



Practical Approaches to

Integrating Resilience Elements in Disaster Recovery

Brief

Introduction

Typhoon Haiyan (local Yolanda) struck the Philippines on November 8, 2013, making it the strongest and most destructive storm that made landfall in the Philippines. Haiyan made landfall six times hitting the provinces of Eastern Samar, Leyte, Cebu, Iloilo and Palawan. Typhoon Haiyan was a category 5 typhoon with wind speeds of 235 kilometers per hour (kph) with gustiness of 275 kph. It brought as much as 30 mm rainfall per hour and storm surges of up to 6 meters high. The aftermath of Haiyan resulted in more than 6,000 deaths with total losses amounting to about \$ 3.0 billion.

Eight months after Typhoon Haiyan, the Philippines was struck again by a category 5 typhoon, Rammasun (local Glenda). It made landfall in eastern Luzon and ravaged the southern Luzon area including Metro Manila with its wind speeds of 165 kph. The typhoon damaged vital power and road infrastructure and agriculture estimated to be \$800 million.

The International Institute of Rural Reconstruction (IIRR) in partnership with the The American Jewish Joint Distribution Committee (JDC) and partners from the municipal government units responded to these typhoons by designing interventions that deliberately linked disaster recovery to resilience building. These post-disaster actions were implemented in the Municipality of Ivisan in Capiz affected by Typhoon Haiyan and the Municipality of Guinayangan of Quezon affected by Typhoon Rammasun.

IIRR presented two strong arguments why it made sense to link relief and recovery to long term community resilience building. First, there are more resources for relief and recovery than for community resilience building therefore it was considered important to redirect some of these resources to resilience building. Studies have indicated that countries that received \$160,000 of disaster relief aid received only \$1 for disaster risk reduction.¹ Second, post-disaster recovery are very good opportunities to start with a clean slate and to derive lessons for long term resilience building. Building back better can only happen after such events. The “clean slate” allowed local governments and responding agencies to consider resilience in recovery efforts.

These projects provided communities with innovative livelihood assistance to restore and strengthen lost livelihoods. Production inputs, financing and training to build the capacities of farmers and fishers in livelihood diversification was provided. Community self-help groups were organized and strengthened. Capacity building to provide psycho-social support services to help communities’ better cope with future disasters received special attention.

¹ Jan Kellet & Alice Caravani, “Financing Disaster Risk Reduction: A 20 year story of international aid.” Overseas Development Institute, Sept. 2013, <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8574.pdf>



A core group of psycho-social facilitators were recruited and trained and a guidebook for facilitators was also developed. To capture lessons from the disaster which can be considered in recovery and future preparedness, village-level participatory disaster risk assessments, risk reduction planning and preparedness activities were facilitated.

The continuum of development, relief, recovery and resilience

Resilience has been one of the most popular development buzzword in the recent years. In disaster response, resilience is closely associated with “building back better”.

The United Nations International Strategy for Disaster Reduction (UN-ISDR) defines resilience as the ability of a system, community or society exposed to hazards to **resist, absorb, accommodate and recover** from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. (UN-ISDR).²

The Inter-Governmental Panel on Climate Change (IPCC) defines resilience as the capacity of a social-ecological system to cope with a hazardous event or disturbance, responding or re-organizing in ways that maintain its essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation. (IPCC, AR5)³

Enhancing community resilience requires all stakeholders to consider more holistic frameworks that recognize the interrelatedness of relief, recovery and development. The goal of resilience building is to minimize future losses and for communities to get back on their feet. A framework that links pre-disaster activities, disaster response, recovery and resilience building guides the BRIDGE project. This is presented on the next page.

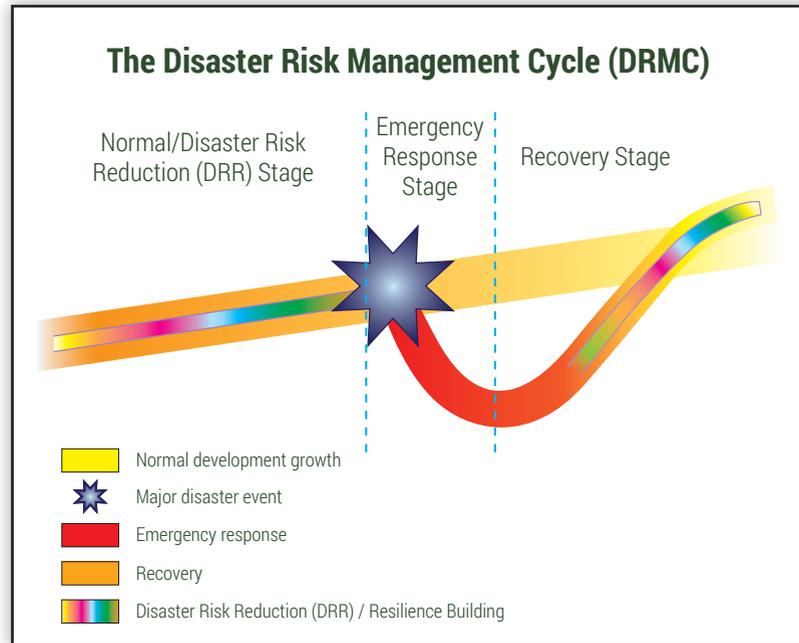
² UNISDR Terminology on Disaster Risk Reduction, UNISDR, 2009
³ IPCC Assessment Report 5 Glossary of Terms, IPCC, 2014



This framework presents a continuum of development, relief and recovery stages. As a continuum, interventions are implemented with conscious consideration of the effectiveness of the other stages. Following this diagram, the goal of resilience building is to minimize future losses and for communities to get back on their feet. This goal is integrated at all stages of the continuum.

The normal development pre-disaster stage is the period when the communities are implementing risk reduction measures that are integrated in livelihoods, environment, health and other development themes. The disaster relief stage is experienced when people are provided humanitarian assistance to survive the impacts of disasters.

Finally, the recovery stage is reached when the community starts to rebuild and bounce back to normal conditions.



Source: Chris Piper/TorqAid, 2002-2015 DRMC version 23

Figure 1. A disaster management cycle that spans relief, recovery and development.



Two years after experiencing the disaster brought about by Typhoon Haiyan in the municipality of Ivisan in Capiz, the gloomy and fearful memories are still haunting the Ivisanons. Nevertheless, reflecting back, village leaders have lessons to learn, serving as their turning point for community resilience building.

There is now heightened awareness on the value of understanding and managing risks: whether disaster or climate risks. "Alagaan at pahalagahan ang kapaligiran" (Take care and value the environment), as emphasized by, Hon. Rico Delos Santos, village chief of Barangay Matnog, demonstrated a mind shift, as he learns about the need to prevent and mitigate disasters and climate change.

The need to invest on capacities of individuals and communities to make them equip with knowledge and skills to anticipate and respond to hazard events is a common insight. "Dapat parating paalalahanan ang mga tao tungkol sa prevention sa kalamidad at sa kahandaan." (We should always remind the community about prevention and preparedness) shared by Hon. Nicasio Ralph Muñoz, village chief of Barangay Sta Cruz. Lessons learned the hard way but the Ivisanons are capitalizing on these as they now take on the Ivisan-wide resilience building.

Practical approaches to integrating resilience elements in disaster recovery

The question of many responding agencies is to know when the community is ready to start "building back better"? Usually affected communities start to exhibit signs of recovery such as the following:

- People are starting to re-settle back in their communities where their basic needs are secured
- People are starting to engage in livelihood activities including the resumption of local businesses
- Local governments are already planning the recovery and reconstruction of damaged infrastructure and services.

Agencies can make use of existing mechanisms of post-disaster assessments such as the multi-cluster initial rapid assessment (MIRA) of the UN agencies and situational reports of UN-OCHA and the Philippine National DRRM Council. These reports and secondary data coupled with scoping visits can provide guidance on the readiness of communities to implement programs that link recovery to resilience.

Assessment

Agencies conduct assessments to determine the extent of the disaster losses, needs of the survivors and existing capacities of the communities to respond to their own needs. Tools for conducting assessments include situational reports, damage assessment and needs analysis (DANA), multi-cluster/sector initial rapid assessment (MIRA) among others. There are also broad assessment methods of the disaster impacts such as emergency market mapping analysis EMMA.



Lessons learned in BRIDGE program:

- As much as possible engage local leadership in the assessment. By doing this, communities are gradually bringing back and rebuilding their capacity to respond to the needs of their community.
- Document not just the damages and the needs of the community like food, water, shelter and health but also assess internal response mechanisms that can be restored and deployed. Assessing their response capacities will provide guidance on the roles of local leaders and structures in the delivery of response efforts.
- In a later period of the emergency, conduct participatory disaster risk assessments to determine other hazards that can complicate the emergency and the vulnerable sectors that need more focused assistance. These risks assessments also provide an opportunity for affected populations to share their experiences and draw lessons from these experiences. These assessments will be useful in preparedness planning to address anticipated risks.

Coordination

In the today' reality of multiple responders and stakeholders in responding to emergencies, coordination is an important determinant for effective and efficient disaster response. For government agencies at the national level, coordination is facilitated by the National Disaster Risk Reduction and Management Council (NDRRMC) under the national Department of Defense. Coordination is also facilitated by the UN Office for the Coordination of Humanitarian Assistance (UN-OCHA) mainly directed towards the actions of all UN agencies and a few international humanitarian agencies for level 3 humanitarian emergencies. At the Provincial and municipal level, local DRRMCs should be well communicated and coordinated.

Some lessons IIRR learned with regards to integrating resilience elements coordination are:

- Provide support to local authorities in their facilitating and coordination efforts - Local authorities better understand the social-political and cultural contexts of their constituents. Allowing them to exercise control over the emergency helps them to better manage their recovery in future disasters. The NDRRM Law provides for the creation of the Municipal DRRM Council which is the local coordinating mechanisms in disaster management.
- Explore possible synergies with planned disaster response and recovery work of local authorities and existing local structures and players - By doing this local authorities are strengthened and they gain confidence to lead and be better organized in responding to future disasters.



Opportunities for integrating resilience building elements.

Response strategy	Suggestions for integrating resilience building
Cash for Work for debris clearing and repairs of damage infrastructure	<ul style="list-style-type: none"> ● Work is targeted to establish community assets for resilience such small-scale mitigation projects, water harvesting ponds to prepare for droughts, etc. ● Inclusion of non-cash compensation to build individual resilience (e.g. accident insurance)
Direct delivery of food, non-food items, water, sanitation and hygiene services, psycho-social support and medical services	<ul style="list-style-type: none"> ● As much as possible source the materials from local suppliers to jump start the local economy ● Provide quality aid following minimum standards to avoid unintended impacts of disasters such as diseases, malnutrition and psychological trauma. By providing quality assistance individual persons will be more resilient ● Engage local organizations in the delivery mechanisms for these assistance. For example, training local barangay health workers to roll out psycho-social support programs in affected populations
Distribution of livelihood inputs such as seeds, tools and equipment	<ul style="list-style-type: none"> ● Level-off with beneficiaries with regards to the objectives of the distribution whether this is for short-term recovery or for long term-resilience ● Consider pre-disaster conditions of livelihoods to ensure that the assistance will not just provide short-term relief but contribute as well to addressing pre-disaster conditions ● Bundle assistance with new technologies that will "build back better" existing livelihoods such nutrition-sensitive family farming, climate smart agriculture (CSA) and diversified agro-forestry, hook and line for oyster farming and livestock dispersal and re-dispersal scheme ● As much as possible source the livelihood materials from local suppliers as these are locally adapted and acceptable more so will also jump start the local economy ● Engage where possible local community organizations as delivery mechanisms. This will build social capital and cohesion which is an important element of community resilience
Direct cash transfer	<ul style="list-style-type: none"> ● Bundle cash transfers with non-cash benefits as well like personal insurance, insurance for houses and farm assets ● Introduce community organizing activities in the delivery of cash transfers e.g. organize mother's club, farmer's association and fishers groups. This will initiate group building that builds social capital
Shelter assistance including the building of new settlements	<ul style="list-style-type: none"> ● Ensure that building materials are culturally and locally appropriate. ● Minimize environmental impacts by conducting rapid environmental impact assessments to prevent for example excessive harvesting of forest wood leading to denudation ● Introduce new design, new materials that will enable new houses to withstand future disasters ● Consider disaster and climate risks and vulnerabilities in settlement planning
Repair/reconstruction vital infrastructure like roads, water tanks, school buildings, hospital	<ul style="list-style-type: none"> ● Introduce new designs, new materials and new locations in the reconstruction of these vital infrastructures ● Consider disaster and climate risks in the reconstruction of these structures

Planning and resource mobilization

Finally, responding agencies plan their disaster response interventions based on the assessed needs of the affected communities. They also consider planned interventions of other responders. Tools for planning include the usual project development frameworks such as logical frameworks and results-based management. These response plans are then used to mobilize resources. Mobilizing resources can be done by: (1) submitting proposals to donors that are ready to fund disaster assistance and (2) conducting public global appeals to gather funding from both donors and from crowd funding. Here are suggestions and lessons for integrating resilience building in planning and resource mobilization:

- Integrate local capacity building in the overall strategy for disaster response. This can be in the form of developing skills of local leaders and responders. This can also include mobilizing local people to be involved in the delivery of humanitarian aid.
- Develop a more comprehensive response program and appeal to support strategies that follow through from relief to recovery to resilience building. Include funding for collective reflection to capture lessons, disaster risk reduction, preparedness and strengthening resilience capacities of local communities. Even if the funding mobilized is for relief only, as long as there is a long-term program design—this design can serve as the anchor where other local stakeholders and responders can gravitate their own response programs.
- Below are specific disaster response strategies commonly implemented in disaster management with suggestions on how resilience building can be integrated:

Recommendations on DRRM Policy and Programming

Based on the lessons learned from the implementation of IIRR's post-disaster resilience building program, the following are presented as implications and recommendations for integrating resilience elements into disaster relief and recovery efforts.

For programming by non-government agencies responding to disasters

- Invest in resilience building activities in post-disaster response by including these elements in the design and programming efforts
 - Contribute towards building local capacities for disaster preparedness, response and recovery by engaging local leadership and communities

For local government units (LGUs)

- Activate the local DRRM Councils as mandated by RA 10121 and mobilize these as primary coordination mechanisms for disaster response
- Conduct household level baseline studies for livelihoods to have a master list or database which lists who are at risk for disasters and climate change impacts



- Facilitate barangay level and municipal level disaster risk and climate change vulnerability assessments to inform not just development planning but also disaster response and recovery work.

For national agencies involved in disaster response, disaster risk reduction and climate change adaptation

- Protect the DRRM Trust Fund especially the 70%-30% ratio between pre-disaster activities and disaster relief by actively monitoring fund allocation and utilization by local governments
- Adopt operational guidelines on how national agencies and local governments integrated "building back better" practices within the current disaster recovery processes
- Implement a national capacity building program for improved coordination and planning of disaster recovery and disaster resilience. This is to complement the current focus on disaster preparedness (e.g. contingency planning) and disaster response (e.g. Oplan Listo)





Testimonies from the field



Julie Belmin, 42, from Barangay Arbismen, Guinayangan in Quezon recipient of the cash for work projects

Julie and her husband till a small plot of land planted to rice and vegetables. A water source for rice, vegetable and domestic use has been a perennial problem of the community during dry months. A decade-old irrigation facility that is very crucial for Arbismen rice farmers is still pending for completion. However, during the rainy months of June to December, water is abundant in Arbismen. Julie and the people in Arbismen are struggling on how to save the rainwater during rainy season for the dry months.

One way to address this concern is the construction of rainwater harvesting ponds that will harvest and save the rainwater for farmers' use during dry months and longer dry season. However, with their measly income from rice farming and vegetables, Julie and her husband cannot afford to pay the labors for digging their own rainwater harvesting pond.

When IIRR's cash for work project was implemented in Arbismen, Aling Julie is one of five (5) beneficiaries of rainwater harvesting pond. The cash for work paid for the labor for constructing a 10 feet by 15 feet rainwater harvesting pond for 15 days.

"What a great relief when cash for work included the constructed rainwater harvesting pond in our farm. This will surely benefit hectares of rice field and vegetable farm."



Catubuan Ruperto, 34 years old of Barangay Ilaya, Ivisan participant to Low External Input Rice Production (LEIRP)

"The training, with the distribution of RC 226, that was given by IIRR was a big help for us, I learned new practices and able to apply them, which resulted in a good harvest. The methodology of Systems of Rice Intensification (SRI) was good it helped minimized the presence of pest. IIRR staff taught us how to minimize the presence of snails "kohol" by using the dried animal manure (goat). After the typhoon Ruby, I observed the rice leaves turned into red color. I changed the way I practice farming. Instead of using commercial fertilizers I used organic fertilizers in my farm. With this, my production expenses lessen. I do not have to buy and use commercial pesticides. The next plan, is to explore different variety of rice that would have better yield."



Ricardo Obrigue, 61 years old of Barangay Mianay, Ivisan participant of the Bio-Intensive Garden approach to vegetable production

"Because of the training/seminar from the BRIDGE I learned the processes of planting vegetables, preparing gardening plot and other technologies like composting. These were very useful. The seeds provided were of great help because I was able to save lots of money for I don't need to buy vegetables from the market anymore. Same with the farm tools that were given by the project I used to borrow tools from neighbors before but now I already have my own. The new technology on vegetable farming being taught was applicable on my farm and it made my vegetable farm more productive. Major changes that I have applied and practiced were the proper maintenance of the garden that was taught and the use of seedling tray. The use of seedling tray is of great help because before I will transfer my seedlings they are 100% germinated unlike before the direct seeding does not guarantee higher germination."



The American Jewish
Joint Distribution
Committee



The Jewish Federations
OF NORTH AMERICA

International Institute of Rural Reconstruction
Zoological Society of London – Philippines
The Local Government Unit of Ivisan, Capiz
The American Jewish Joint Distribution Committee
The Jewish Federations of North America

Bridging relief and recovery towards resilience building in disaster affected areas
in Panay (BRIDGE Project Phase 2)

June 2015

