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## Response to Disasters and Moving from Emergency to Sustainability

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### Abstract

After any disaster that happens, whether natural or war, all governments and organizations accelerate to respond at all levels, humanitarian and others, to restore the damage. If this disaster is huge, it will result in a great change so that what comes after it does not resemble what it was before. In this study, it will be discussed how to respond effectively and how local and foreign authorities can cooperate to achieve the required response. Measuring the effectiveness of disaster response is not by the speed of this response, despite its importance, but the nature of intervention and its effects on the lives of people. It's important to measure whether this intervention leads to the strengthening of urban aspects and increases the public participation and whether it gives stability to the city and population or not, and to what extent this intervention defines the future of this city in general.

**Keywords:** Disaster; Respond; Damage; Local and foreign authorities; Intervention; Stability.

### 1. Introduction

Sustainable planning and development are threatened by the prevalent state of emergency. Disasters can be considered as a challenge for the situation of the built environment, all aspects of life, sustainable livelihoods and how compatible they are. So in the following stages of the study, it has been attempted to introduce the links with other areas of intervention, to study the respond with straight answers to questions that frequently appear between the professionals of the constructing sector, such as: How can the professionals react to a disaster case? How can we get better in post-disaster reconstruction? And how can local and foreign authorities cooperate to achieve the required response?

During the reconstruction phase, many key questions appear and decisions should be made and many options exist, including restoring damaged buildings and enhancing infrastructure in its pre-disaster state or implementing concepts of sustainable redevelopment, including avoidance of risks, energy conservation.

Measuring the effectiveness of disaster response is not by the speed of this response despite the importance of this, but the nature of the intervention and its effects on the lives of people and whether this intervention leads to the strengthening of urban aspects and increases the public participation or not and whether it gives stability to the city and population, and the degree to which it generally defines the future of this city.

### 2. Material and Methods

This paper aims to highlight the need for an urgent and effective response in a post-disaster situation, in which it is necessary for cooperation between local and international authorities to achieve an effective response and implement post-disaster recovery projects, where through this cooperation the available resources and funds will be used in an optimal way in order to reach the stage of stability and sustainability.

We also presented an administrative framework to come up with some ideas in the post-disaster phase by defining the administrative method for moving from an emergency to a state of sustainability by (1) establishing local bodies (2) strategy for post-war power transition (3) using the economic and governmental support to achieve stability.

It has also been pointed out that it is necessary to understand the characteristics of societies and their customs that differ radically and which will inevitably lead to a difference in the application of the reconstruction model from one community to another, and this is what was mentioned in many of the books that were referred to in the study. Several recent studies have also been used that show the effective role played by the decentralized pre-fabrication, and prefabricated unit structures which provide suitable options for rebuilding permanent housing after disasters. Finally, the authors' opinions and recommendations are provided on the best way to implement disaster emergency response projects through effective cooperation between local bodies and international support.

### 3. Discussion

Public participation in this process is the main key to the reconstruction process that achieves stability, since each culture has its own cultural characteristics that vary from one society to another, so we cannot, for example, apply the reconstruction model referring to Hiroshima case after the nuclear bomb to the Syrian case after the war, because the characteristics of societies and their customs differ radically as explained by ARNIM LANGER and GRAHAM K. BROWN in their book - Building Sustainable Peace- that the *“engagement with civil society is best understood as a sequenced transition from national level engagement with all sectors of civil society—‘good’ and ‘bad’ alike—to longer-term bottom-up engagement that seeks to create and promote the kind of informal social capital necessary for sustainable peacebuilding.”* That is true because when the government or some other planning bodies prepare their proposals far from the ideas of the people and without their involvement in the projects, such plans will always fail or not achieve the desired outcomes. For example, this is what we suffered from before the war in Syria, and this was one of the many factors that contributed to the outbreak of the revolution, since the government's policies and plans were far from popular participation, So, when you are planning to build a hospital or a bridge, or when you are planning to open a road, these thoughts have to be a representation of what at least some people see.

But on the other hand, in a post-disaster situation, the situation may be different, as there may be difficulty in involving the people in the decision, as the government may lose the ability to take decisions on its own because it is known that the disaster will have major economic consequences that will make it difficult for the governments of poor countries to rebuild on their own and will have to borrow or demand support from the International Fund or from another countries or international organizations, and this, sometimes, makes it lose the ability to make its own decision. For example, it will not be able to determine in which field it interferes (health - housing - sanitation - education ... etc.) In this case, the government will no longer be able to involve the general public in this decision. At the same time, partnering with local surrogates during a disaster has its disadvantages often. Usually, local groups have less capabilities than the external ones, which may limit the spectrum of feasible foreign intervention objectives, increase the risk of failure, or precipitate high costs for training, supply, and response. This also happens because of the need to rebuild quickly and that is also what C. Alexander Ohlers mentioned it in his book (A Revised Strategy for Post-War Stabilization and Reconstruction) *“Similarly, the interests of local partners will likely differ from those of the outside state, or what is referred to as ‘moral hazard.’ The higher the level of moral hazard, the greater a state’s risk that its goals will be compromised and, consequently ”* the writer investigated the different physical, social, economic and environmental factors that lead a society to a certain degree of "weakness" in such a way that a danger leads to a level of devastation from which without external intervention the community cannot recover, so a catastrophe occurs when dangerous conditions collide with a natural disaster (earthquake, flooding, landslides, etc.). These complex pressures, and these unsafe situations, most frequently emerge from political, economic or social factors, which are called "root causes."

Figure 1 shows the vulnerability model applied to the 1999 earthquake in Turkey as a way of illustrating this claim. This risk management is useful for identifying the macro-scale causes of disasters through the accumulation of unsafe conditions over time.

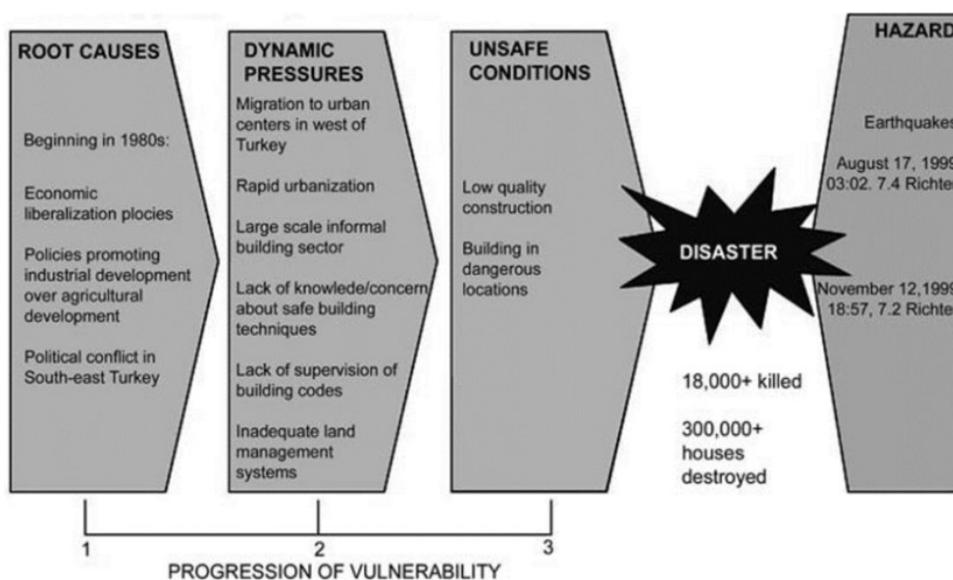


Figure 1. Progression of vulnerability for 1999 Izmit earthquake.

Lack of access to resources (either material, such as finance, housing, roads, infrastructure, public services, etc., or organizational, such as insurance and the individuals' decision-making capacity, education, information, etc.). Thus inherently unsafe conditions and dynamic pressures in the social and physical environments also correspond to inappropriate or insufficient access to the resources that permit a community to deal with the effects of hazards.

#### 4. From emergency to sustainability (Administrative Framework):

According to the study of these resources, we can consider the definition of this process by the way that C. Alexander Ohlers explained in his book *"by extending outsourcing strategies from the conflict phase to the stabilization phase, it is possible to devise an integrated conflict and stabilization strategy. First, local surrogates should be established who can be effective in both the conflict and post-war stabilization periods. Second, a strategy for post-war power transition, governance, and security is best designed during the conflict phase and made a condition of external support. And third, outside states should use military, economic, and political support as leverage to effectuate goals during the conflict and post-war phases."* This definition can be used as a political or administrative framework to achieve stability after the war, but what are the measures and mechanisms that must be taken in achieving this goal. How can we reach the stage of stability in light of the failure to correct the causes that led to the disaster or what was named before in this study as "root causes." Furthermore, how to correct the "weakness" that was before the disaster and that led to it.

#### 5. Long-Term Intervention

The creation and enhancement of long-term local bodies (this local partner can be a local organization or any local body) may require more time and resources but might increase the possibility of an effective stabilization agenda. However, these local bodies that have specific interests and resources for both the disaster phase and post-war processes need international initiatives that assist local players and follow long-term stabilization objectives. For example, recently Molham Volunteering Team have finished one project in Syria/Azzaz that aims to move families from their tents (temporary housing) to buildings built of bricks (permanent reconstruction). The main goal was that these houses protect families from the hard winter conditions that they have been living in at their tents for the past years, the project had been completed and all the money of this project was from individual donors (cost about 1 million dollars), while in previous years much more than this amount of money has been spent on tents that do not shelter them from the hard conditions.



Figure 2,3. Moving the families from their tents to the implemented houses

The social changes within Syria during the Civil War and the displacement have increased the diversity of Syrian families especially in Idlib and Aleppo camps. The social turmoil of the Civil War disrupted family life and daily routine, especially in these two provinces that witnessed more of the destruction and social upheaval of war. According to these conditions, such families have to adapt to living on the border and develop new lifestyles and routines.

However, the biggest challenge here is that these families were living in urban areas before the war and most of them came from Aleppo, Homs or Damascus and found themselves living in rural areas on the border of Turkey.

The idea that the effectiveness of a reconstruction project relies on the speed of the building of houses is not true because it is not construction activities but land acquisition and the implementation of legal and administrative processes that most frequently hinder housing reconstruction. And since homes are rarely the first priority of the communities affected, the evidence shows that the key delays in post-disaster reconstruction come from the procurement of safe housing land and the implementation of legal and administrative processes for the acquisition and transfer of subsidies and loans. In fact, at different political and administrative levels, those two activities often involve lengthy procedures.

##### 5.1. Using the prefabrication units as a solution:

Topography Long-term solutions in the shelter programs such as permanent housing have the same importance as the other emergency relief programs provided after any major disaster. Prefabricated unit structures can provide a suitable option for permanent housing reconstruction after disasters.

" Recent studies show that the decentralized prefabrication of light components already plays a fundamental role in low cost housing in many developing countries "

However, in Syria, we found that the use of these units is not suitable because of the difficult weather conditions in winter. The design of imported prefabricated units used in reconstruction projects was often not suitable to the local needs and expectations, not only were the systems difficult to adapt to particular local specifications, but residents could not easily access the materials and components after the renovation projects were done when they want to add more to their homes. All of this has caused lack of trust in post-disaster housing prefabrication and arguments in favour of a systemic rejection of prefabrication in developed countries, however, they do not hold up to a careful cost and benefit analysis. In fact, recent studies have shown that in many developing countries, decentralized prefabrication of light components already plays a fundamental role in low-cost housing.

## 6. Conclusions

There is an understandable need of urgency response in the post disaster case, and many studies confirmed the importance of moving swiftly to response to pressing problems after a conflict or disaster.

In developing countries, the weaknesses of financial, social and administrative sectors are very big and reduce their capacity to build not only the post-disaster housing but also normal housing projects that aim to reduce disaster vulnerability and deal with the disaster, and as we discussed during this study in which we are trying to come up with some ideas in post-disaster phase by defining the administrative way to move from the emergency to the sustainability by (1) establishing local bodies (2) strategy for post-war power transition (3) using the economic and governmental support to achieve stability , and Public participation in this process is the main key to achieve that because each public has its way to think about the way of the intervention and that when the government loses the ability to control and loses the ability to make its own decision, that will cause difficulty in involving the people in the decision because of foreign interference without thinking about the public participation. On the other hand, the local groups have less capabilities than the external ones, which may limit the spectrum of feasible foreign intervention objectives, increase the risk of failure, or precipitate high costs for training, supply, and response.

So, the best way is to use the external authorities with local monitoring and implement comping respond projects in response to the disaster, and with the efficient collaboration between local bodies and international support, this collaboration will succeed in productively channeling public support and developing administrative tools for the use of resources and funds, and transforming them into substantial buildings, eventually moving them to the sustainability.

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## Conflict of Interests

The Authors declare no conflict of interests.

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