effects is the onset of impoverishment (Cernea, 1995).

The above studies have shown that involuntary displacement force people into new physical settings, which are alien social worlds, functioning on unfamiliar lines, and they enter at a structural

disadvantage, having little educational, cultural or financial capital. The most outstanding study on involuntary displacement and its socio-economic impacts was carried out by Cernea. His Impoverishment Risks and Reconstruction Model shows how impoverishment can occur as a result of displacement. Cernea risk model says that displacement or relocation leave people worse off and 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.

Methodology of the Study

The present study has made an attempt to find out the impact of involuntary displacement and rehabilitation of Indira Sagar Project (Polavaram Dam) on the tribal community in Andhra Pradesh. An ethnographic method has been adopted to carry out this study. An empirical study conducted in west Godavari district Andhra Pradesh. The fieldwork of research was conducted in February 2015 during the year 2015. For the collection of primary data and to reach the objectives of the study, six months of fieldwork conducted in the project-affected area. The present study is empirical, analytical and is based on qualitative and quantitative data. Anthropological tools and techniques used to collect data and the study collected both primary and secondary data.

Indira Sagar Project and Displacement of Population

The Indira Sagar project (also known as Polavaram project/dam) is a major multipurpose irrigation project which is constructed on Godavari River, close to Ramayyapeta village of Polavaram mandal in West Godavari district, Andhra Pradesh. The Indira Sagar Project is the most awaited major irrigation project for many decades. Most Central and state-based political parties have given priority to construction of this project across the Godavari River. The construction of Indira Sagar dam is a political and controversial issue involving political parties, civil society organizations, independent researchers and NGOs. Though many people protested against it and there was much opposition, finally the project gained momentum in the year 2004. The Andhra Pradesh State Re-organization Act, 2014 declared the project as a national project in March 2014 (Government of India, 2014)

According to the official figures, 371 villages will be directly affected by the Indira Sagar project. The project will displace 1,05,601 families, of which tribal families are 55,113 (52.2%). In the project area, 4,069 families from 15 villages have been rehabilitated in new villages; the remaining 101,532 families from 356 villages are yet to be rehabilitated. Official government reports and studies by bodies such as research institutes, individuals, NGOs, agencies and civil society organizations show different figures on human displacement and submergence of human habitations due to Indira Sagar project. According to the Reddy (1996), a total 276 villages are affected by the project housing 1, 77,275 people consisting 44,574 households. The project involves submerging 28,336 cattle sheds, 69,255 productive trees. Of these project-affected people, 47% are scheduled tribes and 14.4% are scheduled castes. And the IEA, 2005 mentioned based on the information extrapolated from the 2001 Census of India, total affected population is 1,70,000. Of the total, scheduled tribes (47%) and scheduled castes (14.4%) and the total affected villages are 157. It is reported that over 276 villages in the state of Andhra Pradesh are likely to be submerged. In Odisha 10 villages and in Chhattisgarh 7 villages are going to be submerged. The total submerging villages in this project are 293 (Reddy, 1996).

The Adivasis are the main victims of the Indira Sagar project as they constitute 52% of the population impacted by the project. Among them, the predominant group is that of Konda Reddy, a particular vulnerable tribal groups (PVTGs). According to official sources, around 7,445 Konda Reddi

tribal people belonging to 2,446 households have been living in as many as 83 habitations comprising more than 20 hilltop habitations in Kunavaram, Chintur, V R Puram, Velerupadu, Aswaraopet and Dammapeta mandals in the Bhadrachalam Agency (The Hindu, 2014). The Konda Reddy tribes in the project affected area have formed an Adivasi Konda Reddi Sangham (Association) and resisted the project to protect their traditional livelihoods and distinct cultural heritage alive. The Adivasis are afraid of being evicted from their place of origin to unknown areas.

Results and Discussion

The Scheduled tribe population in the state of Andhra Pradesh is 27.40 lakhs as per 2011 Census. They constitute 5.53% of the total population of the state. There are 34 scheduled tribes out of which six tribal groups are categorized as Particularly Vulnerable Tribal Groups (PVTGs). An ethnographic study was conducted in the tribal village Devaragondi, which is a resettlement site for 116 households that have been displaced by the Indira Sagar Project. The study focused on issues relating to the land acquisition, R&R compensation scenario, impact of displacement and emerging changes in lifestyle among households and developmental interventions.

The village Devaragondi is a newly established R&R colony, constructed close to the Polavaram mandal headquarters which is 2 km from the village. The village was submerged by the Polavaram dam and it was the first village relocated near the dam site. The Devaragondi village is a tribal village, inhabited Koya community. The villagers moved from the old village to new R&R colony in 2012. The total population in the village is 316 of which males constitutes 133 and females are 183. The Devaragondi village comprises 104 households (actually, there were 115 households including newly married households but after shifting to the new R&R colony, 11 households, who were single, died due to ill health and displacement trauma). The 104 houses are pucca houses (buildings) constructed under the R&R scheme.

The primary occupation of most Koya households (95) in the newly settled village is casual wage labour in both agriculture and non-agriculture works, engaged in dam construction works, agriculture and other allied works. Five households have started petty business/ self-employed and two households are settled in government jobs. The secondary occupation is agriculture. Although, the villagers have received land-to-land compensation under R&R package for their loss of agriculture land in the old village, the compensation land which they received is located nearly 20 km from the newly settled village. The villagers are facing difficulties for cultivation so most of the households have given their agriculture lands on lease to local farmers. For lease, the farmers will pay Rs. 15,000 to 20,000 per acre per a year. In the village, of 58 households who received agriculture land under R&R in new location:

- 38 households have leased out their fields to the outside farmers.
- 18 households cultivate fields on their own,
- One household is not cultivating his fields because it is submerged by the right canal.

The major crops are maize, paddy, pulses and vegetables. The compensation lands which the villagers received under R&R is totally rain-fed cultivation and very recently, the farmers have received bore-wells under land development schemes but the bore-wells are not functioning due to rocky soil. Creation of basic infrastructural facilities is the key for the displaced population to settle down in the new habitations cohesively without being disintegrated. In the absence of such facilities, the affected population faced severe difficulties and may disperse as per their choice of place.

The term 'sacrificing people' is applicable to the inhabitants of Devaragondi village which was submerged by the Polavaram Project. The Devaragondi villagers have had bitter experience and dislocated twice in their lifetime from their original places to new locations. The forefathers of the people had lived at the river bank of Godavari for many years. Later outsiders had come from the plain areas to the Godavari river banks and settled close to the tribal habitations. The tribal people feared the new people who looked different, spoke a different language and behaved differently than the tribal people. The tribals left their rich lands and habitation place and moved to inside the forest and settled in two places at the hill slopes. Subsequently, the places where they settled became Devaragondi and Mamidigondi villages. Now, again these habitants were the main victims of the Polavaram project and evicted from their rich lands and resources. The word '*Devara*' means inside and '*Gondi*' means the place located between two hills. The Koya people called their habitation Devaragondi because it was between the hills. The place was also registered in government records as Devaragondi.

The consequences of displacement have driven the tribals into vulnerable conditions altering their traditional livelihoods. In the old village, the tribals had many resources and they could manage them skillfully. They were happy with their environment and they had never thought that they would be dislocated from their place and settle in new location. The Devaragondi village was the main submerged village. The displacement wave hit the village first among all submerged villages in the project area. A major proportion of income which households used to get from podu cultivation (shifting cultivation) is lost because they don't have access to podu lands in the new resettled village. This has disrupted the household income. After the relocation of the village, the traditional livelihoods of the village is disturbed. The tribals now don't have access to the forest for the collection of non-timber forest produces and podu cultivation stopped as no podu land is available in the new village. No collective work has been initiated in the new village because common property resources is inaccessible. The livestock is decreasing because there is scanty land for grazing. Employment opportunities are limited; the villagers are engaged in casual labour wage work in both agriculture and non-agriculture and around 10 to 15 households are engaged in dam construction works for unskilled labour work.

A group of women said in a FGD that in the old place they had kitchen gardens on their house premises where they grew vegetables such as brinjals, bendi, beans, pumpkin, ridge gourd, drumsticks for household needs but in new village they don't have enough space for proper kitchen gardens. However, in the limited space they have on their premises, they have small kitchen gardens with few varieties for their consumption. Among the Koya community, a woman plays an important role in the decision making at household and community level. In the old village, the women were empowered and their economic contribution to the household income was very significant. They collected NTFP (such as broom sticks, seasonal fruits, vegetables, Kovala Giguru (gum), soap nuts, tubers and roots, vegetable leaves etc) in the forest and CPR for household consumption and for sale. The Girijana Cooperative Corporation (GCC) and local traders often visited the village to purchase these productions. In addition, both men and women were engaged in fetching fuel wood for sale to the local traders. The women were also engaged in VSS work and Forest Department work on daily wage basis. In the old village, women had adequate employment resources and the major portion of household expenditure was borne by them. In the new village, employment opportunities were limited and the condition of women was vulnerable. They were deprived of self-sustainable livelihoods and had to depend on wage labour work.

Conclusion

The Indira Sagar Project (Polavaram) brings misery to more than 2.0 lakh people, by submerging and displacing 276 villages - predominantly tribal villages in an area of about one lakh acres including

forest land. The displaced will be forced to become migrant labourers and urban slum dwellers to which they will not be able to adjust in their lifetime. The people likely to be affected by the submergence, mostly tribal people, have not been informed about details of the project since the executive summary of the Environment Impact Assessment (EIA) report has not been made available to them in their local language. They are also not aware of the rehabilitation packages being offered, and in short the State administration has totally failed to make the affected people in remote villages understand the implications of the project. The people are by and large kept in dark about the project.

During the research work, several issues and concerns of the Project Displaced Families in the study village and other affected villages in the project were noticed. The Government should rely and take necessary actions to address those problems of displaced population immediately and further, the Government should enhance the monitoring mechanism to fulfill lacuna in the implementation of the R&R policy in the project-affected area. Due to improper implementation of this policy, the affected population especially tribes are not fully compensated.

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