

Shadows of creative reconstruction

The Great Hanshin Earthquake of 1995 in Kobe, Japan revealed the shadowy side of “creative reconstruction programmes”

The Great Hanshin Earthquake occurred at dawn on 17 January 1995 in Kobe, Japan. It led to the loss of 6,433 lives and the ruin of 250,000 buildings and caused 10 trillion yen worth of damage. Almost 80 per cent of the victims were lost during the collapse of old wooden houses and in the massive fires that followed the quake. Elevated expressways collapsed and railroad and ports suffered great damage as well.

Ten years have passed since the earthquake and restorative efforts can be seen in every corner of the city. The collapsed buildings have been replaced and the population has recovered. On the surface, the recovery measures seem to have been a great success. However, if we review the current well-being of the victims and the vitality of the trading markets, we find that many are still facing recovery difficulties. Furthermore, problems that were faced during the process of recovery were left unsolved. Due to these shortcomings, it is questionable if the measures taken following the Great Hanshin Earthquake should serve as provisions for future disasters.

Japan is recognized internationally as an economically strong and technologically advanced country. In reality, however, that is only true in certain areas. Unlike many advanced countries, the national resources of Japan are not utilized to provide aid to victims of quake-hit areas: there are no provisional funds for natural disasters such as typhoons and earthquakes. This shortcoming can be seen in the policy for victims who lost their homes in the quake-hit areas of Kobe. There was no system to give any compensation or monetary assistance for the victims to reconstruct their homes. The central government policy stated that as

housing is a personal asset, it is logical that the national fund collected from taxes must not be used to support personal welfare. However, after the Great Hanshin Earthquake, this logic no longer prevailed. Local governments could not ignore the need to provide assistance to the victims of new quake- and typhoon-hit areas.

Japan's national and local governments have taken pride in the outcome of the recovery measures after the Great Hanshin Earthquake. Many people may have heard such a claim at the recent United Nations conference on disaster prevention in Kobe this January. This pride, however, is based on superficial data. Under the surface, many major issues remain.

The population of Kobe city reached 1.5 mn in November 2004, which is more than that before the disaster. However, the population figures by ward shows a different situation. It is only 80 per cent of the pre-quake figure in Nagata ward and 91 per cent in Hyogo and Suma wards.

Also, about a quarter of the present population is made up of children born after the quake and residents who have newly moved into the city. The fact that the current population exceeds the pre-disaster figure does not necessarily mean that the victims have come back to their hometown.

Suicide rate

Suicides have been increasing under the severe recession throughout Japan. The number of suicides per 100,000 population is especially high in the area which suffered severe damage by the earthquake: 36.1 in Hyogo ward, 27.7 in Nagata ward and 31.1 in Nada ward. The national and prefectural average is 23.

The housing reconstruction process following the earthquake had three stages, namely, evacuation centres, temporary housing and permanent housing. 25,000 units of post-disaster public housing were newly constructed in Hyogo prefecture. The proportion of single elderly in post-disaster public housing is notable: 38.2 per cent in Kobe municipal housing (while it is 23.6 per cent in general municipal housing), and 35.2 per cent in Hyogo prefectural housing (while it is 13.1 per cent in general prefectural housing). The rent for post-disaster public housing is set at a low rate, according to income, with special treatment for the disaster victims, and is as low as 6,000 yen (US\$50) per month in some cases. The rent is cheap, but the life there, however, cannot be said to be satisfying.

While many residents are content with the new housing, there are many complaints about the environment, especially regarding noise and exhaust gases. The biggest complaint, however, is the loss of community. Many of the residents responded to our questionnaire survey saying that they had far fewer social relationships compared to their pre-disaster lives. Fifty-seven per cent said they used to have relationships with their neighbours, but the percentage has decreased to 11.

It can be concluded that post-disaster public housing is satisfactory in terms of physical construction, but most of the people there who are elderly and/or single cannot enjoy their lives because they have lost relationships that they used to have now that they live far from their original places or hometown.

Though there is a system to care for elderly people, the caregivers hardly ever visit the residents. The number of *kodokushi* (solitary deaths) has totalled 560, of which 32 were suicides, 11 discovered over a month later. One was found after a year.

According to my survey, after the quake, 5,000 temporary housing units were built by individuals without any public support in Kobe. Such temporary housing varied in type from

prefabricated barracks to containers, quite a few of which (precisely, 1,044 units) still remain 10 years after the earthquake. The dwellers came back to their hometown as early as possible to restart their lives in their neighbourhood. If there had been public support, it would have decreased the demand for public temporary housing, and contributed to the local revitalization. 48,000 units of public temporary housing were built at a cost of 4 mn yen per unit. Since they were meant to be temporary, they had to be ultimately demolished.

After the quake, there were two types of urban reconstruction programmes. One was the land readjustment programme, and the other, the urban redevelopment programme. An urban redevelopment project is now going on in the district of Shin-Nagata station. Today it is facing big difficulties. This is a super-scale project of 20 ha, worth 270 bn yen (US\$2.7 bn). Thirty-eight buildings were planned and 23 were completed or are under construction, but there still remain some zones with no plans. This project has many serious problems such as the planned commercial floor area exceeding past limits, and the high-rise buildings changing the original atmosphere and townscape of this district.

Under this project, half the number of the old small shops could not enter the new building because of lack of money. However, the most serious problem now is that floor lots find no buyers even when a building is completed. The municipal government has already given up selling commercial floor lots and 26 per cent of the floor space for lease is now shuttered.

In the near future, the municipal government will have to inject public money into the project, which might precipitate a fiscal crisis for the local government. In this project, only the big construction companies can make huge profits.

Livelihoods affected

The loss of property due to the Great Hanshin Earthquake is 10 trillion yen, and 16 trillion yen have already been invested in reconstruction programmes. But the victims livelihoods have not been necessarily revitalized. Why? I think the

reason lies in the faulty strategy of the government's reconstruction policy.

The central and local governments said that they did not need only construction programmes, but, rather, creative reconstruction programmes. The "creative reconstruction programmes" aim to achieve a high-level reconstruction fit for the 21st Century. But, in reality, the creative reconstruction programmes had a shadowy side too. Low-income people and small businesses could not reach the high level envisaged. They remain at the same level as before the quake.

So the creative reconstruction programmes really supported the big companies and general contractors who were working for infrastructure recovery and huge urban reconstruction schemes to make large profits. The creative reconstruction programmes did not contribute to support the low-income classes and small businesses.

But there were other ways to help the victims recover quickly. We have to learn these lessons from Kobe if we wish to be successful in good reconstruction of livelihoods of all victims of natural disasters. We have to understand the relationship between natural disaster, environmental destruction and war. Environmental destruction and war, including civil war, are huge impediments

for disaster prevention and reconstruction. If we hope for successful disaster prevention and recovery of livelihoods, we must immediately stop environmental destruction and war everywhere.

This piece by Yoshimitsu Shiozaki, Professor of Engineering, Department of Architecture and Civil Engineering, Kobe University, Japan, is based on a presentation made at the Regional Conference on Reconstruction and Development of Peasants' and Fisherfolks' Livelihoods, Medan, Indonesia, 18 February 2005