# Development-Induced Displacements: A Study of Selected Development Projects in Bangladesh

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Abstract: Against the backdrop of massive construction of infrastructural development projects globally, the paper looked at the plights of the project victims, their helplessness, displacement, compensation, resettlement and livelihood reconstruction. The paper primarily focused on three infrastructure development projects undertaken in Bangladesh, namely, Kaptai Hydro-electricity project; Jamuna Multipurpose Bridge; and Padma Bridge. The paper examined the magnitude of displacement of the Project Affected Persons (PAPs) due to construction of these infrastructures and whether they were aptly compensated, resettled and their livelihood reconstructed. It further questioned whether the project victims were adequately consulted prior to their displacement, resettlement and livelihood reconstruction. The paper argued that a development project not only creates winners, but also losers. Some people enjoy the gains of development, while others bear its pains. Key research finding of the study was that the stakeholders, especially the project victims of three development projects under discussion were not properly compensated, rehabilitated, and their livelihood not reconstructed. The study in conclusion put emphasis on proper implementation of resettlement guidelines, enforcement of resettlement laws and continued good project governance.

**Keywords:** Involuntary Displacement; Jamuna Multi-Purpose Bridge; Kaptai Hydro Project; Padma Bridge; Project Affected Persons; Project Governance.

#### 1. INTRODUCTION

Discourse on development-induced displacements has been in socio-anthropological parlance in recent days as large development projects are being funded by development partners, donors and financial institutions in a country's various sectors of development. These are the development projects concerning infrastructure development for new industries, irrigation, transportation highways, power generation, dam construction and urban developments such as hospitals, schools, airports, cantonments, army firing range etc. Although, such development projects improve many people's lives and provide employment, they also result in displacement. Involuntary displacement causes miseries to the project affected persons, mainly because of the fact that adequate compensation, resettlement and livelihood reconstruction are rarely looked into. M. Cernea (1997) said that the key risks and impoverishment processes in displacement are landlessness; joblessness; homelessness; marginalization; food insecurity; increased morbidity and mortality; loss of access to common property resources; and community disarticulation. Involuntary displacements have now come to be widely recognized as a major economic, ethical, and political problem.

Displacement has often become a part of the development footprint.

Cernea's model (1997) identifies eight important dimensions of impoverishment during any involuntary displacement: a) Landlessness: Expropriation of land assets; b) Joblessness: Reduction of working opportunity even when the development project creates some temporary jobs; c) Homelessness: Loss of not merely the physical house, but of the family home and cultural space; d) Marginalization: Follow a downward trend socially, economically and psychologically; e) Increased morbidity and mortality: Especially among the weakest segments of the population - the children and the old; f) Food insecurity: Low level of food reserve and less daily calorie intake; g) Loss of access to common property: Loss of access to forests, bodies of water, and wastelands, which substantially supplement the food and income of lower-income groups; h) Social disarticulation: Loss of social, economic, and moral support among kinsmen and members of community networks.

According to Kanbur (Cernea & Kanbur 2002), a development project, policy or process not only creates winners, but also losers. The displacement theme brings to centre stage the losers. We get hydropower from dams, faster communication by building highways and bridges at the cost of

involuntary displacement of hundreds of people and mostly they are rarely rehabilitated or resettled in their desired lands. Mostly the losses are all suffered by the poor and vulnerable communities and the gains are accrued by the rich and powerfulsuch a situation cannot be the objective of a development project. Some people enjoy the gains of development, while others bear its pains. Carnea (2000) is of the opinion that cost-benefit analysis undertaken for a development project is utterly insufficient and faulty because it is only a macroeconomic tool that does not explore the distribution of either costs or benefits among the project stakeholders. He argued that social costbenefit analysis should also be carried out prior to undertaking a project.

Against the backdrop of on-going discourse concerning development-induced displacement, the current study primarily focused on following three development projects undertaken in Bangladesh namely: Kaptai Hydro-electricity project (Commissioned in 1962); Jamuna Multipurpose Bridge (Commissioned in 1998); and Padma Bridge (commissioned in 2022). The study examined the magnitude of displacement of people due to construction of these projects; examined whether the project victims could benefit from these projects, meaning whether they were better off prior to undertaking of the projects; ascertained whether the project affected persons were adequately consulted and their views were taken into consideration; examined whether the project authorities did undertake any resettlement action plan including any compensation packages; and saw whether the project victims were duly compensated, resettled and their livelihood reconstructed. The study argues that during the project conception and designing stages, the issue of development-induced displacement rarely considered. Due to less priority given to compensation, resettlement and livelihood reconstruction of the project victims, it is apprehended that these projects would continue to face implementation challenges in the coming years. The study was mainly based on the secondary sources of literature available in print and electronic media. Efforts were taken to visit some of the project sites, interview the project officials, donor agencies, some project affected persons and local administration in order to understand whether the displaced persons were properly rehabilitated and their livelihood reconstructed.

The paper has been structured as follows: the first section gave a general introduction issues related to development induced displacement globally and also touched upon a number of theoreticians involved with the issues of involuntary displacement and resettlement. The second section dealt with the global scenario citing some of the mega projects undertaken and looked at the situations of the project victims and their helplessness. The third section highlighted the three development projects undertaken Bangladesh, namely the Kaptai Hydro-electricity project; Jamuna multi-purpose Bridge project; and the Padma Bridge project. The fourth section dealt with the findings of the study and the last section in conclusion came out with a set of recommendations in order to overcome the challenges raised.

#### 2. GLOBAL SCENARIO

World Commission on Dams (WCD) in its report Dams and Development: A New Framework for Decision-Making (November 2000) said that while "dams have made an important and significant contribution to human development..... in too many cases an unacceptable and often unnecessary price has been paid to secure those benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment." Some 40-50 million people (other reports say as many as 80 million) displaced so far worldwide due to dam construction. Millions living downstream also suffered due to loss of livelihood, not restored so far. Impacts on downstream people not accounted for compensation or relocation. Many displaced persons not resettled or compensated. Vulnerable ethnic communities suffer disproportionately. Gender gaps widened, poor and women suffer the most.

There are protests all around by the victims evicted by large dams. The involuntary displaced persons of Inga III dam project over the Congo river in Africa sent petition to World Bank to suspend Inga 3 Dam project costing US\$12 billion stating that the proposed project and its impacts have not been communicated to the Project Affected Persons. Moreover, the displaced people

of previous two projects have not been resettled yet (Congolese Environmental Groups). The project victims of Ethiopia's Gibe III dam protested that US\$ 1.7 billion project funded by African Development Bank would adversely affect downstream 300,000 people living around Lake Turkana in Kenya. They use lake water for irrigation, grazing cattle and fisheries. They also considered the EIA report was faulty and incomplete. Around a quarter million people from ten tribes are dependent on Lake Turkana, the largest permanent desert lake in the region. They expressed their apprehensions that Turkana will be dried when its source the Omo river obstructed by Gibe III dam is constructed. Despite the protest, the project was commissioned in 2016.

Similarly in Brazil, more than 60 large dams are planned on the Amazon basin, rich in rainforests and wildlife. There is an apprehension that Belo Monte Dam over Xingu river would displace 20,000 indigenous peoples and devastate Brazilian forests and local people continued to protest. In south-east Asia, the Lao and Thai governments began building the massive 1,285 MW Xayaburi Dam on the Mekong River. Dam would block critical fish migration routes of 100 species and block flow of sediments and nutrients, affecting agriculture as far downstream as the Mekong Delta in Vietnam. Three Gorges Dam over the Yangtze river in China is the world's largest hydropower project generating 22,500 MW (commissioned in 2012) and most notorious dam displacing 1.3 ml people. Submergence of hundreds of factories, mines and waste dumps, and massive industries upstream would pollute the reservoir with effluents, silt, industrial pollutants and rubbish. Scientists fear reservoir-induced seismicity and apprehend it would obstruct fish migration.

World Bank estimates that every year (for the decade 1990 - 2000) 10 million people are displaced worldwide due to construction of dams, highway, roads and other infrastructure building programs. Project creates homelessness; loss of livelihoods; food insecurity; psychological trauma; negative health impacts; loss of health status; increased morbidity and vulnerability (especially among women and children) economic and cultural marginalization; and, social disintegration. Forced evictions are also inherently discriminatory, as the poor and marginalized sections of the population are mostly the victims.

By the late 1980s, the World Bank, found it increasingly difficult to promote big dams over rising protests against its policies. About US\$2 billion worth of dam projects are still in the Bank's pipeline. Worldwide 40-80 million people have been displaced by dams, most of them never regained their livelihoods. Current World Bank policy prohibits forced evictions and ensures that displacement is truly a last resort. It intends to avoid or minimize involuntary resettlement; to make any resettlement activities a sustainable development program, including through project benefit-sharing and meaningful consultation with the affected persons; and to assist displaced persons in their efforts to improve, or at least restore livelihoods and living standards.

Asian Development Bank policy suggested that involuntary displacement should be avoided or minimized; where displacement of persons is inevitable, they will be compensated for their losses at full replacement cost; assistance should be given to displaced persons to move and support them during the transition period; assistance should be provided to displaced persons to restore their former living standards, and improve their incomeearning capacity and production levels. Asian Development Bank's Safeguard Policy Statement (SPS) is based on full respect for indigenous peoples' identity, dignity, human rights, livelihood systems, and cultural uniqueness as defined by the indigenous peoples themselves so that they receive culturally appropriate social and economic benefits, are not harmed by the projects, and can participate actively in projects that affect them.

The UN Basic Principles and Guidelines on Development-Based Evictions and Displacement considered forced evictions constitute a gross violation of a range of internationally recognized human rights. Under international law, evictions, including involuntary resettlement, are only permitted in exceptional circumstances, when the project causing the displacement is undertaken solely for the purpose of promoting the general welfare consistent with international human rights obligations, and no viable alternatives to meeting those general welfare objectives are available. Regarding displacement of indigenous peoples, policies are more stringent. Indigenous Peoples are doubly victimized. They are poor and powerless; and they are not from mainstream society.

Millions of people have been forced to give up their homes and risk their food security and wellbeing for dams that are frequently poorly planned and unnecessary. Those forced onto resettlement sites often do not have clean water to drink or enough food to eat. They languish there, stripped of their traditional livelihoods, land and natural resources- the social fabric that binds their communities together ripped apart. Alcoholism, depression, domestic violence and disease increase. Compensation - if provided at all - is typically inadequate. Cash compensation is rarely enough to purchase comparable replacement land. When land-for-land compensation is provided, those displaced, typically receive smaller amounts of poorer quality land. Unable to subsist on their new plots, farming families frequently end up living as migrant laborers or slum dwellers. People who resist are regularly subjected to violence and intimidation. In China, people have been jailed and beaten for protesting against poor resettlement conditions for the Three Gorges Dam, which has displaced 1.3 million people. One of the worst human rights atrocities associated with dams happened in Guatemala in the 1980s. More than 440 Maya Achí indigenous people, mainly women and children, were murdered by paramilitaries because they refused to leave their ancestral lands for the World Bank-funded Chixoy Dam.

There are also a number of documentary films on the plight and suffering of the displaced people. The film "Drowned Out" is about the Sardar Sarovar Dam on the India's Narmada river in Madhya Pradesh constructed in 2017 to generate 1450 MW displacing around 2.5 million people, when completed. Activists like Medha Patkar, writer Arundhati Roy launched Narmada Bachao Andolon (Save the Narmada River). In the face of stiff protest from the project victims, the World Bank suspended the US\$ 450 million loan project 1985. Indian Supreme Court allowed construction in 1999. The project is in progress since then. A similar film, "Damnation" flagged in adverse impacts of large dams on the environment and the people. Arundhati Roy in protest of the Narmada Dam Project wrote in her book "The Cost of Living" that "big dams are to a nation's 'development' what nuclear bombs are to its military arsenal. They are both weapons of mass destruction. They're both malignant indications of civilisation.... they represent the severing of the link....between human beings and the planet they live on. They scramble the intelligence that connects eggs to hens, milk to cows, food to forests, water to rivers, air to life and the earth to human existence" (Roy, 1999).

### 3. BANGLADESH SCENARIO:

Developing guidelines on resettlement and compensation of displaced population due to development works, like, roads and highways, hydro project, factories and buildings and other development projects are essential. Although, a good number of people periodically affected by development projects in Bangladesh, they received scanty or no compensation at all. Moreover due to procedures of collection complicated compensation, the project victims are disillusioned to process such cases. At present, there exists no national policy on involuntary resettlement in Bangladesh. A draft national policy on involuntary resettlement was prepared in early 2008 by the Ministry of Land for consideration of the Government of the Bangladesh (BBA 2011). As in other countries, many people have been displaced by development projects in Bangladesh, which has no proper land acquisition and resettlement policy to protect and provide because of compensation against their various losses. Affected people have been neglected and never adequately rehabilitated (Zaman 1996). It was thought that the development projects for a greater common cause might affect interests of a few - a generalized statement disagreed by development practitioners.

# A) KAPTAI HYDRO-PROJECT

Kaptai Hydro electricity project commissioned in 1962 with a capacity to generate 230 MW of electricity is the lone hydro project in Bangladesh. A dam of 666 meters long and 43 meters high with 16 spillways over the river Karnaphuli inundated an area of 650 sq kms covering 54,000 acres of plough land (40% of cultivable land) of the Chittagong Hill Tracts (CHT). The objectives of the project were mainly to generate hydroelectricity. The other objectives were to provide irrigation and drainage; to ensure riverine communication; to cultivate fisheries; to ensure flood control; and to transport harvested forest resources. Around 100,000 (mostly Chakma) people were displaced by the reservoir. (Haque, 1997; 2013). They mav be termed

"development-refugees" because of their involuntary displacement due to construction of the hydro project. The population of CHT in 1961 was 385,079, according to national census. Apparently, 26 per cent of the population was displaced due to the construction of the dam (Samad 2015). A majority of the displaced families have been rehabilitated on the upper reaches of the rivers Kassalong and Chengi and also a certain percentage has been rehabilitated in other non-submerged areas of Bandarban and Ramgarh.

In case of Kaptai hydro project, no Environmental Impact Assessment (EIA) was done; displaced persons were resettled in inferior land with no compensation or livelihood reconstruction. Some left the country neighbouring Indian province of Arunachal and stayed back; no consultation was done or prior informed consent obtained from the local community. Known as "Bara Parang" (Mass Exodus), the human migration led to a two decadeold armed insurgency in the CHT, partly because of commissioning of the Kaptai Hydro project. Presently, the project is suffering from decreased electricity production; decreased fisheries yield; navigation disrupted for 5 months; siltation of the lake causing flooding; flash floods disaster; and decreased fringe land cultivation. The main objective of the project to generate 230 MW of electricity happened to be very insignificant (0.89% total generation in 2024; ref: BPDB), as the country currently generates 9,918 MW (Day Peak) against forecast of 10,000 MW & 10,558 MW (Evening Peak) against forecast of 10,600 MW (Ref: BPDB, January, 2024). Due to dam construction and inundation, rice cultivation area decreased, jhum cycle shortened resulting in declining soil fertility, low yields from jhum land, and quick erosion and consequent soil degradation. In the process the timber and bamboo resources were also destroyed. The sacrifice made by the poor indigenous communities of the CHT was not recognized by the rest of the country.

## B) JAMUNA MULTIPURPOSE BRIDGE

Completed in 1998, Jamuna Multipurpose Bridge connecting the northern districts of Bangladesh with the capital and rest of the country is the largest infrastructure development project in Bangladesh acquiring around 4000 acres of land. The project has displaced people and affected income and livelihood of about 100,000 people. Despite adoption of a "Resettlement Action Plan", the project affected persons have not been able to reconstruct and restore completely their pre-project living standards in the post-project stage (Ahsan, 2007).

According to the baseline survey conducted by BRAC, 6156 families were directly affected, while the number of indirectly affected households was 5906 (Atahar 2014). The project displaced 5000 households. To resettle those displaced, a formal resettlement action plan was adopted in line with the World Bank's policy guidelines on involuntary resettlement. The Jamuna Bridge resettlement project was established to implement the resettlement plan. The JMB was the first development project in Bangladesh to include resettlement activities as an integral part. In theory, the Revised Resettlement Action Plan (RRAP) endorsed the primary principle of the World Bank Operational Directives that declared that the living standard of the project-affected people should be upgraded or at least their pre-project standard of living reconstructed.

The resettlement project is now considered as a good example for other projects to follow, and it will certainly influence planning and implementing the country's future resettlement policies. The JMB resettlement project is the only good practice established in Bangladesh to date (Pittaluga 2009; Susanna 2008; Zaman 1996). The question is the extent to which it is good. If we consider that something is better than nothing, we can say it is the best practice. However, considering that the RRAP goals proposing to improve or at least restore the living standards of the project-affected persons (PAPs) to pre-project status, and that future practitioners view it as an example to follow, we must critically examine the project to assess various policy measures and implementation activity outcomes.

About 4000 acres of land have been acquired for the construction of the Jamuna Bridge. The Project has displaced people living at the vicinity of the bridge site and affected the income and livelihood of about one lac people. The project authority (Jamuna Multipurpose Bridge Authority, JMBA) adopted a Resettlement Action Plan for proper resettlement of the Project Affected Persons (PAPs). The main objective of the resettlement

plan was at least to restore the standards of living and income earning capacity of the PAPs, if not improved after resettlement.

The major failure was the inability of the affected population to regain or recoup the amount of land lost due to acquisition. Despite this deprivation the resettlement program attained considerable success in other dimensions. There has been a marked increase in the average annual

income of the indirectly affected households. The directly affected households have been able to virtually restore the status of pre-project income. The quality of housing for the displaced people has also improved. Programs like providing squatters and uthulies with a piece of homestead land and providing project affected persons with access to health services, drinking water and sanitation have been very successful. (Ahsan, 2007).

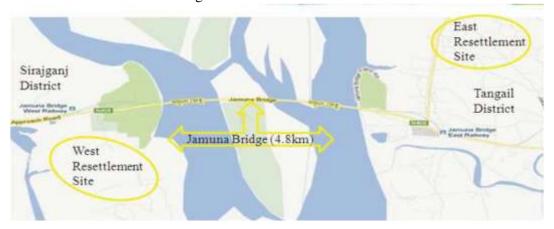


Figure 1: Location of Jamuna Multi-Purpose Bridge and resettlement sites.

Findings of a recent study revealed that though the livelihood of the PAP were affected due of loss of land or other assets and/or change of occupation, failure to utilize the compensation money, unavailability of skill development training they could manage to restore their livelihood during the post-project time. Regardless of the category of PAPs, the rates of literacy (59%) as well as the use of tube well water (99%), sanitary latrine (40%), and electricity (50%) increased in both districts during the post-project time from that of preproject time. Additionally, the status of child immunization (86% in Tangail and 91% in Sirajganj) and the use of contraceptive (61% in Tangail and 67% in Sirajganj) was also higher than the national status after the bridge construction. Self-rated food security status showed the reduced proportion of deficit households i.e. from 64%during the pre-project time to 55% during post-project time. All these factors indicated the improvement of quality of life during the postproject time. However, the shifted to non-farm PAP faced difficulty since agriculture was severely affected due to land acquisition and people activities. The logistic regression indicated that the probability of reporting good quality of life was less likely among the poor, who owned less than 50 decimals of land as well as the PAP who were in Sirajganj compared to their counterparts. The JMB resettlement policy and activities were not always

appreciated by the PAP and thus, a future resettlement activity for any similar project needs revision to make it more effective for livelihood restoration with minimum difficulties.

# C) PADMA RIVER PROJECT

The bridge project over the Padma in central Bangladesh is a much talked about issue because of withdrawal of World Bank concerning lack of transparency in project administration. Since then Government of Bangladesh from its own resources and some loans, initiated this ambitious project commissioned in 2022. The Padma bridge project affected 76,211 people of whom 26,692 required relocation from their homestead and commercial premises (BBA, 2010). About 46,637 people lost their agricultural land and 2,882 affected indirectly from their income and livelihoods due to loss of access to fishing, trade, transportation and wage employment (BBA, 2010). Four resettlement areas on both sides of the bridge have been built with facilities like electricity, drinking water, cooking gas and sanitary latrines. Some of the project beneficiaries were interviewed and they expressed their satisfaction over the resettlement plan of the bridge authority. On the other hand, a number of displaced persons, who were not allotted land within the resettlement areas, complained lack of transparency within the project administration.

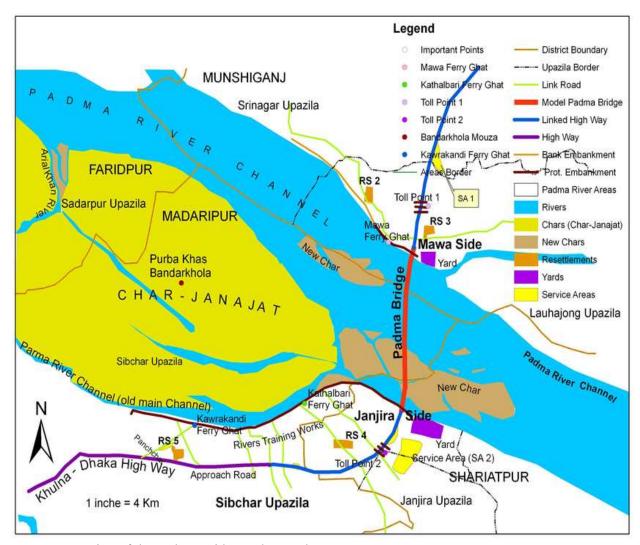


Figure 2: Location of the Padma Bridge and Resettlement areas.

#### 4. STUDY FINDINGS

Kaptai Hydro project was unique in nature as it is the lone hydro project of the country and constructed in the 60s when project planning, monitoring and evaluation was not updated. The issues of environmental and social considerations were not known those days. The project team was composed engineers, technicians economists only. Inclusion of sociologists, anthropologists were not considered. As a result, Kaptai hydro project authorities failed to consider situations of the project victims. The project site was different too. Situated on a hilly terrain in south-eastern Bangladesh inhabited by illiterate ethnic communities, it was a perfect ground for exploitation. The project affected persons were never consulted and their views and apprehensions were not taken into consideration. The project victims were not from the mainstream society. They were members of ethnic communities with different language, religion, culture and tradition. They had the Mouza Headmen (village chief) and Karbaaris (para chief) to collect land tax. They have been living in that hilly terrain for generations and most of them didn't have necessary legal papers concerning possession of the land. The project authorities took it as excuse in depriving them from compensation and resettlement. There was no binding from lending agency as well (in this case the USAID) to conduct proper socioenvironmental studies of the project. As a result, the project authorities were able to deny rights of the project affected persons. Electricity generated in the Kaptai powerhouse was transmitted to national grid for electrification of the towns and cities of the country, while the project victims remained in the dark losing their lands and properties. Some urban people were benefited from power of the lone hydropower station, while thousands in the hills remained deprived of the facilities.

On the other hand, the other two bridge projects were similar in nature. They were constructed in the central plain land of the country and the projectinduced displaced persons were also similar in nature as they were from the majority population. Construction of these two projects took place in last 15 years. By now a number of developments took place in project planning and implementation. The donor-driven projects had to conduct mandatory socio-economic and environmental studies prior to undertaking of a project. A consortium of donors was involved in the construction of the Jamuna bridge project. As a result JMBA had to conduct various socio-environmental studies including that of adverse effects of the project on local flora and fauna. Although, the displaced persons of the Jamuna project were rehabilitated with proper compensation, they were unable to utilize their compensation money due to lack of technical skill and training.

The Padma bridge project took liberty of using the World Bank guidelines concerning compensation and rehabilitation of the project displaced persons. The affected persons were rehabilitated in resettlement camps equipped with modern amenities. However, there are allegations of corruptions against the project officials for depriving some PAPs from compensation and resettlement.

# 5. LAWS ON COMPENSATION & RESETTLEMENT

Bangladesh experiences involuntary displacement every year due to the acquisition of land for various development projects-both in the public and private sectors, such as roads, bridges, railway, power, gas, irrigation, flood control and urban and industrial development. They carry risks associated with loss of land, homes, properties and livelihoods. Land acquisition for development projects pose serious hardship and impoverishment risks.

The "Acquisition and Requisition of Immovable Property Ordinance II" (1982) repealed by "Acquisition and Requisition of Immovable Property Act, 2017 have failed to address the needs of those affected and displaced persons. Currently two different standards are practiced. For instance,

those affected by nationally funded projects receive cash compensation only as per the 1982 Ordinance while the donor-funded projects provide additional funds, including replacement costs for lost assets, relocation assistance, and resettlement and livelihood reconstruction. This double standard needs to be addressed. There is no provision for returning the property to its previous owner, though the purpose of such acquisition might have been exhausted. Any person who contravenes any order made under this 2017 Act shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to ten thousand Taka, or with both. No penalty provisions are enacted to protect the landowners from these coercions.

#### 6. CONCLUSION

Bangladesh experiences involuntary displacement every year due to the acquisition of land for various development projects-both in the public and private sectors. While the projects such as roads, bridges, power, gas, irrigation, flood control and urban and industrial development are planned for their beneficial impacts and are commonly viewed as signs of economic growth. These large projects also carry risks associated with loss of land, homes, properties and livelihoods. Land acquisition for development projects pose serious hardship and impoverishment risks.

Moreover, currently two different standards are practiced in Bangladesh with regard to compensation for the displaced and projectaffected persons. For instance, those affected by nationally funded projects receive compensation only as per the 1982 Ordinance and 2017 Act, while the donor-funded projects provide additional funds, including replacement costs for lost assets, relocation assistance, and resettlement and restoration of income in post-resettlement period. It is, therefore, imperative that consistent national policy guidelines are in place to reduce disparities between projects in treating involuntary resettlement, and minimize the risk of impoverishment those of displaced by development projects

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