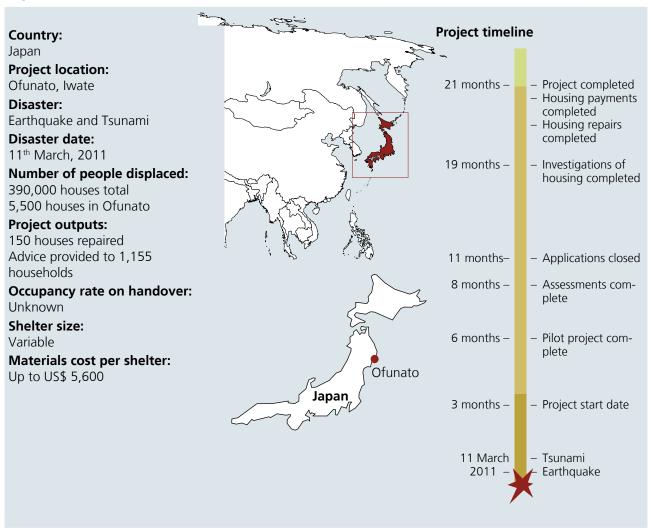
A.14 Natural Disaster

A.14 Japan – 2011 – Earthquake and Tsunami

Update:

Keywords: Urban neighbourhoods, Housing repair and retrofitting, Cash, Structural assessment.



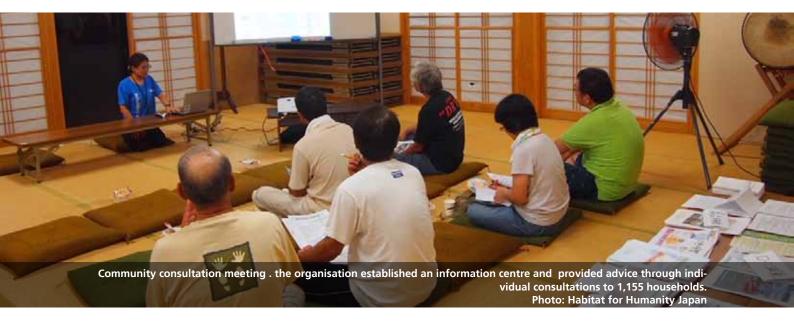
Project description

This project provided cash assistance to repair 150 houses after the tsunami in Japan. It was mainly targeted at families unable to apply for the government's Emergency Repair Aid and for those who required further assistance on top of the government's aid package. The project provided an information and support centre with outreach to support 1155 households. This service provided information to those who had difficulty in accessing other sources of information, primarily the elderly or people living alone.

Strengths and weaknesses

- ✓ The project hired architectural specialists to provide advice to rebuild durable housing.
- ✓ Affected people were supported to return to their original homes, and to reintegrate with their community. This helped to improve security in the area.
- ✓ Local construction firms used local labour and more environmentally sustainable resources.
- ✓ Houses of both evacuated and non-evacuated people were rebuilt.
- ✓ The project's focus on preserving parts of the old town helped to give a feeling of continuity to the community.
- ✓ By coordinating with other organisations, the project was part of a sustainable, sector-wide response. At

- the same time the affected people were thouroughly consulted to gather information and understand needs.
- ***** By supporting rebuilding in potentially hazardous areas, there was the possibility that people could be re-exposed to future disasters.
- * A limited number of households were supported as a result of the high cost per family (a result of Japanese materials prices and culture).
- **★** The financial aid was only for repair and was not for the construction of new houses.
- ➤ Only families who had reached a certain stage in their recovery could benefit from the repair project.
- Vulnerable households were prioritized, including those made up of only elderly people or those with very low incomes.



Before the earthquake

Japan is a high income country with nearly 70 per cent of its population living in urban centres. The affected area was known for its deeply indented coastline, fishing and marine farming.

The population of the area was ageing and decreasing, while the percentages of detached houses and self-owned houses were high compared to urban areas.

After the earthquake

The Great East Japan Earthquake was the biggest in Japan's recorded history. The earthquake caused a huge tsunami with a wave height of over 10m. It also caused a temporary rise in sea level of up to 40m.

The tsunami devastated the Pacific Coast of the Tohoku and Kanto area, cutting off communication routes. More than 390,000 houses were damaged or destroyed, and more than 400,000 people were displaced in the immediate aftermath.

The Fukushima Daiichi nuclear plant was also hit by the tsunami, causing a nuclear crisis that led to long-term evacuation for those living nearby.

The government built 54,000 temporary housing units. These were to last until safe permanent housing could be built. The government also released empty rooms from existing public housing and

rented private houses and apartments for affected people.

The government provided grants of US\$ 6,000 to families who were able to return home but lacked the financial resources to carry out repairs.

In Ofunato city the fishery business was devastated, and the up to 5,500 houses were damaged. The hilly landscape in lwate prefecture, this resulted in many houses being damaged but not washed away, despite being flooded by the tsunami.

Despite the high levels of damage, not all home owners received grants through initial government schemes. This is because lwate prefecture closed its application process earlier than other affected prefectures.

In Ofunato city, the government immediately constructed temporary housing for 1,800 households as an emergency measure. Later on, 150 unoccupied public housings and 500 unoccupied private apartments were rented by the government to serve as temporary housing.

Those that had not been evacuated often had difficulty rehabilitating their houses due to lacking resources.

Selection of beneficiaries

Once the allocation of Emergency Repair Aid grants was completed it became clear that many families in Iwate prefecture and Ofunato city were still unable to repair their homes.

The organisation selected households based on financial need, the relative impacts that repairs would have on the family's quality of life and how much the total cost of repairs would be covered by available financial aid.

Implementation

The organisation provided cash assistance for repairs to houses in Ofunato city. As households had to make applications to receive the financial aid, information about the project was advertised in different media and communicated through individual house visits to ensure that all residents were aware of the process.

The organisation approved 150 of 270 applications.

The works were done by local carpenters selected by beneficiaries themselves. This approach respected local Japanese culture and existing relationships in communities.

Each household signed a contract with the organisation, stating that the household and carpenter (rather than the organisation) had joint responsibility for the construction process. The organisation paid the repair fees directly to carpenters and monitored the construction.

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The organisation made technical assessments before and after the construction, using local, qualified architects. These architects were specialised and qualified with relevant licenses for the works. Their titles would translate as "qualified architect of the first class", "qualified architect of repair technique".

The technical assessments were used to decide whether a house was safe to repair and to provide recommendations on how to improve the disaster resistance of the buildings.

Advice

The organisation provided recovery advice to 1,155 households, including the 150 that received financial assistance. Advice was provided on housing, financial issues, house repairs and how to access government aid.

The project staff conducted the advisory sessions in the temporary housing complexes and local community centers. Staff explained the aid available for each individual case of damage.

In some cases external experts such as lawyers, architects and financial planners, accompanied project staff.

The staff provided the residents with information that they regularly gathered from the city offices and updates on various government assistance programmes.

The project tried to ensure that people who were less mobile, particularly elderly people living on their own, had equal access to information by making home visits.

The organisation hired two full -time staff to manage the project.

Coordination

By coordinating with the city administration and NGOs, the correct up-to-date information was delivered to as many households as possible.

DRR components

There was some concern that the tsunami-affected area would remain at high risk of future hazards





and that encouraging people to repair their original homes was not reducing their exposure to future disasters.

The organisation tried to obtain specific hazard information on each location before they visited each house.

Before repairing a house the team checked whether it was in an area defined as a hazardous area in the city revival planin which case the building did not take place.

Before rehabilitation, architects reviewed each house to ensure their suitability for living.

Logistics

Financial aid was directly paid to the builders and not to the homeowner. The payments were made by the organisation's head-quarters in Tokyo to guarantee secure bank transactions. All of the construction firms that the organisation worked with had bank accounts.

The organisation checked in advance a list of appointed carpenters / builders from city offices. This was required to ensure that the organisation did not contribute to anti-social entities.

