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Chapter 3 Role of NGOs in Community-Based Disaster Risk Reduction Takako Izumi, Rajib Shaw

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# CHAPTER 3

# ROLE OF NGOS IN COMMUNITY-BASED DISASTER RISK REDUCTION

Takako Izumi and Rajib Shaw

### INTRODUCTION

The community-based disaster risk reduction (CBDRR) approach has been taken by nongovernmental organizations (NGOs) as a common approach to build resilient communities in their disaster risk reduction (DRR) efforts. The approach has been initially implemented in the developing world by NGOs, followed by international organizations like the International Federations of Red Cross and Red Crescent (Benson, Twigg, & Myers, 2001; Maceda, Gaillard, Stasiak, Le Masson, & Le Berre, 2009). The approach is now increasingly promoted among local governments in order to strengthen the links between the official disaster management system and community-based organizations (Kafle & Murshed, 2006). There are many case studies of DRR projects with community-based approaches by NGOs and local governments, and there are many variations as well (Heijmans, 2009).

According to Heijmans (2009), toward the end of the 1990s, the approach became an alternative to top-down approaches in disaster management. With this approach it succeeded in raising people's awareness of disaster risks by using intimate local knowledge and recognizing preexisting local

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capacities and institutions. Therefore, it became possible to improve the position of impoverished, vulnerable, disaster-affected people by addressing the root cause of their vulnerability and by recognizing their fundamental right to participate in decisions that impact their lives. At the same time, the capacity development of the community is also critical in this approach to assess the risk, identify risk reduction measures, and plan and implement the measures (Delica-Willson, 2005).

The effectiveness and reasons of promoting community participation and involvement are not only for adopting local knowledge and addressing the root causes of their vulnerability, but also sustaining the community-level initiatives for disaster reduction. External agencies such as government and NGOs often initiate and implement community-level programs before and after disasters. However, such initiatives many times discontinue once the external support is withdrawn. There can be many reasons behind this lack of sustainability, some of which may be the lack of partnership, participation, empowerment, and ownership of local communities. Unless the disaster risk management efforts are sustainable at individual and community level, it would be difficult to reduce the vulnerability and losses. It is therefore important to involve people in decision-making on policies and strategies that should be followed for their development in the community (Kafle & Murshed, 2006; Shaw & Okazaki, 2004).

However, this approach does not highlight only the importance and effectiveness of the community involvement. In DRR, the government shapes policies and institutional frameworks, while civil society actors play a complementary role in supporting vulnerable communities. Primary responsibilities for implementation of the Hyogo Framework for Actions (HFA)<sup>1</sup> rest with states, but the collaboration and cooperation among all stakeholders, including NGOs, will be crucial in order to improve the resilience of communities (Heijmans, 2009; UNISDR, 2005). Each stakeholder has its own role to play in the DRR process, and by the leadership and initiatives of governments and NGOs, the CBDRR approach becomes possible.

The purposes of this chapter are to review the case studies of CBDRR by Asian NGOs to observe the roles of NGOs in CBDRR projects in Malaysia, Cambodia, and India; to address the issues and challenges that Asian NGOs face in the process of CBDRR implementation; and to discuss the wayforward and innovative way for the future CBDRR. Each case study has a different focus in the program, and it showcases the variety of CBDRR programs and different roles of NGOs in CBDRR.

### NGOS AND CBDRR

#### Definition of NGOs

The definition of NGO varies. Streesen (1997) defines NGOs as professionally staffed organizations aiming at contributing to the reduction of human suffering and to the development of poor countries. It is also defined as a formal (professionalized) independent societal organization whose primary aim is to promote common goals at the national and international levels (Martens, 2002). Shaw (2003) stressed that the diversity in tasks, goals, and activities strains any simple definition of NGOs. It can be stated that the NGO includes a wide range of groups, which are independent of government and characterized by preliminary humanitarian activities, with focus on citizens' needs and demands.

Not only the definition but also the roles of NGOs include different perspectives. NGOs have been occupying the role of main service providers. Often replacing the role of the government on the ground, especially in remote rural areas, NGOs have traditionally assumed a gap-filling role that has sometimes created conflicting relations with governments (Clayton, Oakley, & Taylor, 2000; Ulleberg, 2009) Furthermore, NGOs have important functions and advantages such as (1) being good at reaching and mobilizing the poor and remote communities, (2) helping to empower the poor people to gain control of their lives and working with and strengthening local institutions, (3) carrying out projects at lower costs and with more efficiency than the government agencies, and (4) promoting sustainable development (Streesen, 1997).

Nikkhah and Redzuan (2010) emphasized the major role of NGOs for sustainable community development. According to them, NGOs have many programs, functions, and roles that assist the community to become empowered, and eventually attain sustainable development. In their discussion, in order to attain sustainable development, NGOs have to work on capacity development for communities. The CBDRR approach includes strengthening the preparedness capacity of communities (Benson et al., 2001). The NGOs appear to be well placed to play a significant role in DRR. They tend to work with poorer and more marginalized groups in society. Moreover, the participatory approach pursued by many NGOs offers them an opportunity to examine the nature of communities' vulnerability and, on the basis of this analysis, to incorporate appropriate DRR measures into their work.

On the other hand, the lack of sustainability of NGOs activities and programs can be a negative factor to attain the sustainable development of community resilience. Shaw (2009) stressed that many of the NGO activities face the problem of sustainability over a longer period of time, especially once the NGO withdrew from the field. Continuation of community activities over a longer period of time needs a policy environment at local level, as well as local institutions to continue the activities. At the same time, he emphasized the importance of linking NGOs and local government activities, and involving them in policy making.

The capacity development program through the CBDRR approach consists of numerous steps staring from different types of assessment and focus group discussions and requires follow-up activities such as impact assessment and simulation exercises and drills. The NGOs need to strengthen their capacity in many ways for successful and sustainable CBDRR programs: (1) fund-raising capacity to implement a longer-term project, (2) inclusion of both national and local governments to lead mainstreaming DRR into a policy, and (3) ensuring community empowerment in DRR in their programs to initiate the DRR measures by communities.

In the following section, three case studies of CBDRR by NGOs in Malaysia, Cambodia, and India are included. The case study in Malaysia is on the community-based preparedness designed to require the involvement of the local government. The case study of CBDRR in Cambodia is a program that includes a livelihood activity that resulted in achieving stable income as well as poverty reduction. The last case study from India is the CBDRR project linked with environmental management.

#### Case Studies of CBDRR by NGOs

#### Case Study (Malaysia)

Malaysia has not faced any major disaster till date. However, it has been hit by a number of floods every year and there is an urgent need to strengthen the preparedness capacity among communities. According to the Malaysia country report by Views from the Frontline<sup>2</sup> by MERCY Malaysia, the average score of the DRR capacity at local level was 2.8 in Malaysia, which is higher than the midpoint (2.5), reflecting that a foundation in DRR exists. This indicates that the DRR capacity at local level in Malaysia is moderate and there are already initiatives and steps that have been taken toward DRR. However, the information and knowledge has not yet reached the communities. In general, community representatives feel they do not have enough information, tools, and capacity to materialize the five priorities plus cross-cutting issues at community level (MERCY Malaysia, 2009).

MERCY Malaysia initiated their DRR programs in 2008 especially for school children and communities in the flood-prone areas. The communitybased preparedness program started when Johor state was hit by a massive flood in 2006–2007. The program emphasized the importance of the involvement of the local governments and their capacity development as well as the communities. It was considered that the program and community preparedness could be sustainable by the commitment of both communities and local governments. The identification of the target villages was made in consultation with the Malaysian National Security Council (Majlis Keselamatan Negara) and the Johor state office (MERCY Malaysia, 2010).

The Johor community-based preparedness programme (JCPP) aimed to build a culture of disaster preparedness and resilience in the target communities and to strengthen multistakeholder partnerships between local government agencies and local communities. Three districts in Johor were selected that were most hit by the flood in 2006–2007: Batu Pahat, Segamat, and Kota Tinggi. The program consists of three steps: (1) DRR seminars, (2) town watching (TW) workshops, and (3) community consultation and CBDRR projects (Table 1).

As the first step, the DRR seminars were conducted for the local government officials and the community members in Johor in order to promote the DRR concept, provide an insight into the previous DRR activities in Malaysia, and share the program plan to obtain their support and understanding to the program (MERCY Malaysia, 2010).

Second, the two TW workshops were conducted in each district for the local government officials and for the community members. The local government officials trained at the first workshop participated in the TW for communities as facilitators. It was to prepare the government officials to conduct further TW exercises in their communities, encourage them to incorporate DRR into policies and other activities, build relationships between different agencies, and encourage information sharing on existing hazard maps and disaster management plans. TW was originally used as a tool for urban planning, but it is now being used for disaster prevention as well. After the participants walk around the community, they identify both good and bad points and risks to disasters. Through this exercise, disasters are recognized as their concern and the awareness of disaster prevention is increased and actual disaster prevention activities are promoted (Shaw & Takeuchi, 2009).

	Activity	Target	Outputs
Phase 1	DRR seminar	State and district government officials from three districts (Batu Pahat, Segamat, and Kota Tinggi)	<ul> <li>Government officials gained knowledge and awareness on DRR</li> <li>Government officials learned the MERCY Malaysia's DRR project in Johor</li> </ul>
Phase 2	Two Town watching workshops at each district	<ol> <li>District government officials</li> <li>Communities</li> </ol>	<ul> <li>District government officials and communities learned the town watching methodology</li> <li>Problems against disasters in each village were identified</li> </ul>
Phase 3	Community consultation	Communities	<ul> <li>Disaster preparedness tools were identified: posters, signboards, brochures</li> <li>Disaster preparedness activities were identified and implemented: first aid training, school watching workshop</li> </ul>

Table 1. Overview of the JCPP Project.

Through the TW exercises, the participants identified concrete action plans to reduce disaster risks and discussed how to implement them. The actions recommended in the plan became the CBDRR projects supposed to be carried out by the community in the next six months. MERCY Malaysia worked with and supported the communities to conduct the activity. The projects selected by the communities at each district included: (a) developing posters and signboards with DRR messages, (b) conducting a community first-aid training session, (c) conducting a school watching workshop, and (d) developing a DRR brochure that included local knowledge on disaster preparedness as well as basic first-aid tips, and all the projects completed within six months after being identified (MERCY Malaysia, 2010).

The JCPP required the participation by both local government officials and community members from the beginning until the end of the projects. In each consultation, the local government officials were invited to the meetings with the community members and MERCY Malaysia. By the end of the program, the target communities and local government officials in each district had a clear picture and understanding on the hazards that they may face in the future, and a series of the preparedness activities have been completed with the involvement of the communities and local governments.

#### Case Study (Cambodia)

The Battambang province is one of the highly drought affected and vulnerable province in Cambodia. The community members lost their rice crops every year due to drought. The lack of climate-adapted agriculture made the community more vulnerable.

Save the Earth Cambodia (STEC) is a national NGO based in Cambodia. They initiated the community-based drought residence project through microinsurance. The project aimed at developing the capacity of the local government officials and community members on climate change and DRR, raising awareness on a climate change adaptation (CCA) measure in particular for drought, and establishing the mechanism of drought-resilient community through climate-adapted farming and other livelihood programs (Fig. 1). This program included four steps: (1) training workshops for the local government officials and community members, (2) developing drought risk management plan, (3) adapting climate-resilient farming, and (4) initiating poultry farming through microinsurance and home-gardening (Moolio, 2010).

In the Battambang province, rice-growing is the most common occupation. When crops failed, other problems emerged such as migration



Fig. 1. Outputs from the DRR/CCA Project in Cambodia.

and school dropouts. STEC worked with the village community to identify their vulnerabilities and the risks they faced with droughts. The discussion involved persons with disabilities and children. The villagers were trained in climate risk mapping and drafted a risk reduction action plan. The Department of Agriculture provided technical support to the village to develop a farming calendar that applied specifically to their droughtaffected community. The community learned about climate-adapted farming and replaced rice plantations with drought-resilient crops that grew faster than rice. The villagers started planting vegetables that could be harvested within a month instead of waiting for five months to harvest rice. The villagers continue using the training and information and sharing it with neighboring communities (Moolio, 2010).

The project included an activity of poultry farming and home-gardening. It was mainly to support women-headed households to have their livelihood through these activities. For poultry farming, the government officials from the Agriculture Department of the District Office provided training to the villagers on farming. The home-gardening program provided technical knowledge on gardening, seeds, and tools. The villagers learned the green vegetables grown by organic fertilizers are more economical and environment-friendly as well as healthier. This project was examined by an external consultant; the report highlighted that women's involvement in earning livelihood provided the families with stable income and fresh nutritious foods, and contributed to decrease of migration in particular of younger women to a city center for work and poverty reduction (STEC, 2010).

Disasters cause a heavy impact on livelihoods. In order to secure their living after being hit by disasters, it is important for DRR programs to include the livelihood element. It can be a transformation of the current planned crops such as from rice to vegetables and establishment of new scheme of livelihood such as poultry farming and home-gardening. Especially taking into consideration the climate change, in addition to saving their lives by evacuation drills and early warning system that are also major purposes of DRR efforts, it is equally important to provide the support to maintain their lives and build resilience after a disaster by combining DRR and CCA. In this way, DRR program can achieve sustainable income and development among the communities.

#### Case Study (India)

The need to build adaptive capacity to climate change into project and policy planning is rapidly becoming a core concern (Pelling & High, 2005). The environmental community has increasingly seen the relevance of

environmental management and good resource use for hazard control and reduction. It has been stimulated by the impacts of large-scale events that clearly revealed the relationship between environmental degradation and hazard occurrence. Equilibrium and resilience of ecosystems offer natural protection from natural hazards and reduce the likelihood of new hazards generated by processes of environmental degradation (UNDP, 2002).

Around the globe, land-use and land-cover changes are eroding the natural buffers that protect communities from hazard risk. These same changes often erode people's capacity to recover from disasters. Environmental management will reduce the risk, improve the resilience, and build capacity of the local communities. SEEDS India implemented a project to strengthen resilience of the local coastal communities in the Lighthouse Panchayat in Tamil Nadu in 2008 by establishing a multilayered and multispecies bioshield as an appropriate mitigating mechanism to encounter the possible disasters and minimize the extent of damage. The coastal line of Tamil Nadu is constantly facing threat due to sea-borne calamities. Natural disasters such as cyclones and heavy rains with floods have become an annual feature along the coastal districts. Beach erosion, seawater intrusion, and destruction of fragile ecosystem along the coastal districts are the other risks that need to be tackled along the coast. These characteristics bring the coastal areas under pressure to plan and develop mechanisms to mitigate the possible disasters and strengthen the ecological security and resilience of the local communities residing along the coast (SEEDS India, 2009).

The overall approaches of the project are science based, community centered, and partnership and process oriented. The major process of the project includes (1) situation analysis and community mobilization, (2) community-based institution building, (3) preparation of microplan and implementation of the activities, and (4) monitoring and evaluation. By adapting to the above approaches, five major activities were identified (Table 2).

Table 2. Major Activities of the Bioshield Project in India.

	Activity
1	Village meeting to explain the objectives and seek their support and cooperation
2	Identification of the areas for plantation through biophysical survey with local support
	and obtaining permission for the plantation from the land owner
3	Assessment of damage to sand dunes in the project villages
4	Identifying and selecting suitable species for plantation
5	Developing a microplan and management of bioshield and sand dune restoration

The bioshield is established in the village common land. A microplan for the bioshield was developed and is being implemented with the active partnership of local communities and local bodies. A thorough biophysical survey was conducted by a hired expert helped to design the plots for each of the village and to conduct consultation with the community for the identification of the species and suitability of the species. It was also critical to include economically important species such as coconut. A series of community meetings were conducted on how to and who will take care of the plants. The initiative and ownership of the communities were the most important for program sustainability (SEEDS India, 2009).

According to the senior project manager in SEEDS India, the most challenging issue in this project was to convince the community that the project brings both disaster preparedness capacity and incomes, and eventually make the community agree to take the ownership to continue and manage the project. A number of community discussions were required to obtain their understanding and support. Currently, the project has been fully managed by the community and they are able to get a small amount of incomes from the products, that is, by selling coconuts.

#### Lessons Learnt from Case Studies

These three DRR projects have different focuses. The project in Malaysia put the priority on capacity development of local authorities as well as communities, taking into consideration its effectiveness for program sustainability. What needs to be highlighted in this project is it included the local government officials into all the processes. It is often difficult to have their participation in DRR activities by NGOs; however, if the coordination and understanding by governments are strong, it becomes possible. This will be one of the models of pure and typical CBDRR projects focusing on preparedness aspects.

The projects in Cambodia and India include an additional aspect such as CCA to regular DRR activities. Climate change is clearly happening, and it is important to prepare for the increased number and intensity of global disasters (IASC, 2010). Over the past years and decades, the DRR has been strengthened by a large portfolio of experiences, instruments, and methods to predict weather-related hazards, and must be acknowledged as a toolkit to create long-term resilience. In order to scale-up DRR from the current capacity, the present study addresses the urgent need to link DRR and CCA (Birkman & von Teichman, 2009). The projects in Cambodia and India managed to enhance regular DRR projects to the level of CCA including the aspects of livelihood and environmental management to DRR.

In countries such as Cambodia and India, the frequency and scale of meteorological disasters are much worse than a country such as Malaysia. It will be easier for Cambodia and India to develop CCA and DRR projects as the need of linkage is easier to be understood. However, in Malaysia, DRR efforts are still at an initial stage, while awareness raising on DRR is the major activity in disaster preparedness. Differences exist among countries in the speed of development and transformation of DRR and CCA activities. However, the activities and project focuses should be determined in community discussions and based on various types of assessments as the needs vary from country to country. Most importantly, NGOs have a role to identify the critical needs and design a project to be most suitable to the community needs.

The challenge highlighted in all three projects was to gain the community ownership for each project. All three projects organized a series of community consultations and discussions to obtain their understanding and support. No matter how a project is scaled-up, the most critical approach is community-based. The approach of CBDRR needs to be maintained even if it is transformed to CCA or combined activities.

# CHALLENGES AND WAY FORWARD OF CBDRR BY NGOS

In order to discuss the challenges and way forward of CBDRR by NGOs, interviews and surveys were conducted with eight NGO staff from six organizations in six countries (Afghanistan, Cambodia, India, Indonesia, Malaysia, and Philippines) that are conducting the CBDRR projects. Afghanistan was selected to see the views and perspectives from a country that is still suffering from recovery and reconstruction from the internal and external conflicts. India, Indonesia, and Philippines are known as countries prone to various kinds of disasters, and a number of CBDRR projects have been conducted by governments and international and national NGOs. Cambodia is suffering from drought every year as well as poverty issues. Malaysia has no experience of a devastated disaster event and the DRR capacity is still limited. However, it has been hit by floods every year and the preparedness program for the frequent floods is considered critical.

Five questions were asked: (1) value and benefit of the CBDRR conducted by NGOs and why the involvement of NGOs in CBDRR is important, (2) major challenges and problems in conducting CBDRR, (3) how NGOs could tackle these issues, (4) innovative ideas to improve and

scale-up the current CBDRR programs to apply to more complicated situations and conditions, and (5) new elements need to be included in the current CBDRR efforts.

### Value and Benefit of the CBDRR Conducted by NGOs and Why the Involvement of NGOs in CBDRR is Important

The answers mainly included five values (Table 3). NGOs should have professional skills to address issues and develop projects and programs to improve a situation. The ideas such as CCA and microinsurance are the strategies and methodologies brought in and introduced by NGOs in their programs. Furthermore, as NGOs are considered impartial and neutral, it is easier for them to bring all the stakeholders together on the same platform and the support to and understanding of their activities are easily gained. They are not politically based or influenced; rather they work closely with communities. The fact would allow no biasness in the project or project site. The community feels more comfortable in voicing out their problems and concerns in DRR. NGOs are more independent and their voices can be easily heard without biases.

It was also highlighted that NGOs can play a role to bridge the gaps between community needs and current policies. NGOs are working in frontline with communities and expected to grasp the community needs efficiently and address them to higher levels. Especially, in their advocacy role, it was emphasized by an NGO in Malaysia that NGOs have a greater role in nondisaster-prone countries. In such countries, governments hardly advocate DRR and put in no efforts to conduct the capacity development programs of communities in DRR. If the community has no support or very little support from governments, NGOs involvement is more critical.

	Values	Countries
1	Skills, technical knowledge	Cambodia, Indonesia, Malaysia
2	Impartiality	Cambodia, Malaysia
3	Bridging gaps between governments and community (advocacy)	Indonesia
4	Capacity development for communities and government	Cambodia, Indonesia
5	Translating knowledge to the field	India, Philippines

Table 3. Values of NGOs Intervention in CBDRR.

Furthermore, NGOs can develop the capacity of communities to manage the risks while reducing vulnerabilities and having a critical role in advocacy. They have an important role of transferring the knowledge to the communities.

#### Major Challenges and Problems in Conducting CBDRR

Four major challenges were identified (Table 4). NGOs from Malaysia and Philippines pointed out the same issue: the challenge in community organization. It is important to establish a good relationship and trust with communities; however, there are not many trained and dedicated facilitators and local mechanisms that could invest time to strengthen community solidarity and ownership.

Another challenge for Malaysia is that the community does not have any urgency and need for preparedness as it does not have an experience of being struck by a heavy disaster. This will not be a challenge only for Malaysia; rather most of the nondisaster prone countries share this difficulty when they conduct the DRR activities. Given the risk of climate change, all the countries and communities have equal needs to learn how to prepare themselves for disasters, and NGOs particularly in nondisaster-prone countries have a role to strongly raise this point as governments do not have any particular strategy at national level.

Other answers included the lack of sustainability of funds to the projects. DRR requires a longer-term effort; however, the funds to the project can last only for one year most of the time. In such a short period, it is not possible to change the mindset of the communities and introduce the new concept of DRR to them. In addition, a contradiction of the strategy, plan, and message between governments and NGOs causes confusion in communities. Although NGOs clearly promote DRR and sustainable development, the activities and plans by governments and corporate sectors

	Major Challenges	Countries
1	Community organization	Malaysia, Philippines
2	No sense of preparedness need	Malaysia
3	Lack of funds sustainability	Cambodia, India
4	Lack of localized approach	Afghanistan

Table 4. Major Challenges for NGOs in CBDRR.

sometimes lead to an opposite direction. The lack of knowledge and understanding on DRR among governments and corporate sectors is one of the most difficult challenges to NGOs.

An NGO from Afghanistan raised an issue that the common DRR approach and practices such as CBDRR are not applicable to Afghanistan under such a conflict situation, and thus they require a unique and localized approach to be adaptable by the communities and local culture.

#### How to Tackle These Challenges

In order to tackle the challenges addressed, the NGOs underscored six ideas (Table 5).

The enhancement of advocacy efforts was stressed by Afghanistan and Indonesia. The advocacy needs are especially amongst multistakeholders including media, donors, corporate sectors, and governments. The NGOs from Malaysia and Philippines raised the common challenges of the complexity of community organization. In order to improve the situation, measures such as to identify the most effective local mechanism with traditional leaders, teachers, and religious leaders and to maintain frequent meetings and discussions with the communities were suggested. In addition, from the NGO side, it is important to allocate sufficient staff to manage the CBDRR programs to organize regular dialogues with the communities on the need of preparedness and of their support in project planning and implementation.

Given the complex situation, Afghanistan highlighted the need for the theories and practices to be developed in the context of the Afghan

	How to Tackle Challenges	Countries
1	Enhancement of advocacy efforts	Afghanistan, Indonesia
2	Identifying and using most effective local mechanism	Malaysia, Philippines
3	Sufficient staff allocation to conduct the DRR project	Malaysia
4	Developing strategy and measures that can be adaptable to their local context	Afghanistan
5	Giving the ownership to communities	Cambodia
6	Bridging the gap between knowledge and practice	India

Table 5. How to Tackle the Challenges in CBDRR.

environment, circumstances, and its disaster-coping mechanism and capacity. For a country like Afghanistan, in addition to strong advocacy to emphasize the importance and need of DRR efforts and measures in the country, an actual action plan, strategy, and measures that can be adapted to their local context are urgently needed.

#### Innovative Idea

Seven ideas were addressed (Table 6). It was recommended to accelerate the research on DRR tools and technology for more complicated needs in each country. At the same time, it was also emphasized to consider how the local culture and DRR activities can be mixed and localized. Furthermore, the need to develop a new media campaign for DRR was highlighted. Climate change became a trend and popular term when the seriousness of the issue was reinforced by various corporates, media, and governments. Many corporate sectors created the goods and items to promote the campaign and it influenced to make green culture a trend. It would be ideal if the term and concept of DRR can also become as popular as climate change. In order to do that, the advocacy of corporate sectors and media is critical.

An NGO from Afghanistan suggested that the DRR efforts should have a close link and be integrated into the projects in other sectors such as agriculture, infrastructure, health, livelihood, water, and sanitation. Afghanistan is facing various issues and DRR is not their priority under the current situation. Unless the DRR project is designed as an integrated project with other sectors, it would be very difficult to gain support and active participation by the communities and governments.

	Innovative Ideas	Countries
1	Research and technology	Indonesia
2	Microinsurance for livelihood resilience	Cambodia
3	Localization of project	Malaysia
4	Linking different agencies and ministries for DRR	Malaysia
5	Media campaign for wider awareness raising	Malaysia
6	Mainstreaming DRR into other projects	Afghanistan
7	Integrating DRR with the need of the day	India

Table 6. Innovative Ideas in CBDRR.

	Elements That Need to Be Included	Countries
1	Active involvement of media and private sectors	Indonesia
2	Participation of women, children, and persons with disabilities	Malaysia
3	Linkage of DRR and other issues	Malaysia
4	Integration of DRR knowledge into local practices	India

Table 7. Elements That Need to Be Included in CBDRR.

#### Elements to be Included in the Current CBDRR Efforts

Four elements were suggested to be included in the current CBDRR (Table 7). The media can play a very important role to influence the decisions of policy makers and governments. The NGO who raised this concern plans to initiate the awareness raising and capacity development project for media. In many cases, the participation of women, children, and persons with disabilities in dialogues and sessions remains weak. The situation depends on the culture and lifestyle of a country as well and it will not be easy to change the situation immediately. However, it is critical for NGOs to continue advocating the importance and need of wider stakeholders and family members, otherwise, the real goal of CBDRR will not be achieved.

Lack of communications and linkage among the line ministries that deal with disaster issues, environment, education, health, and public works to manage disaster risks may cause the delay of developing systematic and holistic action plans at national level. The last point highlights the importance of collaboration between practitioners and academics. Both research result and experiences and knowledge of practitioners need to be brought down to the grassroot level to maximize the effectiveness and efficiency of the expertise, and NGO can be a coordinator among these parties.

### CONCLUSION

There are various key players in CBDRR such as governments, UN agencies, international and regional organization, research institutions, academics, communities, as well as many types of civil society organizations including NGOs. One of the remarkable characteristics of NGOs is that

they are closer to communities, and are thus familiar with local culture and easily understand the importance of the community-based approach.

There are many case studies of DRR projects with community-based approaches by NGOs and local governments, and there are many variations as well. The current CBDRR program includes different focuses such as capacity development, livelihood, climate change, gender, and health. From the case studies from Malaysia, Cambodia, and India, the major roles of NGOs will be:

- Capacity development of local stakeholders (government, communities, Civil Society Organizations (CSOs))
- Establishing a good network and partnership with local stakeholders, resulting in a smooth coordination in DRR activities
- Identifying local needs, and designing and developing a project with new elements such as climate change
- Creating a sense of program ownership among community members for program sustainability.

Furthermore, through the survey and interviews with the NGO staff, more critical roles of NGOs were identified. The roles of NGOs have to be determined based on their values such as technical knowledge, impartiality, capacity development, advocacy, and translating knowledge into field. At the same time, NGOs themselves acknowledge the need of new innovative ideas and elements required to be added into current DRR tools, and how and in what roles they can contribute to fulfill the need. They have strength in building a network and communications with local governments as both of them know local culture, contexts, and critical needs, and NGOs can enhance the technical knowledge of local authorities providing inputs on developing local strategy and mechanism. At the same time, NGOs can expand the network to other stakeholders such as media, private sectors, and academics. Through collaboration with academics and NGOs, technical knowledge and scientific data can be incorporated in local projects and the required field of research becomes clear. Based on the NGOs' familiarity with local situation, their inputs are critical to mainstream cross-cutting issues into various projects. The additional roles of NGOs are summarized as below:

- Playing a role of facilitator and moderator among local stakeholders as they have a value of impartiality and bridging a gap in communications
- Advocating local needs
- Assisting in and working together with local governments in developing local strategy/mechanism

- Inviting various stakeholders in a DRR framework such as media and private sectors and highlighting the cross-cutting issues in various projects
- Addressing the need of specific field that requires research and technology together with academics and identifying innovative methodology and tools.

NGOs are also facing various challenges and difficulties in the process of CBDRR such as lack of funds sustainability and lack of localized approach. In particular, a country such as Afghanistan has more urgent issues due to conflicts and unique culture and obviously they require a different approach from other countries.

The NGOs have more advantages than other stakeholders in CBDRR and clearly have unique values. By making the best use of these advantages and values, NGOs are expected to further strengthen the CBDRR projects and develop and implement innovative CBDRR and CBDRR/ CCA programs in the future and have a significant role to share their experiences and advocate the local needs to higher levels. No matter how the projects are scaled-up and multidimensional approaches are required, the community-based approach is one of the most critical elements and foundation of any type of project.

## NOTES

1. HFA, adopted by 168 states, sets a clear expected outcome – substantial reduction of disaster losses, of lives as well as the social, economic, and environmental assets of communities and countries – and lays out a detailed set of priorities to achieve this by 2015 (UNISDR, 2005).

2. Views from the Frontline is a participatory multistakeholder engagement process designed to monitor, review, and report on critical aspects of "local governance" considered essential to building disaster-resilient communities. The Global Network of Civil Society Organizations for Disaster Reduction (GNDR) organized the global survey on the progress of UN "Hyogo Framework for Action" at local level. MERCY Malaysia is selected as national coordinating organization for Malaysia and it conducted the national survey.

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