

Topic-Setting Program to Advance Cutting-Edge
Humanities and Social Sciences Research

(Responding to Real Society)

Progress Report
(Summary of Final Report)

[A Study on Roles as Disaster Prevention Revival Resources of the
Social Welfare for the Elderly-People Facilities in the Stricken Areas]

Core-Researcher: Takehiko Otsuka

Institution: National Institute of Technology, Akashi College, Japan

Academic Unit: Department of Architecture

Position: Professor

Research Period: FY2013 - FY2015

1. Basic information of research project

Research Area	Scientific Practice on an Enforcing the Endogenous Activity of the Community and Specialist towards Realization of Convivial Society		
Project Title			
Institution	National Institute of Technology, Akashi College, Japan		
Core-Researcher (Name, Academic Unit & Position)	Takehiko Otsuka, Department of Architecture, Professor		
Project Period	FY2013 - FY2015		
Appropriations Plan (¥)	FY2013	2,400,000	JPY
	FY2014	5,000,000	JPY
	FY2015	2,575,000	JPY

2. Purpose of research

In this study, researchers and practitioners worked together and comprehensively focused on the concept and relationship between the evacuation of vulnerable people in the event of disasters and the development of facilities related to welfare, daily life and residence in the normal times. While studying the pioneering examples in the affected areas, we examined the new concept of the maintenance of shelters and how to reduce the number of disaster-related deaths. We believe that the existence of a network of various living environment facilities and welfare facilities with a good habitability in a town creates the foundation of disaster prevention. There are many reconstruction researches similar with this study in the architecture and urban planning sectors. However, policy recommendations through the research and sharing of awareness of the issues by researchers and practitioners are still insufficient. Further, such information is written in academic and professional terms, making it difficult to be provided to, shared with and inherited by disaster victims and citizens, as well as insufficient for them to provide feedback.

3. Outline of research (Including study member)

The objectives of this study are as follows.

1. Identify the issues and required conditions of welfare shelters through surveys on welfare shelters.
2. Investigate the roles that elderly care facilities play in the local community during the normal times and in the event of disasters.
Understand that welfare facilities are the disaster prevention resources in a broad sense for the local residents.
3. Through surveys on disaster areas inside and outside the country, comprehensively reveal that in addition to welfare facilities, facilities related to our daily life and other good-quality residential facilities, the community that is invisible to our eyes, shrines,

temples and festivals, the nature, and other familiar landscape, which are the factors that constitute the local community, are also disaster preventive and welfare resources. Contribute to the principle establishment for Welfare City Planning.

We conducted surveys on disaster areas, islands and facilities inside and outside the country. We also interviewed the affected persons, supporters and key personnel of reconstruction (Okushiri Island, Genkai Island, Okikamurojima, Rikuzentakata-shi, Minami Sanriku-cho, Ishinomaki-shi, HigashiMatsushima-shi, Nagaoka-shi (formerly Yamakoshi), Kawaguchi-machi, Noto, Dalian (China), etc.).

In particular, the following studies and researches have been conducted:

1. Field survey on secondary shelters and welfare shelters, as well as study on the role that non-designated shelters played in the rescue of disaster victims

- Study on Rikuzentakata, Ishinomaki, Minami Sanriku; - Field survey on the welfare shelters in Higashi Harima, Hyogo Prefecture

2. Elderly welfare facilities Ashiya Kirakuen (Hyogo)'s regional contribution and challenges

— Study on the mixed roles of elderly welfare facilities as welfare disaster reconstruction resources —

Field survey on roles of elderly welfare facilities, day service centers, and 24 hours life support businesses as the resources of local residents' daily life, welfare and disaster prevention

3. Study on life and residential reconstruction resources in disasters and islands

- Study on earthquake reconstruction in Okushiri Island; - Study on temple-based residential resources in Oki-Kamuro Island

- Study on regional disaster prevention resources and residential welfare resources in Miyakojima and Genkai Island

- Study on reconstruction for the Great Hanshin-Awaji Earthquake (Awaji Island), etc.

4. Social contribution of local community facilities

- Roles of volunteers meeting place as the regional disaster prevention resource (Okidai Suzume-No-Ie, Nakatsu, Oita)

- Study on reconstruction for the Niigata Chuetsu Earthquake (November 2014)

We interviewed the residents and staff of Kawaguchi-machi (former Yamakoshi) about the process and lessons learned from the village evacuation in Yamakoshi.

- "Survey on disaster victims who were evacuated to shelters other than the designated ones (in Miyagi Prefecture)" targets: Interview at NPO CLC Japan (Sendai City), etc.

5. Challenges and prospects of the concept of evacuation and reconstruction from the viewpoint of affected disabled persons

○Research members

- Takehiko Otsuka , professor Core-Researcher, National Institute of Technology, Akashi College、Japan((architectural planning and urban planning))

Sharer

- Project leader Kazuo Hayakawa,
University of Kobe,professor emeritus (architectural planning and urban planning)

Team members: "practitioners"

- Reiko Ichikawa,Social president ,Welfare corporation Kirakuen (social welfare)
- Miharu Nagasaka,Home care support center life Meikai (Regional Comprehensive Care)
- Hiroyasu Asao, Chairman,NPO corporation Palette (Victims)
- Kazuto Kitagawa, office manager、 Social welfare corporation Kirakuen (social welfare)
- Itaru Fujie, office manager、 Aozora Foundation NPO (Regional planning)
- Yuko Kuroda, president、 Hanshin Support Network for the Elderly and Disabled(Disaster Nursing)

Team members: "Researchers"

- Kan Lee, Associate professor, Nagasaki Institute of Applied Science (architectural planning and urban planning)

4. Research results and outcomes produced

The study results revealed the following:

1. Facilities used in our daily live and welfare can become disaster preventive facilities in case of emergency
2. Issues and required conditions of welfare shelters identified from the Chuetsu and the Great East Japan Earthquake (needs of medical assistance, nursing care and assistance)
3. Elderly and welfare facilities are disaster prevention resources in a broad sense for local residents.
4. Importance of measures and policies for dual-track evacuation and temporary housing
5. In addition to welfare facilities, facilities related to our daily life and other good-quality residential facilities, the factors that constitute the local community (the community that is invisible to our eyes, shrines, temples and festivals, the nature, and other familiar landscape) are also disaster preventive and welfare resources.
6. The evacuation of persons requiring support and the establishment of shelters are still insufficient. It is important to put reconstruction focusing on persons requiring support in disasters into the process of evacuation and reconstruction.
7. The driving force that overcomes the unprecedented difficulties is not the disaster drills such as fire drills and evacuation drills that are conventionally performed. Allowing the residents to learn the importance of life on a daily basis and be equipped with knowledge,

technology and belief is the way to develop a town that is well prepared when a disaster hits. Residents need to be semi-professional in the disaster prevention area.

We developed easy-to-understand teaching materials with illustrations, describing matters that noticed and lessons learned by researchers and practitioners in the approach during disasters. The materials are distributed to public institutions, researchers, practitioners, citizens, support groups, and press. Seminars and workshops are also being held.



Title: Human Resource Development and Community Development Can Protect Lives - Convey to Future Generations - Approaches during disasters (Published in March 2016, 47 pages)