

## Research Trends and Results

# Undertaking the housing recovery and reconstruction by local builders in the Great East Japan Earthquake

SUMIKURA Hideaki, Researcher (Ph. D., Engineering)

Housing Department, Housing Production Division

MORI Masashi, Head

Housing Planning Division

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### 1. Introduction

By The Great East Japan Earthquake occurred on March 11, 2011, Tohoku region has suffered from significant damage brought by the earthquake and further by the Tsunami in the maritime areas. MILIM has been, remarking the housing recovery and reconstruction undertaken afterward by local builders located in damaged areas, continuously implementing the actual investigation in damaged areas from immediately after the disaster so as to study actual state of the housing production system that contributes to raise up the local potential for recovery at the time of emergency such as disaster. This report is to introduce such reaction for the repair and renovation of housing implemented by local builders and the like immediately after the disaster.

### 2. Reaction of local builders immediately after the disaster

The Great East Japan Earthquake has broken full or half of approximately two hundred thousands housings at the time of December 2011 (including those housings flown out by the Tsunami). The I corporation, having its main office in Morioka, Iwate prefecture, has stopped the construction work immediately after the disaster but started actions to the extent it could do although complaining the gasoline shortage as it has received requirements for repair from the day after the telephone was recovered. The S corporation in Rikuzentakada has sent out its staff earlier to visit the clients homes when the road became available that has been broken around five days by the wreckage brought by the Tsunami, in order to check damaged situation of the housing and acknowledge emergency action as well as requirements for the reconstruction and repair of the housing. The H and other corporations in the same city have taken away the wreckage using their own heavy equipment for construction. Thus, we have found that local builders have started actions for the recovery and reconstruction immediately after the disaster although they themselves have been damaged.

### 3. Repair and renovation of damaged housing by local builders

The above-mentioned S corporation has, to those housings that become available by the repair or renovation, acknowledged the state of the damage and confirmed the owner's intent to live there, then executed the repair or renovation work soon after the disaster. Shown in the figure is that process. There were a lot of shortage in the material and parts to use

for the housing work, such as plyboard for framework, heat insulation material, roof tile and so on as the material factories have been damaged. By that reason, full-scale construction work has just started at the beginning of the April 2011. Another reason was that damaged people could just draw the scenario of the budget encouraged by the public donation also around that period.

### 4. Movement and current situation for the reconstruction of the housing

Coming from now is the areal full-scale recovery stage realized by reconstruction of the housing and so on. As the target of using the productive potentiality of local builders in that period, approximately 360 groups of areal recovery housing builders were organized in Iwate, Miyagi and Fukushima prefectures. At the time of this report (February 2013), there found a few cases of housing reconstruction realized by such a group due to the delay in housing land development except that partial cases are seen undertaken by major housing makers. On the other hand, as examples of model house construction by the same group have appeared one by one, with the progress of the high land development, the group in question is expected to become a powerful resource to undertake the housing reconstruction in damaged area.

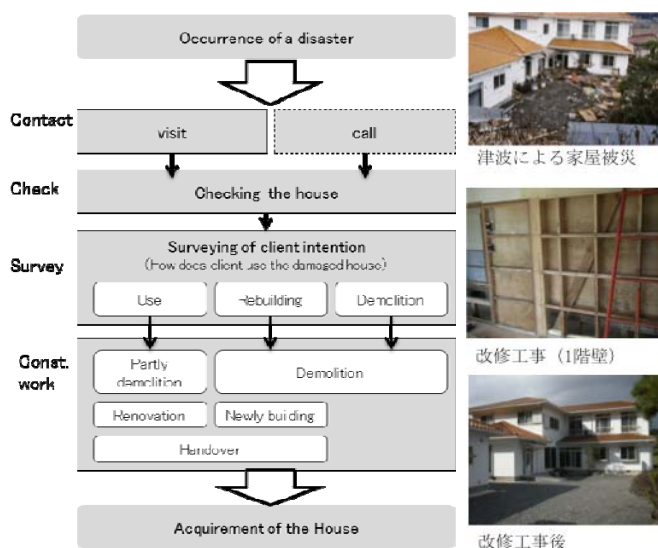


Figure Flow of the repair/renovation of damaged housings