International Journal of Disaster Risk Reduction 10 (2014) 201–212

Contents lists available at ScienceDirect

International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdrr

Community consultation for climate resilient housing: A comparative case study in Vietnam ☆

Tran Tuan Anh [a,b,*], Tran Van Giai Phong [c], Martin Mulenga [d]

[a] RMIT University, Australia
[b] Hue University, Vietnam
[c] Institute for Social and Environmental Transition (ISET), Hue City, Vietnam
[d] International Institute for Environment and Development (IIED), London, UK

ARTICLE INFO

Article history:
Received 2 April 2014
Received in revised form
18 September 2014
Accepted 18 September 2014
Available online 26 September 2014

Keywords:
Post-disaster housing reconstruction
Climate resilient housing
Community consultation
Vietnam

ABSTRACT

Community consultation has been mentioned in literature as one of key requirements for developing climate resilient housing but issues related to its real function and linkage to the effectiveness of resilient housing in a given context or community are still problematic. This article reports on a comparative case study between two climate-change prone cities in Vietnam: Hue and Da Nang, to examine consultation-related issues in the Vietnam context through the lens of post-disaster housing reconstruction. The comparison was carried out against the ISET (2012) urban climate resilience framework. The research outcomes demonstrated an absence of community consultation for the self-built housing, the importance of social relationship in building resilient housing, a big gap between at-risk grassroots communities and technically professional services, and a lack of urban governance for a safe and resilient construction.

1. Introduction

There is no 'perfect' model of community consultation for all situations because of different local contexts and different people in need [10,40]. Recent writings have posed increasing concerns about the problems of community participation and consultation [10,20,5] and the effectiveness of community engagement [10,33,40] in disaster risk reduction and resilience. In Vietnam, one of the five most vulnerable countries to climate change [46], housing has been found to be one of the most vulnerable sectors [29]. Although disaster risk reduction (DRR) for housing has been widely realised by agencies, problematic themes are identified in terms of the usefulness of community consultation and its influences to the effectiveness of climate-resilient housing (CRH).

Post-disaster housing reconstruction appears to be one of key interventions to build resilience for vulnerable communities. Many factors related to the formation of CRH, such as hazard resistant capacity, functional spatial organisation, or livelihood development were addressed in a number of studies and projects [1,12,28,41,5,6] but discussion of the relationship between these factors and community consultation and how to address this relation in planning and implementation is still limited to date. This paper is based on an investigation of this relationship through a comparison of two case-study projects of post-disaster housing reconstruction in Vietnam.

Da Nang and Hue, two of the worst affected cities by climate change in Vietnam, have been selected as the case-study areas for this research. These two cities have several similar characteristics in terms of topographical, climatic,

☆ This paper is based upon a longer working paper originally published in 2013 as part of the Asian Cities Climate Resilience working paper series.

* Corresponding author at: Hue University, 3/175 Tran Phu, Hue City, Vietnam.
E-mail address: ttuananh81@gmail.com (T.T. Anh).

http://dx.doi.org/10.1016/j.ijdrr.2014.09.012
2212-4209/

and socio-economic aspects. Both of them are close to the sea where many tropical storms originate annually. According to statistics from the Vietnam's Central Committee for Flood and Storm Control, the two cities experience about three to five typhoons every year, commonly followed by long-lasting rains, floods and inundations. In suburban, boundary or hazard prone areas of these cities, there are now a considerable number of houses highly vulnerable to climate hazards despite efforts of local governments and NGOs in post-disaster housing recovery.

In post-disaster housing reconstruction, international NGOs have emerged as the key housing providers and implementers. There are two international NGOs dominantly engaging with post-disaster housing reconstruction in Central Vietnam in recent years: Development Workshop France and Save The Children. These two agencies have provided safe houses after typhoons in these two cities and been recognised as some of the best practices of post-disaster housing reconstruction in Vietnam. According to experts from these agencies, post-disaster houses provided by them employed ways of community consultation during the design process. Therefore, two project sites from these two agencies, one in Hue and one in Da Nang, were selected as the study area. This paper examines these case studies in the light of understanding the linkage between post-disaster housing outcomes and the potential to build housing resilience, with a focus on the issue of community consultation.

2. Post-disaster housing reconstruction as a significant opportunity to build resilient housing

It is essential to *"regard shelter and dwelling reconstruction as a development rather than relief/welfare issue"* ([11]: 209). Many authors [18,2,23,7] and implementing agencies (e.g. UN-HABITAT, IFRC and Habitat-for-Humanity) have highlighted the link between housing reconstruction after disaster and the achievement of long-term *resilience* in which opportunities/demands of resilience can be identified and met in the reconstruction period. *Resilience* here is perceived as the ability (of housing) to absorb effects of climate hazards and bounce back to normalcy in a timely and efficient manner without critical changes of its basic functions [15,16,2,34,47]. Post-disaster housing reconstruction, targeting better housing than pre-disaster conditions [39], can bring chances of development for the affected communities [2,22,3]. Besides improving physical aspects, housing reconstruction enables the enhancement of social, economic and environmental functions [45] for community resilience.

However, the concept of *build back better* applied in post-disaster reconstruction is usually inadequately translated into practise. As indicated by Schilderman and Lyons [39], this concept is frequently perceived as 'build back safer' in practical interventions. This misinterpretation leads to excessive focuses on visible end-products of housing in recent practices where resilience targets are not met. In fact, it is unlikely to view post-disaster housing reconstruction as a single recovery action separated from the development of affected communities [3,44] since

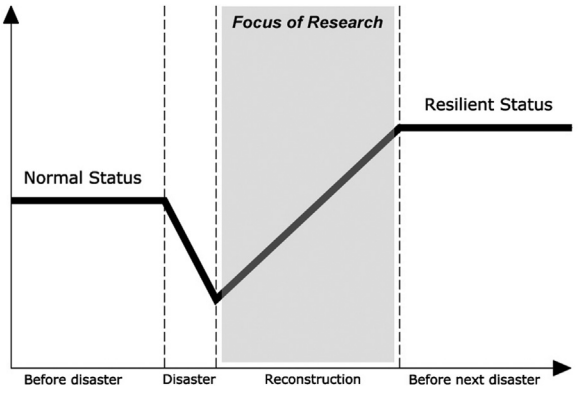

Fig. 1. Post-disaster reconstruction as the key to approaching resilient conditions.

post-disaster housing reconstruction is part of the process of creating housing values in both pre- and post-disaster periods. Its role should be broadened to the extent that makes housing and community more resilient to future stresses and changes posed by natural hazards [38,39]. By this way, post-disaster housing reconstruction potentially improves current housing situations from normal to resilient status (Fig. 1) for the stable development of climate exposed communities [3].

2.1. Targeted reconstruction approaches

In the aftermath of a climate-related disaster, there is usually a vast population whose houses get destroyed or collapse. Despite attempts by local governments and agencies to rebuild damaged houses, there is always a considerable amount of households who do not gain access to this aid. These non-beneficiaries seek various methods of recovery and reconstruction on their own. In the research community, most literature tends to focus on post-disaster housing provided by donors (donor-built) while very few authors and commentators mention the self-built one conducted by people (without donor support). In order to understand the overall perspective of post-disaster housing, this study aimed to examine both approaches, as follows:

1. ***Self-built*** where people rebuild their houses on their own without supports (non-beneficiary) (e.g. [26] for Japan case).
2. ***Donor-built*** where donors help to rebuild the houses (for a beneficiary) (e.g. [19] for Sri Lanka case; [37] for India).

These two approaches have been pursued in Vietnam for years, especially after the 1999 floods. The floods attracted a lot of international attention to post-disaster housing reconstruction. However, self-built post-disaster housing still receives little attention whereas donor-built ones are heavily discussed and praised in forums and platforms. Since the reconstruction approaches and stakeholders involved are dissimilar between *donor-built* and *self-built* post-disaster housing, it is necessary to