

論文の内容の要旨

論文題目: A Study on Disparity and Disadvantage of Housing Reconstruction
in a Society without Severe Social Gap
--- Case of Taiwan 921 Earthquake reconstruction
(ソーシャルギャップが激しくない社会における住宅再建格差の研究
-- 台湾921震災復興を事例として)

氏名: 蔡 緯芳

Housing reconstruction disparity as well as reconstruction disadvantage have long been an unavoidable and thorny issue, usually held tightly associated with socio-economically disadvantaged groups. While with no significant social gap, Taiwan still cannot survive such positions after the 921 Earthquake, which can hardly be interpreted by existing prevailing theories that attribute the reconstruction disadvantage on the existence of social inequality or typical socio-economic vulnerable groups.

In view of the fact that post-disaster housing reconstruction is a kind of construction effort under disaster impact, a study on reconstruction disparity should take into account the effect of practical obstacle, disaster impact as well as external assistance besides socio-economy during reconstruction. Hence, the generation mechanism of reconstruction disparity is explored in the 4 approaches of aid policy, objective factor of reconstruction, subjective factor of individual, and community's collective performance, it is tested in chapters and summarized as follows :

1. Effect and Limit of Reconstruction Policy

In Chapter 4, the issue of policy delivery insufficiency is found by analysis of the process of policy amendment and budget performance. Firstly, limitation of government organization is prone to generate temporal and spatial barriers to local affected households as well as delay of policy amendment, and in turn lead to reconstruction disadvantage. Secondly, government exhibits low accessibility to private property problems of condominium reconstruction and deliverability of consultancy or guidance for disadvantaged households due to his limited authority power.

2. Influence of Reconstruction Resource, Obstacle, and External Assistance on Housing Reconstruction Disparity

Chapter 5 verifies the hypothesis that housing reconstruction results from the interplay of the 3 dimensions of reconstruction resource, obstacle, and external assistance based on the study

framework.

Unexpectedly, as for household resource, it is found that the effect of family income on reconstruction disparity is not significant, but those of education, family size, and occupation are. Education holds significant, positive effect on the superior reconstruction by virtue of loan application, family size does it on the general reconstruction through self-led rebuild, whereas the occupation category of the retired and without regular job reveals greatest impact on reconstruction disadvantage. Those factors demonstrated differing roles and characteristics of household resource on housing reconstruction in Taiwan.

Reconstruction disparity is also affected by reconstruction obstacles, that is, by ownership or operational problems associated with different building styles prior to the disaster. Traditional courtyard housing could intensify the tendency of inferior reconstruction results, whereas condominium or apartment exerts positive impact on the general reconstruction results.

Regarding external aid, although reconstruction loan is proved having a positive effect to enhance reconstruction quality, the loan application rate of totally-collapsed households is only 40.90%, therefore low loan desire and excessively counting on self-reliant reconstruction is another major reason for disadvantaged reconstruction where few housing loan experiences before disaster, debt inconsistent with traditional value and low trust in government all work to reduce willingness to borrow loan.

Applying the above findings, it comes to light by simulating amendment strategies of economic aid that providing corresponding amount of small grants to encourage loan application can effectively reduce the proportion of household in disadvantaged reconstruction, meanwhile achieve the lowest of governmental expenditure.

3. Discrepancy between Resource Possession and Utilization---moderating effect of Disaster Impact and Effect of Inherent Value

From the subjective aspect, the study argues that resource possession and utilization are considered different. Therefore, reconstruction disparity is not only an issue of capacity, but also of ability and attitude. What's more, post-disaster housing reconstruction is a kind of consumer behavior under disaster impact. Consequently Chapter 6 examines the effect of disaster impact and inherent value on individual reconstruction disparity focusing on differences of resource utilization.

A. Moderating Effect of Disaster Impact

Moderating effect of disaster impact was verified by HRM analysis, that "subjective perception of ownership coordination difficulty" and "Time pressure and loan qualification barrier" among disaster impacts do change resource investment behavior, making some high-income households, despite the same income with others, spend more willingly, and on the contrary some low-income more reluctant, which then expand or constrain the effect of existing resources and further exacerbate reconstruction disparity. In result, discrepancy

between resource possession and utilization can lead to reconstruction disparity and exacerbate disadvantaged reconstruction of low-income affected households.

B. Effect of Inherent Value

In spite of more than half houses of Group V (reconstruction of disadvantaged level) rebuilt in steel-plate houses and substandard, most of the owners feel satisfied with their reconstruction results and prefer maintaining the original reconstruction mode upon the re-choice question in questionnaire survey. Thus the ratio of “subjective evaluation of reconstruction satisfaction” to “objective reconstruction quality (reconstruction expenditure)” (variable code as SAT-OQ) is introduced as an indicator to measure different inherent values of each group on residential quality. It turns out that variable SAT-OQ takes the place of “education level” becoming a significant variable, and the larger its value, the more tendency of disadvantaged reconstruction. Thus inherent value on residential quality of affected household is affirmed having potential influence on reconstruction decision making and also drives reconstruction disadvantage.

4. Effect of Collective Community Resource and Intermediary Groups on Collective Reconstruction Disparity

Since reconstruction of condominium unit involves complicated ownership issues, government with limited power can hardly make any intervention about it, and its little profit discourages developers from stepping in. Therefore, self-led reconstruction by residents will continue to be the major effort in the future.

The 25 failed and 16 success study cases of condominium community reconstruction in Taichung County and Taichung City indicate that reconstruction problems stem primarily from interest and ownership disputes induced by mixed land use, shared ownership and basement co-structure. Reasons of reconstruction failures are concentrated in insufficiency of community’s collective resource, ranging from tenuous consensus, loose community organization, low public participation, to indifference or incompetence of reconstruction leaderships. But unexpectedly, down payment affordability of individual households comes less serious.

On the other hand, success experience of community reconstruction asserts underlying grass-roots strength emerging in Taiwan 921 reconstruction, with most of the leaders from blue-collars, the middle-level-educated or women, adept at dispelling resident’s anxiety about decision-making by skilled communications and pros-and-cons analyses of whether to rebuild as well as building mutual trust of community by information transparency and fairness, which are the key strategies to well proceed with reconstruction works. Under their leadership, public participation is built up and community cohesion is maintained by reconstruction websites, volunteers, child and adult classroom etc., witnessing the capability of a community to learn, do, and innovate, a new paradigm of community development in Taiwan.

The “921 Earthquake Relief Foundation”, a NGO established by disaster donation, fills the gap that government cannot directly intervene in private property, implements “Blessing

Program” to buy out the ownerships not participating reconstruction, supply interest-free construction fund, supervise construction works, and provide executive and technical guidance to improve community’s operation capacity. “Blessing Program(臨門方案)” not only provide practical assistance, also exert the accompany function to uplift reconstruction confidence going throughout reconstruction process.

As a result, compared to individual reconstruction, collective reconstructions rely more on community’s collective resources and external aids. It is likely to empower communities soon so as to remove the strains of individual households’ socio-economy and prevent reconstruction disadvantage if intermediary groups are available to help transmit information, coordinate, instruct shortly after and throughout disaster.

In brief, it can be found from Taiwan's experiences that households of disadvantaged reconstruction are not socio-economically the typical and such disadvantage goes subject not only to their socio-economic resources but also affected by reconstruction obstacles, individual’s willingness, disaster impact and inherent values.

Hence, housing reconstruction assistance policy must go beyond traditional strategy of simply providing economy subsidy and regulation relaxation, and should be improved in 3 approaches: (A). such measures as corresponding amount of grant should be offered to encourage affected household applying for loan so as to prevent reconstruction disadvantage caused by excessively self-reliant reconstruction; (B). Publicity or lecture should be given assisting affected households to make proper decision about reconstruction and prevent reconstruction disadvantage induced by value bias or resource misuse; (C). To households of condominium community and would-be reconstruction disadvantaged households, intermediary groups should be introduced to empower them making up the deficiency of consultancy and guidance in government system.