



A Study towards the Formation of Disaster Management Planning Process with Past Disaster Lessons

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ABSTRACT: *Formation and revision process of disaster management plan has not been fully described even though the methodology of analyzing past disaster management operations has developed. In this paper, we described a model of formulating disaster management plan based on the theories of public policy. Following this, we applied the model to the actual revision process of disaster management plan, Standing Orders on Disaster, in Bangladesh. Through the analyses of this revision process, we extracted several on-site agendas. To fortify the accuracy and concreteness of this proposed model, further theoretical and practical analyses would be imperative.*

Key Words: Disaster, Cyclone, Flood, Bangladesh, Disaster Management, Operation, Policy Agenda, Revision of Disaster Management Plan, Policy Planning

INTRODUCTION

The main part of the revision process of disaster management plan has been “qualitatively and quantitatively analyzing past lessons of disaster management operation and reflecting them into the revised plan”. However, if we extend the coverage of organization into larger ones such as prefectural or national level, the revision process comes to be not just a feedback process discussed only within the related people but a policy process in which several actors who hold different interests involve. In earlier discussions of disaster management, this policy process part has not been fully deliberated even though this part affects the effectiveness of disaster management policy. Therefore in this study, firstly we aim to implement modeling of revision process of disaster management plan, and secondly aim to clarify the agendas of the revision process in the context of consecutiveness and reciprocity by using a case study. That can provide a foundation for the total disaster management planning process from the extraction of past disaster lessons to finalize effectuating the policy. With that, we aim to reduce the uncertainty of revision process of disaster management plan.

To develop the theoretical framework and crystallize the agendas of revision process, we will analyze the revision process of Standing Orders on Disaster in Bangladesh that is the national disaster management plan and firstly revised in 2010 as a case study.

MODELING THE DELIBERATION PROCESS OF DISASTER MANAGEMENT PLAN

Formation of policy agendas and breaking the agendas into some patterns

In this section, we will conduct a modeling of formation of policy agendas by introducing several

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theories which have been developed in the field of Public Policy.

We set three elements as what affect the formation of policy agenda (**Figure 1**). The first element is past disaster lessons (based on Punctuated Equilibrium (PE) Theory, Advocacy Coalition (AC) Theory, and Multiple Streams (MS) Theory). The Second element is newly recognized issue (based on AC Theory). This is raised because of the changing of organization's norm derived from an environmental change or the newly recognized risk which had not existed in the past. The third element is disruptive issue which suddenly occurs and totally changes the current standing point of the policy (based on PE theory). Based on these three elements, disaster management related policy agenda will be formulated.

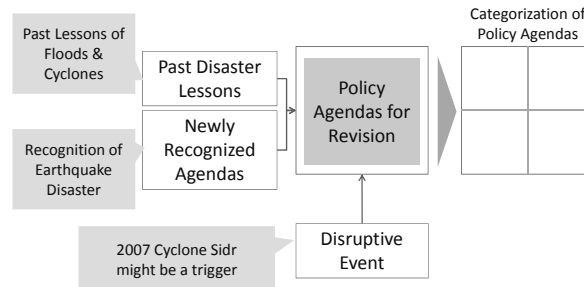


Figure 1. Formation of disaster management related policy agenda

Modeling the deliberation, approval effecting processes

In the last section, we did the modeling of formation of policy agenda. Following that part, we would implement modeling of deliberation, approval, and publication process of disaster management plan. Especially, we would like to discuss the type of participant of revision process, details of deliberation contents among the participating organizations.

In **Figure 2**, a deliberation process of revision of disaster management plan is described. In this model, following flow is anticipated.

1. Disaster management related information is provided from policy formulating organization(s) to policy implementing organization(s)
2. Implementing organization plans own disaster management plan based on the information
3. Disaster management operation related concessions are exchanged between formulator and executor, and the consensus is secured
4. Revision process is finalized by the approval of a certain committee
5. Revised policy will be published and issued to each policy implementing organization

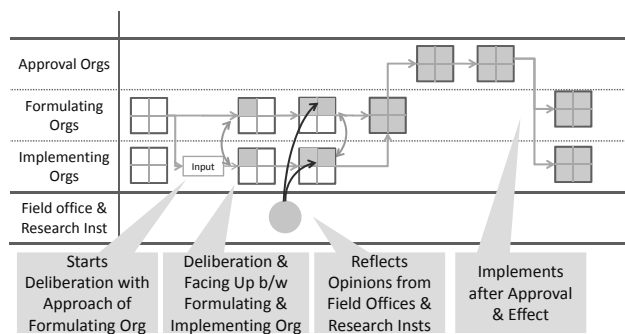


Figure 2. Deliberation process of disaster management plan

CASE STUDY: REVISION PROCESS OF NATIONAL PLAN IN BANGLADESH

Procedure of analyses

In this chapter, we would like to discuss the revision process of national disaster management plan

“Standing Orders on Disaster (SOD)” in Bangladesh, which had firstly published in 1997, and firstly revised in 2010. SOD is the national disaster management plan for all the organizations related to disaster management in Bangladesh. The procedure of the analysis is following. Firstly, we would describe the disaster management related topics in Bangladesh along with a timeline. Secondly, the analyses of revision process will be implemented. These analyses are fortified by the interview surveys toward disaster management related organizations in Bangladesh, e.g. Disaster Management Bureau (DMB), Comprehensive Disaster Management Programme (CDMP), Fire Service & Civil Defense (FSCD), Oxfam Bangladesh, etc. Finally, agendas of the revision would be described. These agendas are mentioned in the context of formulation of policy agendas and of the revision process itself.

Descriptions of disaster related topics in Bangladesh

We would like to briefly overview the disaster related topics in Bangladesh. In 1997, the first SOD was formulated after Cyclone Gorky (1999) as the lesson. In 1998, 2002 and 2004, there were several floods more than a hundred people died. In 2007 and 2009, Bangladesh experienced two cyclones: Cyclone Sidr and Aila. Besides, around 2008, the revision process of SOD gained its momentum. Outside the country, there was Sumatra Earthquake and Tsunami disaster in 2004. Based on the lessons in 2004, a global framework for disaster reduction strategy “Hyogo Framework for Action (HFA)” was formulated in 2005.

Analysis of formation of policy agendas phase

In this section, we would like to clarify the root causes of the formation of policy agendas related to disaster management. Firstly, there was little opportunity to hold a feedback workshop after the flood disasters which we described in the former section. In addition, after 2007 Cyclone Sidr, 2days workshop was held by the leading organization of disaster management: DMB and CDMP on the purpose of summarizing several lessons of disaster management operations. However, there was no direct linkage between the workshop and the revision of SOD according to the interview survey toward DMB. On the other hand, formation of HFA played a significant role to implement the revision of SOD. According to DMB and CDMP, Risk Reduction related descriptions were newly introduced to SOD based on the strategic framework for risk reduction described in HFA.

Analysis of the deliberation process

We would like to describe the agendas along with the procedure. Firstly, shortage of manpower for the policy formation organization was pointed out. Secondly, insufficient coordination was pointed out. Policy formulator implemented deliberation with implementing organizations, respectively. However, there was little opportunity to implement multi-organizational deliberation. Thirdly, there was little room for external specialized organizations such as universities or research institutes to participate in the deliberation process directly. They were only able to get involved in when the framework of the revision had almost formulated. Finally, regarding the approval and publication process, absence of detail implementation plan for SOD, insufficient system of budget allocation and incentive design to implement the revised orders were pointed out. Except some categories, detailed implementation plan of SOD is limited. In addition, still obscure borderlines of authority are remained to implement operation, e.g. who is in charge of rehabilitation of water well which had been developed by the poverty reduction program in normal times, etc.

Discussion

In this section, we would like to discuss the results of analyses.

Firstly, we would like to point out the basic principles of the revision of disaster management plan in Bangladesh. As illustrated above, this revision was mainly and strongly affected by the disruptive event of global disaster reduction. In addition, there was little cohesion among past disaster lessons even though some post-disaster lessons were held to summarize the lessons. From here, we can extract two points. The first point is that global strategic framework of disaster management, such as HFA was able to be an efficient trigger of revision in Bangladesh. The second point is that disasters which almost annually affect Bangladesh cannot be a big trigger of the revision. However, it was true that

fatality in 2007 Cyclone Sidr was the drastic decrease compared to ones in 1970 or 1991. These factors are development of early warning system for cyclone preparedness and the activities of aid agency such as NGO and international organizations. Therefore, there can be still significant room to improve disaster management operations implemented by public organizations. We strongly believe that the establishment of continual revision system of disaster management plan based on past disaster lessons is required in Bangladesh, in addition to the foundation for the revision based on a disruptive change.

Secondly, we would like to describe the agendas of deliberation process. The agendas can be broken down into two points. The first point is the necessity of input of disaster lessons related knowledge to the implementing organizations. In the last revision, policy formulating organizations sent their officers to each implementing organization. However, it was very difficult for the organizations to exhaustively summarize own organization's lessons. Therefore, knowhow of consolidating past disaster lessons and appropriate input of revision related information are required at the beginning. The second point is the necessity of policy deliberation process in which several organizations involve. In the last revision, deliberation among multi-organization was rarely implemented even though several operations are anticipated to do so. However, there is little progress even DMB has taken the shot to the issue. Therefore, as a proposal, introducing a deliberation system by utilizing the current international assistance framework called "cluster" can be one of the foundations.

As a summary of this chapter, we would like to strongly note the importance of human resources development in the field of disaster management in Bangladesh. As we have seen, the trigger of this revision was an external disruptive change. For the continual revision of the disaster management plan in Bangladesh, the revision cycle should be organized and implemented within the country. To achieve that, human resources who can analyze past disasters and accumulate the lessons, who can raise the lessons as policy agendas, and who can handle the deliberation process and issue the new orders are required. In other words, disaster management specialized persons are required for each level of organizations from the field to the center of the government.

CONCLUSIONS

We have seen the overview of revision process of disaster management plan with the case study of SOD in Bangladesh. Firstly, we set a model of revision process with utilizing the theories of public policy. Through the modeling, we were able to figure out one possible procedure of revision. To fortify the model, further accumulation of knowledge both theoretically and practically will be indispensable. Secondly, we analyzed the actual case in Bangladesh. The procedure was overviewed and the agendas were pointed out. Establishing a foundation for accumulating disaster lessons within the country with nurturing the professionals in the several levels of organizations will contribute to minify the agendas.

ACKNOWLEDGMENT

We would like to express our sincere gratitude for the cooperation of DMB, CDMP, other public agencies & INGOs, and Bangladesh University of Engineering and Technology (BUET).

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