

The Role of Non-Governmental Organizations in Disaster Management: A Case study of Bam Earthquake, Iran

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ARTICLE INFO	ABSTRACT
<p>REVIEW ARTICLE</p> <p>Article history: Received: 23 Des 2017 Revised: 7 Jan 2018 Accepted: 10 Feb 2018</p> <p>*Corresponding author: Saeed Fallah</p> <p>Address: Natural Disaster Management Department, Graduate Faculty of Environment, University of Tehran, Tehran, Iran</p> <p>Email: Sd.fallah@gmail.com</p> <p>Tel: +9831492225</p>	<p>Introduction: On December 26, 2003, a devastating earthquake jolted historic city of Bam in Iran. About 26000 people were killed and more than 30000 were injured. The historic monuments including the 2500 year old Arg-e Bam were destroyed severely. Since the scale of the disaster and the number of human casualties was high, management of the crisis became more complicated. Thus, people who were affiliated with different Non-Governmental Organizations (NGOs) helped the government to rescue the affected people.</p> <p>Methods: In the present case study, by interviewing experts and NGOs, their contribution and activities in Bam earthquake were investigated.</p> <p>Results: A few hours after the earthquake, the local and international NGOs started their rescue activities spontaneously and continued their help even during the reconstruction period. Their activities included relief and rescue, food support, sanitation, treatments, emergency settlement, as well as providing physiological treatment and training. It was shown that the affected people were satisfied with NGOs' activities while governmental organizations could not coordinate well with them.</p> <p>Conclusion: Well organized civilian and religious groups can be helpful for governmental organizations in assisting people affected by the earthquake. Therefore, different techniques were proposed to improve the process of preparedness and response during disasters and to have a better communication and coordination between governmental organizations (that are in charge of the crisis situations) and NGOs.</p> <p>Keywords: Disasters, Earthquakes, Non-Governmental Organizations (NGOs), Bam, Iran</p>

Introduction

Iran is a disaster-prone country, which experiences many disasters such as earthquakes every year. Historical data show the occurrence of a major earthquake every 2– 3 years in Iran. In the 20th century alone, 20 major earthquakes claimed more than 140,000 lives, destroyed several villages and

cities and caused extensive economic damages to Iran (1). On the morning of December 26th 2003 at 05:28 (local time), a major earthquake measuring 6.5 on the Richter scale struck the city of Bam, Kerman Province, and south eastern of Iran. According to later estimates regarding the worst earthquake hitting the country during

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the last decade, more than 25000 people were killed and approximately 30000 were injured (2). Although the impact of the earthquake was limited to a relatively small area of about 16 Km in radius, in Bam city more than 85 percent of the buildings were completely destroyed. Its impact on surrounding rural areas was also severe. More than 39361 residential and commercial units in Bam and 34,000 houses in 250 villages were destroyed and 75,000 left homeless by the major earthquake (3). The earthquake caused the electricity, water supply and most public health and education services to be completely disrupted. The 2500 year- old historic city of Bam, an internationally renowned heritage site in the center of Bam, was almost completely destroyed (4). The Ministry of Education reported that all 131 schools in Bam and the surrounding villages, with a combined capacity of 32843 students, were either destroyed or rendered unusable. From early hours after the earthquake, people from other cities and provinces helped people of Bam. Since the scale of the disaster and the number of human casualties and damages to infrastructures were high, management of

the crisis became more complicated (5). Thus, people who were affiliated to local and international NGOs helped the government to rescue affected people.

NGOs and Disaster Management

Disaster Management definition

A disaster is a sudden unplanned event that causes great damage or serious loss to an organization (6). There are two main origins of hazards, namely natural and technological disasters. Natural disasters include hydro-meteorological, geophysical and biological disasters. The technological disasters comprise industrial, transport and miscellaneous accidents (7).

Disaster management involves plans, structures, and arrangements established to engage the normal endeavors of governments, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs. Disaster management cycle has components that might interact with each other and even covered partially by another component (8). Each component of comprehensive disaster management cycle is shown in **Figure1**.

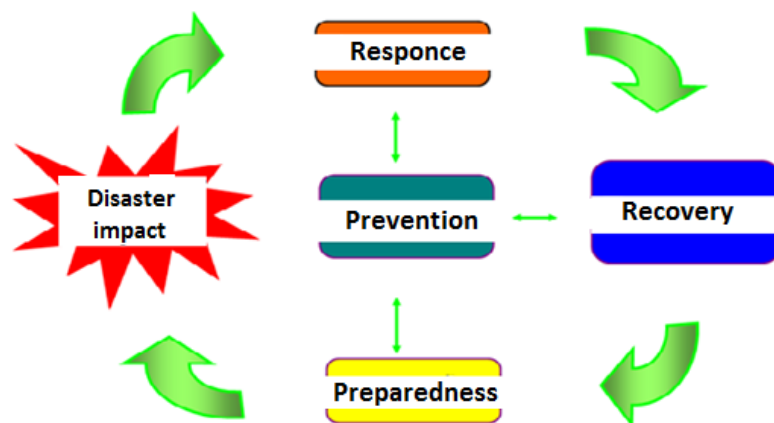


Figure1: Disaster management cycle (9)

NGOs definition

the World Bank defined NGOs as private organizations that pursue activities to relieve suffering, promote the interests of the poor,

protect the environment, provide basic social services, or undertake community development (10). NGO activities can be local, national or international. NGOs have contributed to the

development of communities around the world and are important partners of many governments – while remaining independent from governments (11).

NGOs are usually an element of voluntary participation in the organization and also independent, in particular of government and other public authorities and of political parties or commercial organizations (12).

NGOs are not self-serving in aims and related values. Their aim is to act in large public arena and dealing with concerns and

issues related to people's wellbeing and specific groups of people or society as a whole. They are not pursuing the commercial or professional interests of their members. (13). Their activities are based on the process of disaster management. According to 4 phases of disaster management, they can be active in all processes; however, their activities are often in response and recovery phases. The NGOs' activities in 4 phases of disaster management are mentioned in **Figure 2**.

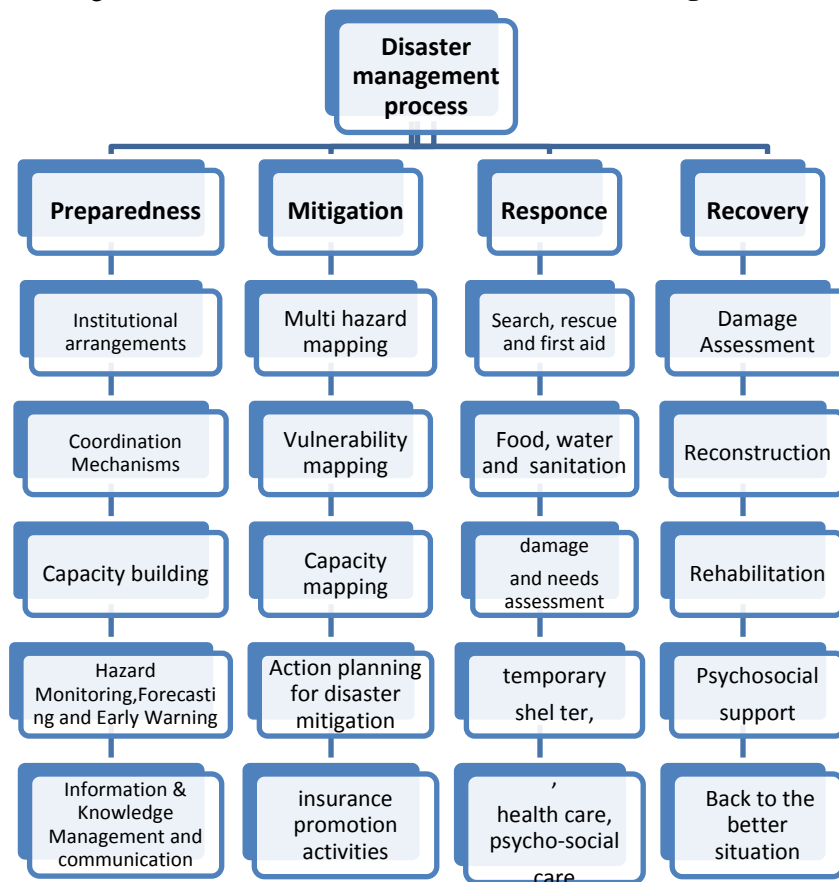


Figure 2: The NGOs' activities in 4 phases of disaster management (The authors)

The NGOs' activities after the Bam earthquake

Following the devastating earthquake in the south-eastern city of Bam on December 26th 2003, at the request of Iranian

government, a lot of local and international NGOs took part in Bam and started their activities for helping the victims of this catastrophic earthquake. **Figure 3** indicates activities of NGOs in Bam.

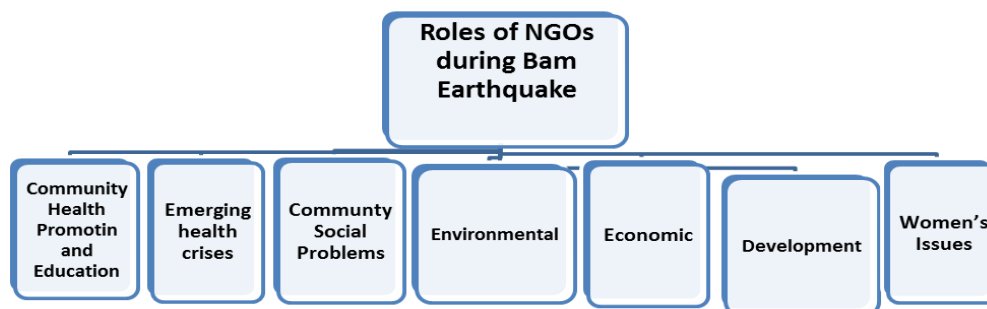


Figure 3: The activities of NGOs in Bam (The authors)

Activities of Local NGOs in Bam:

Local NGOs from Kerman province and other cities of Iran gathered in Bam, some hours after the devastating earthquake. Their activities were useful but their coordination with international NGOs was weak; therefore, they could not improve their plans there. A

Few days after the earthquake, the relationship between international and local NGOs was established and international NGOs could apply their proceedings. **Table 1** reveals the name and activities of some Iranian NGOs. (5)

Table 1: The name and activities of some Iranian NGOs

Name	Type	City
Hamyaran Iran NGO Resource Center	<ul style="list-style-type: none"> • Create a community-based model, emphasizing sustainable development • Protection of the environment, community participation • Poverty alleviation • Vulnerable groups • Equality of citizen’s rights especially of women and young people 	Tehran
Society for the Protection and Assistance of Socially Disadvantaged Individuals (SPASDI)	<ul style="list-style-type: none"> • Awareness raising and public outreach • Community support, engagement & empowerment • Network development and partnerships 	Bam
Earthquake Hazards Reduction Society of Iran(EHRSI)	<ul style="list-style-type: none"> • Emergency Planning, • Building Programs 	Tehran
SINA Association	<ul style="list-style-type: none"> • Protection and Care facilities of children 	The Iranian residents IN Vien
Association for Protecting Child Laborers	<ul style="list-style-type: none"> • Educational assistance for refugees or Iranian street children 	Tehran
Mehrazan Javan	<ul style="list-style-type: none"> • Architecture • Building safe houses • planning to cope with natural disasters 	Bam
YARA	<ul style="list-style-type: none"> • training through workshops and seminars • organizing a rescue team and performing rescue operations 	Tehran
Mashiz	<ul style="list-style-type: none"> • Manages orphanages 	Bam
Nobavaran	<ul style="list-style-type: none"> • facilitate cultural events such as education, sports, and care for children 	Bam

International NGOs' Activities in Bam

International NGOs played an important role during the emergency period because they provided enormous, effective, and relief operations with their expertness and

experience. However, most had left Bam by mid April after 3 months of operations. (Okano and Atsum, 2004). **Table 2** presents the name and activities of some International NGOs (5).

Table 2: The name and activities of some International NGOs

Name	Activities	Country
Caritas	<ul style="list-style-type: none"> Emergency relief peace buildin respect for human rights, development of social justice 	USA, Switzerland, Italy
Cordaid	<ul style="list-style-type: none"> Works for poor people 	Netherlands
Operation Mercy	<ul style="list-style-type: none"> Reelief and development programs 	Sweden
People in Need	<ul style="list-style-type: none"> Rebuilding of health and education facilities 	Czech
ASB	<ul style="list-style-type: none"> social and medical services 	Germany
Medair	<ul style="list-style-type: none"> Respond to suffering victims in war and disaster situation 	Switzerland
TDH	<ul style="list-style-type: none"> Giving direct aid to children 	Switzerland
Malteser	<ul style="list-style-type: none"> emergency relief rehabilitation measures 	Malta
IBC Turkey	<ul style="list-style-type: none"> Training of crisis management period Psychosocial therapy for children 	Turkey
Help Germany	<ul style="list-style-type: none"> Emergency assistance rehabilitation and development projects 	Germany
AID24	<ul style="list-style-type: none"> Medical activities Rebuilding of house units 	Hungary
ADF Turkey	<ul style="list-style-type: none"> Disaster relief services Refugee assistance 	Turkey
World Vision	Relief and development organization working for the wellbeing of all people, especially children	Germany
STL	Emergency operations Trainings and other capacity building programs	Turkey
OXFAM	<ul style="list-style-type: none"> Active in decreasing poverty and injustice Campaigning to responding to emergencies 	
Mercy Corp-USA	<ul style="list-style-type: none"> Alleviate suffering, poverty and oppression by helping people build secure, productive and just communities 	USA
NICCO	<ul style="list-style-type: none"> Urgent disaster assistance Self-reliance support Rural environment protection Human resource development. 	Japan
Merlin	Provides medical relief in the aftermath of conflict, natural disaster or epidemic disease	UK
Relief International	Build the capacity of communities through the use of innovative educational and ICT programs	Bangladesh
Action Hambre	End the cause of hunger in the world	Spain
ICCO	The structural reduction of poverty and the realization of internationally recognized human rights	Netherlands
Diakonie	<ul style="list-style-type: none"> Social welfare Running and taking care of hospitals Providing services for elderly, disabled, orphans and other vulnerable groups 	Germany
European Perspective	<ul style="list-style-type: none"> Promote sustainable development Provide humanitarian assistance Contribute towards the establishment of democratic institutions in 	Greece

Name	Activities	Country
ADRA	the target countries <ul style="list-style-type: none"> • Community development • Food distribution • Institutional development • Ongoing disaster relief 	Germany
IRAC	<ul style="list-style-type: none"> • Advocates for lifesaving assistance and protection for displaced people and promotes solutions to displacement crises 	UK
Humedica	<ul style="list-style-type: none"> • Aid and assistance to the hungry, those affected by disasters and others in need 	
Doctors without Boundaries	<ul style="list-style-type: none"> • Provide urgent medical care in countries to victims of war and disaster 	USA
Save the Children	<ul style="list-style-type: none"> • Building the care and protection of children into broader social welfare • poverty reduction and other national development strategies 	India

For instance, Caritas as a famous NGO performed the emergency and post emergency operations in Bam. In Figure 4, its operation is detailed.

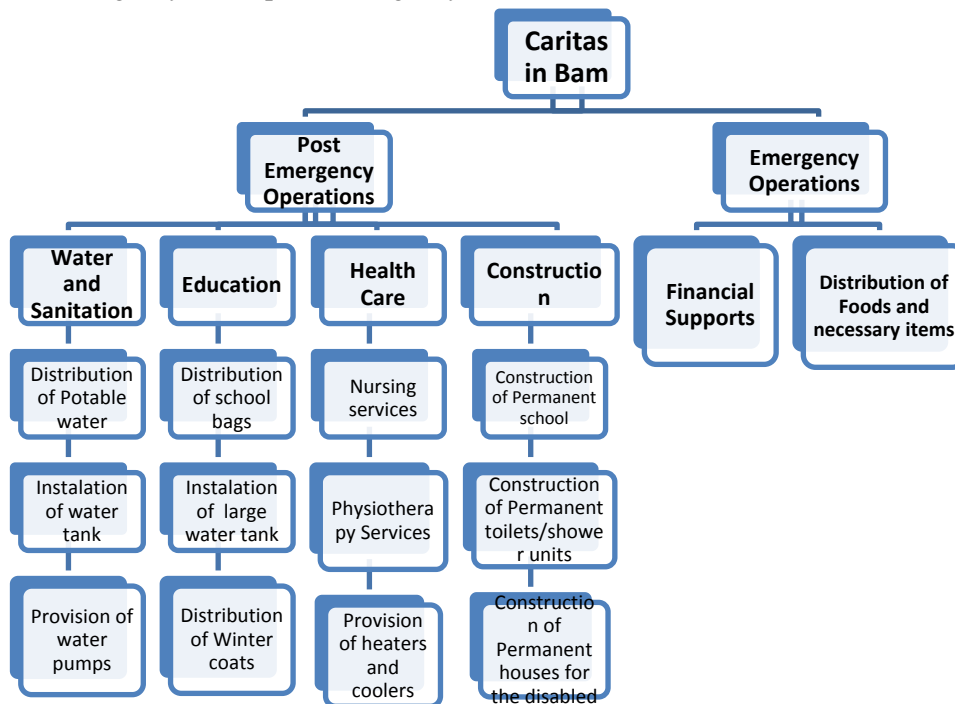


Figure 4: The Caritas Operations in Bam (The authors)

The challenges of NGOs’ activities in Iran during disasters:

- People' lack of knowledge about NGOs and their roles during disasters.
- The government is uncooperative and there are some administrative problems on their activities.
- The society is not self-confident enough for cooperating in NGOs activities.

- Some NGOs disregard the role of victims during disasters.
- The amount of financial aids and the way of spending them is not determined.
- Inaccessibility to enough information for implementing the process of disaster management.
- The management weakness in organizing the NGOs.

- Lack of suitable cooperation between all NGOs in Iran.
- The NGOs do not have long-term plans in responding disasters.
- Lack of progressive laws about NGOs in Iran.

Solutions and suggestions for improving the NGOs activities during the disasters:

- Broadcasting culture of public contribution and motivating the youth and experts to establish NGOs.
- Public education for planning activities of NGOs during disasters through holding workshops and offering training courses in universities.
- Enactment of comprehensive laws for empowering the NGOs.
- Increasing the transparencies of governmental organizations and NGOs to determine their functions, properties and the amount of effectiveness.
- Decreasing the government tenure and increasing their supervision on NGOs' operations.

Conclusion

According to a wide extension of the disaster occurred in the country as well as the high vulnerability of cities against the earthquake, developing the NGOs' activities in all levels, including technical, social, cultural, and economical aspects, is an appropriate reaction strategy to reduce and/or even omit the existing risks. On the other hand, Iranian NGOs' operations focus on response and

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recovery phases in disaster management; whereas, improving the level of the capabilities can be useful in pre-emergency phase, such as preparedness processes. Although the government plays a significant role in the process of improvement, it is so important to give enough opportunity to NGOs in order to be more active and productive during disaster management. The results of the NGOs' activities during Bam earthquake demonstrate that a successful coordination between victims of the earthquake and NGOs is taken place. However, there were some uncoordinated relations among NGOs and governmental organizations that could influence their functions. Therefore, solving the problems can be effective in decreasing the negative consequences of oncoming disaster.

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Conflict of interest

The authors declare that they have no competing interests.

Authors' contribution

All of the authors approved the content of the manuscript and agreed on all aspects of the work.

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