

# Lessons learned from our experiences of earthquakes and natural disasters

JAPAN

ACHR JAPAN Prof. Uchida Yuzo

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I encountered a tsunami-like experience in Aug. 1975.  
I visited a *Buraku* settlement in Japan - *Hewa* in *Tosa City, Kochi Prefecture*.  
Among the 300 houses, 250 were flooded by the typhoon. I had committed myself to drawing up the reconstruction plan of the area.

Also, in the case of The Great *Hanshin-Awaji* Earthquake in Jan. 1995, I was responsible for the research group of the All-Japan Prefecture and Municipal Workers Union (*JICHIRO*). I was engaged in research on the reconstruction plan and also a disaster prevention urban plan as a member of the Special Committee of Architecture Institute of Japan (AIJ) and City Planning Institute of Japan (CPIJ) .

For the more recent *Niigata* Earthquake which occurred in Nov. 2004, I have been working on the reconstruction plan of *Yamakoshi* village - one of the most badly affected areas. From the 1980s to 1990s, I have researched affected area of *Minamata* for the local society of *Minamata* , *Kumamoto Prefecture*, and the life of the *Minamata* victims, as a member of the *Shiranui* Sea Research mission.

Looking back over these experiences, I came to think it was my duty to organize and report about the problems of disasters during the process of restoration and recovery. However, in Japan's case, the society is already moving toward a low-growth period from a high-growth period. Therefore, her population is decreasing and aging and today it is already in the era of population-decrease. Please be noted that it is very different from other Asian countries whose societies are mostly undergoing the high- growth and population-increase and rapid urbanization.



## Lessons learnt from the Japanese Experience

### 1. Disaster affects the poor more severely.

It is not true that people in a town or city are affected equally by disaster. The poor families receive overwhelmingly larger damage in the scope of disaster, and have more difficulty and delays with reconstruction.

In the case of *Hewa* flood damage, those *burakumin* (, (people are discriminated against in Japan - as a kind of lower caste) lived on the swamp land of river banks or under cliffs and therefore received more damage from the floods and landslip. In addition, because the roads were extremely narrow and the road networks were not good, reconstruction work such as clearing damage was much slower.

In the case of the *Kobe* earthquake, many old people and overseas students died because they lived in the aging, cheap wooden houses (in Nagaya also). Here there are densely built-up areas where clusters of houses and small factories are located to produce plastic shoes - this area was also more severely damaged. It's area where Koreans live in Kobe.



Wooden House in Kobe

### 2. Disasters expose the weakness of communities and fasten their decline.

In the case of *Hanshin-Awaji* --- Nagata area in Kobe City the area which once prospered in producing plastic shoes. However, when the earthquake hit, it was already declining because of the competition from cheap labor in China and other Asian countries. After factories were destroyed by the fire from the disaster, such production in this area disappeared completely.

In the case of *Niigata*--- *Yamakoshi* village - an aging area located between the mountains. After having its few and declining areas of rice fields and waterways damaged, its few agricultural areas were mostly destroyed, and this lead the youngsters to leave and flow to the cities. Probably the aging would precede more.



Fires Kobe Earthquake

### 3. Temporary shelters or reconstruction of permanent housing should be constructed as close as possible to the former community.

The relief effort usually corresponds to a time frame after the earthquake

1. At the time of occurrence--- take refuge and start rescue work

2, Emergency rescue and relief - medical care and food supply (3 days or one week is the critical period). During this period, people usually mostly stay temporarily in public facilities like schools or live in tents on public land.

In the Kobe case, these types of temporary shelters existed for 2~3 months for the shortest case and 2 yrs for the longest.

3. Living in Temporary Housing

In Japan. These temporary houses were prefabricated houses constructed by municipal bodies. The law provided a maximum time period of 2 years for living in a temporary house, but in many cases it would be 3 years.

4. Moving into Reconstructed Permanent Housing

The final period is when people moved into a repaired or reconstructed permanent houses or moved into special public rental housing for the victims. However, by this time many people had moved to live with the young families / relatives living in other areas.

Immediately after the disaster, local people took refuge at the nearby school (especially gym rooms) or public facilities, and in many cases, public facilities become the temporary shelters. They also, pitch tents on the school ground or in the park.

In Kobe City, there were some large scale tent camps on the park land. The administrators tried to construct prefabricated temporary houses immediately, intending to evict the victims from the public spaces such as parks and schools. However, if the temporary shelters are far away from the former residential area, the links (social and economic) of the former community will be broken, making it difficult to continue working the same as before. Also, it would make it difficult for the community to participate in the reconstruction of the community.

Temporary housing should be as far as possible constructed in the former community (if possible, on vacant land of the community). There were many cases that the local authority evicted victims who resisted relocation to the remote area, demanding to live close to their former community. I myself believe that we should accept self-supporting reconstruction movements positively, even though public land might be occupied for some time.

The concerned authorities tend to construct temporary housing in relatively remote areas where larger areas of land are more easily available. However, it might be important to construct housing scattered in smaller areas, or to use private leased land in the existing cities within a definite period of time.

#### 4. Appropriate housing should be guaranteed.

In Japan, there were many problems during the process of moving from temporary housing to permanent reconstruction of housing.

In the Kobe case, the cheap wooden rental houses were destroyed by the disaster, and there was no housing for low income people or the elderly people who used to live in these types of houses.

The Government did not compensate people directly for their destroyed houses in every case, insisting that "State does not take part in formation of citizens' private property." On this, there were strong objections from citizens saying "State should help us in these emergencies" What do we pay tax for?" "There are several favorable treatments for companies !"

This issue became very controversial in the diet (parliament) also.

Donations of money for victims comes from people all over Japan. And from the budgets of concerned authorities. However money is not distributed equally. - locally or nationally.

In Niigata case, for the first measure, 2,000,000 yen was paid to families whose housing was fully devastated. 1,000,000 yen was paid for the half damaged houses.

However, expenses to remove the collapsed houses are also necessary. Also, at present, the expense to rebuild a wooden house is at least 150,000 yen ?? . It is difficult for the victim to rebuild the same size house as before. For those who had worked for the small and medium-sized enterprises and shops which went bankrupt because of the disaster, it was almost impossible to rebuild houses. Further, in the case of victims rebuilding houses, there were only a few cases of where interest on the loan was lower than public housing loans in general.

When people moved from dangerous areas such as under cliffs or from riverbeds, there would be some subsidy to the residential developer of the resettlement area, but not when an individual bought the land and to build his/her own house by him/herself. However, in the case of *Machizukuri* (town-planning) in the *Hawa*



Tsunami Japan 1984



to build their own house by him/herself. However, in the case of *shimin-kaiiku* (town planning) in the *buraku* area, the *Buraku* problems were taken into consideration and the residential land and houses were purchased in real terms.

I will also just mention that in the case of condominiums, it was very hard to rebuild those which were damaged and collapsed.

#### ? Insurance

Private fire Insurance or property insurance does not cover the damage by natural disasters such as earthquake, fire caused by earthquake, flood, tsunami etc. There is earthquake insurance, but the amount of premium is three times as high as the general one, and only a few buy it. Therefore, there were almost no insurance reimbursed for the collapsed or burnt houses. Because of the special measures for affected area, the legal status of rented land was continued even after collapse or total destruction, but it was difficult for the renter to rebuild the house by him/herself.

Therefore, people in many cases used the public rental houses provided by Province or City. Enough public rental houses were provided quantitatively and rents were low, but most were built in areas remote from the previous community and residents became isolated. This especially affected older people: such separation and isolation caused much loneliness and often lead to "lonely-deaths" (death without anybody noticing and being found many days after dying).

Public housing should be built close to the former community. Collective Houses or various kinds of Co-Housing which focus on community bonds should be planned.



### 5. Even after having infrastructure rebuilt, reconstruction of people's lives or community requires more time.

Ten years has passed since The Great Hanshin-Awaji Earthquake. Restoration Projects of public facilities by local authorities are given financially favorable treatment from government. Over the past 10 years, infrastructure such as roads, railways, harbors, and public buildings such as City Hall and schools have been completely reconstructed. Newly built roads and land readjustment projects have also finished. Also, waterworks and sewerage, electricity, communication networks were restored within one or three months of the disaster.

However, restoration and reconstruction of housing and small size stores made very slow progress, and in many cases, communities were broken apart. In the traditional shopping and residential districts of Kobe city, shopping streets declined because the elderly residents were scattered in all directions. Communities in these areas changed significantly in real terms.



## Conclusions

I have pointed out the problems of the restoration and reconstruction after disasters in Japan. Now, I would like to express my opinion about the reconstruction plan of the Asian countries based on my experience. Again, please note that situations of the other Asian countries and Japan are very different and it is not appropriate to discuss as them as the same.

#### 1. It is necessary to the socially weaker people into consideration.

We should be careful to watch that the socially weak people do not face the disadvantage: this include native people, those who suffer discrimination, migrant workers, those who do not have legal land ownership under the modern system.

#### 2. Land ownership

We should make sure that those who have resided in the area regardless of modern law are not forcibly evicted.

We should make sure that the settlements formed on public or unused land would not be evicted using this tsunami disaster as an opportunity.

#### 3. Consideration for appropriate housing

We would like to propose that those who lost houses or fishing boats should receive compensation from the government.

For those who build houses by themselves or buy residential land or buy income generating materials such

For those who own houses of members, or day residential care, or day income generating materials such as fishing boats, there should be special low-interest loans.

It may be necessary to provide public rental houses for the victims who find it difficult to rebuild themselves.

#### 4. Recovering local people's life, work and community life is the task

Restoration and reconstruction of infrastructure should progress fast, by government, local authorities, and ODA. The major problem however is reconstruction of people's life, livelihood, and community.

In this area, there might be many common approaches to those of *Machizukuri*, or community development, and low income settlement development. The public institution or UN institutions which already work in partnerships with ACHR network have various experiences.

Basically, government or international institutions need to support people by acknowledging the people's initiative and consider the people's autonomous self-development activities as important.

CODI's support of community reconstruction in Thailand and Women's Bank in Sri Lanka are noteworthy and are recognised in Japan.

5. I am very happy to know that various CBOs and NGOs are doing well all over the tsunami affected areas. Although what we can do is only a little, we the members of ACHR-JAPAN would like to support the autonomous livelihood/community reconstruction movement by people from overseas.

Lastly, I would be very happy if this report is useful for the local people.

This report was translated from Japanese to English by Mami Nakamura and if it would be shared with ACHR friends, I would like to express my gratitude to those who concerned.

### More Lessons from Japan

# The Great Hanshin Earthquake

The "[Citizen-Centered Assessment on Rehabilitation](#)" introduced below is a report compiled by our research group consisting of citizens and researchers, who have been involved in activities in the area hit by the Great Hanshin Earthquake. We carried out research from the years 2000 and 2001 for this report.

Five years after the earthquake, administrative bodies conducted programs to assess and examine the earthquake reconstruction and consequently issued their reports. The reports, however, raised a question for us: The results as reported appeared quite different from the actual feeling of the citizens themselves. We, therefore, decided to conduct our own research to examine and review the actual situation of reconstruction from the citizens' point of view.

In our report, we examined the problems found in the assessment and verification programs conducted by the governmental bodies. We also studied other post-disaster reconstruction cases both at home and abroad into which we had conducted research.

We decided to translate the main points of our report into English to make it public on a website. We hope many people will have the chance to know about the true situation of post-disaster reconstruction after the Great Hanshin Earthquake through our website and to send us their comments, which will give us the chance to more profoundly discuss and consider how reconstruction in the future should go. We greatly appreciate your comments and opinions on this report.

The assessment report is [HERE](#) on a separate web site.

