

**Disaster recovery from a gender and diversity perspective:
Cases following megadisasters in Japan and Asian countries**

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Introduction

Inclusive recovery efforts following disasters should encompass the needs and vision of various groups, especially women, youth, the elderly and people with disabilities, in order to realize the priority areas for disaster risk reduction (DRR) as stipulated in the Sendai Framework for Disaster Risk Reduction (SFDRR). This framework stresses enhancing disaster preparedness in recovery, rehabilitation, and reconstruction as priorities. Accordingly, the planning methods of recovery programs need to respond to diverse needs of disaster-affected communities and improve their local governance. While the existing researches offer little analysis on gender and diversity dimensions in disaster recovery efforts, finding out the means to strengthen the disaster coping capacity of women and other diverse groups, as well as involving them in decision-making processes to enhance their disaster governance are indispensable in the effective implementation of the SFDRR.

The focus of discourses on gender and DRR has shifted from the vulnerability of women and other marginalized groups of people to their agency and leadership. Many relevant specialists used to address the linkage of gender with DRR only from a humanitarian aid perspective, namely regarding women as disaster victims and passive aid beneficiaries. It has been pointed out that women were more likely than men to be vulnerable and seriously affected by a disaster due to their limited access to the information and resources necessary to prepare for the risk assessment, response, recovery, and adverse effects of a disaster (Adger, 2006; Agarwal, 2003; Blaikie et al. 1994; Demetriades and Esplen, 2008; Denton, 2002; Kumar-Range, 2001; Fothergill, 1996; MacGregor, 2010; Terry, 2009).

Whereas women have come to be recognized also as actors and “agents of change” because of their coping capacity (Bari, 1992; Bradshaw, 2013; Chowdhury, 2001; Dankelman 2010; Enarson and Morrow, 1998; Hewitt, 1997; Mitchell et al., 2007) which was built around on the basis of situated knowledge gained through their daily roles and responsibilities based on gender, class, ethnicity, age, and place (Agarwal, 1992; Harding, 1996; Raveya et al., 2016; Rocheleau et al., 1996). The gender and DRR specialists nowadays urge the empowerment and involvement of women as main actors in the decision-making processes of disaster-reconstruction and DRR. However, whether or not women are regarded as victims or actors, the root causes of women’s vulnerability, that is unequal power and gender relations, have remained unchallenged (Arora-Jonsson, 2011; Bradshaw, 2013; Rao et al., 2017). Arora-Jonsson (2011) argues that women may end up being instrumentalized for DRR and development unless the causal processes that make women more vulnerable and perpetuate gender inequalities are resolved

(Rao et al., 2017). Thus, the transformation of unequal power and gender relations are crucial for women to become real actors and “agents of change.”

In the current discourse on vulnerability to climate change, in particular, specialists argue that vulnerability and impacts vary by context-specific power relations structured by not only by gender, but class, race, ethnicity, caste, age, dis/ability, place, etc., so focusing only on gender may be misleading (e.g. Carr 2008; Carr and Thompson, 2014; Fordham, 2008; Kaijser and Kronsell, 2013; Rao et al., 2017; Tschakert, et al. 2013). Those social attributes and factors are raised together with gender in various vulnerability assessments, including the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report's. Apart from essentialism or ecofeminism (e.g. Shiva, 1988), feminist environmentalism (e.g. Agarwal, 1992; Nitingale, 1996) and feminist political ecology (Rocheleau et al. 1996) claim that climatic impacts vary not only by unequal social relations, but by the ways a person relates to nature and the environment, which differentiates knowledge of interests in, and responsibilities for them even among women.

As in other disasters, some groups were more vulnerable than others in the Great East Japan Earthquake in 2011 two-thirds of the deaths were over 60 years old. They could not escape to higher ground because they were physically weak. Response efforts could not cover women's needs well, since men managed most evacuation centers (Federica and Ishiwatari, 2014; Saito, 2014).

The critical point is that intersectional vulnerability analysis should be done at multiple levels because unequal power relations are structured at different levels and by the intersection of different attributes and factors, each case of which is context-specific (Kaijser and Kronsell, 2014; Winker and Degele, 2011). At the household level, for example, gender and age determine vulnerability especially in South Asia in particular. As Sen (1981) shows, there is an intra-household inequality in terms of food distribution against girls and women in Bangladesh, especially in time of crisis. Similarly, based on the theory of cooperative conflicts by Sen (1990), women are forced to accept such discrimination and sacrifice themselves because women regard themselves as less valuable than men, and less contributing to their household economy than men. In the patriarchal societies, there is a clear gender-based division of roles, such as women taking on unpaid household chores and care work and men take decision-making roles as household heads. Women are not able to participate in DRR decision-making processes or take a leading role based on the patriarchal social institutions. Without resolving the discriminatory power and gender relations persistent in patriarchal societies both at the household and community levels, other discrimination and inequality at higher policy levels may not be resolved.

On the other hand, disaster can provide opportunities to transform the stereotyped gender-based division of roles and unequal gender relations to more equal ones, depending upon the kinds of interventions given for the afflicted people (Bradshaw, 2013; IRP, 2009; Morrow and Enarshon, 1996; Phillips and Morrow, 2008). If external organizations do not recognize women's coping capacity, agency, and leadership and involve them in disaster-reconstruction and DRR processes just as beneficiaries from a humanitarian aid perspective, little change or transformation will occur. Involving women only as mothers or caretakers in the process may reshape or even reinforce the pre-disaster gender-biased division of labor and unequal gender relations (Anderson, 2011; Blaikie et al., 1994; Bradshaw, 2013). If the transformative disaster-reconstruction and DRR programs are designed and implemented, women can play non-stereotypical roles and take on more leadership. Thus, whether these interventions can transform women from victims to "agents of change" depends on the affected women and men themselves, but also largely depends on the visions and attitudes of external organizations.

The following sections will examine the cases on how different groups of people, community disaster governance from gender and diversity perspective. The first two cases focus on the roles that the younger generation and women played in the reconstruction process after the Great East Japan Earthquake in 2011, drawing from the cases of Oya Kaigan (Coast) and Kitakami in Ishinomaki City. The last two cases examine interventions by Japan International Cooperation Agency (JICA) and analyze how they contributed to promoting disaster-affected women's agency and leadership in the Philippines and Sri Lanka.

Semi-structural interviews of key stakeholders, affected people, experts involved in recovery programs, and government staff, were conducted at these sites. Researchers, assistance agencies, civil society organizations, and affected people participated in workshops, were conducted in October 2016 in Tokyo and in July 2018 in Ulaanbaatar.

1. Challenges of young generation against building dykes in Oya coast,

Kesennuma city

The tsunami caused by 2011 Great East Japan Earthquake destroyed beaches and forests along the coast in the Tohoku area, which used to create local scenery and recreation areas before the tsunami disaster. The recovery programs of coastal areas required a multi-sector approach covering DRR, ecosystem, environment, infrastructure, and town planning to respond to a wide range of local community needs. While local governments were primarily

responsible for planning and implementing the recovery programs, it was challenging for them to reflect the diverse needs and perspectives of people into the programs. This was mainly because the local governments were forced to implement a large number of recovery programs under severe time constraints, along with limited capacity and experiences of engaging local communities in such programs.

In this regard, a coastal dyke program on the Oya coast in Kesenuma City can be regarded as one of the best practices that local communities played a leading role in during the coastal reconstruction program. The local communities succeeded in revising the plan of a coastal dyke proposed by the local government to preserve the coastal environment. The community members conducted questionnaire surveys, organized workshops to discuss the program, and finally proposed an alternative plan of dyke construction by compiling community opinions.

What was unique about the coastal dyke program on the Oya coast was that young people in their twenties and thirties took on the leading roles in the activities. Traditional local community organizations are usually headed by elderly males, who play a leading role in the consultation processes of recovery programs in Tohoku. Although the government organizations proposed the rehabilitation plan of a dyke with 10-meter high and 40-meter wide at Oya coast in July 2012, the local communities were concerned that the dyke would diminish the sand beach and create adverse effects on the natural environment of the coast. The Oya coast, covered with a one-kilometer white sand beach, used to provide beautiful scenery and environment and attract tourists for sea bathing and leisure activities from other districts before 2011. The people felt that the sand beach was a precious asset of the community and needed be preserved. The following is the concrete actions taken by the younger leaders in local communities.

Firstly, the local communities requested the Mayor of Kesenuma City to suspend the rehabilitation plan in November 2012 and conducted consultations with the communities. About 1,300 out of 3,700 local community people signed the petition of the suspension.

Secondly, the local communities established a study team to examine the recovery plan from a wide range of perspectives, such as disaster management, environmental conservation, scenery preservation and livelihood recovery. In this connection, the team organized a series of workshops, in which academia, experts, practitioners and CSOs provided advice on the plans with local communities.

Thirdly, local community organizations established a Planning Committee of Oya coast in 2014, which followed the study team. About 80 % of Committee members belonged to relatively younger generations in their twenties and thirties, both women and men, who will stay and continue to revive the disaster affected areas. The

Committee held a series of consultations with local governments. The Committee submitted the proposal to revise the rehabilitation plan of the coastal dyke in 2015, to setback the dyke and construct it by raising a national highway to retain the white sand beach, coastal environment and recreation places (See Figure 1).



Figure1. Recovery Plan of Oya Coast
(Source: Miyagi Prefecture)

Finally, the local government organizations accepted the revised plan in 2016, i.e., five years after the tsunami

disaster. The construction work started in January 2018 according to the revised plan and will complete in 2021.

A lesson from the case is that engagement of various groups, especially younger people and external experts, is essential in formulating recovery programs to respond to various needs of local communities. Another lesson might be that inclusive decision-making processes, involving local communities, need a long period. It took the local communities for five years to reach initial agreement with the government, and will take another five years to implement the plan, i.e., 10 years in total for constructing the coastal dyke according to the revised recovery plan.

2. Inclusive and gender-responsive rebuilding of tsunami-battered community in Kitakami, Ishinomaki City

The rural areas of Tohoku, the northeastern part of Japan, have long been considered economically deprived industrial undeveloped, and with induced labor migration to other areas. They have served as a supply base for food, cheap labor and electricity (including nuclear power), among others, to urban areas (mainly Tokyo and its vicinity). Tohoku has been also known as socially conservative and a cultural “periphery”. Rural women in Tohoku have been “invisible” and “voiceless”, assimilated into patriarchal system and framed by traditional gender norms. There are strong gender expectations for rural women to be engaged in heavy agricultural labor, while taking care of time-consuming household and care tasks. Persistent gender norms require women to be obedient to husbands and family members, not to claim for the rights to assets, such as land, from parent’s homes and families a woman has married into.

Thus when 2011 Great East Japan Earthquake hit coastal rural areas in Tohoku, the evacuation centers were mainly operated by elderly local males, and most women had little voice in expressing the needs for women-specific

emergency items, the partitions for privacy and security, women specific places for changing clothes, nursing spaces for children, etc. During the disaster reconstruction stage, it was rare for women to participate and raise their opinions in decision-making processes for community recovery plans and programs. However, women in the tsunami-battered Kitakami in Ishinomaki city in Tohoku presented a different picture, which is worth analyzing for developing a new approach for inclusive and gender-responsive recovery and reconstruction.

In the case of Kitakami, Ishinomaki City in Tohoku, the 2011 tsunami barreled up the mouth of Kitakami River, and 211 lives were lost and 85 were missing out of total 3,900 residents. Fifty-seven people (37 residents and 20 municipal officials) took refuge at the city branch office, but most of them were washed away. The only survivors were two officials and one child. Evacuation was done as planned, but the power of tsunami was beyond their expectations. Out of total 1,100 households in Kitakami, 546 houses were totally damaged and 463 were half damaged, and many lost their livelihood.

During the disaster aftermath, two surviving municipal officials were overwhelmed with the immediate demand for food, medicine, shelter and other emergency needs. They also had to make and submit the overall recovery and reconstruction plan with the allocated government budget. Mr. TK was one of the two surviving officials at Kitakami city branch office, and played a key role in recovery process. He was unable to manage all the urgent recovery tasks to be done, so he decided to delegate planning efforts to Kitakami Economic Development Committee, consisting of citizens and local business people, in July 2011. People started organizing meetings and it was renamed and officially recognized as Kitakami Town Planning Committee in February 2012. Mr. TK asked the Committee to take the initiative for preparing reconstruction plans. He especially requested Ms. NS, leader of a women's group called "We Are One KITAKAMI", to undertake local consultations and needs surveys, since he had already learned a lesson from the disaster recovery of Yamakoshi in Niigata after the 2004 Chuetsu quake, where after bringing local women's groups into community consultations, the problems were solved and the reconstruction process speed up.

The Committee also needed expertise on resettlement town planning, so it asked Mr. HT, an architect based in Sendai city, to join the Committee. After a series of discussions and workshops organized by the Committee, the women's group successfully voiced their needs and interests in all the aspects of designing the resettlement town plans (See Figure 2 and 3)



Figure 2. Committee meetings in Kitakami

(Source: Hiroyuki Teshima)



Figure 3. Layout of town proposed at Committee meetings in Kitakami

(Source: Hiroyuki Teshima)

Some of the points requested by the women's group were as follows:

- i. Elderly women wanted to watch and take care of each other in a small group, so a social housing complex of barrier-free single-story units should be built, instead of a high-rise building or multi-story concrete block, after moving to higher ground. The houses should be connected with slopes, not by stairs, so that they can easily visit with each other. The complex shared gardens and common spaces should replicate the fabric of the old community. They wanted to keep the social fabric and live out the rest of their life together. The place is now completed and called Nikkori social housing complex (See Figure 4).
- ii. The houses should not be all facing to the same direction, i.e. to south, as usually designed for government housing, but face to Kitakami River, since they favor to watch their soul river every day.
- iii. The public service offices should be placed together in the center of the town, such as clinics, the post office, shopping stores, elderly centers, etc., so that they have easy access to all public services.
- iv. Keep the open space and playground in the middle of the community so that they can hear children's voices. The elementary school, baseball diamond and festival space are to be all grouped together, and surrounded by rebuilt housing (See Figure 5).
- v. Preserve the forests as a natural windbreak, and keep the good scenery instead of bulldozing the entire area into a flat plateau.



Figure 4. Nikkori social housing complex

(Photo: Y. Tanaka)



Figure 5. Playground in the middle of the town

(Source: Hiroyuki Teshima)

Major lessons learnt from Kitakami's case are as follows:

- i. With limited personnel, time and budget, the local administration tends to make one standard plan or one-size-fits-all plans in order to avoid favoring one area over another, thus imposing the same plans for disaster recovery housing on all the communities. However, the tripartite collaboration among local administration, local committee with active women's participation, and

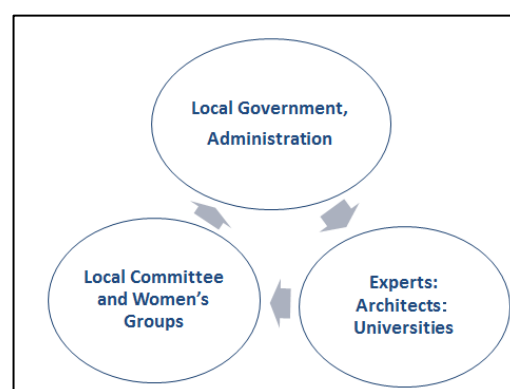


Figure 6. Tripartite collaboration for inclusive reconstruction in Kitakami

external expertise can bring out inclusive and gender-responsive recovery processes, better meeting the specific needs of local people and building back better the social fabric, leading to a more sustainable society (See Figure 6).

- ii. Local women can act as good consensus builders as they listen well to the specific needs and situation-based interests and values of people.
- iii. Since women in Kitakami had a tradition of working together for agricultural labor and community revolving fund, utilizing
- iv. women's power for neighborhood consultation during the disaster aftermath further enhanced their active roles, enabling them to bring out people's, especially women's voices, allowing them fully participate in decision-making processes, thus nurturing their own agency and leadership as well. They established a multipurpose women's center and working for entrepreneur and marketing activities of local products as well.

- v. The inclusive consultation process took a long time, however, the people of Kitakami continued discussing until they reached full consensus. The reconstruction housing is usually allocated by lottery by local administration, and people are randomly scattered throughout the relocation housing, causing them to lose their original neighbors, relatives, and friends, which often causes health and mental deterioration, and can be a matter of death or alive. Who gets to live where was decided by consensus after extensive discussion in Kitakami, so everyone was happy and satisfied.
- vi. The role and decision of local government to delegate authority to local communities, especially women's groups, for planning and implementing, is pivotal for inclusive and sustainable disaster recovery. If pro-active intervention with a gender and diversity perspective is brought by local administration, it enables an environment, which further advances women's and various groups' agency and leadership, which is necessary for producing social transformation and building a more equal and sustainable society.

3. Targeting women's groups in livelihood in recovery process in the Philippines and Sri Lanka: Achievement and challenges for women's agency and leadership

3.1. Case of the Philippines

In November 2013, the Philippines was seriously hit by Typhoon Haiyan which was one of the strongest tropical cyclones ever recorded. The Typhoon caused catastrophic damage throughout much of the Islands of Leyte and Samar, as well as Cebu, Capiz, Negros, and Iloilo, where cities and municipalities were largely destroyed. The storm surge measured 5 to 6 meters and even devastated second-story buildings in the coastal areas of Leyte and Samar Islands and flooding reached inland areas. According to the National Disaster Risk Reduction and Management Council, at least 6,300 people were killed, 1.1 million houses were fully destroyed, and 4.1 million people were displaced due to the Typhoon.

This catastrophic typhoon destroyed the livelihoods of men and women, as well as public facilities and infrastructures, such as schools, hospitals, roads, etc. in the affected islands, including Samar and Leyte. Under the Project on Rehabilitation and Recovery from Typhoon Yolanda (Haiyan), JICA implemented Quick Impact Projects

(QIPs) which aimed at the enhancement of affected women’s livelihoods. For QIPs, JICA targeted mainly the women’s associations in Leyte Island that lost the materials, tools, and working places necessary for doing business due to the Typhoon and were not able to restart their businesses by themselves. During the project period of February 2014 to October 2016, JICA supported 15 women’s associations in total by providing them with necessary equipment and facilities and tailor-made training and by expanding their sales channels to super markets in a city nearby (See Figure 7 and 8).



Figure 7. Producing noodle by members of women’s association under QIPs

(Photo: Y. Tanka)



Figure 8. Processed fish made by members of a women’s association under QIPs

(Photo: A. Nonoguchi)

In the QIPs, women were involved as main actors, not as victims or passive beneficiaries, which led to their collective empowerment and economic achievements to some extent. This is a transformative process from disaster victims to “agents of change”. Those women who had been battered by the Typhoon were motivated by the QIPs to stand up and move on their own toward going back to at least pre-disaster conditions. Through QIPs’ activities, women participants learned how to work collectively in order to achieve the goal of enhancing their livelihoods. Under strong leadership, some associations built good teamwork by complimenting some members’ weakness with others’ strength within an association. All the associations communicated and collaborated well with key officers of relevant local governments, including the Social Welfare Development Office. In terms of economic achievements, a couple of associations expanded their sales channels to supermarkets through JICA expert’s assistance and made good profits whereas others faced marketing difficulty and were not able to make sufficient profits to distribute regularly among members.

In spite of some achievements made, however, women’s agency and leadership did not necessarily gain through the QIPs. This was largely because during the planning process for the QIPs, women’s agency and leadership, that is gender strategic needs, were not taken into account, but the enhancement of the livelihoods

that is gender practical needs, was. Therefore, QIPs' activities were confined to income generation, not other community activities, including community-based DRR. More problematically, there was no sensitization workshop conducted within the QIPs in order to change the attitudes and behaviors of women and men toward gender. As a result, both women and men took it for granted that women participants should take on their original roles of household chores and child-care at home and additionally work on the QIPs activities. Without negotiating with their men, women, specifically younger women with small children, faced difficulty with balancing their time between their original and new tasks and were not able to concentrate on the QIPs activities.

3.2. Case of Sri Lanka

In the middle of the civil war which had lasted since 1983, Sri Lanka was seriously struck by the Indian Ocean Tsunami resulting from the Indian Ocean Earthquake with a magnitude of 9.0 on December 26, 2004. The Tsunami seriously devastated the coastal villages in the northern, eastern, and southern parts of the country in particular. People in the northern and eastern parts of the country who had already been battered by the civil war suffered from another disaster. According to International Recovery Platform, 35,399 persons were killed, 114,069 houses were fully destroyed, and 480,000 persons were displaced due to the Tsunami.

In the immediate aftermath, the Government of Japan and JICA started their grant aid and technical assistance projects in affected areas throughout the country, aiming to support the Government of Sri Lanka and affected people to get recovered from the adverse effects of the Tsunami. In one of the projects, titled the Tsunami and Conflict Affected Communities Uplifting Project (T-CUP), the Government of Japan built a new village, called Japan Sri Lanka Friendship Village (JSFV) in land owned by the Government of Sri Lanka, with necessary public facilities. It provided permanent houses built in the village for those Tamil and Muslim households who lost their houses in Iqbal Nagar, Trincomalee District due to the Tsunami. In the T-CUP, JICA experts facilitated both the Tamil and Muslims and men and women to form groups for community development and provided short-term skill training for the enhancement of both men and women's livelihoods. JICA also conducted micro-financing activities through Women's Coop, a local NGO, which targeted exclusively women, both Tamil and Muslim women (See Figure 9 and 10).



Figure 9. Permanent houses provided by the Government of Japan

(Photo: A. Nonoguchi)



Figure 10. Women participating in micro-finance activities

(Photo: A. Nonoguchi)

The T-CUP women increased women's access to information and reasonable financial resources. In terms of the construction of permanent houses, Japanese consultants explained and showed alternative designs for permanent houses to both men and women and encouraged them to choose one. They also invited both men and women and conducted a workshop in which they explained how the dwellers of the JSFV would be able to take over the ownership of the land and houses from the Government of Sri Lanka. Apart from the QIPs in the Philippines. The T-CUP increased women's access to reasonable financial resources, compared to village-based moneylenders who required relatively high interests.

Due to a lack of a gender perspective during the planning process, the T-CUP did not necessarily promote the agency and leadership of affected women in the target areas. The T-CUP provided both men and women with short-term skill training based on ad-hoc, stereotypical gender division of roles and divisions. Men took training on carpentering work whereas women took ones on sewing and jam making. Without providing marketing strategies and encouraging women to do business with the skills gained, most women who trained, specifically Muslim women, ended up making dresses and jams only for family consumption. Micro-finance activities conducted by Women's Coop under the T-CUP also aimed to empower women, but resulted in improving the welfare of their family members. Those women, particularly Muslim women, did not use the money borrowed for themselves, but gave it to their husbands or sons. There was little sensitization workshop conducted in the T-CUP to change social norms embedded in the society, including stereotypical gender division of roles and women's limited mobility. Women participants in the micro-finance activities were not encouraged or did not develop agency enough to negotiate with their men about their doing business even outside their home by borrowing money.

3.3. Lessons Learnt from Cases of the Philippines and Sri Lanka

In both JICA projects, the QIPs in the Philippines and T-CUP in Sri Lanka, disaster-affected women were involved as main actors, which motivated them to recover from desperate conditions and move forward. In the case of the QIPs, the provision of materials, facilities, and training contributed to women's collective work and economic achievements largely. Through the T-CUP, tsunami-affected women were able to have access to information on alternative designs for their permanent houses and on land ownership and access to reasonable finance resources. Due to a lack of a gender perspective during the planning process, however, both projects ended up providing the women with resources and information, but not agency or leadership. The QIPs targeted exclusively women whereas the T-CUP worked with men and women separately on community development activities and skill training and targeted exclusively women for micro-finance activities. This was not a gender-responsive approach in which both women and men were targeted to improve unequal power relations. Thus, for gender-responsive reconstruction and DRR projects, it is essential to approach both women and men and challenge social norms and institutions, including stereotypical gender division of roles and unequal gender relations.

Conclusion

In the aftermath of disasters, local governments are primarily responsible for implementing quick recovery programs, including the relocation of affected people from areas at risk to safer places, rehabilitation of destroyed infrastructure, as well as the recovery of health, livelihood, social security and protection. The concerns of local administrations concerned, however, often face difficulties in reflecting diverse needs and perspectives into recovery programs, due to limited capacity and experiences dealing with a large number and variety of recovery programs under severe time and personnel constraints.

Recovery programs need consensus building among various groups, especially women, youth, the elderly and people with disabilities; and an integrated approach to multi-sectors, such as environment, ecosystem and town planning. Local communities need to express their voice in planning recovery programs, often with support from external experts and various aid organizations, including national and international CSOs. In reality, however, the inclusion of various groups in recovery planning is little concern of local governments, thus they end up to making one standard plan or one-size-fits-all plans, to avoid favoring one area/group over another. In addition,

local people, especially women, youth, the elderly and people with disability, are often regarded as only victims or beneficiaries of humanitarian and emergency aid, rather than as actors and agents of change.

The first two case studies in Tohoku in Japan shows that local young generation and women's groups played the role of "agents of change." They led in formulating the alternative recovery plans as shown at Oya coast and Kitakami. The women's groups facilitated consultations between the local government and communities in Kitakami, in particular, contributing to consensus building and finally promoting an alternative and relocation program, as they wanted. Going through the pro-active process, women increased their capacity and nurture agency and leadership.

The last two cases illustrated that recovery and reconstruction intervention provided in the aftermath of disaster by the government and international aid organizations supported local women's groups by rehabilitating their daily lives and livelihoods to a great extent. However, it was still a big challenge to focus on non-traditional and non-gender-biased roles of women and pay specific attention to increase their agency and leadership.

The Sendai Framework Recovery for DRR stresses enhancing disaster preparedness in recovery, rehabilitation and reconstruction as a priority area. The aftermath of disaster poses a great opportunity for women, youth and other local groups to be empowered and exercise their agency and leadership, therefore, the governments as well as aid organizations and international society should utilize such a chance to increase their community disaster governance and transform a society to be more equal, inclusive, resilient and sustainable. Their recovery policies and approaches should involve various stakeholders, particularly vulnerable groups, in decision-making processes. As shown in cases in the Philippines and Sri Lanka, development assistance agencies should include capacity building activities in leadership for women and other vulnerable groups.

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