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# Taking Back Control: Issues and Benefits of Bottom-up Redevelopment

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#### Abstract

Much critique has been directed towards top-down community and housing redevelopment models. Yet top-down approaches continue to be the preferred development models of government and donor organisation. This paper explores post disaster redevelopment models, bottom up approaches and a local community led housing development. Using a case study approach, the paper presents the situation of an ethnic minority fisher community in Thailand after the 2004 Asian Tsunami and the outcomes of top-down and bottom-up rebuilding approaches on their living environment, recovery and lives. The aim of the paper is to discuss the processes that led to the outcomes of the case studies and identify how recovery and empowerment can be facilitated through community engagement.

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#### 1. Introduction

Community and housing development projects can be approached and driven from two directions—top-down and bottom-up [1-8]. These two development models follow distinctly different processes with the quality of the outcomes likely to vary, with the degree of difference ranging from significant to not much [1-8]. This same range may echo community satisfaction with the redevelopment. What informs the quality of the outcomes and the level of community satisfaction is the sensitivity and skill with which each approach is managed and how well aligned the stated or implied goals are to community context, culture, needs and aspirations, together with the social, economic and environmental benefits development presents to the community, in both the short and long term [1-3].

Today we can identify two approaches to post disaster community and housing developments [3-7]. In one

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approach governments play the role of facilitator by initiating and partially funding projects through the provision of state land, subsidization of material costs, and securing of funding or donor commitments rather than engaging directly in the rebuilding [3-7]. The other is where governments opt to play the role of controlling authority by either completely managing and defining the character of the redevelopment, or creating and implementing development policy and establishing management structures to control and direct the development [3-7]. These two approaches fit within one of the four recovery models identified by Camerio in 1998 following a study of post disaster reconstruction efforts between 1970 and 1998[8]. Camerio believed these four models to be the dominant approaches to reconstruction at the time, reflecting national government attitudes [8]. Summarised in Table 1, these four models are characterised by a common factor in that they all employ top down processes. Importantly what Camerio's study highlights is the low preference of governments for bottom up processes. An analysis of recent reconstruction projects [3-7,9-12] reveals that not much has changed in government attitudes in the 20 years since Camerio published her findings.

Table 1. Application of Camerio's Development Models to 21st Century Redevelopment

Camerio's 4 Development Models	Examples from the 21st Century
Complete redevelopment funded and managed by national governments	Rebuilding of Sichuan province, China following the 2008 Wenchuan earthquake. Government led and controlled, state government funded. This model was considered essential for speed, efficiency and rapid economic progress of the region. Community consultation was not a priority. Completed in three years a predominantly rural pre-disaster environment and economy was replaced by new cities and new industries and entire communities relocated to these [4]. This is a model preferred and widely used by the Chinese government. Myanmar followed this model after the devastation of Cyclone Nargis in 2008 but after extensive international pressure accepted funding and international aid workers [8].
2. Outside aid targeted towards low-cost housing provided by governments and charities,	Widely used following the 2004 Asian Tsunami. The extensive damage sustained by poor communities resulted in a vast influx of donor funding and support. This was channeled by governments into rebuilding of housing and infrastructure. Government control of the rebuild was maintained through policy and land allocation. Inexperience of governments and donor organization in dealing with a wide scale disaster and mass rebuilding seriously undermined the rebuild and recovery [9].
3. Limited-intervention by governments based on assumption of insurance payouts, property price adjustments to new conditions and some financial assistance	Represents the attitude of the New Zealand government following the 2010 and 2011 Christchurch earthquakes. The government established the Canterbury Earthquake Recovery Authority to manage the rebuild and allocated funding for infrastructure and buy-outs of private properties [10]. Controls imposed on residential rebuilds, issues with insurance payouts and communication issues significantly affected private home owners and those without insurance cover. Public input on the city rebuild was disregarded in preference for experts' plans and bureaucratic processes have delayed the rebuild [4,9]. This model is used by developed nations as in the cases of Hurricanes Katrina and Rita in 2005 and Sandy in 2012.
4. Complete reliance on market forces to adjust and adapt to the new situation	Following the 2011 East Japan Earthquake the Japanese government focused its priorities on disaster prevention, economic development and infrastructure development, payouts and compensation for evacuees [12]. Extent of damage from the earthquake, tsunami and nuclear contamination has meant a slow recovery. The case of evacuees unable to return or not planning to return to contaminated zones and unsellable properties has resulted in significant devaluation of property and regions [11,12]. Large numbers having relocated are forced to live in rental accommodation for several years; this has become an economic strain for evacuees and a burden on host environments [11,12]. Communication transparency issues and government pressure on evacuees to return have caused mistrust between people and the government [11,12]. The Japanese government adopted a similar approach following the 1995 Kobe earthquake and was identified by Camerio as an example of Model 4 in her 1998 study [8].

#### 2. Changing Character of Post Disaster Reconstruction

Post-disaster recovery is increasingly characterised by a widespread charitable culture triggered by the unprecedented global coverage of disaster events on TV and in social media. This has resulted in the sympathetic outpouring of financial aid and an increase in humanitarian organization and volunteer support, and a significant shift in the traditional role of these organisations from emergency relief to long term development [5-7]. Following the 2004 Asian Tsunami several humanitarian organisations undertook to re-build housing and redevelop communities, schools, hospitals, community centers and infrastructure [3-7]. This shift is further reinforced by

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