Post-Disaster Collaboration between Governmental and Non-Governmental Stakeholders: The Case of Bam Earthquake, Iran

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Abstract

Research on cross-sector collaboration has grown over the past decade. This model of collaboration brings organizations in two or more sectors together, to link or share information, resources, activities and capabilities when no single organization has enough time, money, knowledge or authority to address them alone. In a post-disaster period, the governmental organizations particularly in developing countries usually are unable to provide all necessary services alone; hence, collaboration with other agencies is required. In the last decades, studies have used the viewpoint of collaboration between NGOs and the government, and shown a beneficial relationship between them. Most studies have focused on the structures of the collaboration in the aftermath of disasters with hierarchies, protocols, authoritarian roles and the standardization of procedures but there is a gap in analysing the process factors and the interaction of process and structural factors influencing the collaboration during post-disaster period. In this study, the aim is to identify the main factors of process and structures influencing the collaboration between Iranian government and NGOs after the earthquake in Bam city in Iran in 2003. Analysing the content of the previous studies showed that lack of experience on how to deal with disasters and unclear tasks as well as insufficient trust and mutual understanding between the actors were the main reasons of failure in collaboration. The lack of specific organizational tasks at a given time led to exacerbate the tension in the process of working together; increase the lack of common understanding, and fail to achieve the mutual goal.

Key words: Collaboration, Government, NGO, Post-Disaster, Process, Structure

1. Introduction

Cross-sector collaboration has gained significant attention in the last few years as a response to disasters [1, 2]. In addition, the importance of collaboration between governmental and non-governmental stakeholders (GO-NGO) for crisis management has received much attention worldwide. According to Drennan and Morrissey [3], NGOs are considered as partners with many governments to deal with disasters.The benefits of post-disaster cross-sectoral collaboration between NGOs and governments are numerous. This relationship has the potential to compensate for single sector weaknesses; governments can benefit from the skills, money, knowledge and experience of NGOs, and NGOs can receive government support and regulation to avoid lack of resources[4]. Improving the decisions, legitimacy and social capital, resolving long-standing tensions, raising public value, promoting communications and learning between different actors [4, 5] are the advantages of this collaboration; however, in the time of crises, these factors cannot be achieved easily [6, 7]. Although, the incentives and motivations can be seen in GO-NGOs collaboration to provide delivery service, mistrust and rivalry rather than cooperation are generally observed between them [8]. The GO–NGOs collaboration to provide public services is complex, particularly in the aftermath of disasters when critical and timely information is needed amidst high-level risks and uncertainty [9]. Furthermore, different

structures, forms, working styles and motivations [10] and the gaps in their power, resources and perspectives are identified as the barriers in the collaboration between the government and NGOs [11, 12]. As a result, their collaboration often operates in failure, due to extremely uncertainty, and ambiguity of the nature of the crises[3, 13]. Moreover, restricted resources of the NGOs [7] typically inhibit successful participation of them in post-disaster phase. NGOs also face legal, economic and political restrictions when collaborating with the government, thereby resulting in failure to collaborate in the aftermath of disasters[14]. In Iran, a large-scale disaster such as the Bam earthquake in 2003 opened a new opportunity for NGOs to collaborate with Iranian government. While collaboration between the government and NGOs during Bam is considered to be of crucial importance in the Iranian context, little is known about how these stakeholders operated together at that time. In this study, we attempt to bridge this gap by answering the following question: which factors influence the Iranian governments collaborate with NGOs in the aftermath of Bam earthquake, and how their collaboration can be understood. To answer this question, we conducted a content analysis of previous studies to investigate how Iranian government collaborated with NGOs after the occurrence of the Bam earthquake. Our study contributes to existing cross-sector collaboration literature, specifically adding values to the literature on post-disaster collaboration between GO-NGOs. In the following, the theoretical model of collaboration is first presented. In the third section, the method used is introduced, and case processes and analysis are elaborated in the fourth section. The discussion and conclusion are presented in the final section.

2. Analytical Framework

### 2.1.Comprehensive Theoretical Models of Collaboration

Chen [15] argued that the majority of the existing literature has focused on one of the three aspects of collaboration: initial conditions and antecedents, developmental processes, and perceived collaborative outcomes[4, 16]. Research concerning the first aspect identify initial conditions and antecedent factors that motivate the formation of partnership (Oliver 1990; Guo and Acar 2005; Gazley 2008). The second aspect of research focus on dynamic process and their relevant structures that unfold at the implementation stage in which the level of sharing resources, mutual respect and trust, joint decision-making and the autonomy changes over the time[15, 17, 18]. Studies of the third aspect focus on key perceived collaboration outcomes such as whether collaboration has accomplished its goals and whether it has contributed to increased inter-organizational interaction[19]. Very few studies link between these three aspects of collaboration [20]. To investigate this link, the most common factors that influence the collaboration between the GO-NGOs were selected through eight comprehensive and theoretical models of collaboration with the components of the initial conditions and antecedent, the process, the structure. The factors of collaboration of these theoretical are extracted in Table 1 [4, 5, 15, 17, 21-24].

Table 1- Comprehensive models of cross- sector collaboration

Publication	Initial conditions and antecedents	Process	Structure

Bryson, Crosby [4]	**Initial conditions**
	• General Environment
	  ◦ Turbulence
	  ◦ Competitive and institutional elements
	• Sector Failure
	• Direct Antecedents
	  ◦ Conveners
	  ◦ General agreement on the problem
	  ◦ Existing relationships or networks
		Formal and informal
		• Agreements
		• Leadership
		• Legitimacy
		• Trust
		• Conflict management
		• Planning
			Formal and informal
			• Membership
			• Structural configuration
			• Governance structure

Thomson and Perry [17]	**Antecedents** • High levels of interdependence • Need for resources and risk sharing • Resource scarcity • Previous history of efforts to collaborate • Dependence resource • Complex issue	• Mutuality • Norms of trust and reciprocity • Organizational autonomy -	• Governance • Administration
Provan and Kenis [23]		• Degree of trust • Goal consensus • Evolution of these governance systems over time	**Governance structure:** Organizational vs network governance • Ideal types of network governance ◦ Participant governed ◦ Lead organization ◦ Network administration organization • Need for network • Number of members • Level competencies (nature of the task and kinds of external demands)
Ansell and Gash [21]	**Starting conditions** • Power-Resource Knowledge Asymmetries • Incentives for and constraints on participation • Prehistory of cooperation or conflict (initial trust level)	• Face-to-face dialogue • Trust building • Commitment to process • Shared understanding • Facilitative leadership	**Institutional Design** • Participatory inclusiveness • Forum exclusiveness • Clear ground rules • Transparency

Publication	Initial conditions and antecedents	Process	Structure
Daley [5]	• Collaborative experience • Professional experience	• Problem agreement • Trust • Top leadership	
Chen [15]	• Resource Acquisitions • Organizational Legitimacy • Partners Characteristics • Supply-side Imperfection	• Joint Decision Making • Joint Operation • Resources Sharing • Trust Building • Reduced Organizational Autonomy	
Koschmann, Kuhn [24]		• Communication practices ° Increasing meaningful communication ° Managing centripetal and centrifugal forces ° Creating a distinct and stable identify • Development of authoritative texts • Trajectory of authoritative texts • Communication practices to assess overall cross-sector partnership value ° External intertextual influence ° Accounts of capital transformation	
Emerson and Nabatchi [22]	• Consequential Incentives • Interdependence	• Principled engagement • Capacity for joint action • Shared motivation	• Drivers ° Leadership

Figure 1 shows a conceptual model of collaboration with the factors common in all comprehensive theroretical model extracted in Table 1.
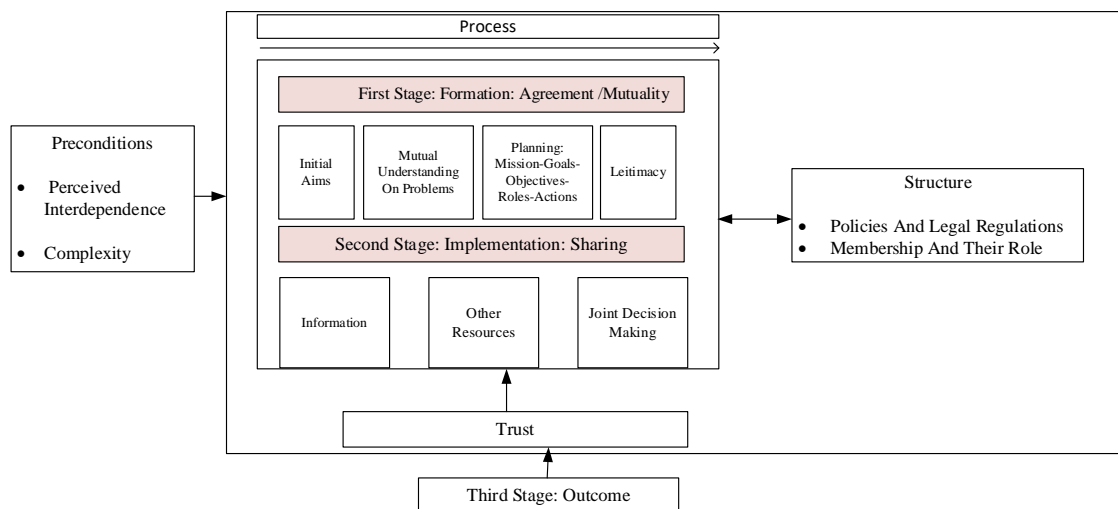
Figure1- Conceptual model of cross- sector collaboration extracted from previous studiesRegarding the theoretical framework extracted from previous studies, the preconditions, process and structural factors influencing the GO-NGOs collaboration after the Bam earthquake in Iran, 2003 is analyzed in the following. In the next section, the factors influencing the collaboration will be explained in more detail.

2.2. The factors influencing the post-disaster cross-sector collaboration

2.1.1. Precondition factors

In the aftermath of the disaster, increasing the demands and limited resources available for various organization brings diverse and discordant responses from various actors and groups [25]. In these situations, there are precondition factors that motivate or discourage stakeholders to cooperate. In terms of precondition factors, complexity of the situation is considered as the main reason to gather people through formal and informal communication to address the problems [2, 26, 27]. Moreover, perceived interdependence factors such as early participation, previous history of conflicts of the actors, or the collaborative experience benefits collaborative implementation [5, 28-31].

2.1.2. The process, structural factors and the outcome

Collaboration is generally recognized as a life cycle between partners [32] including three main stages of formation, implementation, outcome [33]. Each stage will be discussed in the next section.

First stage

First stage of collaboration is defined as the formation of partnership which includes recognizing the participants and the problem through them, reaching to the mutual understanding on issue' definition, collecting a variety of information, making a joint commitment to work together, identifying initial resources, and legitimising key stakeholders. At a certain point in the collaborative process, stakeholders are required to develop a shared understanding of what they can achieve together [21]. Shared understanding is described in the literature in terms of common mission [34, 35], ground [36], purpose [37] and aims [38]. Common objectives, shared vision, clear goals, or the alignment of core values and priorities [39-42] or agreement on a definition of the problem can be used in this context. [39-43].

Second stage

In the second stage, the process of engagement is followed by the implementation and management of the partnerships with the governance, structure, and leadership characteristics, as well as behavioral dynamics such as culture, communication, and relationship development. Sharing information and other resources [44] and integrating different types of information to make decisions [45-49] are the other factors that are important in a collaborative process [50]. Structural factors refer to the basic protocols, ground rules, policies and legal frameworks, and the roles and tasks[4, 22, 27] as well the network structuring & managing forces for collaboration [21, 23]. According to Huxham and Vangen [38], the structure of collaboration is continually changing, because some external factors such as new government policies are likely to have a direct influence on who can and should be the actor.

Third stage

In the third stage, clarification of the process and structure is considered to measure the tangible results and outcome such as system capacity for learning and change, reporting the process of

gaining achievements ended by the sustained effects. Stöteler, Reeder [32] argued that cross-sector collaboration is a learning process to address the problem through engagement, which is started with the creation of trust between partners, and it is influenced by the power and the role of stakeholders within each stage of engagement[16].

3. Method and case study

This study has focused on Bam earthquake happened in 2003. Content analysis of the published paper since 2003 to 2019 was used to gather in-depth data on the level collaboration between stakeholders. All contents have been extracted through google scholar and some Iranian research engine with the keywords of "collaboration, working together, cooperation and Bam earthquake". In total 67 local and international papers were selected for analysing.

3.1.The earthquake of bam, 2003 in Iran

Iran is among the top 10 worst disaster prone areas in the world and fifth in Asia. Two thirds of the 42 disasters occurs in Iran. About 80,000 people have died in earthquakes since the Rudbar earthquake (31 June 1989). Indeed, the management of the Bam earthquake happened in 2003 in a variety of areas discussed in the following, is a turning point in the history of earthquakes in Iran (Iranmanesh, 2018):

- The first urban earthquake in Iran
- The highest number of deaths, according to the latest official statistics, was 31830 and more than 40,000 according to objective evidence
- The collapse of the old Bam citadel, recognized as the largest clay structure in the world
- Extensive and high presence of domestic and international NGOs (INGOs)
- Highly active participation of social capitals
- The first experience of local council's involvement in Iranian crisis management history
- The emergence of a widespread challenge for the first time in the history of earthquakes in Iran and perhaps the world and the general misconception of the affected community about the cause of the earthquake and its attribution to human factors

4. Findings

Evidence showed that post-disaster collaboration between I / NGOs, civil society and the government in the aftermath of Bam earthquake in Iran was poor. The findings supported the comprehensive theoretical model in terms of precondition, process and structural factors on cross-sector collaboration.

4.1.Precondition factors

4.1.1. Complexity of the environment

The magnitude of the Bam earthquake and the complexities emerged after the earthquake, attracted a large number of NGOs and INGOs to collaborate, which was different compared to previous disasters in Iran[51]. Many INGOs brought their expertise and experience with massive, successful and relief operations in the aftermath of Bam earthquake [52, 53]. According to Iranmanesh' observations, there are general achievements of Iranian NGOs'

interaction in Bam such as mobilizing of public organizations, forming some interactions with government agencies, and encouraging the private sector to broadly engage in humanitarian activities. Omidvar, Zafari [54] claimed that public participation was well accomplished; however, some others argued that this was a short-term procedure. Manafpour [55] explained that during the post-disaster rescue and relief cycle, citizenship awareness in Iran grew, and there is an unprecedented upsurge in volunteering and a huge influx of volunteers, all of whom made significant contributions to disaster relief. At the end of the disaster relief missions, however, public enthusiasm often faded and they quickly fell apart [56].

4.1.2. Perceived interdependence

NGOs who participated in the region could be the best actors to identify the essential survival needs of people in an accurate way. However, many of the NGOs had not been trained in disaster work, which resulted in poor communication and lack of teamwork. Moreover, international aid organizations and NGOs suffered from inadequate experience and limited knowledge about local conditions [57, 58]. And their short-term participation did not let them learn and share knowledge with the local informal sectors and other local agencies.

4.2. Process factors

4.2.1. Agreement and mutual understanding

Collaboration between NGOs/INGOs and government was complex. Because of highly centralized government's policy, a number of international NGOs were unable or unwilling to work within the conditions set by the Government of Iran. Due to a lack of coordination, there were difficulties to achieve a common goal between them. UNOCHA and UNISDR as the main coordinators between INGOs and government had some difficulties in developing their coordination process, because of the power of iranian governmanet and the coordination measures that had already been implemented by them[58]. Based on the expert's authority that can be used by government to legitimise disaster management practises, Iranian government councils became an increasingly political place. In Bam, the diversity of participants in terms of priorities, expertise and resources, generated serious challenges in post-disaster recovery projects such as discontinuity of programs, fragmentation of aid delivery and the conflicting role of agencies in emergency response[57]. Consequently, the lack of coordination and poor information sharing increased the chaos aftermath of Bam earthquake [58] between NGOs and public agencies. It is recorded that some NGOs/INGOs decided to give up collaboration [57]. Furthermore, the lack of local agreements has hindered the progress of the project and generated financial blockages [59].

4.2.2. Sharing

At the level of decision-making and policy-making, the engineering and technical level, and the operational and implementation stage, different workshops were held to provide national authorities. These workshops brought together Bam council members, senior government officials, UN officials, and post-earthquake recovery experts from Iran, Japan, India, and Turkey to share experiences and consult on reconstruction issues (UNDP, 2006). More than 60 housing models were designed and offered to people to choose from by the accredited and approved engineering consultants. The UN system worked closely with Iran's government, local authorities, affected communities, the private sector and field experts in the first months after the Bam earthquake [60].The UNDP in cooperation with other international organizations

((UNIDO, ILO, WHO, WFP, UNICEF, UNESCO, UN-HABITAT) coordinated numerous seminars and training programs for different group of stakeholders who participated in the reconstruction [61].

4.2.3. Trust

There was lack of trust between NGOs, volunteers, and even survivors and government. Most of NGOs tended to work independently of governmental and public aid organisations, believing they should distribute their own goods and disaster relief supplies because of their past experience working with disaster survivors. In spite of the little trust created between the volunteers and the government after the Bam incident, the level of people's participation is limited to the private, family and persona interest rather than social participation as a public issue in formal networks. Moghaddasjafari and Karimi [62] identified social trust as the most effective variable in youth participation after the Bam earthquake. Roshanfekr and Zokayi [63] also examined the dimensions of social capital that were subject to youth voluntary behavior following the Bam earthquake. They suggested that the normative aspects of social capital (trust) were directly related to all voluntary tendencies. The volunteers were those who had higher radical-protest tendencies and were less trusting of government institutions [63]. In terms of the trust of the people to participate, ZandRazavi, Ziayi [64] found that there was a direct and significant relationship between norms and trust in the people of Bam and their participation, and there was a direct and significant relationship between the participation rate and feelings of powerlessness.

4.3. Structural factors

4.3.1. Ambiguity in roles and tasks

In one side, the government in Iran have enough authority to declare the state of emergency. On the other side, the regulation appears to be a form of decentralization, meaning that local authorities play an important role in the process of emergency declaration when a disaster occurs. Due to the lack of clear definition of national and regional levels, it is unclear exactly where the central authorities (Minister of Interior) are competent to declare the state of emergency, and to what extent the local authorities has the competence to identify the emergency [65]. In terms of NGOs' involvement, although they had some achievement in engaging in the aftermath of Bam earthquake, they could have had more significant impact for the long-term recovery in the affected region [61]. Despite of lack of financial and technical capacity of some NGOs, they were heavily involved construction instead of governmental organizations, leading to be deviated from their main goals and tasks.

4.3.2. Ambiguity in rules and policies

There is a lack of determination of the levels of crisis at the national, regional and local levels in Iran. What is missing in this regulation is the existence of a precise and principled mechanism for documentation of a crisis or emergency [65]. As a result, there is no separate and specialized plan for various stages of post-bam earthquake, and there was no comprehensive plan to cover all stages of disaster management.

5. Discussion and Conclusion

Many governmental organisations, businesses, and NGOs contributed to provide low-priced shelters quickly after Bam earthquake, however, inadequate technological and managerial

skills failed to understand the local conditions leading to an ineffective collaboration. The lack of specific organizational tasks at a given time led to exacerbate the tension, increase the lack of common understanding of the reconstruction, and fail to achieve the mutual goal. Regarding the relationship between government and NGOs in Bam, in the immediate aftermath of the earthquakes, the involvement of NGOs was high. Nevertheless, in overall, there was an active involving in the initial stages yet weak response in the following and many NGOs continued to decline after recovery efforts. In this regard, providing mutual spaces for experienced organization (either governmental or non-governmental organizations) to communicate and share their experience with other agencies about learning lessons gained in the previous major disasters to reach the mutual understanding, increasing synergy, building trust, and involving key actors in decision-making process could motivate NGOs to continue their collaboration. In addition, providing more flexible environment for NGOs, INGOs and inter-governmental agencies to act in post-disaster stage while improving an oversight process of them through government could be effective. In fact, as many of these organizations were mostly established grassroots NGOs from local areas, they could have had a better understanding of the communities; if the government would had provided some room for the intervention of the NGOs due to the urgent need for relief in the early stages. Nevertheless, there was a general absence of mechanisms to incorporate the NGOs into the government decision-making processes. This is partially due to their lack of experience and/or poor organisation of the newly established networks in Iran. As a result, most NGO networks struggled to push the collective efforts effectively and thus found it difficult to maintain their operations.

Furthermore, the attitudes of the government towards NGOs were changing over the time. That is, as the situation gradually came under the state control, further constraints were imposed on the NGOs, and the rivals or subordinates emerged rather than allies [66]. Consequently, the number of NGOs was initially relatively small, and their presence reduced gradually as disaster recovery progressed[66]. In reality, despite of NGOs' involvement in reconstruction stage, Tierney, Khazai [67] and Amini Hosseini, Hosseinioon [56] argued that the role of government that they should have fostered public awareness and about the role of I/ NGOs and they should not got involved directly. Because of highly centralized government's policy, a number of international NGOs were unable or unwilling to continue working within the conditions set by the Government of Iran. For more efficient disaster management, it is advisable to adopt specific plans for each of the stages (prevention, preparedness, response and reconstruction) to provide a clear framework to the specialized crisis management workgroups. In addition, the role of informal and formal leadership to facilitate the process and structures in collaboration through interacting with communities, NGOs, INGOS and governmental organizations is emphasized. Making capacities through specialized NGOs and public agencies to train the aid organizations to gain appropriate technical and managerial expertise; motivating them to analyse local conditions, and work either with local construction industries or with the local informal sector prior to happening the next disaster is also recommended for the following disasters. Finally, community-based management and use of indigenous knowledge to integrate societies' culture, capacities and local knowledge to reduce vulnerability of natural hazards and improving trust is suggested.

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