Special Issue
Disaster in Transition: Displacement and Networked Assistance in the 2011 East Japan Tsunami

Displacement and Re-invention of Communities: Disaster Process and Assistance Networks in Ofunato City

Tadahito YAMAMOTO

INTRODUCTION

The Study Group on Infrastructure and Society (SGIS) established a research team[1] to study the impacts of the 2011 tsunami disaster on the Iwate Sanriku coastal area. Since it was formed in November 2011, the research team has conducted most of its fieldwork in two cities in the Iwate Prefecture: Kitakami City and Ofunato City. Kitakami is one of the bases/nodal points for inland assistance activities, and Ofunato City is one of the most heavily damaged tsunami-stricken cities on the coastal side (Yamamoto 2012a; 2012b; Maruyama 2012).

The aim of this paper is to describe the disaster process, which means a combination of the natural disaster itself and the emergency response process to the disaster, and the development of assistance networks in Ofunato during the year following the Great East Japan Earthquake and Tsunami in 2011 (on the role of Kitakami City, see Iwadate's article).

Ofunato City is located in the southern part of the Sanriku coastal area in Iwate Prefecture. Prior to the tsunami its population was 40,737—the third largest population in the 12 municipalities along the Iwate Sanriku coast (2010 Census).
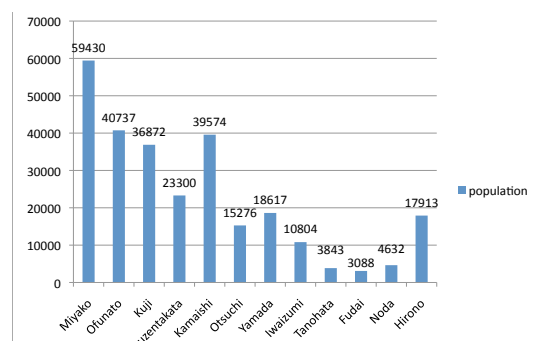

Figure 1: Population of Municipalities in Sanriku Coast in Iwate Prefecture   Source: 2010 Census

Four hundred and fourteen residents of Ofunato City died in the 2011 tsunami, and 79 were declared missing. This was the sixth hardest-hit area along the Iwate Sanriku coast. The number of totally collapsed houses was 2,787, the number of half collapsed houses was 1,147, and 1,605 were partially damaged. Ofunato experienced the largest damage in terms of the destruction of houses in all coastal municipalities (Fire and Disaster Management Agency, Sep. 1st, 2013).

At present Ofunato City is composed of both the former Sanriku Town area and the former Ofunato City area. The major industry in the former Sanriku Town area is fishing. The former Ofunato City area is more urbanized. Its industry includes not only fishing

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but also manufacturing.

Both municipalities were merged into today's Ofunato City in 2001. The policies implemented by the central government to effect this merger changed the framework of municipal administration and caused some confusion in community governance.
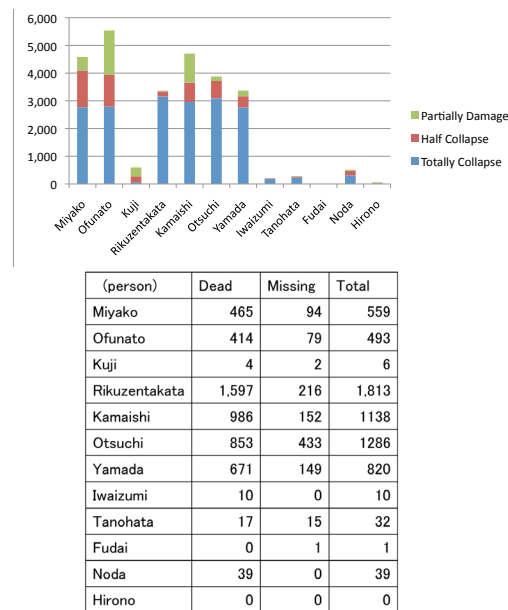

(person)	Dead	Missing	Total
Miyako	465	94	559
Ofunato	414	79	493
Kuji	4	2	6
Rikuzentakata	1,597	216	1,813
Kamaishi	986	152	1138
Otsuchi	853	433	1286
Yamada	671	149	820
Iwaizumi	10	0	10
Tanohata	17	15	32
Fudai	0	1	1
Noda	39	0	39
Hirono	0	0	0

Figure 2: Human Damage (Municipalities in Sanriku Coast in Iwate Prefecture)Source: Fire and Disaster Management Agency (Sep. 1st, 2013)

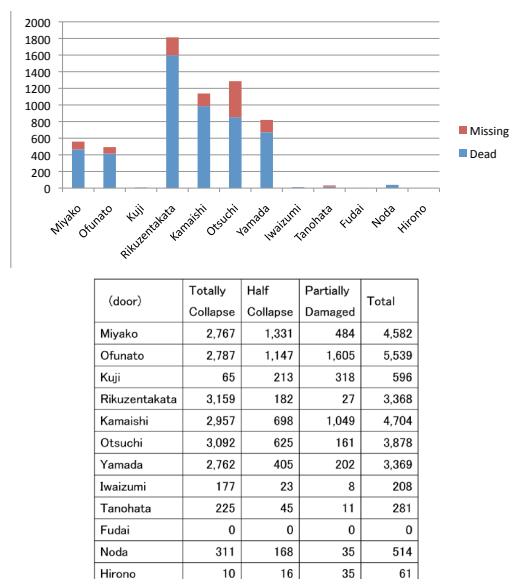| (door)	Totally Collapse	Half Collapse	Partially Damaged	Total
Miyako	2,767	1,331	484	4,582
Ofunato	2,787	1,147	1,605	5,539
Kuji	65	213	318	596
Rikuzentakata	3,159	182	27	3,368
Kamaishi	2,957	698	1,049	4,704
Otsuchi	3,092	625	161	3,878
Yamada	2,762	405	202	3,369
Iwaizumi	177	23	8	208
Tanohata	225	45	11	281
Fudai	0	0	0	0
Noda	311	168	35	514
Hirono	10	16	35	61

Figure 3: Damage to Housing
Source: Fire and Disaster Management Agency (Sep. 1st, 2013)

The influence of these merger policies on social responses to the 2011 disaster are one aspect of this research (Maruyama 2012).

THEORETICAL PERSPECTIVES AND THE AIM OF THIS PAPER

This research is based on the displacement/forced migration approach described in disaster studies. Oliver-Smith, one of the major scholars to have used this approach, defined the term "displacement" as "the uprooting of people from a home ground" (Oliver-Smith 2006). This term was originally focused on refugee studies or development studies in developing countries, where migration and relocation processes caused by social conflicts or developmental projects have been researched on a huge scale(Scudder 1973; Hansen et.al. ed. 1982; Cernea et.al. ed. 2000; Oliver-Smith ed. 2009; Oliver-Smith 2010). After the Sumatra Tsunami in 2004 and Hurricane Katrina in 2005 the term was brought into disaster studies, and has been used in the analysis of forced migrations induced by disasters.

In the context of disaster studies, "displacement" indicates a type of situation in which people become vulnerable as a result of social restructuring. Essentially, neoliberal oriented policies and economic globalism undermined the collective base of people's lives, and thereby greatly increased their vulnerability to displacement (Brunsma et.al. ed. 2007; Steinberg et.al. ed. 2008; Button 2009; Johnson ed. 2011; Weber et.al. ed. 2012; Forced Migration Review, Special Issue Tsunami: Learning from the Humanitarian Response, July 2005; World Disaster Report 2012, Focus on Forced Migration and Displacement).

I am using the theory of displacement to try to understand the effects of extended evacuation and social isolation on victims of the 2011 Great East Japan Earthquake and Tsunami, and more specifically,

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as a type of socially created "displacement" in a Japanese context.

The displacement/forced migration approach assumes the process of relocation and community building will follow four predictable stages (planning; coping; initiating economic development and community formation; facilitating the transition to second generation resettlers). The main focus of this approach has tended to be placed on the case of development projects, or refugee phenomena caused by war/social conflict[2].

We need to focus on different aspects in the case of displacement/forced migration induced by disaster.

For example, refugees who are the victims of wars/social conflicts have difficulty getting assistance from their own governmental agencies, which are engaged in the war/social conflict (Hewitt 1997). Evacuees who are the victims of disaster-induced migrations, however, rely on the continuation of the previously existing social resources provided by their local governmental agencies, professionals and NPO/NGOs to survive.

In contrast to the relocation process induced by a developmental project—which commonly extends into years or even for generations in difficult cases—disaster-induced displacement happens contingently, in over a short time period, in a "compressed" way. Given the unique features of this type of displacement, it is important for disaster researchers to broaden their scope of research to include the immediate social process following a disaster, in detail.

From the perspective of these concerns I will view the process of organizing an assistance network as constructing multiple pathways to enable displaced persons to re-access former social relationships, and will try to categorize early stages of the disaster into some "phases" on the basis of Ofunato's experience.

A geographical approach has also been used to analyze the complex process of disaster management and subsequent reconstruction (Hewitt 1997; Bolin et.al. 1998). The development of geographic information systems (GIS) has impacted disaster studies by expanding the capabilities inherent in a geographical approach (Curtis et.al. 2009). In this research I take advantage of these powerful information systems to focus on some transitory spaces described as "temporary living spaces" (shelters, temporary housing etc.) and "bases of assistance activities" organized by civilian groups. The construction of such transitory spaces provides the infrastructure needed to network various types of social agencies and functions, thereby serving as an intermediate conduit to link the local interest with the broader society.

I will use information describing transitory and temporary spaces to create a socially constructed index, which will allow me to identify key agents and analyze interrelationships among the disaster process and social restructuring in the wider context of society.

In sum, I try to answer three questions in this paper.

First, how can we divide the early stage of the disaster process into phases? At what moment do these phases change?

Second, by whom and for what purpose are spaces and networks of assistance activities were created?

Last, what were the key points in "displacement" phenomenon in the case of the Great East Japan Earthquake and Tsunami? In particular, how can we understand the problems of "in-home sufferers" from the perspective of displacement studies?

RESEARCH OUTLINE

Sampling of Informants

The major sources of information for this research are key persons participating in assistance activities

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in the Ofunato area.

Informants were chosen from two groups.

One group of informants is comprised of members of the Ofunato Action Network. This Network, established on June 30th, 2011, has played a central role in networking civilian assistance groups and some municipal/semi-municipal agencies.

Another group of informants is made up of leaders of local community centers. These centers are the most basic level of community governance. Most community centers were used as urgent shelters just after the tsunami, and from here community members and municipal countermeasures headquarters offered assistance activities .

Transcripts and Chronicle of Assistance Activities

I interviewed 23 persons and made transcripts of my interviews in preparation for writing this paper. On the basis of these transcripts I constructed a "Chronicle of Assistance Activities in Ofunato City" (see Appendix), and divided the assistance networking process—beginning with the time following the tsunami until about one year after the disaster—into three phases.

Making Maps of "Temporary Living Spaces" and "Spaces of Assistance"

I drew two kinds of maps using GIS.

The first type of map shows temporary living spaces such as urgent shelters and temporary housing units in Ofunato.

The second type of map shows "bases of assistance activities" during each phase of assistance. I refer to these spaces as the "Spaces of Assistance" in this paper.

Each map showing "Spaces of Assistance" can be viewed as an epitome of the changing character of each phase in the disaster process. By providing comments on what each of these maps tells us, I

will describe the changing process of disaster and its meaning.

PHASE ONE: FORMATION OF SHELTERS AND COMMUNITY RESPONSES (MARCH-JUNE 2011)

Outline
Many shelters were made in Ofunato community centers, schools, religious facilities and other structures just after the earthquake and tsunami. The municipal government set up local headquarters in the community centers, which had previously played a central role in each district. Different types of shelter management were provided, depending on whether communities were in urban or rural areas, and whether or not they had been washed away by the tsunami.

Almost at the same time as these community-level responses were being initiated, municipal agencies and various types of local civilian organizations became active and started to offer assistance to victims.

Formation of Shelters
According to Ofunato Municipal Office records, 61 shelters had been completed before March 15th, 2011, the fourth day after the disaster (Figure 5).
The map is color-coded to show where different types of facilities were used for shelters (private house-type shelters couldn't be drawn on the map because their sites were not known). The most popular structure used for shelters was the community center, which housed 25 shelters. The second most popular sites were schools, which accounted for twelve shelters. In addition, shelters were set up in eight hospital/welfare facilities, and seven religious facilities.

Proportional circles are used to represent the number

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of evacuees. Almost all shelters were small in scale, with fewer than 100 evacuees. Grassroots-type local community centers played the most important role in providing this size of shelter.

In the case of larger-scale shelters (101~800

evacuees), schools played an important role. This was especially the case in coastal areas where a school had been built on high ground, did not suffer direct damage from the tsunami, and was located near crowded urban core areas along the Sakari River
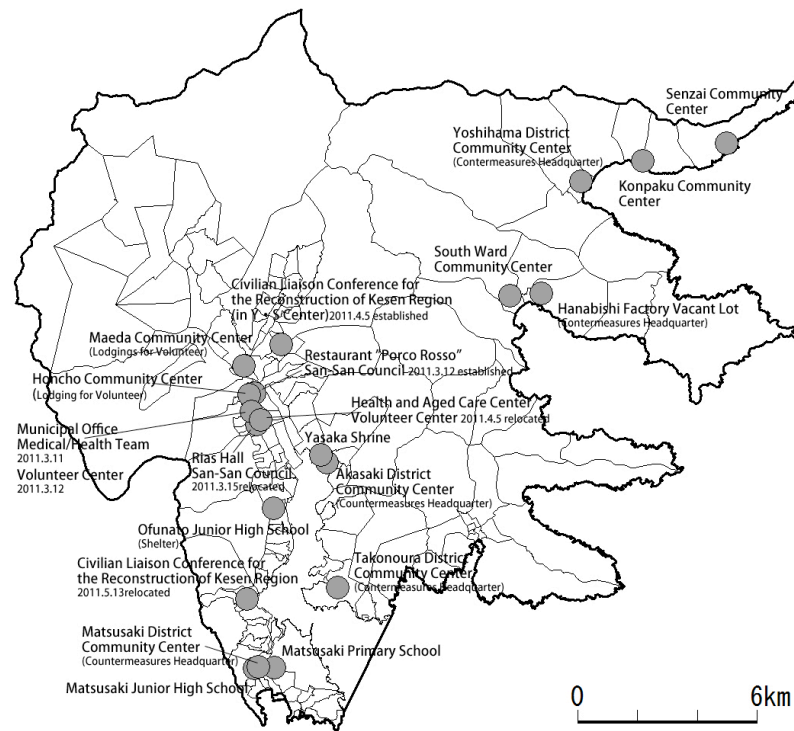
Figure 4: Map of "Spaces of Assistance" in Phase One (Mar-Jun, 2011) Note: Made by author
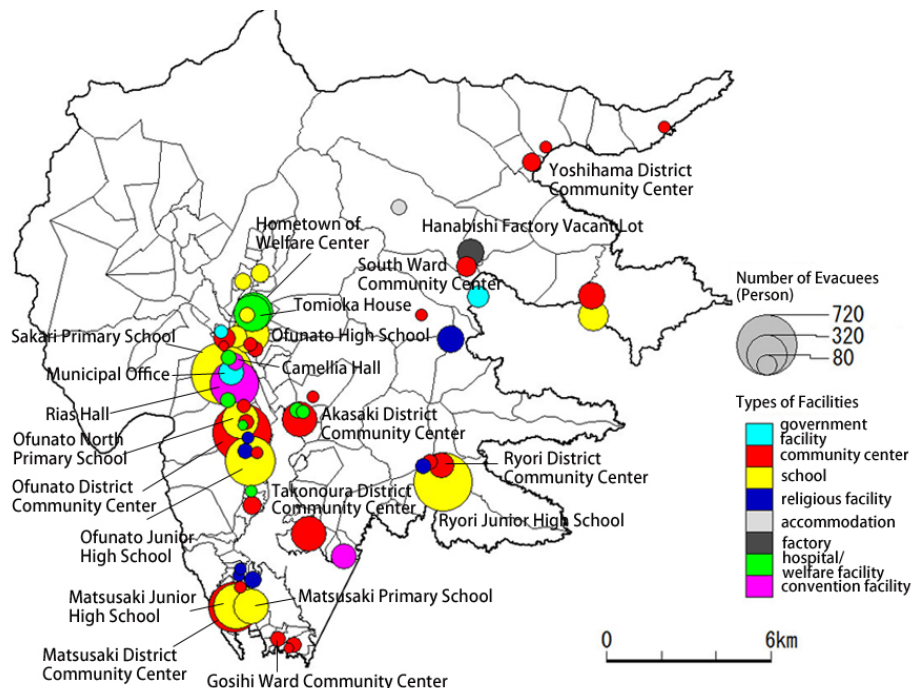
Figure 5: Map of Shelters in Ofunato City (15 Mar, 2011)Note: Made by author based on Ofunato Municipal

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Type	number
government facility	3
community center	25
school	12
religious facility	7
lodging facility	1
factory	1
hospital/welfare facility	8
assembly facility	3
private house	1
sum	61

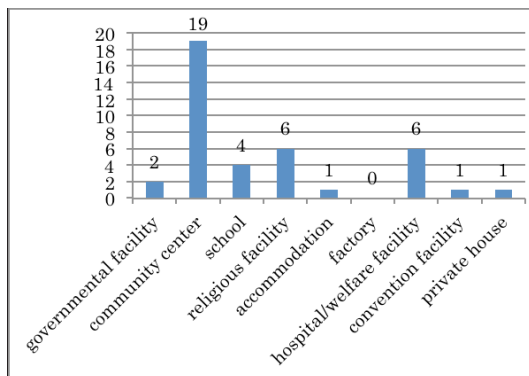Table 1: Types of Facilities for Shelters in Ofunato
Source: Ofunato Municipal Office

Table 2: Number of Shelters with Fewer than 100 Evacuees (Classified by Facility Type)
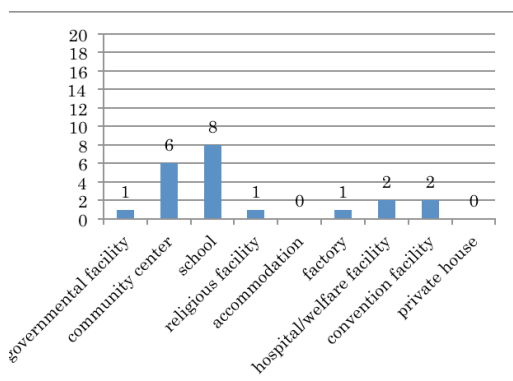Source: Ofunato Municipal Office

Table 3: Number of Shelters with 100-800 Evacuees (Classified by Facility Type)
Source: Ofunato Municipal Office

where local communities had been totally washed away. Under these circumstances school buildings provided a large volume of needed shelter space.

Community Centers

There are two types of community centers in Ofunato City. One is a "neighborhood community center" which is established in a unit of local neighborhood society. Of the 132 neighborhood community centers in Ofunato, 34 were damaged by the tsunami.

Another type of community center is the "district community center," established in a "district" unit, which basically means the area of a former "village" founded in the Meiji Era—the age of modern nation-state building. There are eight districts along the coast: Sakari, Ofunato, Matsusaki, Akasaki, Takonoura, Ryori, Okirai, and Yoshihama. Immediately after the disaster the municipal government put a countermeasures headquarters in each district community center.

The Social Education Act of 1949 defined community centers as social educational facilities. This Act says that the aim of community centers is to provide services related to education, science and culture to local residents.

In the case of Ofunato City, community centers have functioned not only as social educational facilities, but also as "centers" for general activities of the community organizations themselves. District community centers have been established and managed according to the ordinances of municipal governments. But neighborhood community centers don't have a specific legal base, funding has been provided by grassroots community organizations and the centers have been self-managed.

As a result, the administrative procedures used have been inconsistent, and hierarchical relationships between districts and neighborhood community centers have been ambiguous. Further, grassroots-

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type neighborhood organizations have experienced a gradually diminishing capacity to provide enough services for local residents as the result of a decreasing and aging population.

Potential problems had been raised before the disaster. For example, what are the roles of district and neighborhood community centers? Should their functions continue to cover general activities in order to provide community services, or should they be restricted to social education? Should the authority of district community centers become stronger? Should the administrative hierarchy be made clearer?

Municipal mergers between Ofunato City and Sanriku Town in 2001 made this problem more severe. Historically in Sanriku Town, where fishing has remained a major local industry, grassroots-type neighborhood organizations and neighborhood community centers have had greater power to integrate residents than has been the case in Ofunato City—a highly urbanized center around harbor facilities. However, an "Ofunato model" was imported into former Sanriku Town area by implementing a compulsory change of administrative

framework coupled with a municipal merger, giving district community centers strong authority.

Changing local social structures and nation-wide merger policies after the 1990s have caused confusion around community governance to escalate.

We should focus on the activities and functions of grassroots-type neighborhood community centers to provide shelters, as these resources are most familiar to local residents, and more quickly available than is access to other local agencies.

At the same time, however, we need to watch and review the roles of district community centers as local disaster countermeasures headquarters in the context of community governance. These centers are built on a larger scale, and some of the facilities built at the time of municipal mergers functioned as a locus to sustain a large proportion of victims in each district. Chiefs in district community centers managed shelter space, allocated goods and food provided by municipal governments to local residents, and held meetings with chiefs of neighborhood community centers in each district to coordinate daily evacuees' needs and municipal offices. After the phase of urgent
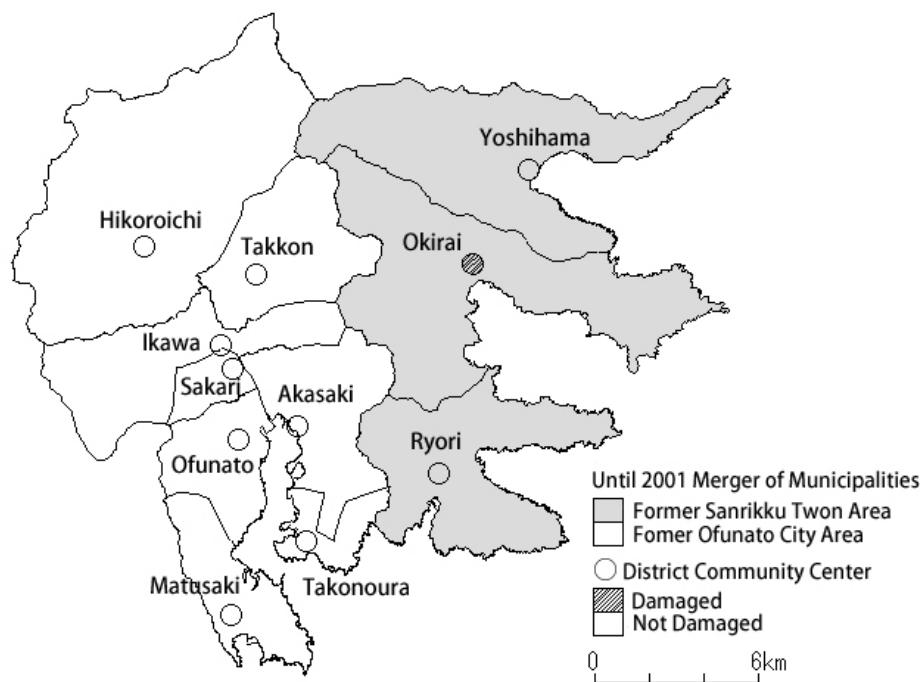

Figure 6: District Community Centers in Ofunato City
Note: Made by Author

assistance had passed, reconstruction committees in each district were moved to the district community centers.

Shelter Management in Rural and Urban Areas

The types of shelter management provided tended to differ between rural and urban areas.

Almost half of South Area—in the Okirai District in the rural part of the former Sanriku Town—was washed away by the tsunami, and 120~130 people were evacuated into the South Area neighborhood community center until nightfall. The disaster countermeasures team had been established by the neighborhood organization during the day. While the delivery of food supplies from outside the area was stopped for two to three days after the disaster, residents who avoided direct damages by the tsunami worked cooperatively to manage the shelter and provided the food they had stored in their houses, for the evacuees who lost their houses.

In this case, the "principle of common ownership" by the neighborhood community functioned to provide emergent assistance. We found the same behavior in Yoshihama and Akasaki District community centers, and shelters in the Matsusaki District, and especially in Goishi and Kamisaka—areas where residents became isolated because main roads had been shut down by debris.

All these cases have common characteristics in that they were located in rural areas, community centers were functioning and neighborhood residents continued to work cooperatively in spite of the damage done by the tsunami. Sufferers collectively evacuated to their own area's community centers, while maintaining existing neighborhood relationships, and community organizations initially managed shelters by themselves.

The urban center core area around Ofunato Bay

and Sakari River was totally washed away by the tsunami, and consequently the approach to shelter management taken in rural areas could not be adopted here. Because the Taiheiyou Cement Factory and various other kinds of companies had been located in the bay/riverside area, many outsiders had lived here. During the gradual process of urbanization, neighborhood ties had become weaker than was the case in rural areas.

Severe damage caused by the tsunami destroyed the physical infrastructure and community ties. Residents individually dispersed to near-by shelters or relatives' houses outside of the disaster-stricken area. Shelter communities were composed of a mix of residents in terms of original community, gender and social class.

Photo 1: South Area Neighborhood Community Center
Note: Photograph by author, Aug. 24th, 2012.

Photo 2: The South Area Viewed from Central Area in Okirai District.
Note: Photo by author, Aug. 24th, 2012. The central area in the Okirai District was almost totally washed away by the tsunami. In South Ward, half of it was flooded and half of the slope of the hill remained.

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Photo 3: Yoshihama District Community Center.
Note: Photo by author, Aug. 23rd, 2012.

Photo 4: Yoshihama Farm
Noto: Photo by author, Aug. 23rd, 2012. The sea is on the right side of the photo. This farm was created by collective relocation to the upland after Meiji (1896) and Showa (1933) tsunami.

Photo 5: Akasaki District Community Center
Note: Photo by author, Jan. 29th, 2013.

Photo 6: Oikata Area and the Factory of Taiheiyo Cement Corporation in Akasaki District
Note: Photo by author, Jan. 29th, 2013.

Photo 7: Matsusaki District Community Center
Note: Photo by author, Aug. 24th, 2012.

Photo 8: Goishi Area Neighborhood Community Center
Note: Photo by author, Nov. 4th, 2011.

Photo 9: Main Road to Goishi Area Shut Down by Debris Just after the Tsunami (Kadonohama Area)
Note: Photo by author, Oct. 2nd, 2012.

Photo 10: Ofunato District Community Center
Note: Photo by author, May 27th, 2013.

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Photo 11: Ofunato Center Core Area Totally Damaged by
Tsunami
Note: Photo by author, Nov. 4th, 2011.

Photo 12: Slope from Center Core to Ofunato District
Community Center
Note: Photo by author, May 27th, 2013. Under the slope,
houses and buildings were totally flooded. On
the middle of the slope almost half-collapsed or
partially-damaged types of houses have remained.
In such areas, in many cases sufferers returned to
their damaged houses and lived without public
assistance and enough information from outside.

In such an environment it was difficult to establish a stable shelter management system, and municipal headquarters' or NPO's assistance, rather than the neighborhood community, often took initiatives to coordinate evacuees in shelters. Victims were not assisted according to the "principle of common ownership," but exposed without sensitivity to the "principle of public assistance," administered by outside agencies in degrees, depending on how much material property each person possessed, and more objectively on the extent to which each sufferer's house was a "total collapse," a "half collapse," "inundated above floor level" or "inundated below floor level."

These standards caused evacuees to separate into "have" and "not have" groups, and led to pressure to exclude people whose houses had remained standing from public assistance. Immediately following the disaster however, when distribution of goods and energy stopped completely, even the people who still had their houses were also "sufferers."

If we call uprooting people from their homes by the shock of disaster as "material displacement," we can see that being denied public assistance, and living in either their own damaged houses or in a relative's house was in fact "secondary, socially created displacement." This presaged the much larger scale of inequality which would follow in the next phase.

Outreach from the Municipal Agencies

One of the major agencies in the Ofunato Municipal Office to provide outreach to sufferers is the Health and Aged Care Center. It has public health nurses on staff, and provides residents with public health and aged care services in ordinary times.

Because the tsunami in March 11th reached the Health and Aged Care Center public building, at first the health nurses evacuated to Rias Hall (the main public hall in Ofunato City) on the opposite side of the road, and after several hours they went to the municipal office. They established a public health/medical team under the direction of the welfare division and began to assist sufferers on the same day.

On the next day, March 12th, these nurses went around to all the shelters on the tsunami-stricken coastal side so that they could confirm the situations of almost all shelters already verified by the municipal office. There were about twenty staff members at that time—a supervisor, fourteen nurses and temporary workers.

Though established policy gave the chief of the Health Center responsibility for supervising the

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Photo 13: Health and Aged Care Center
Note: Photo by author, Mar. 23rd, 2012.

public health/medical team in the municipal office, he couldn't actually assume this responsibility because he had to cover both health centers in Ofunato and Kamaishi City. On March 12th, a doctor in the Ofunato Prefectural Hospital went to the municipal office and advised the nurses to take responsibility for managing their teams themselves.

They held their first meeting in the middle of the night, and at that meeting shared the situation of sufferers they had seen in the shelters. This meeting became a regular occurrence, and was called the 'medicine, public health and welfare meeting'. A wide range of municipal staff members engaged in disaster assistance activities participated in these meetings, which soon became an important hub of mutual communication among various kinds of professional supporters both inside and outside of Ofunato City.

Beginning on March 19th, nurses' teams, assisted by doctors and public nurses from all around the country, began visiting all households in the tsunami-stricken area. Starting June 3rd they began offering 'Salon' activities for evacuees whose aims were to provide the opportunities to communicate among residents in temporary housing and to research on the needs of them. These became one of the starting points of the organized outreach programs which assistance groups implemented after temporary housing had been constructed (Ofunato Municipal Office Welfare Division 2012).

Agencies to Mobilize Volunteers

Following approved procedures for setting up a volunteer center that would mobilize civilian powers to assist sufferers was an important issue for the municipal office. In Ofunato City the Municipal Council of Social Welfare was supposed to establish a volunteer center according to an existing manual. In addition, the Council had trained its staff annually, every May, around the memorial day of the 1960 Chili Tsunami which had caused large-scale damage along the Iwate Sanriku coast.

The Council set up the Ofunato Disaster Volunteer Center on March 12th, in front of the entrance to the municipal office. On April 5th the facility was moved onto the car park of Health and Aged Care Center where the Volunteer Center is still located (March, 2014). During the month of March major activities had included sorting and carrying relief goods, and assisting in the management of shelters. In the early stages there were about 20~30 volunteers, many of whom were high school students in Ofunato. Beginning on March 19th additional support staff sent from Akita and the Aichi Prefectural Council of Social Welfare strengthened the capacity of the volunteer center.

One of the difficult problems in the early phase was to agree on when and how the Volunteer Center should receive volunteers from outside of Iwate prefecture.

In Ofunato information about volunteer activities had not been shared sufficiently with ordinary residents. Staff at Ofunato's volunteer center were worried they would undermine confidence in volunteer efforts because they had not yet built enough of a system to coordinate volunteers and local residents. To address this concern the Center decided not to accept outside volunteers until the end of April. On May 1st the Center started to receive volunteers formally, and about 1000 people came to Ofunato as

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Photo 14: Volunteer Center Managed by Municipal
Council of Social Welfare
Note: Photo by author, Aug. 22nd, 2012.

Photo 15: District Welfare Commissioner, Ms. Sachiko
Ishibashi at Shizu Temporary Housing
Note: Photo by author, Oct. 2nd, 2012.

volunteer workers during the golden holiday week from May 3rd to May 5th.

In order to identify the needs of sufferers, the Center partnered with professional District Welfare Commissioners who were closely tied with local communities. Starting in May the Center began publishing an information paper called "Oryashita," which means 'How are you?' in Ofunato's dialect. The purpose of this paper was to provide sufferers with information about volunteer activities, and conversely to ask sufferers what they needed. "Oryashita" was delivered to all shelters. In addition to this handmade media, word-of-mouth communication played a most effective role in getting information about peoples' needs.

On September 12th, 2011 the name 'Ofunato Disaster Volunteer Center' was changed to 'Ofunato Reconstruction Volunteer Center of Municipal Council of Social Welfare'.

Professionals Rooted in the Local Community

The municipal office has another senior administrative officer with responsibility for sustaining welfare services to the local community—the District Welfare Commissioner. In contrast to the Municipal Council of Social Welfare which has some professional full-time workers and is responsible for providing services all around the Ofunato area, while District

Welfare Commissioners are also a type of welfare worker, they are essentially volunteers, and often members of neighborhood community organizations. These semi-governmental welfare agencies are most closely linked to local residents.

Sachiko Ishibashi is a key person in welfare activities in Ofunato. She is a former staff member of the Municipal Council of Social Welfare, and is now the District Welfare Commissioner in the Takonoura District where she lives, and is a member of 'Open Heart'—a civilian support group for visually-impaired persons.

Ms. Sachiko Ishibashi went far from her house when the disaster struck, and evacuated into Rias Hall in Ofunato's center core area. In the Takonoura District the disaster countermeasures headquarters were set up in the district community center. On March 15th, when debris stored on the road to her living district was removed, Ms. Sachiko Ishibashi went home and joined the headquarter's team as a District Welfare Commissioner with responsibility for caring for aged and handicapped persons in the community center shelters.

At the same time, she visited the tsunami-stricken area as a member of Open Heart and confirmed the safety of visually-impaired persons.

Every Tuesday she holds a "salon" meeting for the residents of Shizu temporary housing. This activity is a worthy focus of attention as it is one of the ongoing

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Photo 16: Rias Hall
Note: Photo by author, Nov. 4th, 2011.

Photo 17: Activities of San-San Council in Rias HallNote:
Photo by San-San Council, Jun. 12th, 2011.

practices designed to help the local community care for aged victims and other handicapped residents.

Voluntary Groups from the Local Community

・San-San Council

New grassroots groups emerged after the disaster, with the intention of offering voluntary assistance.

One such group is "San-San Council," whose major activity is providing food to sufferers around the Ofunato area. "San-San Council" is the abbreviated term for "3.11 Council for the Reconstruction of Sanriku Kesen Region." In Japanese we read "3" as "San," and the first syllable of "Sanriku" is also "San," this group has given itself the nickname of 'San-San Council' .

A chef at an Italian restaurant named "Porco Rosso" made "onigiri" (rice balls) and delivered them to sufferers on March 12th. This event served as the basis for future activities of the San-San Council. On March 15th their activities were relocated to Rias Hall, which was a public hall that had been constructed as a major cultural facility in Ofunato

City in 2009. It included a big, well-equipped kitchen for a restaurant tenant on the first floor. Because it was so well equipped, Rias Hall became one of the major shelters in the Sakari District.

A key aim of San-San Council activities was to provide sufferers with needed dietary side dishes. For example, some members of the council felt strongly about the necessity of such an approach when they learned that some sufferers had acquired beriberi because the main food supplied by the municipal office had been rice or bread, especially in the early phase of the disaster, and sufferers had become deficient in important nutrients. In this instance we can say that civilian groups formed after the disaster played an important role in raising the alarm and making arrangements to compensate for a municipal shortcoming.

The Council delivered 2000 meals a day to all the shelters in Ofunato during the peak of demand . It continued to provide that level of support, without even one holiday, until August 14th. At the time of our interview in November, 2011 the number of meals that had been delivered exceeded 170 thousand. About 500 volunteers participated in the Council's activities. It was able to provide such high quality meals in large part because several professional chefs whose shops had been flooded supported the Council.

San-San Council opened its Facebook page on May 4th, 2011, and used it to send information to the broader society using the internet. It also used two community centers near Rias Hall as lodging houses for outside volunteers. In this way, the Council functioned as an intermediate organization for Ofunato and outsiders in the early phase of the disaster.

The municipal decision to turn over use of the space in Rias Hall to the Council was a definite factor allowing the development of all its activities. But once this phase of the disaster had passed, the aim of the activities undertaken had to change, and it became

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difficult for the Council to maintain its partnership with the municipal office.

On July 11th the Council changed its major objective of delivering food to residents in shelters, to delivering food to those in temporary housing. At this time the municipal government began delivering daily packed lunches to sufferers. Because permission to use Rias Hall was scheduled to end in September, 2011, the Council relocated to another space on September 30th.

・Civilian Liaison Conference for the Reconstruction of Kesen Region

On April 5th, NPO "Dream Net Ofunato" addressed other civilian groups from the Ofunato area and established the "Civilian Liaison Conference for the Reconstruction of Kesen Region," in collaboration with NPO "Aichi Net," which came into Ofunato from outside, namely from the Aichi Prefecture.

Dream Net Ofunato was founded in 2006. It was the first intermediate NPO to support various types of civilian groups in the "Kesen" Region, which includes Ofunato City, Rikuzentakata City and Sumita Town. The Dream Net website provides information about sixty-four groups in this region. Pre-existing relationships among members of these groups prior to the disaster helped speed the establishment of a viable network during this emergency.

This network-type of conference distributed relief goods and food to shelters. Since April 11th it had published "Reconstruction News," which carried information about assistance services provided by the municipal office and NPO/volunteers, and about events held for sufferers.

At first the conference placed its tentative office in the building of the Municipal Council of Social Welfare (named as the Y・S Center). The next, and independent, office was located in Matsusaki District on May 13th, 2011.

Photo 18: Office of the Civilian Liaison Conference for the Reconstruction of Kesen Region in Matsusaki District
Photo by Civilian Liaison Conference for the Reconstruction of Kesen Region, Mar. 19th, 2013.

Summary

Figure 7 provides a schematic of the organizations, groups and individuals who provided assistance during the first stage of the disaster, and their inter-relationships.

The horizontal axis represents the scale of activities. The left side indicates a broad scale, senior to municipalities. The right side indicates a narrow scale, at the neighborhood community level. The vertical axis represents a state/civilian continuum. The upper level denotes state activities, and the lower level denotes civilian activities.

In the first phase municipal and quasi-municipal agents assisted sufferers using institutionalized methods of communication/governance across municipal and local/civilian sectors. This can be termed a "hierarchical partnership" type of relationship, in the sense that it presupposes a vertical relationship among both sectors.

Local quasi-governmental agents such as district community centers and district welfare commissioners played an important role with regard to the intermediate municipal assistance network for sufferers in local neighborhood-level shelters.

Some NPOs/volunteer groups emerged after the earthquake and tsunami. They provided assistance for sufferers from outside the institutionalized/administrative assistance networks, and in some

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cases played an important role in compensating for deficiencies in the municipal sector's assistance.

Especially in places where local community ties had been totally destroyed by the tsunami, existing systems for providing assistance did not function adequately. These issues would become more apparent in the next phase of the disaster, and ultimately provided the motivation to build networks linking assistance groups.

PHASE TWO: REMOVAL TO TEMPORARY HOUSING AND FORMATION OF ASSISTANCE NETWORK (JUNE 2011-MAY 2012)

Outline

A step to the next phase of the disaster process was

moving sufferers from emergent shelters to temporary housing. Finding space where sufferers could live as a family unit generally meant that they would get the opportunity to move from an unstable evacuation situation into the stage of rebuilding a normal, ordinary life.

On the other hand, the abolishment of shelters caused risks by requiring sufferers to leave their local communities, and so an important relationship which had helped to sustain them while they had lived in the shelters. Municipal agencies and other assistance groups had to organize assistance networks to protect these social relationships during the transitional period.

The Ofunato Action Network—established in June 2011—became the first group to organize these important assistance networks in Ofunato.
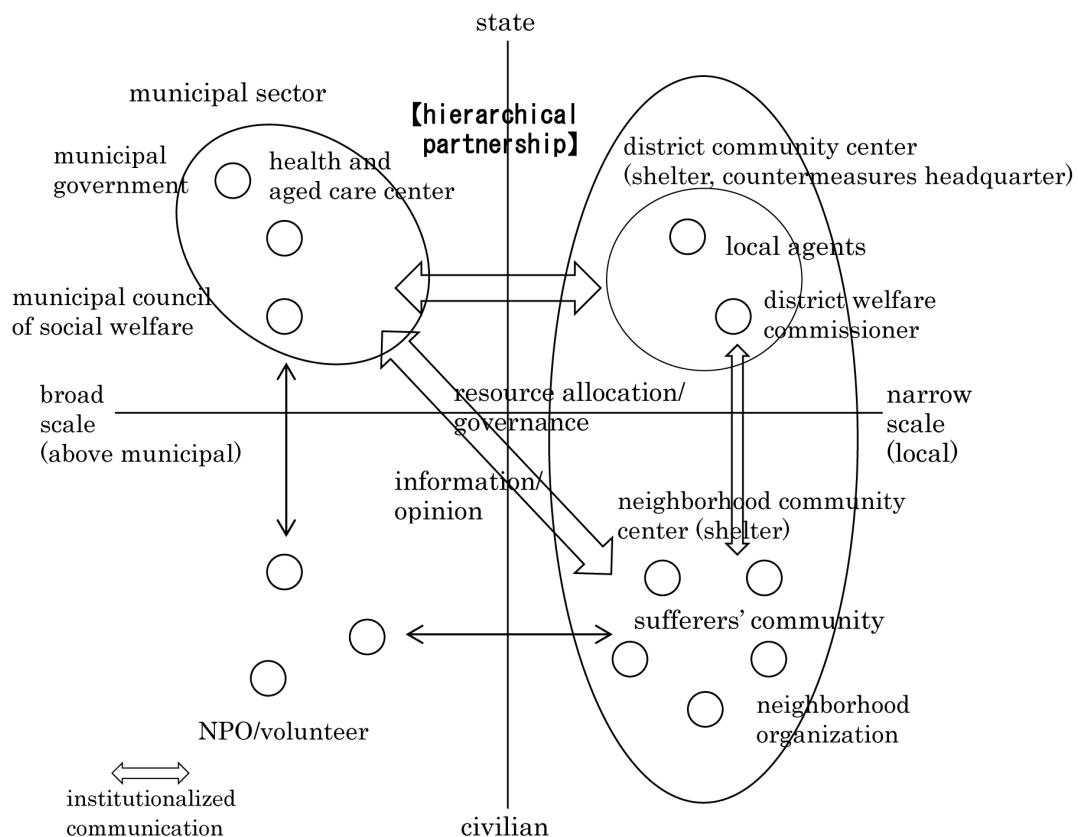
Until then, assistance groups from outside Ofunato

Figure 7: Relationships among Key Providers of Assistance in Ofunato During Phase 1
Note: Made by author

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could continue to enter the coastal disaster-stricken area, and an intermediate "space" was used to coordinate these volunteer groups. One such group—the "Tono Magkoro Net"—was formed at the end of March 2011 in Tono City, the mid-point between the inland and coastal sides of Iwate Prefecture .

A staff member of NPO "Moyai," one of the major anti-poverty movement organizations in Tokyo and a national level homeless support network, took initiatives in constructing the Action Network in Ofunato.

The Municipal Council of Social Welfare and one of the major inland municipalities, Kitakami City, in partnership with a temporary employment agency called "Japan Create," formed a new team to assist with the management of temporary housing in Ofunato using an Iwate Prefecture fund. Kitakami City's office employed 80 staff who had been

sufferers, and intended to create a model system for providing assistance to the residents in temporary housing.

Through such cumulative, mutual and dynamic communication among those inside/outside the disaster area, and governmental/civilian sectors, a framework of assistance networks began to form in this phase.

Removal to Temporary Housing

Construction of temporary housing in Ofunato began on March 25th and finished on July 28th, 2011. Through removal process more than 60 shelters were integrated into 37 temporary housing units. A large number of the available residential spaces in urbanized areas were inland, and in rural areas temporary housing units were often constructed on the former grounds of public facilities or vacancies
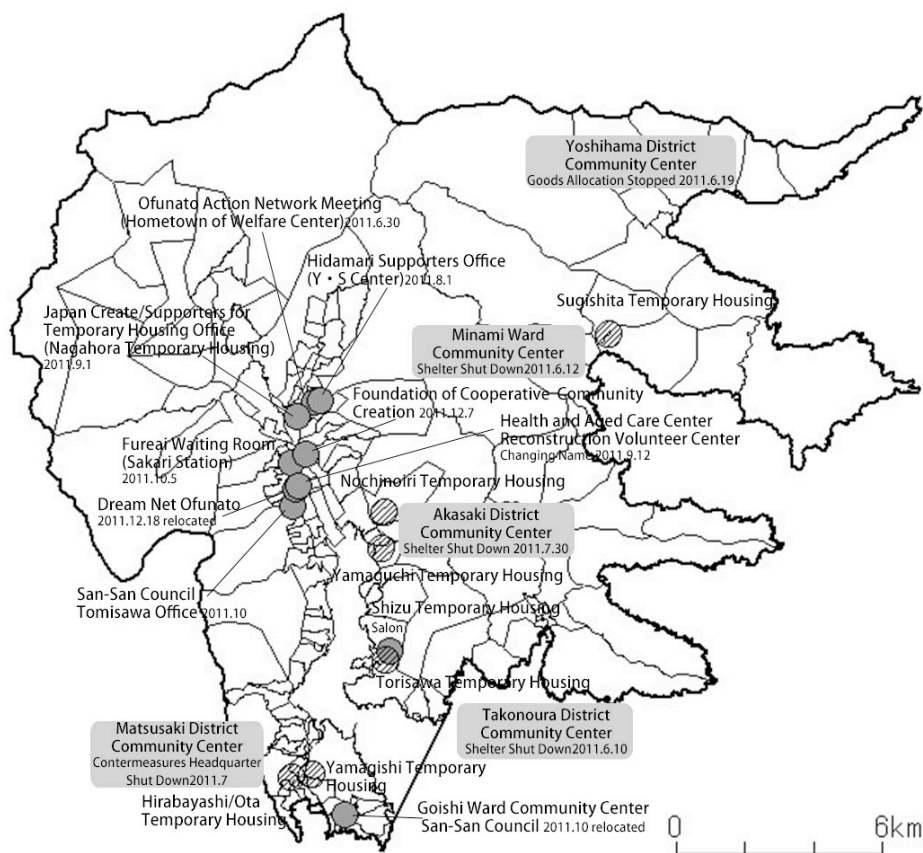

Figure 8: Map of "Spaces of Assistance" in Phase Two (Jun. 2011-May. 2012)   Note: Made by author

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on hills.

Residents for each housing unit were selected by lottery. This method of selection had the effect of destroying the shelter communities formed during evacuation. Residents in shelters were dispersed across multiple temporary housing units. During the process of migration to temporary housing, original neighborhood communities tended to dissolve because of the double shock of the disaster itself, and the subsequent dispersion of residents into temporary housing.

On the other hand, in some cases in rural areas residents could negotiate with the municipal office and get permission to keep a shelter unit. For example, in the case of the Sugishita temporary housing in Okirai District, residents in a shelter could enter each housing unit as a group.

We should also focus on changes in the ways communities were managed in such cases. Shelter communities in rural areas tended to be managed by existing neighborhood community organizations themselves. After sufferers relocated to temporary housing, the disaster countermeasures teams in local communities dissolved, and new associations comprised only of sufferers who lived in each temporary housing unit were established.

On the one hand, removal to temporary housing provided a more secure living environment for sufferers than had been possible in shelters, but on the other hand, the re-location created risks of being uprooted by severing the relationship they had had with their neighborhood community.

Organizing Assistance Networks

In the process of moving from the emergent situation phase to rebuilding ordinary life, issues became more complex, and how assistance groups and municipal agencies contacted sufferers and managed temporary housing units which were now also new social units
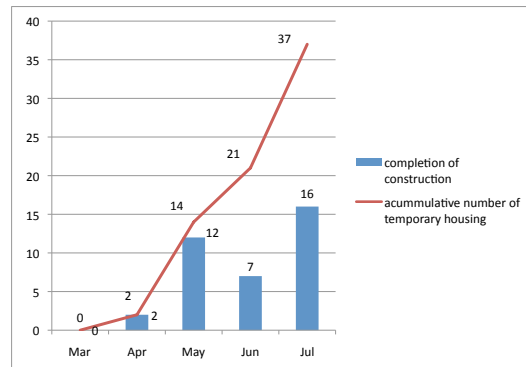

Figure 9: Number of Temporary Housing Units Constructed
Source: Ofunato Municipal Office

became a big problem.

On June 30, 2011, assistance groups in Ofunato organized the "Ofunato Action Network," to respond to such situations. Its aims were to build a system to care for sufferers, to prevent isolated deaths and suicides and to reconstruct society in anticipation of the city's re-development. This Network held meetings periodically to share information about the needs of sufferers and coordinate activities among civilian groups and municipal agencies.

We should note that both civilian and municipal, agencies participated in this meeting. The Ofunato municipal sector did not have enough resources to care sufficiently for sufferers, and wanted to have information about volunteer groups' activities. In this sense we can see that the Ofunato Action Network was not only one of the starting points for horizontal networks of assistance groups in the civilian sector, but also of a governance system constructed among volunteer groups and municipal agencies (Ozeki 2011a; 2011b; 2013).

Ozeki Terukazu, an activist in NPO "Moyai—one of the major anti-poverty movement organizations in Tokyo and the "National Homeless Support Network"—took the initiative of organizing the network in Ofunato.

Ozeki took part in assistance activities following the Kobe Earthquake in 1995, and again after the Mid Nigata Prefecture Earthquake in 2004. These were the

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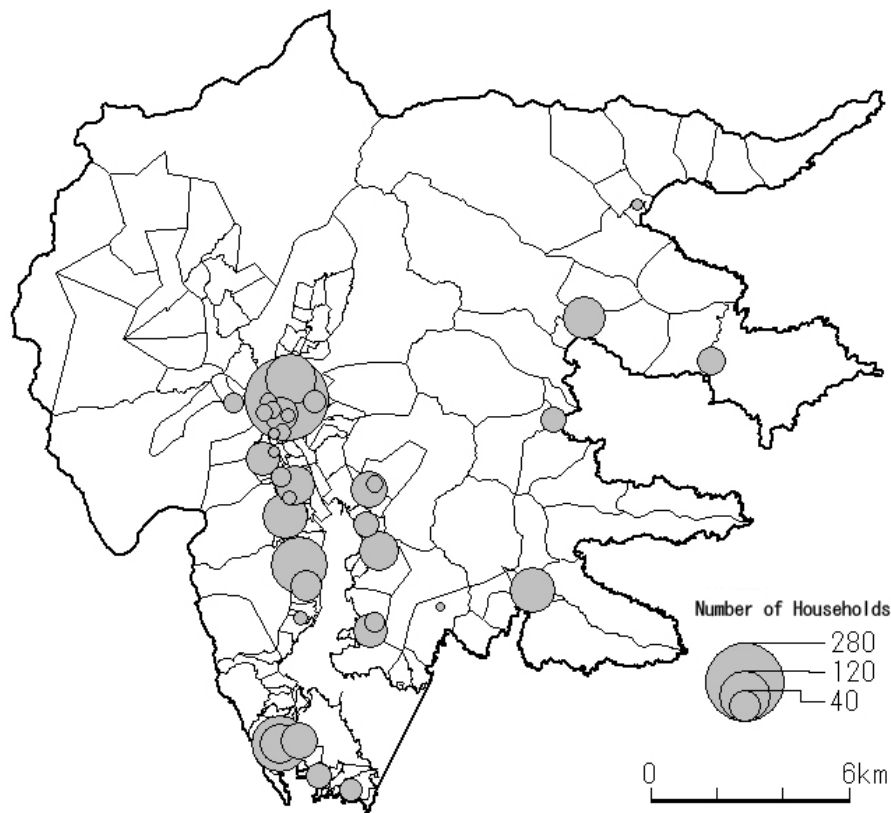*Tadahito YAMAMOTO*

Figure 10: Map of Temporary Housing Units in Ofunato City
Note: Made by author based on material from the Ofunato municipal office.

two major earthquakes after the 1990s in Japan. Both disasters played important roles in the development of voluntary disaster relief organizations around the country, and the institutionalization of their activities in governmental policies.

Mr Ozeki had been engaged as a staff member of "Moyai" in support of activities for temporary workers who had been dismissed abruptly after the 2008 financial crisis. The Government of the Democratic Party of Japan, which came to power in 2008, recruited a chief of "Moyai," Makoto Yuasa, as Special Advisor to the Cabinet to cope with problems of poverty. He became the Head of the Cabinet Secretariat's Volunteer Coordination Office on March 16, 2011 in the immediate aftermath of the Great East Japan Earthquake.

The National Homeless Support Network was established in 2007 to support homeless people and to advise the national government on how to draft policies that will solve the problem of homelessness, and how to use the Act on Special Measures Concerning Assistance in Self-Support of Homeless.

The Chief of the national network is Kazushi Okuda, a clergyman in Kitakyushu City and the chief of the "Kitakyusyu Homeless Support Organization." As a member of the Social Security Council of the

Photo 19: Ofunato Action Network Meeting
Note: Photo by author, Nov. 4th, 2011.

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Ministry of Health, Labor and Welfare he is also a key person in the development of national social inclusion policies.

On April 1st, 2011, the National Homeless Support Network formed a joint project entity with two cooperative networks—the Green Coop and the Seikatsu Club Consumers Cooperative—to assist sufferers. The project was called the Joint Assistance Project Entity of National Network, Green Coop and Seikatsu Club. Its central office was located in Sendai City and its branch office was situated in Tono City, as a base to assist those in the Iwate tsunami-stricken area. Ozeki was recruited as a key staff member to the Iwate Branch of the Joint Assistance Project Entity. He chose Ofunato as the main focus of its activities.

The Joint Assistance Project Entity was reorganized

Photo 20: Terukazu Ozeki in Tono Branch
Note: Photo by author, Nov. 5th, 2011.

and renamed the "Foundation of Cooperative Community Creation (FCCC)" on Nov. 1st, 2011.

A characteristic of assistance networks in Ofunato is that civilian groups in the anti-poverty /homeless support movements participate in disaster assistance and have taken initiatives to organize volunteer networks.

Relay Point to the Coastal Side: Tono Magokoro Net

One of the reasons Ozeki Terukazu and the Joint Assistance Project Entity placed its branch office in

Tono City was that a large volunteer coordination association had already been created there. That network—the "Tono Magokoro Net,"—was established on March 27, 2011 by representatives of local NPOs, the Municipal Council of Social Welfare, and a company collaborating with assistance groups coming from outside Iwate Prefecture.

Tono City was a useful point from which to assist the coastal side because it was located mid-way between the tsunami-stricken area and inland major cities along the Northeast expressway and Shinkansen (ballet train), the main traffic line linking Tokyo with the northeast region of Japan.

Individuals and assistance groups coming from outside the Iwate prefecture could not have matured as they did without Tono Magokoro Net, because many local volunteer centers on the coastal side had prohibited outside assistance groups in the immediate aftermath of the disaster (Tono Magokoro Net ed. 2013).

Supplementation for Outreach

The construction of temporary housing for 1801 households gave the municipal office the necessary influence needed to design a new system for mobilizing skilled persons to help sufferers. The Ofunato Municipal Council of Social Welfare employed 11 staff members and established a new support team—named "Hidamari (which means 'sunny spot' in Japanese) Supporters,""—to respond to such needs on August 1st, 2011. The number of staff members increased to 23 in November of that year.

One of the main roles of Hidamari Supporters was to provide routine care for the residents in temporary housing. They periodically visited and assessed the living conditions in temporary housing units and held and managed "salon" meetings in temporary housing units to meet with sufferers and facilitate

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Photo 21: Tono Magokoro Net in the Tono Synthesis
    Welfare Center
Note: Photo by author, Aug. 17th, 2011.

communication among sufferers.

Hidamari Supporters inherited "salon" activities from the municipal team of public health nurses, and started holding them in nine places on October 10th, 2011. The number of "salon" meetings had increased to 21 by October 2012.

"Salon" meetings were a precious opportunity to study every sufferer's mental and physical conditions in detail. It is characteristic of Ofunato that the Municipal Council of Social Welfare played such a central role in planning and practicing 'salon' meetings in coordination with other NPOs/volunteer groups.

Another important activity of the Hidamari Supporters was to maintain the list of residents in "deemed temporary housing," and to collect information about them. "Deemed temporary housing" meant rental housing which the central or municipal government subsidized as temporary housing for sufferers. Because there was no difference in outside appearance between ordinary rental housing and that deemed temporary housing, it was difficult for assistance groups to find out where the sufferers were.

Even the municipal government did not have a complete list, because the agency which managed deemed temporary housing directly was in the Iwate

prefectural office.

At first Hidamari Supporters got information about deemed temporary housing from District Welfare Commissioners. In December 2011 a lot of information became available because the Prefectural Council of Social Welfare got the list of residents of deemed temporary housing in Ofunato, and sent letters to them to permit them to give their information to the Municipal Council.

Hidamari Supporters proved to be an indispensable resource for the Ofunato municipal office when it required information about residents in deemed temporary housing.

Support from Outer City

Kitakami City, one of the major cities in the inland Iwate Prefecture, was engaged in support activities for the coastal side of tsunami-stricken municipalities. In particular, its project on "supporters for temporary housing" provided a basic framework for managing temporary housing in Ofunato city.

Kitakami City, NPO Iwate Fukko (Reconstruction) Collaboration Center and Iwate Prefecture made a plan to support municipal governments on the coastal side, and proposed its adoption in June 2011. The Collaboration Center was organized by the intermediating NPO in the Iwate Prefecture on April 28, 2011, and played a key role in coordinating the involvement of related agencies in drafting the proposal.

Ofunato City agreed to adopt the plan in the late June. The Kitakami Municipal Assembly approved the plan in July and started the project in September.

The gist of the project was that Kitakami City would employ "supporters" from the population of sufferers in Ofunato by using funds for emergent employment in Iwate Prefecture, and provide ongoing assistance to residents in temporary housing. A temporary employment company named Japan Create, was

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Photo 22: Deemed Temporary Housing 雇用促進住宅赤崎宿舎（2012.8.22）
Note: Photo by author, Aug. 22nd, 2012.

commissioned by Kitakami City in early August to organize staff and manage support activities. Japan Create employed 80 staff members until the end of August, and activities commenced on September 1st.

The supporters' teams were placed in each temporary housing office every day, seven days a week. Their activities were divided into providing "assistance" and "linkage." "Assistance" meant helping residents and neighborhood organizations in temporary housings. "Linkage" meant linking the needs of residents with the appropriate municipal agents or other professional groups, and initiating communication among residents.

Kitakami City held a meeting in the Ofunato Municipal Office on August 24th, named as "Ofunato City Partnership Meeting for Livelihood Support." The first Chairman was NPO Iwate Fukko from the Collaboration Center, and most members represented municipal governmental or quasi-governmental agencies in Ofunato, such as Japan Create, several divisions in the municipal office related to the management of temporary housing, the Health and Aged Care Center, Hidamari Supporters and the Volunteer Center managed by the Municipal Council of Social Welfare, the police, and so on. At first NPO groups did not participate.

This was the second important network to link a broad range of agencies providing assistance with those needing temporary housing. A characteristic of this group was that the level of government involvement was much greater than that in the other assistance network, Ofunato Action Network.

The genesis for the development of this project was the success of a community building project in Kitakami City in 2006. In that project Kitakami City reorganized local "community centers" into "civic communication centers," and commissioned neighborhood councils to employ local residents as workers and manage communication centers themselves.

The skills produced by this reformation of community governance were used to manage temporary housing after the disaster.

Another factor related to the implementation of this project was an internship program by NPO "ETIC," which commenced in 1993 and provided internship programs to develop young persons' entrepreneurial talents from before the disaster.

Three young staff members participated in Kitakami City's project as managers through ETIC's program called the 'disaster recovery leadership development project'. Such resources from outside NPO led to the stable management and continual elaboration of Kitakami City's project (Kikuchi 2011; 2012; 2013).

The establishment of a strong system for administering temporary housing forced the reshuffling of former relationships among municipal offices and civilians, as well as between local and external assistance groups. Distinctions and relationships among the activities being conducted by Kitakami City staff and existing civilian assistance groups became confused.

Ozeki Terukazu and a staff member in the Joint Assistance Project Entity participated in a "Partnership Meeting" held in the Ofunato Municipal Office on September 21, in order to share information and coordinate responsibilities between the "Partnership Meeting" and the civilian "Action Network Meeting."

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We can say that through such an interactive and dynamic process of communication, an "elliptical structure of mobilization" was created in Ofunato.

One center was the "Ofunato City Partnership Meeting for Livelihood Support" managed by Kitakami City. The aim of this network was to assist residents living in temporary housing. The major role of civilian groups in this network was to supplement activities of the supporter's team managed by Japan Create (Commissioned by Kitakami City) in terms of caring for or holding "salon" meetings with residents.

The other center was the "Ofunato Action Network" managed by civilian assistance groups. This network included all types of assistance and partially played a role in supplementing governance mechanisms to intermediate civilian assistance groups and municipal agencies.

Ofunato City created such a multi-layered system to relieve the needs of sufferers, and to coordinate various types of actors engaged in assistance through multiple connections.

We can call the elliptical system of coordination the "Ofunato model" created through the experience of the Great East Japan Earthquake in Ofunato.

What issues were visualized by such a system, and how it transformed the structure of the assistance networks, became the themes of the next phase of the disaster process.

Relocation of Volunteer

The end of the emergent phase of assistance forced volunteer groups to relocate and to change what they had been doing. Some groups ceased their activities and left the disaster-stricken area. If the groups continued to act, they had to create a new field of activities to respond to the new situation.

San-San Council left Rias Hall and began preparing meals and conducting other activities at the Goishi Area Neighborhood Community Center on September 30, 2011. San-San Council moved its prefab office to Tomisawa in the center core area in Ofunato City. After its use of Goishi Area Neighborhood Community Center ended on December 30, 2011 the Council started construction on a permanent building with a kitchen and communication space, thanks to the donation of a building kit by the Malaysian Government. It was named the "San-San Kitchen House" on June 2012.

San-San Council continues to provide side dishes for sufferers in temporary housing, and to explore ways for it to become an independent NPO, which produces and delivers safe food to aged persons or to welfare facilities.
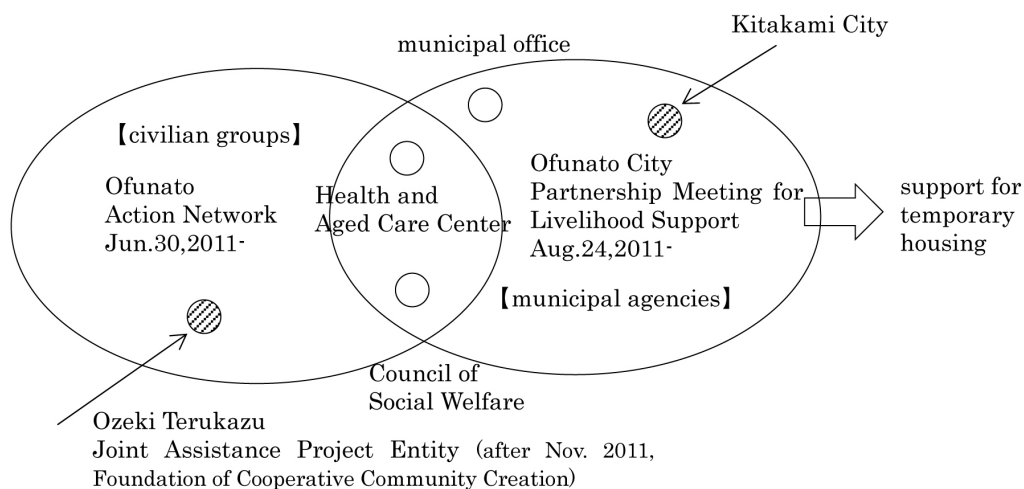
The Sanriku railway was destroyed by the tsunami

Figure 11: Elliptical Structure of Assistance Networks in Ofunat Note: Made by Author

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on October 5, 2011. Dream Net Ofunato was commissioned to manage the "Fureai Waiting Room" at the Sakari Station. The purpose of creating this space was to provide sufferers with the opportunity to talk with other people and to get information about assistance.

Dream Net Ofunato relocated its office from Matsusaki to the Sakari District near the center core in Ofunato on December 18, 2011. The Civilian Liaison Conference for the Reconstruction of Kesen Region was completed on April 2012.

Summary

Establishing the Ofunato Action Network was a step toward the next stage in the process of building an assistance network. The coordinator of the network was a NPO, the Foundation for Cooperative Community Creation, from outside the

Iwate Prefecture It had grown up after the 2000s by providing support activities for the homeless. This was a horizontal network made up of various types of workers engaged in providing support for sufferers marginalized in the existing administrative system of assistance. We can describe this as network as an "inclusive partnership," in contrast to the "hierarchical partnership" type of network that appeared in the first

Photo 26: Kitchen of San-San Council in Goishi Area
Neighborhood Community Center
Note: Photo by author, Nov. 4th, 2011.

Photo 24: Office of San-San Council in Tomisawa
Note: Photo by author, Mar. 23rd, 2012.

Photo 27: San-San Kitchen House under Construction
Note: Photo by author, Mar. 22nd, 2012.

Photo 25: Space of Activities by San-San Council in Goishi
Area Neighborhood Community Center from
September to December 2011
Note: Photo by Author, Nov. 4th, 2011.

Photo 28: Fureai Waiting Room at the Sakari Station
Note: Photo by author, Nov. 4th, 2011.

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phase.

One of the major challenges of the second phase was the construction of a support system for temporary housing. Because the inland industrial city of Iwate Prefecture, Kitakami City, agreed that the Ofunato Municipal Office should cope with this problem, the administrative sector played a central role in providing assistance for temporary housing.

As a result of these dynamic networking processes , an elliptical structure was created for mobilizing assistance in Ofunato. It was composed of the "Ofunato Action Network" and the "Ofunato City Partnership Meeting for Livelihood Support."

This situation led to pressure to rethink the specific roles of civilian groups in assistance activities, and necessitated the reorganization of relationships among municipal/civilian sectors. This became a major issue in the next phase.

PHASE THREE: DISCOVERY

OF "IN-HOME SUFFERERS" AND RECONSTRUCTION OF ASSISTANCE NETWORKS (MAY 2012-PRESENT)

Outline

People's vulnerability to disaster is dependent on whether they have the opportunity to access resources such as housing, goods, information and human relationships needed to rebuild their lives while living in a situation of forced displacement caused by disaster (Wisner et.al. 2004).

Now the legal basis of public governmental assistance is the Disaster Relief Act established in 1947. Its objectives are defined by the extent of damage inflicted on houses and described as total collapse, half collapse, partially damaged and inundated above floor level. Public agencies can give "houseless" sufferers material resources such as temporary housing and relief goods on the basis of such standards.
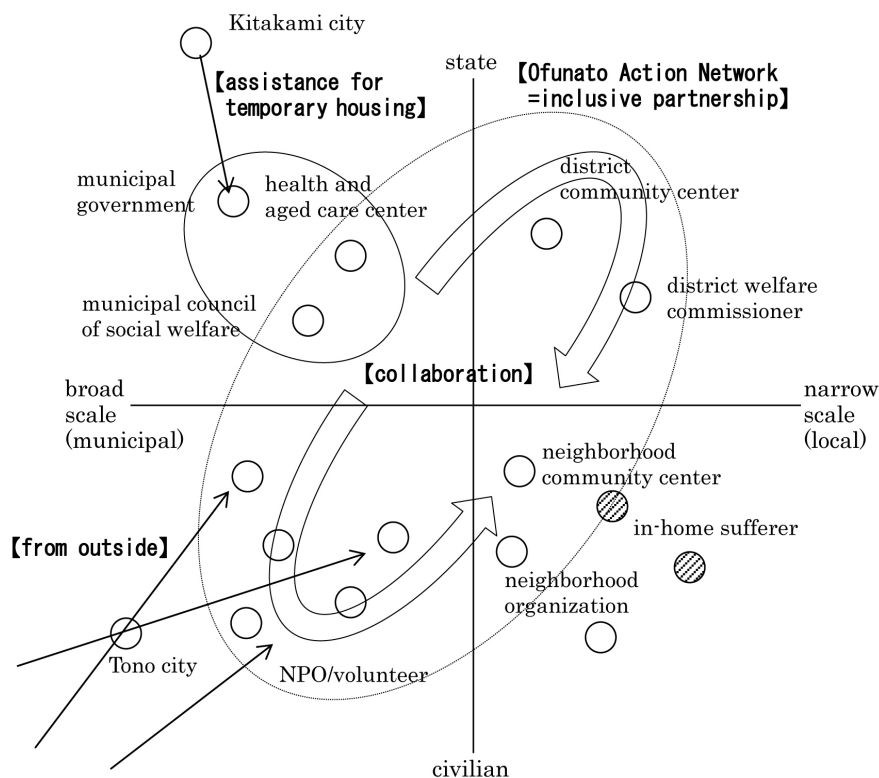

Figure 12: Relationships among Key Figures Providing Assistance in Ofunato during Phase 2   Note: Made by author

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This standard can cover only a part of sufferers' loss, if we define a "sufferer" as losing the opportunity to access not only residential space but also access to resources such as goods, energy, information and human relationships indispensable to keeping themselves alive after a disaster.

Following people's removal to temporary housing, the inequalities between sufferers who were covered by public assistance and those who did not lose their houses but 'suffered' from the disaster became more and more apparent.

This "in-home sufferers" problem appeared in Ofunato after the construction of temporary housing.

Civilian assistance networks actively coped with such invisible "sufferers" and warned the governmental sector and wider society of the severity of this problem. On December, 2011 one of the central groups in the civilian assistance network,

Foundation of Cooperative Community Creation, set up an independent office in Ofunato as a point from which they could provide continued assistance to 'in-home sufferers' It was formally commissioned by the Ofunato Municipal Office in May 2012 as a support project for such types of sufferers.

We can see this process led to the discovery of the "in-home sufferers" problem, and the institutionalization of a post-disaster civilian network of assistance in Ofunato.

Discovery of the "In-Home Sufferers" Problem

The process of discovering " in-home sufferers " had two steps.

The first shock occurred during the CSR project in August 2011 which involved giving sufferers seasonings provided by the Ajinomoto Company. Originally the Ajinomoto Company asked the Ofunato Municipal Office to cooperate with this

Figure 13: Map of 'Spaces of Assistance' in Phase Three (May, 2012-)   Note: Made by author.Note: Made by author.

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project. Because the municipal office refused to do that, the Ofunato Action Network allocated the seasonings instead of the municipal agents.

At first the aim of the project was to present seasonings only to residents in temporary housing. The project was extended to other types of sufferers when members of the civilian network met with sufferers outside of temporary housings while allocating space and moving around the disaster-stricken area.

On September 10th, immediately after Terukazu Ozeki, an officer of the Action Network put advertisements for this project in a local newspaper. About 80 sufferers who had vacated their own houses but had not received any public assistance called him in one day. The total number of "in-home sufferers" given seasonings by members of the network totaled about 250 in the end.

The second step was the project by the Foundation of Cooperative Community Creation (FCCC) to give blankets and clothes to sufferers to prepare for winter. The objective of this project was to help all types of sufferers beginning on November 24th. In the process of conducting the project FCCC assessed the situation of "in-home sufferers" in collaboration with broad assistance provided by members of Action Network and municipal agents. Mass media covered this problem, and then the municipal office

Photo 29: Office of Foundation of Cooperative
    Community Creation in Suwamae, Akasaki District
Note: Photo by author, Mar. 21st, 2012.

gradually realized the severity of the situation. The FCCC proposed a collaborative project to the municipal office to build a system to care for "in-home sufferers" and assess the total extent of the situation by networking across professional/municipal agents and civilian assistance groups on November 15th.

Until the end of March 2012, blankets and clothes were given to 350 households.

Through such processes the inequality among sufferers in temporary housing and "in-home sufferers" became recognized as one of the big issues in the disaster-stricken area.

Structure of the Problem

Why did such inequality of assistance emerge? Why did the problem not become apparent until several months after the disaster, even though situation of "in-home sufferers" was so serious? The causes are divided into two factors: making the problem itself and visualizing it.

The first factor related to the cause of the problem has three points.

To begin, the act outlining the provision of public assistance for sufferers is not adequate.

According to Disaster Relief Act, which is the legal basis for governmental sector assistance activities, the municipal office cannot assist sufferers who live in their own houses. The act presupposes that if sufferers have their own houses they can live life securely by themselves. But in the case of the Great East Japan Earthquake and the Tsunami this assumption was incorrect. Many sufferers evacuating their own houses became isolated and suffered from shortages of public assistance, goods and information.

Secondly the causes of the "in-home sufferers" problems are complex.

Table 2 illustrates the paths leading to, and the causes for, becoming "in-home sufferers," according to interviews with researchers on the situation of "in-

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home sufferers" in FCCC staffs.

Paths are of four kinds and include voluntary/ involuntary living in one's own house, or evacuation to a relative's house or rebuilding one's house.

Conditions which caused "in-home sufferers" problems are classified into three categories: disaster-induced factors (lack of food, goods and information); physical factors; and social factors. The last two of these factors derived from vulnerabilities which sufferers already had before the disaster. The "in-home sufferers" problem was caused by integrating disaster-induced factors with the physical/ social vulnerabilities of residents existing prior to the disaster. Besides that, the situation of sufferers changed from time to time. As time passed, if the lack of goods and information induced by the disaster vanished, they became labeled as "non-sufferers,"

though they could continue to be placed in serious situations as long as they had vulnerable factors.

To grasp the situation of "in-home sufferers," researchers must assess each situation on a case by case basis, and approach it repeatedly. This type of communication is difficult for an administrative sector to administer.

Thirdly, "in-home sufferers" were invisible and spatially dispersed around the disaster-stricken area. We could not discern them even if we could see their houses from the outside. Because of such spatial characteristics, once temporary housing had been constructed, assistance tended to be concentrated on those sufferers.

The next factor related to visualizing the problem has two points.

First, the civilian network of assistance was

factors / paths	goods shortage	Information shortage	elderly disabilities patient household	household without young children	no earthquake insurance	Vulnerable road users	Loosening of kinship	unemployment economic poverty
evacuation to relatives' house								
voluntary living in one's own home								
involuntary living in one's own home								
reconstruction of house								
	factors directly induced by disaster	physical factors	social factors					
	【disaster】						【ordinary times】 →	

Table 2: Factors Which Caused the "In-home Sufferers" ProblemNote: Made by author.

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established in June 2011 after the construction of temporary housing had commenced. Network leaders had not only disaster relief skills, but were also trained to deliver welfare services as a result of their experience with homeless support activities during the 2000s. This made a flexible and comprehensive approach to the assistance project in Ofunato possible At the same time, after the Lehman Brother's shock to global markets the central political regime changed and relationships among government and NPO agencies were strengthened to make anti-poverty policies more effective. As a result, it was possible to get approval for FCCC's proposal, based on the experiences of homeless support activities.

Finally through the process of conducting assessment and assistance activities for "in-home sufferers," trust gradually grew between professionals in the municipal sector and civilian activists. Such close communications among participants coupled with the openness of the municipal sector were important conditions enabling the governance network to cope with the problem.

These factors make us think deeply about today's public system of disaster relief. The experience with the assistance network in Ofunato will be a touchstone for disaster relief activities in the age of a post-aging/shrinking local society.

Institutionalization of the Network and Assessment Results

The Foundation of Cooperative Community Creation formally commissioned the support project for "in-home sufferers" by the Ofunato Municipal Office in May 2012. FCCC employed five Ofunato residents as staff members and assessed the situation of "in-home sufferers" all through the tsunami-stricken area. They have interviewed all households whose houses remained inside the inundation area. Interim results to the end of March, 2013 are provided below.

Researchers interviewed 571 households, and 447 of them were viewed as "in-home sufferers."

Thirty-three percent of their houses were in total collapse, 26% were heavily half collapsed, 33% were half collapsed, and 8% were partially damaged.

Two hundred and eighty-seven households of "in-home sufferers" did not need assistance when approached by the researchers. Ninety-four households became no "sufferers" as a result of assistance activities provided by FCCC. FCCC continued to assist 190 households.

They had been directly damaged by various types of disaster-induced factors.

11% of the households had experienced the death of a family members or close friends.

Six percent lost their jobs, and 12% were in temporary retirement because of damage inflicted by the disaster.

Thirty-three had not finished repairing their houses, even though they needed these houses.

The next aspects to be analyzed are physical factors.

23% suffered from depression or excessive mental stress.

9% began to drink more alcohol than they had before the disaster.

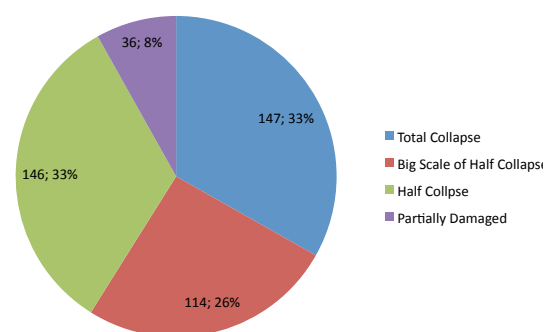Finally other social vulnerability factors were identified.

Figure 14: Types of "In-home Sufferers" in Terms of Disaster Victim Certification
Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

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11% lived alone, 34% lived with one other person, 25% lived with two other people, 11% lived with three other people, 8% lived with four other people, and 11% reported more than six people living together.

9% were elderly and living alone, 16% were two elderly people and 2% were three elderly people.
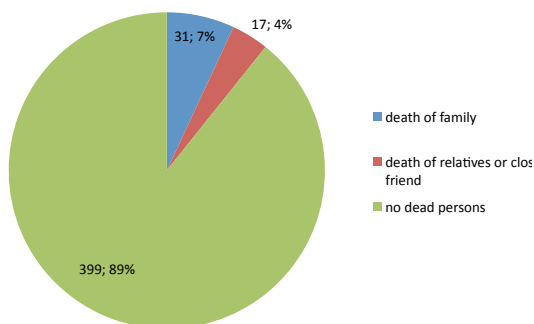
76% had no child under school age.

16% had no close friends nearby.

11% had no friends who could visit them.

The first task which should be given priority in 2013 is to conduct research on the households in the tsunami-stricken area which have not yet been interviewed. We also need to focus on residents who returned to reconstructed houses from temporary housings.

Figure 15: Were any of Your Close Acquaintances Killed?
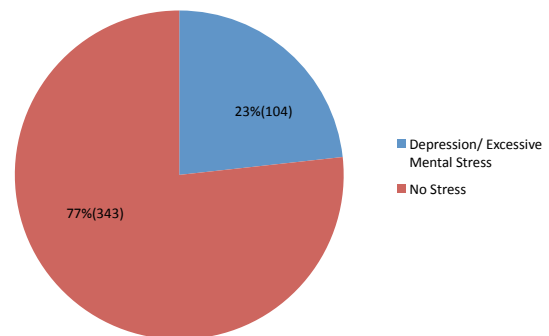Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

Figure 18: Do You Have Mental Stress?
Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.
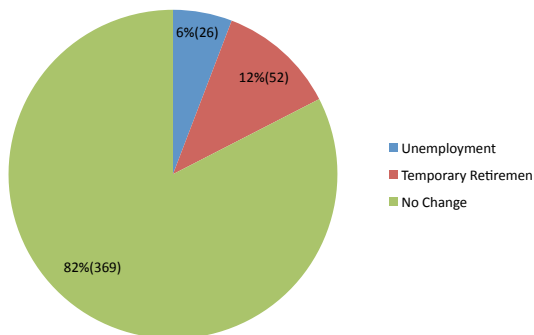
Figure 16: Is there any Change in Your Work Environment?
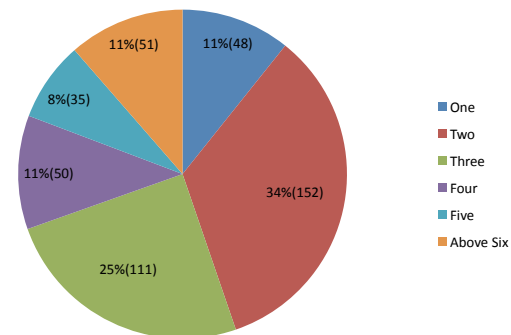Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

Figure 19: Household Size
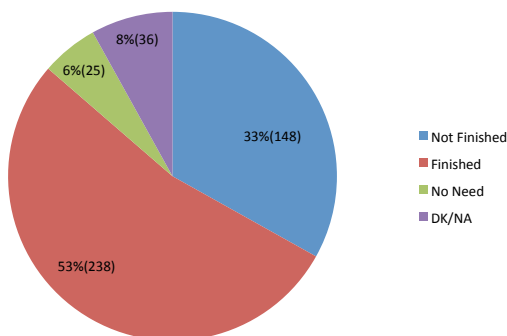Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

Figure 17: Have You Repaired the Damage to Your House Caused by the Disaster?
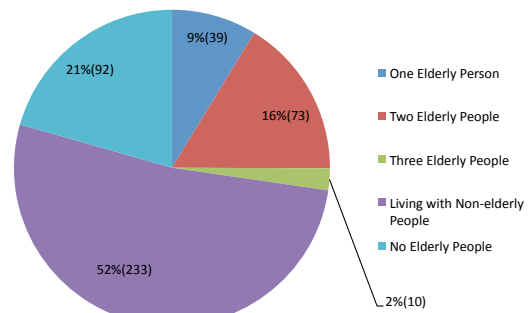Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

Figure 20: Are There Elderly People in the Household?
Source: Foundation of Cooperative Community Creation, Mar. 31st, 2012.

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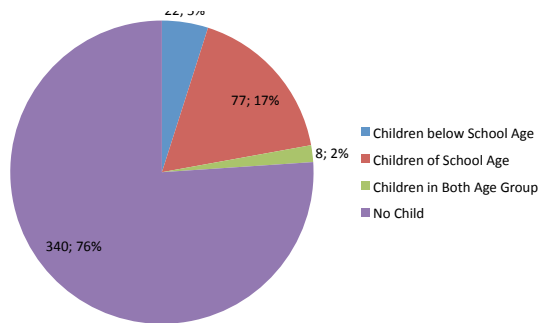*Tadahito YAMAMOTO*

Figure 21: Do You Have Child in the Household?
Source: Foundation of Cooperative Community Creation,
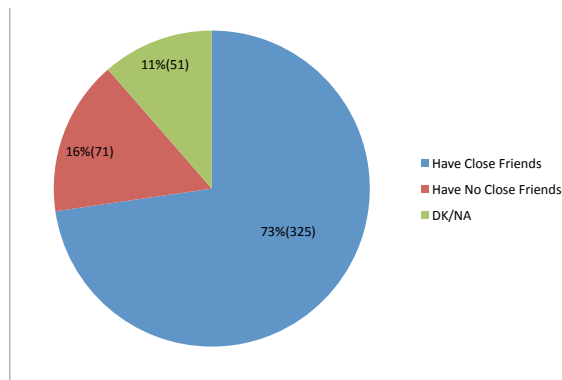Mar. 31st, 2012.

Figure 22: Do You Have Close Friends in the Nearby Area?
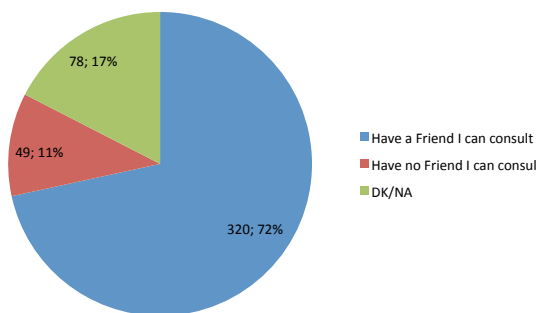Source: Foundation of Cooperative Community Creation,
Mar. 31st, 2012.

Figure 23: Do You Have Friend You Can Consult?
Source: Foundation of Cooperative Community Creation,
Mar. 31st, 2012.

The second, more important task is to develop a close network among local agencies engaged in providing support activities and creating a model for continuous assistance on the basis of the experience in Ofunato.

Such tasks will be issues in the next phase.

Summary

An "inclusive partnership" type of assistance network functioned effectively to discover "in-home sufferers" marginalized in an administrative system that provided assistance by focusing on temporary housing, and assessed the complexly intertwined conditions which resulted in such problems.

The causes of the problem were related directly to the disaster-induced conditions and physical/ social vulnerabilities, which were exacerbated by the social restructuring of a shrinking/aging population beginning prior to the 2011 disaster.

The experience of collaboration while coping with such problem strengthened trust among key participants engaged in assistance, and prompted the municipal office to decide to commission an NPO to support the project for "in-home sufferers."

We can see that the process led to the "institutionalization of assistance network" which appeared after the 2011 disaster.

Ofunato's challenge to networking has the possibility of making a model support system not only for sufferers in an urgent disaster situation, but also for various types of collective risk in post-neo-liberal environment with a shrinking/aging local society This will be a point of study in a further phase of reconstruction.

CONCLUSION AND AGENDAS FOR THE FUTURE

Conclusion: Answers to the Paper's Questions

In this section I summarize my conclusions and present agendas for further research.

The early stage of the disaster process in Ofunato City is divided into three phases: the first is March to June 2011; the second is June 2011 to May 2012; the

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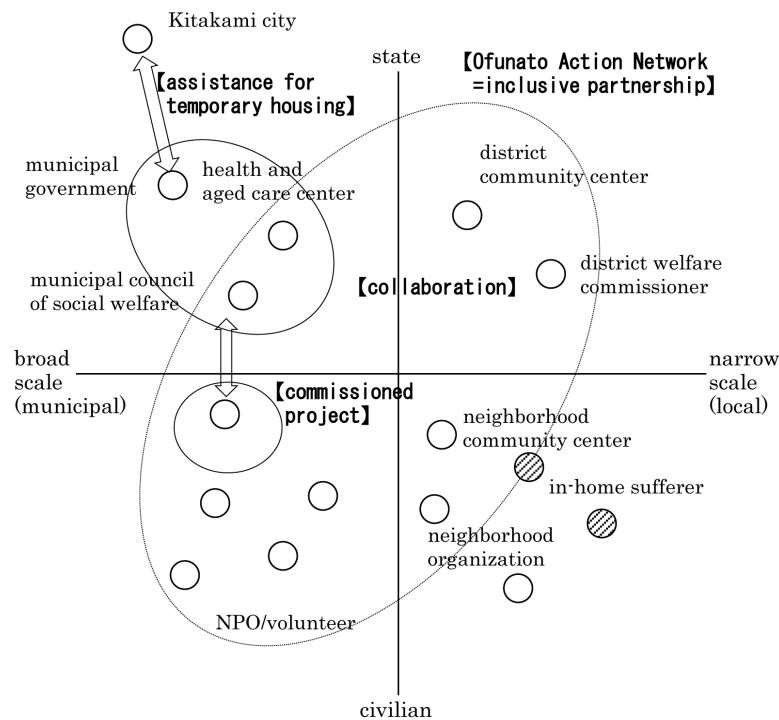
third is after May 2012.

Major factors which changed the first phase into the second were the construction of temporary housing and emergence of the "Ofunato Action Network" which functioned as a central network to bring civilian assistance groups and municipal agents together. Institutionalization of the network was the next factor, and the one which changed the second phase into the third factor. Significantly, an NPO, Foundation of Cooperative Community Creation—which plays a key role in managing civilian networks—was commissioned by a municipal agency to lead a support project for "in-home sufferers"—one of the important tasks for government that appeared during the disaster.

Secondly, these assistance networks were composed of municipal/semi-municipal agents (the health and aged care center, the council of social welfare, the district welfare commissioner, the district community center and an external municipality, Kitakami City), NPO/NGOs from the local and external society, and grass-roots community organizations (the neighborhood community center). Two different

types of networks were important: "Ofunato City Partnership Meeting for Livelihood Support," which was formed to support temporary housing with the assistance of Kitakami City and the civilian "Ofunato Action Network."

The elliptical structure integrating such different types of networks is a characteristic of the assistance systems in Ofunato. We can call it the "Ofunato model" for mobilizing asistance activities. Especially, it is a noteworthy to point out that in the case of the Great East Japan Earthquake and the Tsunami that anti-poverty social movement organizations and welfare agencies took the initiative of constructing networks.

Finally, important information provided by such complex networks led to the recognition of the "in-home sufferers" problem, which occurred after building temporary housing. The existing act presupposed that moving evacuees into shelters and temporary housing were the major objectives of public assistance. Displacement studies have usually focused on the process of collective relocation from former communities, through shelters to new sites of

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residence.

Having dispersed invisible "evacuees in their homes" for extended periods was an unexpected outcome by the conventional assistance system of public agencies.

Agendas for Further Research and Analysis

・What Is the "In-home Sufferers" Problem?

From the view of displacement analysis I will focus on three points as an agenda for further research and analysis.

The first point is to think about the "in-home sufferers" problem from the view of socially created displacement in the context of a shrinking/aging population promoted by neoliberal policies.

The Foundation of Cooperative Community Creation is continuing further research on the "in-home sufferers" in Ofunato. Conducting a detailed analysis of the data collected from such research will be the next task.

We can see in a sense that the "in-home sufferers" problem developed from the "isolated death" problem focused on in the case of the Kobe Earthquake in 1995, because the root causes of both problems have common elements—"social isolation" or "being displaced" from ordinary community relationships.

However, in some regards the "in-home sufferers" problem seems to be more serious.

In the "isolated death" problem following the Kobe Earthquake, the places where problems became apparent tended to be restricted in temporary housing or disaster recovery public housing. How to supplement a deficiency in the emergent welfare system by mobilizing volunteers was a major issue of discussion by disaster study researchers. There was an implicit assumption that families and communities outside of temporary housing or disaster recovery public housing still had enough capacity to offer support to sufferers.

But in case of the Great East Japan Earthquake

such assumptions were not self-evident. "In-home sufferers" were spatially dispersed, the problems induced by the disaster were complexly intertwined with accumulated vulnerabilities that existed before the disaster. Boundaries between the space allocated as a result of the disaster and ordinary living space became more blurred.

It is necessary not only to supplement, but also to "reconstruct" the emergent welfare system itself, because the strength of the administrative welfare system has been weakened by neoliberal-oriented merger policies and municipal reforms of the previous twenty years.

To cope with these problems it is not enough to focus on the functions of volunteers in times of emergency. It is necessary to mobilize many kinds of social skills to cover a wide range of social needs including a continuing support system from just after the disaster until the reconstruction of life for each sufferer has been completed. The framework of research must cover not only volunteer activities but also the total system of community governance.

The trial use of the assistance network in Ofunato is a touchstone for rebuilding a support system for residents in the age of a shrinking/aging society following neoliberal restructuring of local municipalities.

Therefore, the existence of "in-home sufferers" is not necessarily unique to Ofunato. For example the same type of problem was reported in Ishinomaki and Kesennuma in Miyagi Prefecture. In this sense the "in-home sufferers" problem is symbolic of the problems that appeared with the Great East Japan Earthquake.

・Meaning of Networks and Re-invention of Communality

The second point is thinking about the meaning of assistance networks from the view of re-invention and re-definition of communality.

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Oliver-Smith wrote that according to Lifton's psychological studies, becoming uprooted from family and community has become a normal condition of life in modern times (Lifton 1970; Oliver-Smith 2005). In such conditions we always need a radical re-invention of the self and community as a principal form of social living. In this sense we can say that the "re-invention" of communality is needed in disaster-stricken areas to overcome the effects of displacement and to reconstruct the community.

Tomoshi Okuda, one of the proponents of a "personal support system" in welfare services, spoke of the necessity of "the fourth communality." In present times people tend to be directly exposed to risk because three types of communality have emerged in post-war Japan: family, the local community and company, have been shrinking drastically. We need to create a "fourth" type of communality among individuals to help them cope with aspects of communality that the former three types cannot cover (Okuda et.al. 2013; Yamazaki et.al. 2006).

We can see that displacement made these problems of communality more visual in a disaster situation. One of the important missions in assistance networks is to create some paths to access resources indispensable to rebuilding the base of life, and to present models of communality needed in our times.

Following up on the movement to organize networks from such viewpoints is one of the issues that needs to be addressed in further research.

・Future of Community: Dissolution, Reconstruction or Creation?

The last point addresses the future of community.

Some communities had already been dissolved in the heavily damaged tsunami-stricken area, because residents had been prohibited from returning to former housing in the inundation area. They were placed in the most difficult circumstances for reconstructing a community. There is high probability that there will be a "community dissolution scenario" in such cases.

If members of a community were able to find and get new land they could collectively relocate to a new housing site. Even in this case it would be difficult for all members of the community to remain until the relocation had been finished. In other words relocation does not mean "re-appearance" of the past community, but rather the "re-creation" of community which has built in a new environment with new rules on ways of collective living.

The process of relocation is an experiment to rebuild communality in the present society. This is another important follow-up point for further research.

Appendix

Chronicle of Assistance Activities in Ofunato City

Notes

1　The members, in alphabetical order, are: Yutaka Iwadate, Masao Maruyama, Takefumi Ueda, and Tadahito Yamamoto.

2　In development studies, Scudder' s four stages model is famous, stage 1:planning for resettlement, stage 2: coping with the initial drop in living standards that tends to follow removal, stage 3: initiating economic development and community-formation activities necessary for improving the living standards of first-generation resettlers, stage 4: handing over a sustainable resettlement process to the second generation of resettlers and to nonproject authority institution. It is difficult for this model to be applied directly to the displacement/forced migration process induced by disaster. At the same time of referring such recent discussion in displacement/forced migration studies, we also need to survey on long discussion on "disaster process model" in disaster studies.

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