

Technical Guidance for the Restoration of Houses and Communities in the Area Affected by the Kumamoto Earthquake

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1. Introduction

Municipalities hit by the Kumamoto Earthquake need to promote restoration and reconstruction of affected houses and communities. However, not a few municipalities have limitations in the smooth implementation of such activities due to the lack of know-how and human resources. At the request of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), the Housing Department served as a contract consultant and provided technical guidance to the municipalities in terms of the Survey on the Restoration of Houses and Communities in the Areas Affected by the Kumamoto Earthquake conducted in 2016.

2. Outline of the Survey

Out of all municipalities designated as serious disaster areas in Kumamoto, the following ten, which were seriously in need of support, were surveyed: Aso City, Minami-Aso Village, Nishihara Village, Ozu Town, Mashiki Town, Mifune Town, Kosa Town, Uto City, Uki City and Kashima Town.

Fundamental components of the survey were 1) knowing if the affected residents want to rebuild their houses, 2) establishing basic policies for the reconstruction of houses and communities, 3) examining the application of living environment improvement projects that cover specific areas such as a project to build public housing for affected people and a project to improve the areas filled with small-sized houses, and 4) examining the basic plan for the potential location of public housing for affected people. The survey was conducted considering the degree of damage and needs of each municipality and setting priority on the survey contents.

As for the technical guidance, the target municipalities were grouped into three regions: East, West, and Central. A responsible person was assigned to each region and provided technical guidance in collaboration with the staff of the Building Research Institute. We also liaised and shared information with the Kyushu Regional Development Bureau and Kumamoto Prefecture on site.

3. Problems and the Details of the Examination

(1) East Region (Aso city, Minami-Aso Village, Nishihara Village and Ozu Town)

Specific communities were significantly suffered as a whole (Photo 1). In particular, damage caused by the collapse of hillside housing sites and retaining walls was extremely serious. In addition to the reconstruction of individual houses, policies for the recovery of communities as a whole were examined in the main.



Photo 1: Damaged houses in a community



Photo 2: Damaged houses in a community

(2) Central Region (Mashiki Town, Mifune Town and Kosa Town)

Specific communities, including houses and buildings, were heavily damaged as a whole (Photo 2). In addition to the examination of the supply of public housing for affected people, policies for the recovery of communities as a whole were also examined.

For the east and central regions, preparing new ground or restoring land for housing, widening narrow roads, and securing open spaces for temporary shelters constituted problems that needed to be solved and were also discussed.

(3) West Region (Uto City, Uki City and Kashima Town)

Individual houses were damaged but communities as a whole were not as affected. We examined, in the main, the basic plan for the supply of public housing to the people who had difficulties in reconstructing their own houses by themselves.

4. Specific Issues Examined in the Affected Area of the Kumamoto Earthquake

We examined the preparation of public housing for affected people in coordination with the renewal of the stock of public housing, including the demolishing of deteriorated buildings in the existing public apartment complexes (Photo 3). We also examined the need for the conversion of wooden temporary houses (Photo 4) into permanent houses.



Photo 3: A deteriorated building in an existing public apartment complex to be demolished.



Photo 4: Wooden temporary houses that have the needs as permanent houses.

5. Conclusion

Restoration of houses and communities in the affected area has just started. We are going to continue our technical support.