Beginning of Full-scale Process for Housing Recovery

MIZUTANI Akio

Director of the Housing Department

(Key words) The Great East Japan Earthquake, Rebuilding of houses, Livelihood support, Regional challenges

1. Introduction

It has been 2 years since The Great East Japan Earthquake. The damages caused to houses in the great earthquake were: about 150,000 houses fully-destroyed, 270,000 houses were half destroyed, 730,000 houses were partially destroyed. As of December, 2012, 320,000 people are still forced to live in shelters or temporary housing, and prompt development of restoration is a great challenge. Each municipality has been setting up a line of rebuilding homes with reconstruction plans, but counting just Iwate and Miyagi prefectures 90,000 housing supplies as permanent housing are needed in the future, and 20,000 houses of these have been planned as disaster public housing. The number will be further increased when a portion of Fukushima prefecture is crystallized in the future. This portion has not been published yet due to the effect of the nuclear accident. The number of housing construction has been increasing in the disaster-stricken regions, but full-scale process of rebuilding homes will be desired with the development of reconstruction projects in each region.

2. Past efforts

Immediately after the disaster to now, efforts regarding securing housing and livelihood support for the victims that respond to each stage such as refuge life, securing of temporary housing, rebuilding homes and restoration have been continued, and NILIM has done related research for supporting such as giving advice to the municipality at each stage.

Especially, the disaster happened in areas where depopulation and the aged population have been growing, various challenges have actualized including livelihood support of elderly people, maintenance of the regional community, maintenance of the vitality of local society. Supports for these challenges are also in securing housing and housing planning has been required.

Exemplifications related to the housing field that NILIM has addressed are: Guidance and advice to municipalities regarding temporary housing construction, technical support for improvement of capacity of the housing supply system in the region, and technical support for the establishment of supply plan and planning model projects towards public disaster housing construction promotion.

3. Future challenges

Challenges have become clear during the past efforts. The challenges of rebuilding homes that have shifted into full swing are: ① Establishment of a housing production system that responds to demands and speeds up of the rebuilding of homes. ② Housing supply that meets residency needs of the disaster-stricken inhabitants. ③ Continuation and vitalization of local society and regional community. ④ Maintenance of housing after a large amount of supply.

Towards these problems, NILIM continue to shape resolutions and address them by creating models of future development, creating institutions and structure, and establishing standards and assessment measures.

① For establishment of housing production system that responds to demands and speeding up of rebuilding houses

It can be said that speeding up supply and rebuilding homes to resolve refuge life in temporary housing as soon as possible are the most important task. Also, it is predicted that housing demands will increase rapidly with the development of reconstruction in the future. Establishment of housing production system is an agenda to supply a large volume in a short period, and efforts from various angles such as securing materials, transportation, and people will be needed.

Moreover, reconstruction has already become full-scale and the increase of cost of building materials has been concerned. Measures to greatly cut costs down for the liability relief of residents are needed.

2 For housing supply that meets residency needs of

It is thought that support to municipalities is needed continuously for early materialization of housing supply plans based on the truth of disaster-stricken inhabitants. Regarding response to livelihood support of elderly people, vitalization of the regional community, housing

Messages from Departments and Centers of NILIM

supply that fits regional homes, and planning of housing design with care to regular vocation of inhabitants, consideration will continuously be needed. Inhabitant consciousness is high regarding regional disaster prevention in the devastated areas, and consideration is needed for housing planning.

Moreover, residence needs may change as time goes on, and responding flexibly by reviewing housing supply plans is also an agenda.

③ For continuation and vitalization of local society and regional community

Housing supply contributes to the continuation and vitalization of local society and regional community, and also the vitality of local society contributes to the improvement of residence quality. It is needed to proceed with "Renewal of regional potential" regarding the crystallization of housing planning.

Also, the issue of battered city center that many local cities have is an evident fact, and it is important to address with a standpoint to recover the vitality with the reconstruction.

4 Maintenance of housing after a large amount of supply

After the supply of housing and to maintain the function in a long period, proper operations for the administration and maintenance are needed. It is also needed to arrange the maintenance system with the supply system in advance. From the stock management standpoint, it is needed to consider the time to renew.

4. Conclusion

It is said that a disaster exposes challenges that regions have. The Great East Japan Earthquake is not exceptional. Aging, depopulation and regional communities, each of these is a challenge that has to be strongly addressed in other regions. Also, there are many regions that are required to respond to the challenges of facing disasters.

The process of reconstruction after the Great East Japan Earthquake will be a model of disaster prevention enhancement for other regions, and it also has to be a model in a standpoint that responds to various challenges that the regions have.

I was dispatched to China when The Great East Japan Earthquake occurred, and observed responses after the disaster from outside of Japan. The response to the disaster was seen with major concern also in China. It can be said that it gathered attention from not only China, but from all over the world.

The disaster, the process of reconstruction, challenges that have become clear, and the direction of resolution should be applied to not only Japan, but also foreign countries for development of a region and housing construction.

In addition, the majority of reconstruction process of the 2008 Sichuan Earthquake has been completed in 3 years. The reconstruction process was very quickly developed. The Sichuan Earthquake also wreaked enormous damage (I was dispatched to a project related to the reconstruction process.) where as many as 87,000 people died or were missing (Most of them were caused by collapsing residences and schools.), more than 5 million rooms collapsed. The processes of evacuation immediately after the disaster, temporary residence such as temporary housing, rebuilding and relocation of houses were same as Japan, but according to the report after 3 years, 2.2 million houses were rebuilt, and 4.4 million houses were repaired. It is said Chinese government also attached importance to quick reconstruction, and was aware that the process of reconstruction would be a 'Model' for the future.

Difference of the state of affairs in a country, especially segregation of duties of local government and central government, strong development of economic cooperation between regions, and reconstruction in a soaring economy, many parts are from a different background and context of our country, but the process (including: let it be a lesson to everyone) such as crystallization of quick planning, prompt business deployment, cooperation and support system, efforts to regional economic revitalization, records and storing should be referred.

[Sources]

RESEARCH REPORT of NILIM No.52
 Emergency Responses and Engineering Contributions by NILIM for the Recovery from the 2011 Great East Japan Earthquake, Jan. 2013

http://www.nilim.go.jp/lab/bcg/siryou/rpn/rpn0052.htm

2) Reconstruction Agency Website "Actual status and effort of reconstruction"

http://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-1/

3) The Japan International Cooperation Agency (JICA) Website

China Earthquake Resistant Architecture Human Resource Development Project

http://www.jica.go.jp/project/china/006/index.html

4) National Diet Library Reference 2011.9 "3 years from China Sichuan Major Earthquake - The sequence of reconstruction and challenges"