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Development, Politics and Disaster Mitigation: a Case Study of the Moragahakanda Irrigation Project

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Abstract

In Sri Lanka, development projects and their aims cannot be understood in absence of politics. Not only the rationale of the project, but also it's the process and outcomes are products of the clientelistic politics practiced in the country's politics since its independence. In that context, examining the process and politics is immensely important to understand the disaster potential of the Moragahakanda Development Project. This project is one of the last components of the Mahaweli Development Program that was designed as a 30-year project. The main objective of the project is to provide irrigation facilities to the existing water scarce farmlands (82,000ha) and also to open up new land (5000ha) for agriculture development in Northern, North Central, and Eastern and North Western provinces. In addition, generating and supplying of 25MW hydro-power to the national grid, increasing inland fish production, provision of potable and industrial water requirements, Eco tourism and effective flood control are also among the objectives of the project. According to the Mahaweli Authority, nearly 70% of the construction work of the Moragahakanda reservoir has been completed and the project is expected to be concluded by December 2017. This paper will be based on the field research that the author is carrying out for his forthcoming publication. Often such mega projects present its objectives loud and clear while keeping pitch silent about its negative effects. This paper, in order to examine the relationship between development politics and disaster mitigation, focuses mainly on the issues that are hardly being discussed. The Moragahakanda project has displaced a total of 5870 people in 1181 families from 11 Grama Niladari Divisions (GNDs). Once the project is completed Six GNDs areas will be totally and six other partially submerged causing more displacement of families. Its effect on the environment is also alarming. This paper aims to examine the role of politics in development in relation to Moragahakanda project and thereby study the readiness of such mega projects to mitigate possible future disasters. It is naïve to expect development projects to be completely free of consequences on environment and human lives. In addition, one has to be completely ignorant of the nature of politics in our society to believe that development projects to be initiated and implemented free of politics and practice of clientalism. Therefore, the strategies for mitigating potential disasters of such projects should also be examined in relation to the politics within which such projects are implemented.

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1.1 Introduction

In Sri Lanka, development projects and their aims cannot be understood independently of politics. Not only are the rationale of a project, but also its process and outcomes products of the clientelistic politics characterizing Sri Lankan politics since independence. In that context, examining the process and politics of the Moragahakanda Development Project is immensely important to understanding its disaster potential.

1.2 Objectives

Often, such mega projects extol their objectives loud and clear while keeping silent about any potential negative effects. Based on field research that the author carried out for a forthcoming publication, this paper examines the relationship between development politics and disaster mitigation, focusing on issues that are barely discussed regarding the Moragahakanda Project. For instance, the project has displaced a total of 5,870 people (1,181 families) from 11 Grama Niladari Divisions (GNDs). Furthermore, once the project is completed, an area spanning 12 GND will be totally submerged causing more displacement of families. Similarly, the effects on the environment are alarming. This paper examines the role of politics in development in relation to the Moragahakanda Project and, thereby, the readiness of such mega projects to mitigate possible future disasters. It is naïve to expect development projects to be completely free of consequences on the environment and on human lives. In addition, one has to be completely ignorant of the nature of local politics to believe that development projects are initiated and implemented free of the politics and practice of clientelism. Therefore, the strategies for mitigating the potential disasters that may be wrought by such projects should also be examined in relation to the politics against which they are implemented.

1.3 Theoretical Framework

In the general most of the time term disaster have been used to refer only natural disasters. It is reported that more than 62 million were killed in natural disasters world-wide since 1900 (OFDA/CRED: 2003). At the same time, the concept of disaster have commonly been discussed in the disciplines such as economics, environmental studies and geography. However this paper attempts to conceptualize this term in the perspective of political science. There is a large volume of literature that focuses on the political dimension of the disaster prevention discourse (Olson, 2000; Platt, 1999; Blaikie et al, 1994; Albala-Bertrand, 1993; Bommer, 1985; Cuny, 1983; Davis and Seitz, 1982; Diggins, Wright, and Rossi, 1979; Abney and Hill, 1966)” (Cohen, Werker, 2008: 1-2). According to Fordham (2007) many scholars argues that there is a strong connection between disaster and development. McEntire (2004) and Fordham (2007) indicate four relations between development and disaster: (1) development increases vulnerability to disaster, (2) development reduces vulnerability to disaster, (3) disaster sets back development, and (4) disaster provides development opportunities. (Manandhar, McEntire, 2014: 22). Despite of the growing acceptance of this close relationship between disaster and development, many challenges like political conflict, lack of coordination, and resource inadequacy makes this integration mere rhetoric (Manyena, 2012). Nonetheless, development and disaster management activities should be integrated and go hand-in-hand in order to alleviate future impacts of disasters. There are many approaches have been employed to study the nexus between disaster and development. For instance, Fordham (2007) discusses the natural hazards, disaster sociology, and vulnerability perspectives. The natural hazard paradigm is correct to concentrate on probable natural hazards. However, this perspective often ignores man-made hazards (technological, terrorism, HAZMAT) (Afedzie and McEntire 2010; McEntire 2005, McEntire et al. 2010). The disaster sociology approach, on the other hand, looks into disasters through organizational and collective behavior lenses (Fordham 2007). This study employed building resilience approach as the key approach which emphasize the reduction of vulnerability and commonly referred as the ability to recover or bounce back to normalcy after a disaster (McEntire et al. 2002: 269). The resilience perspective looks into disasters as anticipated events and emphasizes the

act of planning to predict contingencies and reduce the initial shock (Blanke, McGrady 2012: 75). Creating hazard mitigation plans, planning evacuation routes, and providing drills and exercises provide emergency management officials and the public guidance on steps to alleviate loss from future disaster. (McEntire, 2011).

1.3 Methodology

While the study adopted a pluralistic research methodology (consisting of both primary and secondary data), this paper relies mainly on primary data collected from the Moragahakanda, Thorapitiya, and Maoya resettlement villages in the Wellevela GND located on the Left Bank of the Kalu river (System “F”). The Kalu river resettlement area is located 20-35kms away from the Moragahakanda reservoir bed (the affected area). The gross area of the System “F” is 39sq. km, of which 78sq. km has been identified as potential land area for development. There are 1,267 families resettled in these villages, and 250 families were randomly selected as respondents for the field survey. Apart from that, a number of in-depth interviews were conducted with the Project Director, Resident Project Manager, Director (Physical Planning), and Director (Environment and Natural Resources) of the Moragahakanda Development Project. Furthermore, community leaders of the Matale, Naula, and Kabarawa were consulted to gather information. Secondary data was accumulated from publications of the Ministry of Irrigation and Water Resource Management and the Mahaweli Authority of Sri Lanka.

1.4 The Environment Restoration Program of the Moragahakanda Development Project and Its Impact

Out of the 4,148ha of land (including the tank bed, elephant corridor, and road deviation affected by Moragahakanda Project 2,268ha) is covered by shrub, jungle, and forest. A further 177ha consists of the river and streams, as well as marshy and rocky land (Resettlement Plan, 2010:15). This accounts for 69% of the land area, with only 31% partially developed. Thus the Moragahakanda Project will affect a considerable area raising specific issues which need to be addressed regarding the displacement and relocation of 1,581 householders, environmental consequences, and the riparian rights of downstream farmers. Environmental approval for the project was given by the Project Approving Agency (PPA), namely the Ministry of Agricultural Development and Agrarian Services, and the Central Environmental Authority (CEA) on 26 October 2001. The Environmental Impact Assessment (EIA) stipulated several recommendations to be implemented by the MASL, including preparation of a resettlement implementation plan. Accordingly, a Memorandum of Understanding (MOU) was signed between the MASL, the Irrigation Department, and the District Secretary of Polonnaruwa. On riparian rights downstream farmers (Resettlement Plan, 2010:5).

Concerning resettlement, the Systems “F” and “D” have been developed to accommodate the affected families in a fairly vast area that was stripped of light and scrub jungle, which could have resulted in soil erosion, destruction of water resources, and disturbance to wildlife. Consequently, the EIA recommendations were carried out concurrently with the project to mitigate these impacts. In addition, community forests will be established and reserved lands will be protected with fencing to prevent private encroachment into the settlement areas (Resettlement Plan, 2010:56). In this light, the Moragahakanda Project envisaged the necessary safeguards for environmental protection. Special attention has been paid to minimizing impacts on the environment and biodiversity. About 1,365ha in the catchment of the Amban Ganga basin was reforested, while a 100m buffer zone was created around the Moragahakanda reservoir by reforesting approximately 650ha (Report of the Moragahakanda Benefits, 2010:11). Moreover, an elephant corridor was created between the Giritale- Minneriya nature reserve and the Wasgamuwa National Park, while enriching the habitat. Tanks in adjacent nature reserves were rehabilitated and invasive plants eradicated. An electric elephant fence was installed around the resettlement area (Report of the Moragahakanda Benefits, 2010:11). Additionally, reforestation was started in the areas of upstream of the Moragahakanda Project. In 2007, a nursery was established to grow the necessary plants for reforestation, along with five plant nurseries at community levels.

For these reasons, the Moragahakanda Project will strengthen the resilience of agro-ecological and socioeconomic systems to climate change. According to Munasinghe, just in the first half of 2016, Sri Lanka experienced both abnormally high temperatures and record rainfall (Sunday Observer, 2017). Furthermore, floods have ravaged the

capital, Colombo, at least five times in the last ten years, damaging vital urban infrastructure. Also, floods and drought have decimated the agricultural heartland of the country in recent decades, especially, the dry zone covered by the Mahaweli schemes. Additionally, climate change will have devastating effects on food production and livelihoods: small farmers, especially, will bear the brunt of climate variability and the increasing unpredictability of the monsoons. By the end of this century, the *Maha* season crop will require 20% more water due to climate change. This will reduce rice production and farm incomes; worsen poverty, inequality, and malnutrition; increase rural to urban migration; and, encourage the migration of women for low-skilled jobs in the West Asian region. Conceivably, the Moragahakanda-Kaluganga Project will help local communities to adapt better to the effects of climate change.

1.5 Key Findings

Eighty per cent of the ASP have resettled in the Left Bank area of the Kalu River. Initially, with 1,894 families occupying 139sq. km of land, there was a low population density in this area (about 14 families/sq. km) in comparison with the population density in other Mahaweli regions (approximately 35 families/sq. km) (Resettlement Plan, 2010:86). In this context, the MASL justified resettlement of families displaced by the Moragahakanda Project in this area: following resettlement, the population density of this area has increased three times to about 42 families/sq. km.

The changing population density in the resettled area, as shown by Table 2, has led to numerous consequences on the natural environment. Initially, Dahamwewa village in System “F” was selected as the most suitable area for resettlement of the affected families and there aren’t any host families in this area. As per the structure plan, 701 farmsteads allotments were carved out from 420.6ha. of irrigation land. A total extent of 245 ha. of highland is available in this unit where there are total provision for homesteads allotments equivalent an land area of 157 ha. However, most families being resettled selected the System “F,” compelling project officers to change their plan. According to some respondents, there were some Janatha Vimukthi Peramuna (JVP) Political forces behind that.

The survey revealed the respondents' main concern about the loss of their sources of income through the acquisition of their land, agriculture, and businesses. According to the manager of the Land Acquisition Unit, people were compelled to consent to the acquisition of their properties as the Moragahakanda Project was presented to them as necessary for the nation’s welfare. Furthermore, they were particular about the extent and location of the land they were to receive. The MASL’s socioeconomic survey revealed that, at public meetings, participants highlighted that they are living in traditional villages and would prefer to resettle close to these original locations (Resettlement Plan, 2010:141). Moreover, farmer families indicated that they earn a living mainly from vegetable cultivation and farm products sold at the wholesale market in the nearby town of Dambulla where the marketing facilities are available with the wholesale market (Resettlement Plan, 2010:141).

The MASL’s resettlement implementation plan proposed a number of measures to overcome these constraints and losses. These proposals were framed in a multidimensional and flexible manner to garner broad socioeconomic benefits for the target group. As resilience perspective point out any development project has to plan project aiming the possible disasters and emphasizes the act of planning to predict contingencies and reduce the initial shock (Blanke, McGrady 2012: 75)

However, the majority of respondents in the author’s survey did not agree with the information given by the officers and in the survey report. Most consented to surrender their properties as they were afraid of the Department of Acquisition’s legal powers and wanted to avoid confrontation, rather than because they understood the project’s positive outcomes. Further, even though the MASL socioeconomic survey noted the need to set up market facilities for the resettled families to continue to sell their agro products, it appears that most people who have resettled in System “F” have experienced a decline in their farming activities and incomes. Until March 2017, 2,018 farmers did not have water facilities for farming. Since 2010, resettled families have had to depend on government rations and part-time jobs. Having neglected home gardens in favor of cultivated crops, these families are now increasingly compelled to forage in the jungle for firewood, food, spices, etc. it is possible that the resulting overuse of the natural

environment, because of the lack of socioeconomic infrastructure for the resettled community, will have harmful consequences in the future.

Following the socioeconomic survey conducted by MASL, a Grievance Redress Mechanism was introduced for the affected families. All disputes related to land acquisition, compensation payments, and resettlement are dealt by the Grievance Redress Committee (GRC). APS should be able to make complaints without fear and without having to contend with bureaucratic hurdles. ASPs can make their complaints, either in writing or verbally, to the GN officer or directly to the settlement officers attached to the project office. The latter are supposed to record and forward the complaint to the Project Director who will convene the GRC. The latter consists of the Additional Secretary of the Ministry in charge of the Mahaweli Development Program, the Divisional Secretary, the Director of the Moragahakanda Development Project, members of the Land Acquisition and Resettlement Committees, leaders of the Community Consultative Groups, or representatives of the APS. Any grievance that cannot be resolved at this level is meant to be forwarded to the Project Committee for final decision. To develop decision making power, the GRC members were provided training and are assisted by the Resettlement Officers.

The respondents of System “F” surveyed by the author were neutral about the GRC: in fact, the survey revealed that most project officers conceal or avoid addressing people’s grievances. According to a one male respondent, the officers give their superiors and political authorities the impression that the project is running smoothly: when the relevant minister asks about any community grievances resulting from the project, the officer replies that everything is fine and that they can look after all issues. A female respondent stated that, up to the point that people agreed to leave their properties, the officers displayed a very kind and keen manner towards them: however, after the acquisitions took place, “we are not important to them anymore. Therefore, we have to survive by ourselves through chena cultivation.” The majority of respondents about their rations as well. Given the lack of a permanent income, many people found it extremely difficult to survive on their regular ration of a 30kg bag of rice, two sardine tins, 2kgs of dry fish, and 5kg dhal. However, due to the water scarcity, the community cannot resume agricultural activities until March 2018. Finally the survey data indicated that the majority of APS were dissatisfied with the mechanisms implemented to rehabilitate the environmental, socioeconomic, and political repercussions of the Moragahakanda Project.

1.6 Conclusion

The resilience perspective looks into disasters as anticipated events and emphasizes the act of planning to predict contingencies and reduce the initial shock. As the literature shows there is a direct relation between development and disaster. Though the Moragahakanda project doesn’t go the extent of disaster, the results of the resettlement process has created numerous issues as discussed earlier. Weaknesses of planning in development also can lead to a disaster situation and therefore, the Moragahakanda project also need make a reassessment in order to prevent the potential future disaster or conflict. For instance the developing tension between the settlers and the original habitants and the dilemma between beneficiaries and victims can develop up to a future conflict situation and disaster unless it carefully manage. Therefore, this study proposes a serious discussion aiming at the issues that have been immerge parallel to the project.

References

- [1] Almond, Gabriel and Coleman, James (eds), *The Politics of the Developing Areas* Pnncton, NJ: Pnncton University Press, Princeton, 1960.
- [2] Afedzie, R., & McEntire, D. A., Rethinking disasters by design. *Disaster Prevention and Management*, 2010, 19(1), 48–58.
- [3] Blanke, S. J., & McGrady, E., From hot ashes to a cool recovery reducing risk by acting on business continuity and disaster recovery lessons learned. *Home Health Care Management & Practice*, 2012, 24(2), 73–80.
- [4] Benefits of the Moragahakanda development Project, Mahaweli Authority & Department of the Water Resource Management and Department of the Irrigation, Colombo, 2010.
- [5] Cohen, Charls, Werker, Erick, *Political Economy of Natural Disasters*, Harvard Business School, Boston, 2012
- [6] Fordham, M., Disaster and development research and practice: A necessary eclecticism? In *Handbook of disaster research*, New York: Springer New York. Manandhar, 2007.

- [7] McEntire, Disaster and development: Examining Global issues and Cases, Spriger, New York, 2014
- [8] Manyena, S. B., Disaster and development paradigms: Too close for comfort? *Development Policy Review*, 2012, 30(3), 327–345.
- [9] McEntire, D. A., The history, meaning and policy recommendations of sustainable development: A review essay. *International Journal of Environment and Sustainable Development*, 2005 4(2), 106–118.
- [10] McEntire, D. A., Crocker, C. G., & Peters, E., Addressing vulnerability through an integrated approach. *International Journal of Disaster Resilience in the Built Environment*, 2010, 1(1), 50–64.
- [11] McEntire, D. A., Understanding and reducing vulnerability: From the approach of liabilities and capabilities. *Disaster Prevention and Management*, 2011, 20(3), 294–313
- [12] McEntire, D. A., Fuller, C., Johnston, C. W., & Weber, R., A comparison of disaster paradigms: The search for a holistic policy guide, *Public Administration Review*, 2002, 62(3), 267–281.
- [13] OFDA/CRED, “EM-DAT: The OFDA/CRED International Disaster Database.” Brussels: Université Catholique de Louvain, 2003, (Accessed May 2016). URL: www.cred.be/emdat.
- [14] Hadenius, Axel, *Democracy and Development*, Cambridge University Press, Cambridge, 1992.
- [15] Leftwich, Adrian, 'On Primacy of Politics in Development' and 'Two Cheers for Democracy? Democracy and the Developmental State', in Leftwich, Adrian (ed.), *Democracy and Development. Theory and Practice*, Polity Press, Cambridge, 1996.