Consideration of “New Public Commons” Characteristics for Disaster Reconstruction

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ABSTRACT
This paper studies the characteristics of New Public Commons for disaster reconstruction through three case studies: the Unzen, Hanshin-Awaji, and Chuetsu disasters. New public activities can be launched after huge calamities. They are mainly soft measures and provide victims and communities with innovative methods for community reconstruction. Public-private partnership is also important to sustain new public activities and to revitalize the communities.

KEYWORDS: New Public Commons, Large scale disasters, Soft measures, Self-help, mutual and public support systems, Public-private partnership

JEL CLASSIFICATION: A13, R11

1 NEW PUBLIC COMMONS

In Japan, many still hold the notion that so-called public activities are the exclusive domain of the government. On the other hand, activities carried out by communities, NPOs and companies are called “New Public Commons,” which aim to rebuild the society. While public activities implemented by the government sector are called “public-public,” new public activities handled by the private sector are referred to as “private-public” (Figure 1).

According to the Japanese national government, New Public Commons refers to “Citizens, NPOs, and companies that provide public service and property development. They launch activities, for example, in education, nurturing, nursing care and welfare with mutual support for each other.” “New ideas can emerge from the ties among the people, which can trigger social innovations that promote fresh growth in the society.” After the Great East Japan Earthquake, the government also proposed the following five agendas: 1) discussion among interested parties to implement their reconstruction plan, and to disseminate relevant information; 2) integration of the project capacity and know-how for reconstruction by individuals, companies and organizations; 3) society development for financial support of activities by New Public Commons; 4) establishment of a hub to support new regional development; and 5) promotion of information sharing and cooperation among companies, NPOs and local governments. The role of New Public Commons draws more attention in the society.

Figure 1.Public-Public and Private-Public Activities

Public activities by public sectors
(Existing public activities)

Public activities by private sectors
(New public activities)

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However, this is not an entirely new phenomenon. After the Great Hanshin-Awaji Earthquake in 1995, volunteers and non-volunteers developed relief activities in evacuation centers. They also took care of elderly survivors in temporary and permanent housing facilities. Experts provided technical assistance for collective housing, community development, revitalization of shopping malls, and so on.

In this research, I wish to clarify the characteristics of New Public Commons for disaster reconstruction. I analyzed three case studies: A) Unzen Fugendake Volcanic Eruption Disaster in 1991, B) Hanshin-Awaji Earthquake Disaster, and C) Chuetsu Earthquake Disaster in 2004. The Unzen Fugendake Volcanic Eruption was a huge disaster and victims were prohibited by law from going back to live in affected areas in Kyushu Island. However, people were not given any compensation. The Hanshin-Awaji earthquake heavily damaged the infrastructure, industries and urban amenities in the city of Kobe, other metropolitan areas and Awaji Island in western Japan. On the other hand, the Chuetsu Earthquake Disaster was disastrous in the mountainous regions of Niigata in northern Japan where aging, depopulation and problems of community decline had been severe.

Each disaster has unique and specific characteristics, but I wish to clarify the common elements related to New Public Commons in the disaster reconstruction process. It is significant to consider the characteristics of New Public Commons for future disaster reconstruction programs.

2 RECONSTRUCTION FROM THE UNZEN FUGENDAKE VOLCANIC ERUPTION DISASTER

2.1 Characteristics of the Disaster

Volcanic eruptions sometimes cause long-term disasters, unless the eruptions eventually halt. The Unzen Fugendake volcanic eruption disaster has continued from November 1990 to February 1996. The toll for casualties and unaccountable persons amounted to 44, while injured victims totaled 12 persons. The number of damaged homes was 2,511. These damages were mainly caused by mud and pyroclastic flow and ash deposits. According to Article 63 of the Disaster Basic Act, the affected municipality governments assigned caution areas that became off-limits to the people. Victims were prohibited to live and conduct any type of business in those areas.

Victims and local governments demanded compensation from the national government. However, these requests were rejected under the premise that the government is not responsible for natural disasters, and that the government could not provide compensation using public funds for private properties damaged by the natural disaster. This view is still the current official position of the government.

Volcanic ash fall also caused serious damage to houses, commercial industries and farm crops. The estimated value of damages and casualties reached around 230 billion Japanese yen.

2.2 Annaka Triangle Area

This disaster occurred before the Hanshin-Awaji Earthquake when volunteer activities were not very popular in natural disasters, except for donations. However, in this chapter, I analyzed one case where one-community victims exerted efforts to promote reconstruction in severely affected areas. This took place in the Annaka Community, in Shimabara City, located in the lower reach of the Mizunashi River. Both mud and pyroclastic flow reached this area on several occasions along the river. The community was filled with earth and sand, with 531 totally affected homes.

After lifting the off-limits areas, the national government decided to set a new training wall, and to
level up the height of the riverbank against these flows to prevent future disasters. Eventually, the community was surrounded by the river, the new train wall and the ocean, which were called the Annaka Triangle Area (Figure 2).

Concern regarding the inner community lands becoming lower and increasing vulnerability to risks of mud and pyroclastic flow. Most of the affected community land spaces were privately owned, and the victims had to remove the mud by themselves without any compensation and support from the national, prefectural, nor municipal governments. It was very difficult for the victims to function under these conditions.

Figure 2. Location of the Annaka Triangle Area

The victims changed the idea, and proposed to level up their community land. In the upper region, the national government planned the construction of a new “sabo” (mud slide prevention) dam, for which they had to look for a mud dumpsite. Thus, the community victims tried to collect the mud through the public works system, and to receive payment for their reconstruction activities. Both national and local governments accepted this proposal. While the Shimabara City government implemented a public works system, some victims who abided by this the community. According to Mr. Tatsuro Omachi, who was the community leader during that time, it was easier for the residents to be persuaded by their neighbors rather than by the government officials. The public works system was

Figure 3. Leveling Up the Land in Annaka Triangle Area

1 According to the interview with Mr. Omachi, the residents were usually cautious against government officials, and tried to disagree with them. On the contrary, they had a trusting relationship with their neighbors, and listened to them sincerely. They considered the welfare of their future community, and refrained from excessive demand.
launched in June 1995. In addition, the area with 98.4 ha was leveled up for about 6m by 3.3 million cubic meters of earth and sand. Both the housing land and the farm readjustment projects were also leveled up, and 113 houses were completed by April 30, 2004. Figure 3 shows the leveling up of the land around the Annaka Triangle Area.

The community members also established the “Annaka Machizukuri (community development) Committee,” and drafted the Annaka Dream Plan after implementing public works. The purpose of this plan is the following;

1) Population recovery and prevention of depopulation through community development accompanied by determination and rapport among the townspeople
2) Assurance of adequate employment and promotion of a vigorous community
3) Establishment of a stable local economy through tourism

The plan consisted of 45 items. Table 1 shows 21 out of the 45 items, which were implemented in cooperation with the government.

| Table 1. Annaka Dream Plans (21 items put in practice, out of 45) |
|---------------------------------------------------------------|
| Plan | Item No. | Content |
| Community Reconstruction | No.1 | Relocating the local shrine and building a shrine park |
| | No.2 | Developing roads of about 16 meters wide |
| | No.3 | Developing a municipal bridge over the training wall |
| | No.4 | Developing new communities |
| | No.5 | Developing a community hall |
| | No.9 | Positioning local parks as evacuation spots |
| | No.11 | Developing an anti-fire community |
| Sports Development | No.12 | Building an athletic facility in the reclaimed land |
| | No.13 | Building a sports ground within the training wall |
| Volcanic Disaster Learning Facility | No.17 | Building a sand erosion control learning center at the former elementary school site |
| | No.19 | Developing access roads between tourist facilities |
| | No.20 | Developing agriculture below the “sabo” (mud slide prevention) dam site |
| Fishery Revitalization and Marine Leisure Development | No.28 | Opening of a convention hall |
| Agriculture Rehabilitation | No.30 | Developing an agriculture production base |
| | No.31 | Developing new agriculture and processed products |
| | No.33 | Developing roads to touristic farm lands |
| | No.34 | Developing a flower land project |
| Roads and Railways | No.40 | Building a road linking the new reclamation land to Kamikoba and Onokoba communities |
| | No.43 | Building a recreation trail network |
| | No.44 | Resolving a dead-end street problem |
| Event | No.45 | Volcano-related and other events |

Source: Annaka Community Coordinating Association (1996). Annaka Dream Plan, 45 Proposals to Gamadasu Plan, and NPO Shimabara Fugenkai (2000). Unzen Fugendake Funka Saigai wo Taikenshite Hisaisha karano Hokoku (Report from the Victims in the Unzen Fugendake Volcano Eruption Disaster).

Another case demonstrating the residents’ initiative for disaster reconstruction was the development of the Waren small stream. This stream used to be a common laundry space and local residents played activities before the disaster occurred. It survived without any damage. Since it was located inside the new train wall area, the Ministry of Construction (currently the Ministry of Land, Infrastructure, Transport and Tourism) took charge of the land infrastructure development. Residents in those areas improved water corridors, steppingstones and small ponds. In addition, both community and local governments cooperated to manage and operate the stream. It has become the memorial and entertainment spot for setting up annual events by the local people since the disaster...
occurred, as well as for conducting outdoor activities run by schoolchildren, and others.

2.3 Lessons Learned from the Unzen Fugendake Volcanic Eruption Disaster

Table 2 summarizes the activities of the reconstruction process in the Annaka Community. Cooperative activities among self-help, mutual and public support have been implemented to reconstruct the community. Following are the lessons that concern New Public Commons. The community victims and the governments cooperated with each other to promote recovery and reconstruction activities. As a result, public support for private lands was provided for the victims so they could return to their original community (Figure 4).

1) The victims conceptualized a new idea of using public works to collect the earth and sand, instead of removing them from the ground.
2) Finding a mud dumpsite was also beneficial for the national and local governments. It was a successful project for both the victims and the governments.
3) The community victims persuaded other neighbors to launch public works, which facilitated the gathering of a community consensus.
4) The community continues to take initiatives in creating a development plan after implementing public works.

Table 2. Process of the Cooperative Project in the Annaka Triangle Area

| 1. Post disaster situation in the Annaka community area  |
|--------------------------------------------------------|
| a) Sediment deposition; housing collapse.              |
| b) Surrounded by the river, new training wall and the  |
| bay; The community height might become lower.         |
| c) Future concern about mud and pyroclastic flows.    |

| 2. No public support given to private properties       |
|--------------------------------------------------------|
| a) The area has become off-limits according to the     |
| Disaster Basic Act.                                    |
| b) No compensation was given to private properties.   |

| 3. Proposal of leveling up the land by collecting the  |
| earth and sand from the dam construction site         |
|--------------------------------------------------------|
| a) The community stopped the idea of removing earth   |
| and sand from private lands.                          |

| 4. Method decision by the prefecture, municipality and |
| community                                             |
|--------------------------------------------------------|
| a) Dump site for earth and sand in a dam construction  |
| site leading to the Annaka Triangle Area.             |

| 5. Gathering a consensus from other community members |
| level up their lands                                  |
|--------------------------------------------------------|
| a) Community members, not government officials,       |
| persuaded other members to gather a consensus.        |

| 6. Public works by the national and prefectural       |
| government                                            |
|--------------------------------------------------------|
| a) Leveling up the land through earth and sand dump   |
| conducted by the national government.                 |
| b) Land readjustment project run by the prefecture    |
| government.                                           |

| 7. Community Development Annaka Dream Plan            |
|--------------------------------------------------------|
| a) 25 items in the plan were implemented.             |
| b) Small stream development.                          |
3 RECONSTRUCTION FROM THE GREAT HANSHIN-AWAJI EARTHQUAKE DISASTER

3.1 Characteristics of the Disaster

The Great Hanshin-Awaji Earthquake Disaster was an enormous calamity that measured a magnitude of 7 on the Japanese intensity scale, and struck major metropolitan areas in Japan. Urban infrastructure, such as roads, railways, electricity, gas, water supply and telephone lines, was paralyzed. Architectural construction, such as commercial and apartment buildings, residential homes, hospitals, was also severely damaged. The number of deaths and missing people were 6,437—around 80% caused by the collapse of residential housing. The total number of full and half-collapsed buildings was 249,180. There were also 14,610 damaged houses caused by fire.

Consequently, housing construction became one of the major tasks after the disaster occurred. Nearly 50,000 temporary and 38,600 public reconstruction houses were built in the affected areas. Moreover, the victims’ livelihood and employment situation were huge issues that needed to be solved. Since this disaster hit the urban areas in the matured and aging society, we had to face new challenges, which could not be solved with the existing systems. Thus, we targeted not to put everything back the way they were, but to achieve creative reconstruction wherein we could establish a social framework suited to the new age.

3.2 Recognizing Self-help, Mutual and Public Support

One of the prominent phenomena that occurred in relation to this reconstruction program was volunteer activities. The year 1995 was said to have marked the “first year of volunteerism in Japan.” Around 1.3 million volunteers gathered at the affected sites of the Great Hanshin-Awaji Earthquake Disaster. NPOs and communities launched their activities. The terms, “self-help, and mutual support” have become popular against “public support.”

Self-help and mutual support can be regarded as New Public Commons. They existed in each stage of relief, recovery and reconstruction, as well as in many fields of post-quake activities—housing, livelihood, health, welfare, education, culture, and others.
I would like to cite the case of “community development associations” in Kobe City. The affected areas were separated into three types of development. The first type was the areas where projects based on the City Planning Act, such as land readjustment and urban redevelopment projects, were implemented. These areas were called “black areas.” The second type was the areas, consisting of systems that have been adopted to support housing improvement and rebuilding. Such areas were called “grey areas.” Finally, the third type consisted of the areas where disaster victims were required to reconstruct by themselves. The areas were called “white areas.”

Furthermore, the reconstruction of black areas consisted of two stages. In the first stage, the city government decided on the planning framework, including the targeted area, project method, and key facilities, like roads and evacuation parks. In the second stage, detailed planning was decided through cooperation between the government and affected communities. The community established a “community development association,” according to the Community Development Ordinance stipulated by Kobe City. The association was designated as the contact point between the residents and the government. Although the government was responsible for these projects, the residents’ participation was also encouraged to translate their proposal into plan. The government subsidized the expenses of the experts, such as consultants, lawyers or tax accountants, to assist with the proposal. There were 58 community development associations established.

According to this ordinance, communities have been developed with unique themes in the second stage, like “safe and comfortable community for many generations from children to elderly,” or “community with full of life.” Proposals were also varied, depending on each community. For example, a trunk road with 17 meters wide was regulated for city planning in the first stage, but it was too big in proportion for the size of the community. In the second stage, the communities proposed to be divided into 7ms street and 10ms sidewalk, or other communities established a small stream in the road. Some communities sought children’s ideas to create a public park. Another community decided to build cooperative dwellings instead of individual houses.

The ordinance requested the city mayor to consider the proposal through the association. While the government coped with institutional matters that residents could not cope with, the association was required to exert responsibility to persuade landowners to ensure enough space for roads and parks. A distinction between the role of the government and the association was adopted.

However, the black areas covered only 3% of the total areas. The rest of the areas were mostly white areas. In addition to self-help by the community residents, mutual support extended to aid such communities. For example, experts for community development, urban planning and architecture, technically supported cooperative housing or green development. Associations of lawyers, tax accountants, judicial scriveners, real-estate surveyors, house inspectors and architects cooperatively established the “Institution for Supporting Hanshin-Awaji Community Development” to solve problems regarding cross-sectoral approach. Some private funding organizations have been set up to provide financial support.

The Hyogo and Kobe governments jointly established “The Great Hanshin-Awaji Earthquake Reconstruction Fund.” The characteristics of the fund were to give further assistance to residents, communities and private supporting groups that public support could not cover,. The fund subsidized the dispatch expense of community advisers or consultants, and the cost of their activities in the white areas.

In the case of community development association, it is important to identify the relationship between “self-help and mutual support” and “public support.” In this research, I analyzed how these types of support played their roles based on “The Report of the 10-Year Reconstruction Overall and

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2 Members of community development consisted of both residents and employed workers, or other persons related to the community. On the other hand, the prominent members of the neighborhood association were mainly elderly people who influenced the community. They were usually conservative and had difficulty accepting new proposals.
Recommendations” compiled by Hyogo Prefecture Government. This report has verified activities within ten years after the quake occurred, and issued twelve keynotes of recommendations, which included lessons and challenges for the future. The report serves as a good material to identify the role of self-help, mutual and public support under the process of reconstruction. I showed the research result in Table 3, by expressing the basic examples from the role of self-help and mutual support (a), and that of public support (b), and the characteristics of the relationship between (a) and (b) in each keynote. This result leads to identification of the characteristics of New Public Commons in the reconstruction from the disaster.3

Table 3. Role of Self-help, Mutual and Public Support under the Process of Reconstruction in the Hanshin-Awaji Earthquake Disaster

| Keynote | Examples from the Roles of (a) Self-help/Mutual Support and (b) Public Support | Characteristics of (a) and (b) |
|---------|--------------------------------------------------------------------------------|-------------------------------|
| (1) Developing Safe and Secure Urban Communities | (a) Operation of “disaster community organization” and “machizukuri (community development) association” (b) Infrastructure development for essential lines, housing and public facilities, System of “disaster community organization” and “machizukuri association” | While (b) reconstructed infrastructure or established a system, (a) fostered strengthening of community networks. |
| (2) Creating a “Symbiotic Society” | (a) Reconstruction by the community itself; Support activities by NGO/NPO (b) Support system to community and NGO/NPO | (a) launched a pace-setting project, and (b) provided rearguard support to (a) financially or systematically. |
| (3) Making Further Progress in Administrative Decentralization and Reconstruction Spearheaded by Local Organizations | (a) Outreach support activities through “Victims Reconstruction Support Meeting” (b) Creating and Managing “Victims Reconstruction Support Meeting;” Reconstruction with local initiative and promotion of decentralization | This item mainly belongs to area (b), but (a) also was implemented to return its attention to the victims. |
| (4) Promoting the Active Participation by and Cooperation with Ordinary Citizens | (a) Promotion of community and civic power by NGO/NPO (b) Ordinance regarding the Promotion of Active Participation and Cooperation, Cooperation with community organization and NGO/NPO | (b) provided the opportunity for having a self-governing civic society and human resource development; and (b) Authorized them through institutionalization. |
| (5) Establishing Effective Risk Management System | (a) Disaster relief volunteer activities (b) Disaster response center, Strengthening cooperation among prefectures, municipalities, police and firefighting agencies | While many systems were established through (b), (a) also increased disaster relief activities. |
| (6) Improving Emergency Aid Systems and Support Mechanisms for Rebuilding Lives and Homes | (a) Expert activities for housing rehabilitation and cluster housing, Enrollment in housing mutual-aid program (b) Loans from the Livelihood Restoration Fund, Constructing a friendship center at a temporary housing site | (b) provided financial help to victims. While construction works were promoted through (b), know-how for community development was provided through (a). |
| (7) Response vis-a-vis the Elderly and Other Particularly Vulnerable Social Elements | (a) Guarding elderly people, Group home operation (b) LAS/SSC assignment for elderly people, Traumatic stress center | (a) developed a pace-setting program, which was systemized through (b). |

3 This analysis is based on a previous study (Aota, Murosaki, Hokugo, 2009).
3.3 Lessons Learned from the Hanshin-Awaji Earthquake Disaster

Following are the lessons of New Public Commons learned from the Hanshin-Awaji Earthquake (Figure 5).

1) The government sector established institutional design, and promoted hard infrastructure development through public support.

2) On the other hand, the private sector has taken a new approach through soft measures, such as caring for the aged and community development, by self-help and mutual support.

3) Self-help and mutual support were found in all keynotes. These types of support have been identified in post-quake activities.

4) Government support is important to sustain self-help and mutual support through institutional or financial assistance or authorization.

5) The relationship between the government and private sectors for public commons is strengthened, which leads to the transformation to a “symbiotic society” thriving on “participation and cooperation.”
4 RECONSTRUCTION FROM THE NIIGATA CHUETSU EARTHQUAKE DISASTER

4.1 Characteristics of the Disaster

This disaster hit mountainous areas facing the Japan Sea. Since the affected sites were not located in a densely populated area, the number of deaths totaled 68. Local houses were usually tough against accumulated snow, and the number of full and semi-collapsed houses was 16,985.

However, many landslides occurred and blocked the access to affected rural communities. For example, Yamakoshi village (currently Nagaoka City) was isolated for two days, and eventually all the people had evacuated from their hometowns for more than two years. Most of the affected sites were rural communities. The people mainly earned their livelihood through rice crops in terraced paddy fields, carp nurturing and other small-sized enterprises. Since the aging and depopulation problem had been severe before the disaster, intensified community decline became a serious concern.

4.2 Community Revitalization Support by Private Intermediary Organizations

I studied the activities of Chuetsu Fukkou Shimin Kaigi (CFSK, or Association for Civic Reconstruction in Chuetsu affected regions), a private intermediary organization, which promoted the revitalization of rural communities. Since CFSK activities covered the whole area of affected sites, this study is suitable for discovering the characteristics of New Public Commons in the case of the Chuetsu Earthquake.

CFSK was established in 2005. The original number of full-time staff was only two, but a steering committee consisted of twenty-nine members from governments, universities, business and civic societies. CFSK was originally a volunteer group, but was assisted by a variety of supporters. In the beginning, CFSK inspected the affected sites to listen to the victims’ needs. For example, in House Community, Oguni town (currently Nagaoka City), the survivors proposed to manage a lodge by making use of the abolished elementary school. CFSK made arrangements to invite experts from Tokyo and other areas to research about local resources. It also implemented events to boost the development of the area. The proposal led to the opening of “Yamabiko House,” a public accommodation facility, which was operated by community residents in November 2005. Yamabiko mainly provides youth generation with outdoor activities around nature. It promotes exchange between urban areas and the rural community.

CFSK also opened workshops in Kizawa Community, Kawaguchi Town (currently Nagaoka City). Community victims have grown special local rice, promoted hunting for edible wild greens, built a hiking road, organized a tour map, and so on. CFSK has promoted community reconstruction by acquiring local needs and making use of local resources through the assistance of outside experts.

From December 2005, information exchange and sharing commenced between CFSK and Niigata Prefecture government. Through such cooperation, the government policies were smoothly disseminated to victims, while the government had easy access to and information regarding the victims’ needs. In addition, through CFSK, the prefecture joined community reconstruction meetings hosted by each community. CFSK was also involved in community revitalization support teams organized by the prefectural and municipal governments. The communication between the local governments and the victims has strengthened through this intermediary organization.

4.3 Exchange Meeting for Local Reconstruction and Support Project of Local Reconstruction Design
CFSK has opened “Exchange Meeting for Local Reconstruction (EMLR)” five times from 2007 to 2010. Representatives from affected communities, governments, universities, NPOs and other related support groups (around 50 organizations with 150 participants) gathered at each meeting wherein the governments, academic researchers, communities and NPOs delivered presentations and conducted free discussions. Table 4 shows the outline of the 3rd meeting. It indicates that the varied kinds of stakeholders worked to reconstruct affected communities. The communities acquired knowledge and experience from outside experts and other communities.

Niigata Prefecture established “The Chuetsu Earthquake Disaster Reconstruction Fund” to support mutual and self-support activities, as well as to supplement public activities. Financial compensation for EMLR was covered by the Fund.

CFSK has also implemented, in cooperation with the prefecture, “Support Project of Local Reconstruction Design” from 2007. It has supported a local community, which considered future design that was supported by a grant (Yen 7 million maximum) from the Fund. Related events for the design program have also been financed (Yen 10 million maximum for each community).

The victims of the disaster were not professionals of reconstruction. CFSK and the Prefecture established the system of “Community Supporter for Local Reconstruction (CSLR)” sponsored by the Fund. So far, each of the 51 supporters took charge of respective communities to promote network building, events, liaison with the government, consultation with victims, and others. The personnel, operational and activity costs were covered by the Fund. Academic researchers and NPOs have also given rear assistance to these supporters.

Table 4. The 3rd Exchange Meeting for Local Reconstruction

| Host Organization | Chuetsu Fukkou Shimin Kaigi, Chuetsu Bosai Anzen Suishin Kikou (Chuetsu Organization for Safe and Secure Society), Chuetsu Bosai Volunteer (Chuetsu Volunteer for Disaster Reduction), Fukkou Design Kenkyukai (Study Group for Reconstruction Design). |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Co Host Organization | Niigata Prefecture, Uonuma City, Hokuriku Kensetsu Kosaikai (Hokuriku Construction Association), Chuetsu-jishin Daichi Fukko Suishin Kaigi (Group for Promoting Reconstruction in Chuetsu) , Yamanokurashi Saisei Kikou (Organization for Revitalizing Livelihood in Mountainous Area). |
| Participants | Affected communities, Support Organizations, Local Governments, Universities, NPOs (97 organizations, 241 people). |

Program

(1) Lecture
“Towards full-fledged reconstruction” by Prof. Hirai, Nagaoka Institute of Design “Reconstruction support into the future” by Mr. Maruyama, Niigata Prefecture

(2) Activities Report
“Local products and exchange promotion for reconstruction,” “Approach by Yamanokurashi Saisei Kikou,” “Approach by Chuetsu Midori Fukkou Action (Action for reconstructing a greenery in Chuetsu),” “Approach by Chuetsu Fukkou Shimin Kaigi and Fukkou Design Center,” “Ensuring sustainable public transportation,” “Snow shoveling at the affected sites”

(3) Advanced Cases from community and NPO activities
“Ninanina for exchanging among many generations,” “Group for keeping rice terraces in Ojiya,” “House community,” “Wakatochi Miraikan.” “Ennadori Machizukurinokai,” “Ojiya city bullfight promotion association,” “Higashikawaguchiko reconstruction committee,” “Echigo Kawaguchi exchange net REN,” “Tookamachi development project committee”

(4) Information Exchange and Talkfest
Community victims from Nagaoka, Kwaguchi, Ojiya, Tookamachi, Uonuma, Minamiaizu, Kashiwazaki and Kariba Municipalities

Source: Chuetsu Fukkou Shimin Kaigi (CFSK). Opening the Third Exchange Meeting for Local Reconstruction. Available at WWW:<http://www.cf-network.jp/index.php?itemid=1309>. [Accessed 2011-10-25].
Table 5 shows some examples for the design program. Around sixty communities from ten municipalities have considered the design at the end of 2010. Variety in the design was shown by using tradition, custom, scenery, and local resources of each community. In addition, CFSK organized “Presentation of Future Design of Local Community (PFDLC)” where the community residents themselves made presentations before the supporters, such as local governments, universities, NPOs and other communities.

While EMLR has provided local communities with input, like knowledge and experiences for reconstruction, PFDLC has become the output opportunity of the communities, taught by EMLR. It was discovered that community victims, who were previously merely the target of support, have become the main subject for reconstruction (Figure 6).

| Community | Catch Phrase | Main Projects |
|-----------|--------------|---------------|
| Mitsuke City Reconstruction Association | Discovering the people, community and the atmosphere | • Human resource development, human relationship  
• Platform for local people to spend their lives vividly  
• Making use of local materials to attract people outside the city  
• PR Event, like Kite Festival |
| Taromaru Community, Oguni in Nagaoka City | Hometown with oracle and cherry blossoms | • Oracle pavilion  
• Walking road  
• Encouragement of young people by U,I, or J Turn  
• Revival of cultivation |
| Naka Community, Tochio, Nagaoka City | Safe, comfortable and vivid community with cooperation among several sectors | • Hometown full of welfare and hydrangea maple  
• Local calendar with traditional events and customs  
• Exchange with other communities and generations  
• Local plant resource research |
| Kogomo Community, Yamakoshi, Nagaoka City | Community development with residents gathering and caring for each other | • Memorial monument  
• Record of submerged community map  
• Farm products stand  
• Exchange with semi-residents outside the community |
| Higashiyama Community, Ojiya City | Integration within the community and connection with outside people for reconstruction | • Tourism and exchange to promote bullfighting  
• Revival and lore of traditional events  
• New system of nursery and after-school care |

Source: Author’s summarization from the database of http://www.fukkou-dc.jp/?cat=35

4 This table was summarized from the database of http://www.fukkou-dc.jp/?cat=35
4.4 Lessons Learned from Niigata Chuetsu Earthquake Disaster

Following are the lessons learned from the Chuetsu Earthquake disaster. As an intermediary organization, CFSK has strengthened the network among victims, local governments, experts and supporters, and extended support activities in a multilayered way (Figure 7).

1) CFSK has gathered local needs through outreach activities, and has built a trusting relationship with the victims. CFSK also strengthened the relationship between the victims and the governments.

2) CFSK invited experts and supporters outside of the affected sites. Such outsiders discovered beneficial local resources for community revitalization.

3) The government, in cooperation with CFSK, established the Reconstruction Fund and CSDR to accelerate self-help and mutual support.

4) CFSK provided opportunities, such as EMLR and PFDLC, where affected communities and supporters gathered to share information, and to exchange inputs and outputs.

Figure 7. Intermediary Role by CFSK
5 CHALLENGE TO PROMOTE NEW PUBLIC COMMONS; RELATIONSHIP WITH PUBLIC SECTOR AND OTHER STAKEHOLDERS

New Public Commons originated from the private sectors. It is important to maintain a proper distance from the government, although cooperation with them is also vital. Actually, there has been some problems with public support.

In the case of community development for the Hanshin-Awaji Earthquake Disaster, for example, public support was mainly allocated to the “black area,” while residents basically had to reconstruct by themselves in the “white area.” However, when the projects were completed in the black areas, most of the associations disbanded. Those that remained in small number had been active through the residents’ initiative even before the quake occurred. Even in the white areas, some communities developed their own ways of reconstruction with mutual support from several experts. These facts prove that the citizens’ initiative is the key factor to reconstruction, rather than public support to promote New Public Commons.

Another issue was about commission contracts between local governments and NPOs. One NPO functioned as an implementation agency, but the responsibility of the project was placed under the government. The NPO was required to follow the government policy, and was not able to improve the project at its own discretion. On the other hand, the financial resources from the government were important to sustain management. Eventually, the NPO was pressured, and tied to carry out the contract.

The relationship between NPOs and the neighborhood community association is also important. While the former is basically an outsider of the community, the latter consists of local residents. There have been some problems with community development associations. In such a case, an intermediary organization is expected to play a catalyst, which facilitates both sides to cooperate with each other.

In the case of the Chuetsu Earthquake Disaster, CFSK, an NPO, was also positioned as a “Reconstruction Design Center” in the Chuetsu Organization Safe and Secure Society to strengthen the relationship with Niigata Prefecture Government. Since COSSS was an incorporated association that had a strong relationship with the public sector, RDC could easily get financial assistance through the Chuetsu Reconstruction Fund established by the Prefecture. Eventually, CFSK’s personal, operational and activities costs have been supported through public support. However, in a formal sense, the support menu to RDC has been limited to promote human development, like CSLR. CFSK has been required to make some adjustment, if it would like to retain and extend their original policy and activities.

Both the public and private sectors should maintain equal partnership. However, the public sector is actually well positioned in the point of financial resource and authorization. The relationship between the two sectors often results in vertical, rather than horizontal direction. Participation and cooperation with government initiative, but without New Public Commons, does not lead to a sound partnership.

6 CONCLUSION

This research addressed the characteristics of New Public Commons in the disaster reconstruction process by demonstrating three case studies: A) Unzen Fugendake Volcanic Eruption Disaster, B) Hanshin-Awaji Earthquake Disaster, and C) Niigata Chuetsu Earthquake Disaster. A) occurred in 1992 when volunteers were not active. The affected residents in rural areas were rather conservative. However, community initiative was seen to take a different approach from public support. B) occurred in the period during the first year of volunteerism. Citizens initiated to recover and reconstruct victims’ livelihood in a variety of fields. “Self-help” and “mutual support,” different
from “public support,” have been identified. In C), although the affected sites were mountainous and
the local people had a tendency to rely on the government, the private supporters gave empowerment
for local communities to rebuild their society. I summarized the lessons of New Public Commons
from these disasters in Table 6.

As a result, the following 1) to 5) can be found out as the common characteristics related to New
Public Commons. The items in the boxes express the main examples in A) to C). This conclusion
would be useful for considering reconstruction from huge disasters, like the Great East Japan
Earthquake (Figure 8).

Table 6. Lessons of New Public Commons from the Three Case Studies

| Disaster | Type of Calamity | Damage Characteristics | Challenge | Lessons of New Public Commons |
|----------|------------------|------------------------|-----------|-------------------------------|
| Unzen    | Volcanic eruption| Mud and pyroclastic flow| Off-limits area—loss of private land, housing, property and community | (Community activities) 1) Piling up earth & sand to level up private lands, payment for public works 2) Successful project for both victims and governments 3) Consensus through persuasion by community victims 4) Community development with residents’ initiative |
| Hanshin-Awaji | Earthquake | Hit metropolitan area | Loss of housing, community, urban infrastructure and industry | (Activities in 12 keynotes) 1) Institutional design and hard infrastructure by the government 2) Soft measures by self-help and mutual support 3) Identification of self-help and mutual support 4) Importance of government support to sustain self-help and mutual support 5) Relationship between government and private sectors |
| Chuetsu  | Earthquake       | Hit rural mountainous areas | Aging, depopulation and community declination | (Intermediary organization) 1) Picking up local needs and building a trusting relationship 2) Intermediary role between victims and governments, and victims and supporters 3) Provision of a fund and human resource through government cooperation 4) Opportunity to share information, and to exchange input and output by communities |

1) Large-scale disasters bring challenges not to be solved with existing methods.
   A) Residents in Annaka area had to remove mud for themselves, because both national and local governments were not responsible for recovering private lands.
   B) Many people lost their families, housing and jobs and faced difficulties to continue their livelihood. Limits of government capacity were recognized in both quality and quantity.
   C) The affected sites were originally aging and depopulation area and community declination was seriously concerned by the disaster.

2) In such situation, new public activities can be started with innovation and give empowerment to victims and communities.
   A) The affected community created the new idea of piling up mud by public works for dam construction to level up their land.
   B) In the white areas, experts and NPOs supported community development. In some black areas, new community development was implemented by the proposal from the residents.
   C) Affected communities were given community empowerment through CFSK, which played the intermediary role among local governments, outside experts/supporters and communities.
3) The private sector is good at taking care of each victim and community using soft measures, while the public sector is familiar with hard infrastructure and institutionalization.

A) While the government carried out public works to level up the land, community victims persuaded other residents to launch the project. In addition, the government took charge of land infrastructure development in the Waren small stream, while the community constructed the dream plan.

B) The government implemented city planning through public projects, or set up temporary and permanent houses. On the other hand, experts and NPOs got access to each affected community to pick up their needs and give some technical advice. The elderly were easily isolated and NPOs launched a visiting system, which was systematized by the local government.

C) Many victims moved from mountainous areas to urban sites, where the government set up temporary houses. While it recovered access roads for victims to return to their homes, NPOs and experts gave empowerment to communities for their reconstruction.

4) Government cooperation is indispensable to sustain new public activities. The government gives rear-support through financial resource and authorization.

A), B) and C) Each local government established the “Reconstruction Fund.” The fund mainly supported private sectors to which the government could not make use of public subsidy.

A) The reconstruction fund, established by the Shimabara City Government, covered the operating costs in leveling up the triangle area in the Annaka community.

B) The cost for community development in the white areas was covered by the Hanshin-Awaji Reconstruction Fund.

C) The cost for EMLR, PFDLC and CSLR was covered by the Chuetsu Reconstruction Fund.

5) On the other hand, it is important to maintain a proper distance from the government to promote New Public Commons.

A) The community constructed the Annaka dream plan by themselves because the government tried to draft plans based on sectionalism.

B) In the black areas, some communities disbanded themselves when the city subsidy was exhausted. Commission contract prevented NPOs from having equal partnership with the local government.

C) While RDC (CFSK) receives support through the Reconstruction Fund, it is required to make some adjustment to follow the support mission.

**Figure 8. New Public Activities after the Occurrence of Huge Disasters**
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