

## 論文の内容の要旨

**論文題目:** Participatory decision making for post -earthquake housing reconstruction  
(震害後の住宅再建のための市民参加における参加型意思決定に  
関する研究)

**氏名:** ホリタ ファン カルロス

### **English Abstract.**

Post disaster reconstruction efforts aim at delivering safer built environments capable of resist future earthquakes on one hand, and meeting the requirements of residents on the other.

For reaching such goals participatory development has been advocated by the largest most influential aid agencies including United Nations and the World Bank. However such advocacy does not imply the existence of evidence on its effect over project performance as pointed out by Isham et. al. (1994). Since then, little attention has been paid to the influence that victim participation provide to project performance

In addition, little research has addressed post disaster reconstruction, as most of the literature focuses on mitigation (Olshansky, 2001). For example, when looking at the Basic Plan for Disaster Prevention in Japan, the ratio of detail dedicated to mitigation/response/recovery is 125/232/25; recovery is the less discussed (Kawata, 2003).

Critical part of the restitution to normality is housing reconstruction projects. After disasters, residential stock constitutes large portion of the damages which are one of the most costly to repair. For house reconstruction projects, speed, safety and victim acceptance are usually the metrics of successful recovery. However, schedule compliance and ways for reaching victim acceptance often confront. In that sense, interrogatives remain regarding decision making at community level to understand the necessities of the affected population during reconstruction. (Olshansky, 2005)

This dissertation attempts to address the following questions: Do participation processes positively produce impact to reconstruction projects? In which ways participation processes produce an impact in reconstruction project performance? And, how participation processes applied to reconstruction projects of houses can support victim recovery?

This thesis aims to analyze and discuss the effects of victim participation in project performance during post-earthquake dwelling reconstruction. For doing so, a cross case analysis of four house reconstruction projects that utilized community participation was undertaken. Since large earthquakes are infrequent events it is difficult to identify locations that had recent earthquakes and implemented victim participation for decision making. Therefore cases in Cuauhtemoc district in Mexico City 1985, Seshui village in Taiwan 1999, Anamizu and Wajima cities in Japan 2007 were selected. Data collection included direct observation in the field, document gathering and structured interviews with key informants during a period from August to November 2007. For each case, the analysis includes participation aspects such as: structure, processes and level of participation. Project performance indicators include schedule compliance, cost, quality, definition of requirements, participants relationship and degree of satisfaction.

Results indicate that the effect that victim participation produce to project performance indicators such as definition of requirements, participants relationship and degree of satisfaction is higher that to cost, time and quality. On the other hand, the passivity or activity of decision making methods resulted to be the most influential aspect of participation compared to the flow of participation activities and the structure of the participation setting. Also, the e indicates that there exist a significant gap between literature on participation and its practical use.

Implications of the study are directed at the organizing of participation processes. Since social

interaction during chaotic circumstances are fragile participation processes need to take into consideration the social atmosphere among players so that confronting position do not lead to the obstruction of project process. Likewise, selection of methods and the sequence of its application affect the confronting-collaborative tone of negotiations among participants. In the same manner, direct connections between adversarial participants put in risk project process.

However, reconstruction projects are part of a larger spatial and temporary system. Local participatory decision making that lack the input of long term plans may arrive to sound decisions only for the short term or a limited area. Long term and short term scales as well as local and regional levels are crucial input during decision making.

The above mentioned analysis although useful is difficult to undertake soon after the occurrence of an earthquake, therefore its integration in mitigation plans is suggested. Finally, the impact of participation in project performance indicators such as time and cost need to be further investigated.