

## Analyzing the Differences of the Reconstruction Quality of Bam Neighborhoods

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### Extended Abstract

#### 1. Introduction

Today, improving and increasing the inhabitant environment quality is the main purpose of the civil planner policies. In this study, the improper location of the physical elements and the urban land uses, the inefficient street network, the compact urban fabric, the high urban density, the improper condition of infrastructures, and the lack of civil open spaces and some other items are such matters which have the main role in increasing the vulnerability of cities to earthquake. In this study, in December 26, 2003, Bam was shaking with the intensity of 6.3 Richter during which 30000 people were killed while 30000 people were injured. Most of the city sections were destroyed completely and other parts also were destroyed up to 30 to 70 percent. The reconstruction quality of Bam is discussed according to the harsh earthquake in 2003 in Bam and the construction of a new city afterwards, so, we should have the deep look to the reconstruction after the earthquake as an opportunity for removing development obstacles. In this relation, the evaluation of reconstruction quality of Bam city is very important. So, the research is trying to analyze the differences of the reconstruction quality of Bam neighborhoods after 2003 earthquake with emphasis on household's socio-economic status.

#### 2. Theoretical Framework

Disasters themselves are devastating, but they do provide the opportunity for governments and communities to implement strategies and frameworks that not only recover and reconstruct but also mitigate against the consequences of further disasters. There are a number of different post-disaster reconstruction approaches adopted by the governments after the disasters. The different approaches primarily relate to the amount of control a household possesses over the reconstruction of their homes. The different approaches principally fall into two different reconstruction philosophies the owner-driven reconstruction and donor-driven reconstruction.

The selection of a specific Post-disaster reconstruction approach should be decided on the basis of the results of a damage and the loss assessment conducted after the disaster along

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with the consultation with the affected communities and the leading disaster agency. However, the main purpose of the reconstruction is sustainable and equal development, the emphasis on low income and weak households and groups, and the minimum differences of reconstruction quality. So, the selection of the suitable planning and management model and continued evaluation of the reconstruction quality and process is necessary to achievement this purposes.

### 3. Methodology

In this study, the research method is analytical-descriptive. The operational definition of reconstruction quality offered in 7 indices and 9 sub-indices, by AHP and SAW methods. The required data are gathered by households, experts, and field questionnaires. The sample is 319 households calculated. To test the hypothes causal-comparative method is used. The collected data are analyzed by One-Way ANOVAs and Tukey test.

### 4. Results & Discussion

The results of One-Way ANOVAs showed that there is a significant difference between Bam neighborhoods in the quality of reconstruction. Also, there is a significant difference in 5 dimensions of quality of reconstruction between neighborhoods. The results also showed that the physical quality of reconstruction is different between various neighborhoods and is not suitable. The considerable point in this research is the meaningful differences of services accessibility in Bam after the reconstruction. The results show lack of attention to the proper accessibility to all families and neighborhoods. This reveals the regeneration of unequal condition that has been before the earthquake.

Results showed that the degree of prospect quality and services is 63, 58, and 53 for high, middle, and low neighborhoods according to the defined scales of 1 to 100, the degrees lower 40 show the low quality, and the degrees between 40 and 60 show the medium quality. Also, the, result showed that the degree of composed index of reconstruction quality is 56/38, 48/54, and 40/99 for the high, middle, and low neighborhoods. Also, in relation to the general Index of quality of reconstruction, the results showed that neighborhoods have significant differences at 99% confidence level. So, the quality of reconstruction of bam city is medium and its degree differs between different neighborhoods.

### 5. Conclusions & Suggestions

The result of research shows that the opportunity of reconstruction is not used properly. According to the findings, reconstruction quality at the society scale has socio-economic aspects. So, we must pay attention to this point seriously. Finally, the results are in agreement with this scientific rule that access to reconstruction opportunities is not equal and depends on the socio-economic status of households and the status of other factors of greater and macro scales, such as: government policies, pattern and ability of planning system, government worldview and definition of equity, and the amount of success to implement the equity and sustainable policies.

**Key Words:** Earthquake, Bam, Households, Neighborhoods, Quality reconstruction

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