# How Hyogo Prefecture Constructed the Recovery Policies after the 1995 Great Hanshin-Awaji Earthquake -Results from Social Random Sampled Survey in 2001

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#### 1. Introduction

The Great Hanshin-Awaji Earthquake Disaster in Japan's southern Hyogo Prefecture on January 17, 1995, caused unprecedented local catastrophe. That left extensive direct and indirect damage whose broad influence was felt widely and long after the event. To mitigate damage, the personnel who dealt with disaster were requested to stand on long-term perspective that had been never experienced before. The most typical example of this was the damage sustained by urban residents to their lifestyle and its recovery. Problems in recovery for victims involved lifestyle and its recovery. Problems in recovery for victims involved finding new lives in new environments due to sudden, extensive destruction of a complex social and urban infrastructure. Within the framework of the Basic Disaster Countermeasures Act (BDCA), the protection of three elements – national land, human life, and property (Article 1 of BDCA) – was considered the objective of disaster prevention. Because, at any stage in emergency, response, or reconstruction and restoration measures, importance tended to be placed on the restoration of lifelines and the reconstruction of buildings, no case has arisen in Japan, even in recent years, in which study was conducted systematically to assist in life recovery. To clarify the problems of life recovery, it is important to verify measures for such problems and use this experience as cultural accumulation in future disaster.

### 2. Hvogo Prefecture Put What They Learned from the Social Surveys into Practice

Hyogo Prefecture struggled with verifying measure for how much victims had recovered from the suffering in order to carry out policy measures that would be necessary for them. The researches gave advice to conduct random sampling survey in the impacted area because scientific research would be needed in order to construct new policies. 4 social surveys were conducted every 2years after 1999 to 2005. (e.g.[1]) Hyogo Prefecture constructed and implemented many policies for victims based on the result of surveys.

## 3. Introduce the Specific Results of this Study

## 3.1 Assistance Program for the elderly called 'Life Support Advisor'

The life recovery scale consists of 14 five-points Likert scale that asks 1) the recovery of daily activity, social relationship, subjective well-being (7 items), 2) life satisfaction and quality of life (6 items), and 3) optimistic/pessimistic prospect of life that is one year from now (1 item). These 14 items were originally developed in the 1999 Kobe survey and showed unidimensionality with high reliability. In 2001 survey we found 60s and above had much lower sense of life-recovery than 20s &30s and 40s &50s (Figure 1).

Hyogo prefecture had provided sufficient support to the elderly population since the Great Hanshin-Awaji Earthquake Disaster occurred; however, we once realized how much the elderly were suffered. Hyogo Prefecture decided to implement the program called "Life support Advisor," who visited periodically to confirm

the safety of the elder victims and provide consultation for them. Hyogo Prefecture focused on provided this program to the elderly who lived in public housings for victims because aging rate was much higher than the rate in the other places (Figure 2).

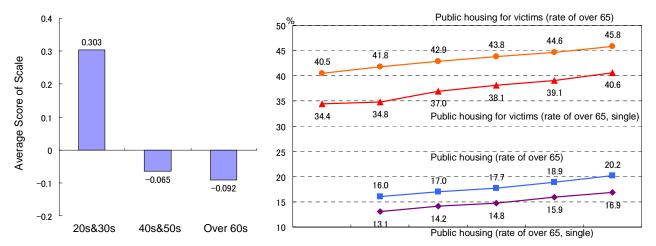


Figure 1 The Degree of Life Recovery (Generation)

Figure 2 The rate of residence, over 65 years in pubic housing for victims

# 3.2 Assistance Program for Local Shopping Area

The result of 2001 survey clarified that the industrial workers and the self-owned shop owners had much lower sense of recovery than those who had other occupations (Figure 3). Before the occurrence of the Disaster the many local shopping areas became stagnant and local industries become declined that was commonly reported. The Great Hanshin-Awaji Earthquake Disaster made the situation worse. Hyogo Prefecture considered this as high-priority issue because victims were eager to express the strong hope to increase popularity of the town again. Hyogo Prefecture implemented to support indirectly to local shopping area and industries such as hosting the periodic events in the area and develop an environment conducive to activities by local industries.

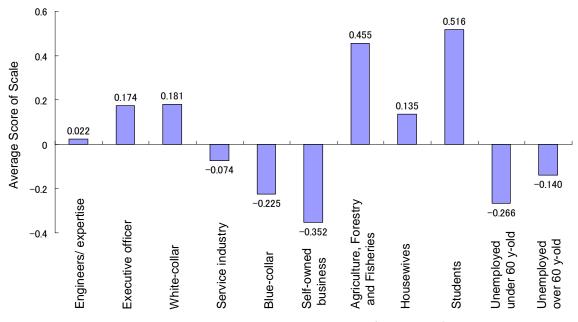


Figure 3 The Degree of Life Recovery (Occupation)

#### References

[1] Tamura, K., Hayahsi, H., Tatsuki, S. and Kimura, R., "Socio-economic Recovery from the 1995 Hanshin Awaji Earthquake Disaster -Report of Panel Survey Data 2001-," *Proceedings of 7th US/Japan Workshop on Urban Earthquake Hazard Reduction*, 5pp., 2003.