



Community recovery of Tohoku disaster hit area and recovery supports from outside

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1. Outline of the Disaster



Characteristics of the destruction

- ▶ The following characteristics appear when we consider the earthquake disaster from a viewpoint of the recovery of the stricken area.
- ▶ (1) Wide area
Damage occurred widely. The inundation area of the tsunami is 550 square kilometers.
- ▶ (2) Compound
Various damage like as a nuclear plant accident and rumors damage occurred like a chain reaction.



Characteristics of the loss

(3) Bankruptcy

They lost everything. They lost not only the building and the property but also the work and the land. Many people lose their hometown for radioactivity and subsidence.

(4) Function paralysis

In the local government of stricken area, the building was broken, and the staff died, too.

In some governments, 20-25% of staffs died.



The number of dead people

- ▶ Dead 15,960 person (6,434)
- ▶ Missing 4,004 person (3)
- ▶ Injured 6,110 person (47,792)

blue letter ▪ ▪ Kobe earthquake 1995

In addition, more than 2,000 people died for the diseases in conjunction with the earthquake disaster.

In the local government where the damage is the heaviest, the death rate of inhabitants is 10%, and the death rate of administrative staffs is 25%.



2. Situation of the support

Outline of the support

- ▶ In the Tohoku disaster, the largest support is carried out in history. However, there was little number of general volunteers, and, in addition to a range of the damage being wide, the support was not enough.
 - (1) The Self-Defense Forces supported total of 1 million scales.
 - (2) The emergency relief team of the firefighting more than 4,000 rushed on the next day.
 - (3) Local government staff of 10 times in the case of the Kobe earthquake rushed to the support.
 - (4) There was the support from the overseas country more than 50.
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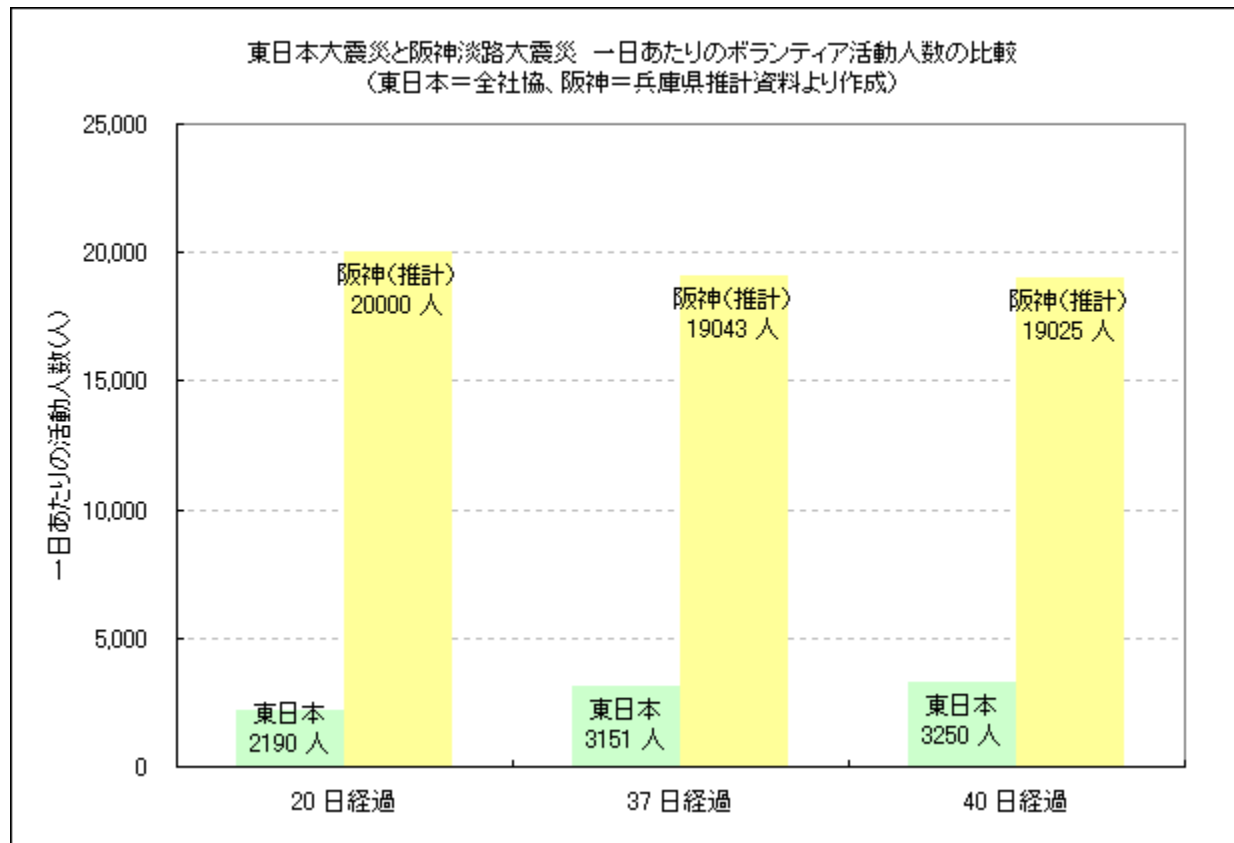


Confusion and blank of the support

- ▶ Because it was an inexperienced large-scale disaster, the support did not succeed.
- ▶ During one week, "the blank of the thing" that medicine and water necessary to live did not come was born, and during one month, "the blank of the person" that the volunteer who snatched the victim did not come to was born.
- ▶ The blank of the support was dripped by the stoppage of the information that a telephone was not usable. In addition, it was brought by lack of the gasoline not to be able to move a car.



The number of volunteers per day (comparison with the Kobe earthquake)




Delay of the relief and recovery

- ▶ By the support, sense of speed and scale were lacked.
- ▶ These delay of the support increased the pains of the victim.
- ▶ In the situation of earthquake disaster three months, removal of debris were 20%, the cancellation of the refuge were 30%.



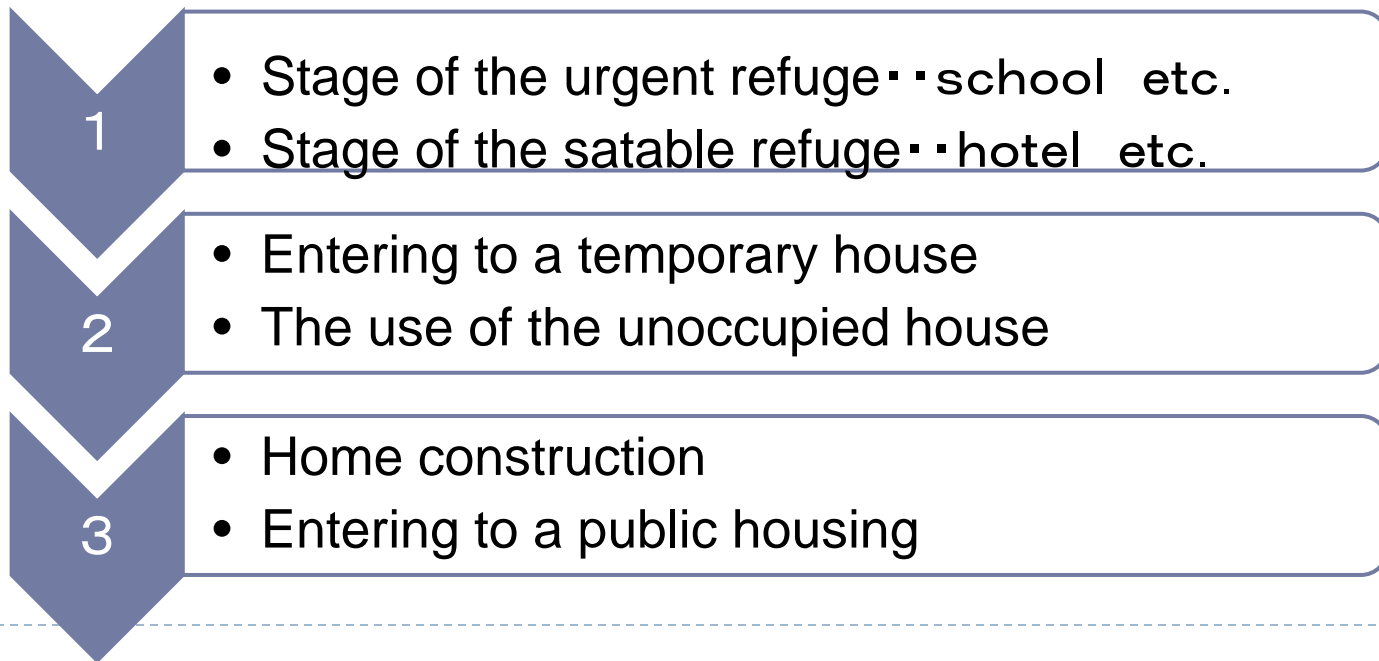


3.Process of Recovery



Stages of community recovery

- ▶ The stage of the community recovery after disaster is composed by a stage of the refuge (quick recovery), a stage of the temporary residence (short-term recovery) and a stage of the permanent residence (long-term recovery).



Stage of the refuge

- ▶ At a peak , the refuge which exceeded 2,000 was installed, and the refugee more than 400,000 entered.
- ▶ The refuge has which many problems that a meal is poor and privacy is poor. Therefore , it is not the place where they should live for a long term.
- ▶ Many people gave up living in the refuge and came back to the risky broken home.



Stage of the temporary residence

- ▶ About 100,000 households of people became able to finally live in the temporary house after an earthquake disaster in a half year. However, 50,000 households of people still live in the refuges outside of their hometown.
- ▶ The temporary housing complex has a lot of problems to be hard to make community and to be inconvenient for shopping and going to hospital.
- ▶ As a result, people shutting itself up in a house increase. There is a loneliness death trap.
- ▶ The action of the farm labor and the action of the temporary store are carried out by the volunteer.



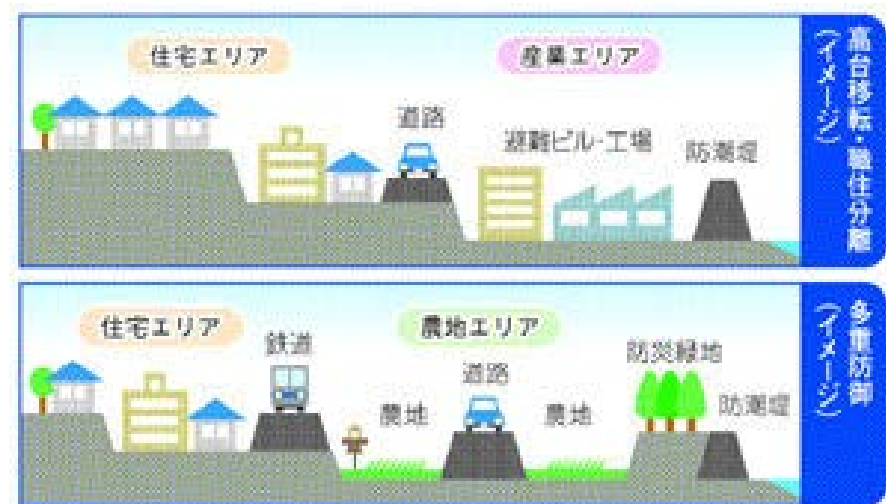
The situation of the temporary housing



Stage of the permanent residence

- ▶ The development of the revival plan is late, and one permanent house is not built.
- ▶ The move to the hill are planned to ensure the security from a tsunami. However, it is not concluded that it costs much for a move and appropriate places are lacked.

It is not preferable to separate the workplace and residence.



4. Roadmap for Community Recovery

Principle to recovery I

- ▶ (1) We solve the social distortion such as a aged society problem or a medical depopulated problem that became clear by the disaster.
- ▶ (2) The solution to a variety of problems are planned comprehensively. We must consider not only the safety but also the convenience and the comfort.
- ▶ (3) In a recovery plan, we must make thought of the each victim dream. A process to summarize the opinion and hope of all is important.



Principle to recovery II

- ▶ (4) It must be a thing drawing the independence and the spirit of the stricken area. The support is not a thing to give and a thing to draw.
- ▶ (5) We must keep it in mind for environmental symbiosis with nature. make much of industrial reproduction We aim at sustained community and the compact city.
- ▶ (6) We value memory of the history and traditional culture in the area.
- ▶ (7) We make much of industrial reproduction and community business.



Principle to recovery III

- ▶ (8) We perform the final act of the connection with the person to be similar. We try for continuation of the community.

