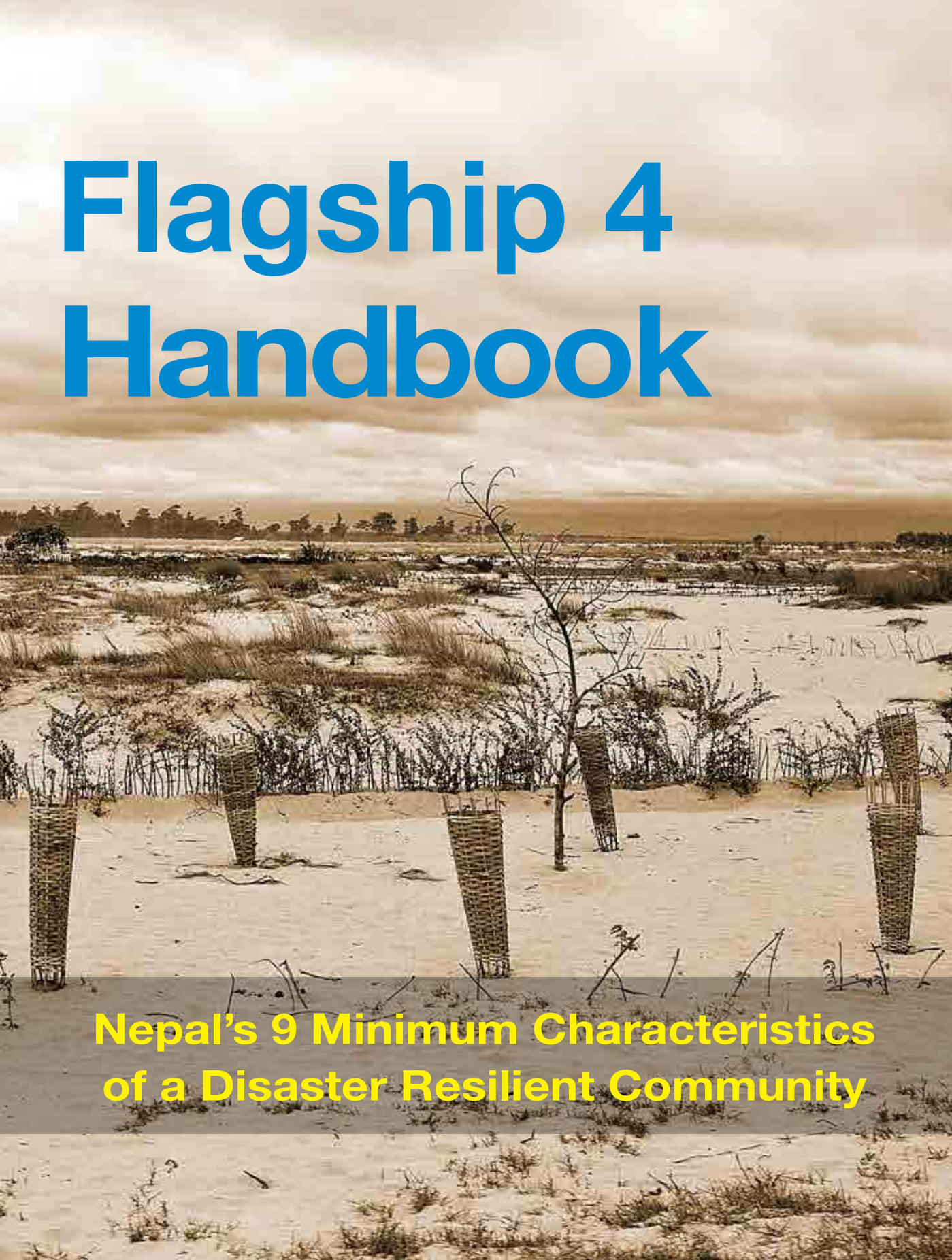
Flagship 4 Handbook



Nepal's 9 Minimum Characteristics of a Disaster Resilient Community

Published July 2013

Flagship 4: Integrated Community Based Disaster Risk Reduction/Management

Flagship 4 is led by Government of Nepal's Ministry of Federal Affairs and Local Development in partnership with the International Federation of Red Cross and Red Crescent Societies

Flagship 4 is part of the Nepal Risk Reduction Consortium.

An electronic version of this handbook can be downloaded from www.flagship4.nrrc.org.np

The handbook is available in both English and Nepali

Copies of the handbook and other documents can be obtained from IFRC's Flagship 4 coordinator

About This Handbook

Since the inception of the 9 minimum characteristics of a disaster resilient community in Nepal, there have been many questions by Government, implementing agencies, researchers, and community members on how to operationalise these characteristics. These questions have led to the formation of this handbook which contains more information about each characteristic and examples of how they can be applied in interventions.

Many organisations have contributed to the development of this handbook and we would like to firstly thank the Ministry of Federal Affairs and Local Development, as the Flagship 4 Government lead, for their leadership and support of the program, the International Federation of Red Cross and Red Crescent Societies (IFRC), along with, but not limited to the following implementing agencies: ActionAID; ADRA Nepal; British Red Cross; CARE Nepal; Danish Red Cross; Handicap International; Lutheran World Federation; Mercy Corps; Merlin; Mission East; Nepal Red Cross Society; the Nepal Society for Earthquake Technology; Oxfam; Plan Nepal; Practical Action; Save the Children;UNDP; and UNICEF.

Target audience

The handbook is targeted primarily at implementing agencies and local Government, of not just Community Based Disaster Risk Reduction interventions, but those working in other sectors who are interested to include disaster management into their intervention strategies.

Handbook contents

Case studies

One attempt to provide guidance on operationalising the characteristics has been to collect a number of case studies from implementing agencies in Nepal. Each case study corresponds to a specific characteristic and outlines how the implementing agency has incorporated the characteristic, its impact on resilience and challenges that have been encountered.

25 case studies are documented in the handbook and Flagship 4 would like to thank implementing agencies for sharing their experience with us. However, more examples may be out there and could be available in future.

Example indicators

The example indicators attempt to show what disaster resilience in Nepal 'looks like' in practice, providing direction to interventions on how to include the minimum characteristics and outlines avenues on how to connect with Government structures, processes and budgets.

Additional resources

In order to highlight documents and resources that provide further information on a characteristic, including information that is specific to the context of Nepal, resources have been highlighted throughout the document. For a soft copy of documents, please visit the Knowledge Library on the Flagship 4 website www.flagship4.nrrc.org.np

Glossary of Terms

CBDRR/M	Community Based Disaster Risk Reduction / Management
CDMC	Community Disaster Management Committee
DDC	District Development Committee
DDMC	District Disaster Management Committee
DDRC	District Disaster Response Committee
DEECC	District Energy, Environment and Climate Change Division
DMC	Disaster Management Committee
DPRP	District Preparedness and Response Plan
EFLG	Environmentally Friendly Local Government
INGO	International Non Government Organisation
LDMC	Local Disaster Management Committee (VDC / municipality level)
LDRMP	Local Disaster Risk Management Plan (VDC / municipality level)
MoFALD	Ministry of Federal Affairs and Local Development
NGO	Non Government Organisation
NRRC	Nepal Risk Reduction Consortium
NSET	National Society for Earthquake Technology
UN	United Nations
UNDP	United Nations Development Programme
VCA	Vulnerability and Capacity Assessment
VDC	Village Development Committee
VEECCC	Village Energy, Environment and Climate Change Committee

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MRS. LAXMI PANDEY

Under Secretary, Ministry of Federal Affairs and Local Development

1. What is Community Based Disaster Risk Reduction?

Community Based Disaster Risk Reduction (CBDRR) refers to the efforts in strengthening resilience at the local level through the development of plans and policies, mitigation efforts and awareness raising about risk reduction and preparedness at the community level. The overall aim of CBDRR is to promote a community led process that owns and internalized risk reduction.

2. Why is it important to focus on communities for DRR?

Communities are most affected by disasters and are the first to respond to those disasters. By focusing on the community and building their capacity to mitigate, reduce risks and respond to disaster, we can directly minimize the impact of disaster. However, it is ineffective to apply DRR as a separate initiative. Rather, it is imperative to mainstream DRR into development programs and plans to ensure the issue of risk reduction is considered at all levels to protect hard earned development gains made by the community.

3. Who is involved in CBDRR?

Several ministries of Government of Nepal, INGOs, UN agencies, Red Cross and Red Crescent Movement, CBOs and researchers are involved in CBDRR.

4. What are the short and long term goals for CBDRR?

The short term goal of CBDRR is to enhance immediate capacity of communities by providing the necessary training, equipment and planning to reduce vulnerability. In the long term, the goal is to create a safe environment and develop disaster resilience communities by ensuring governance structures, development plans, and budgeting include risk reduction issues. To achieve both short and long term goals, we need to adopt a holistic approach to our planning, policies and projects that utilize community leadership.

5. How can CBDRR projects become sustainable?

CBDRR has, at present, given its emphasis on building capacity for resilience as well as on the process of ensuring long term sustainability. The nine minimum characteristics of a disaster resilient community developed under Flagship 4 of the NRRC are of utmost importance since they set a standard for CBDRR projects in Nepal. However, the issue of sustainability has been and continues to be challenging.

In order to achieve sustainability, we must work closely with communities to ingrain a culture / behaviour of risk reduction and mitigation. When a community understands and owns risk reduction, they will prioritise it within their communities and sustain it in the long term. This is a difficult task, but one that I am confident we can achieve.

6. How can others get involved with this work?

For organizations working with communities, it is important to include risk reduction and mitigation into their planning. By working with the government and Flagship 4 of the NRRC, we can ensure we work in tandem with communities to promote DRR as a crosscutting issue of sustainable development. Organizations that are working with communities, it is strongly recommended they work within the Flagship 4 framework.

The Nepal Context

Classified as a global 'hotspot' (World Bank, 2005), Nepal is vulnerable to multiple natural disasters, suffering an average of 900 natural disasters each year resulting in lost lives and damaged livelihoods (MoHA, 2009). These disasters include landslides, earthquakes, floods, windstorms, hailstorms, fire, glacial lake outburst floods (GLOFs), and avalanches. Adding to the picture is the diverse landscape of the country, with the majority of the country classified as mountainous or hilly (MOHA, 2011). In addition, Nepal is experiencing the fastest rate of urban growth of any South Asian country (World Bank, 2013). Nepal, in short, is confronted with many challenges in making itself more resilient to disasters.

What is disaster resilience in Nepal?

Flagship 4 has taken a pragmatic approach to disaster resilience and developed the 9 minimum characteristics in an attempt to articulate the agreed minimum components necessary in interventions to improve a communities' level of resilience.

During the review of current best practices in Nepal and adapted from Twigg (2009), organisations generally agreed that disaster resilience is the ability to:

- Anticipate, minimise, and absorb potential stresses or destructive forces through adaption or resistance

Photo Credit: NRRC

Community members undertaking local risk reduction measures such as river bank reinforcement.

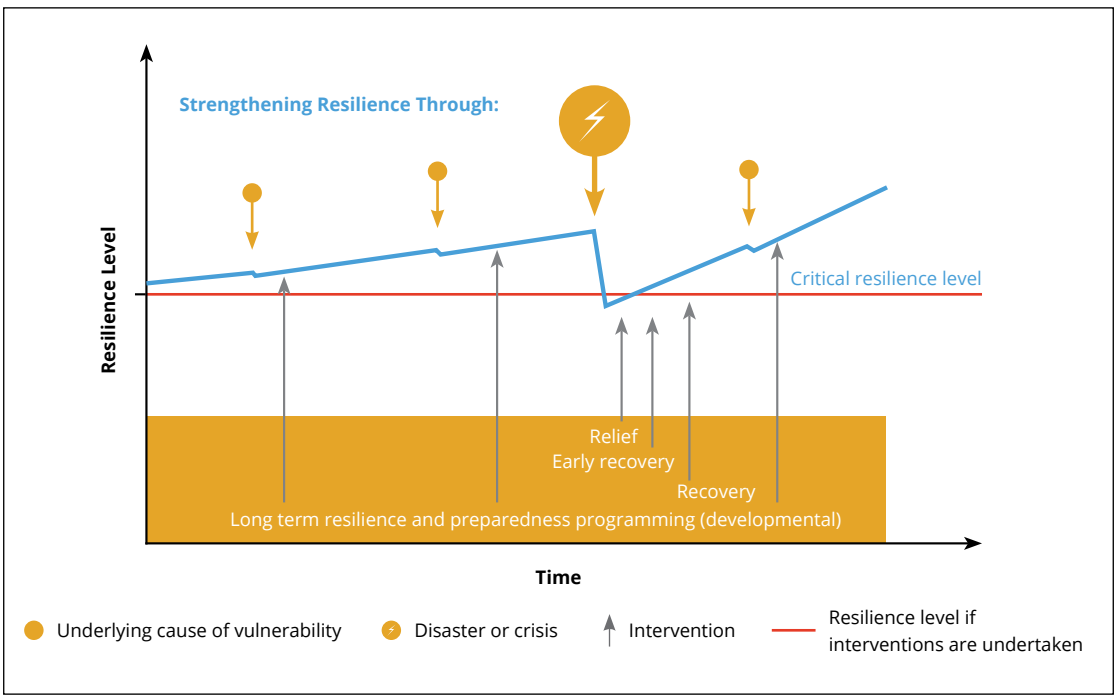
- Manage or maintain certain basic functions and structures during disaster events
- Recover or 'bounce back' after an event (Twigg, 2009)

Figure 1 illustrates the impact of resilience over time on a community's capacity to develop, respond and adapt.

Flagship 4 recognises that in order for interventions to assist communities in becoming more resilient, communities themselves must have the capacity to develop their existing resources (or incorporate new resources), and be willing to improve their capacity and knowledge at a community and individual level (Norris et al.,2008). Sudmeier-Rieux et al. (2013) also notes in their research that communities '… may not use the word 'resilience' but they do know which resources are necessary to overcome adversity and which resources are needed to improve everyday lives'.

There is also wide recognition at the program level that building disaster resilience and investing in disaster risk reduction helps protect longer term development gains and minimises the negative impact on development that disasters have.

FIGURE 1: **Effects of interventions to strengthen resilience over time (IFRC 2012)**



Developing a Consensus on Community Based Disaster Risk Reduction / Management

The handbook has been prepared through a consultative process building on Flagship 4's existing body of work. The value of community level implementing partners in interventions has been recognised as a key driver in building community safety and resilience to the numerous disaster risks faced in different parts of the country. These organisations are supporting communities to understand the risks they face, undertake mitigation and adaptation actions, act on hazard analysis and early warnings, and to plan and prepare for their eventual need to respond to disaster events as first responders. However many of these activities are based on different approaches, with different target groups and thematic emphases, making it difficult to capture and track the overall progress towards creating nation-wide disaster-resilient communities.

Flagship 4

Flagship 4 seeks to capitalise on the Community Based Disaster Risk Reduction/ Management activities and experience already accumulated by organisations, to create a more consistent and systematic approach to CBDRR/M at Village Development Committee (VDC)/ municipality level. By following a set of minimum characteristics for disaster-resilient communities and adopting a package of common elements to be included in all Community Based Disaster Risk Reduction/Management interventions, the Flagship aims that communities receive consistent support and will enable more effective tracking of progress in VDCs / municipalities across the country.

RESOURCES

Building Resilience Amongst Communities in Europe 2012 *Working Paper Systematization of Different Concepts, Quality Criteria, and Indicators*

DFID 2011 *Defining Disaster Resilience: a DFID approach*

IDS 2012 *Resilience: New Utopia or New Tyranny? Reflection about the Potentials and Limits of the Concept of Resilience in Relation to Vulnerability Reduction Programmes Working paper*

Sudmeier-Rieux, Jaboyedoff & Jaquet 2013 *Operationalising 'resilience' for disaster risk reduction in mountainous Nepal*

IFRC 2012 *The road to resilience: Bridging relief and development for a more sustainable future*

IFRC 2012 *Understanding community resilience and program factors that strengthen them: A comprehensive study of Red Cross Red Crescent Societies tsunami operation*

Twigg, J. 2009 *Characteristics of a Disaster-Resilient Community: A guidance note (2nd edition)*

Formation of the 9 Minimum Characteristics for a Disaster Resilient Community in Nepal

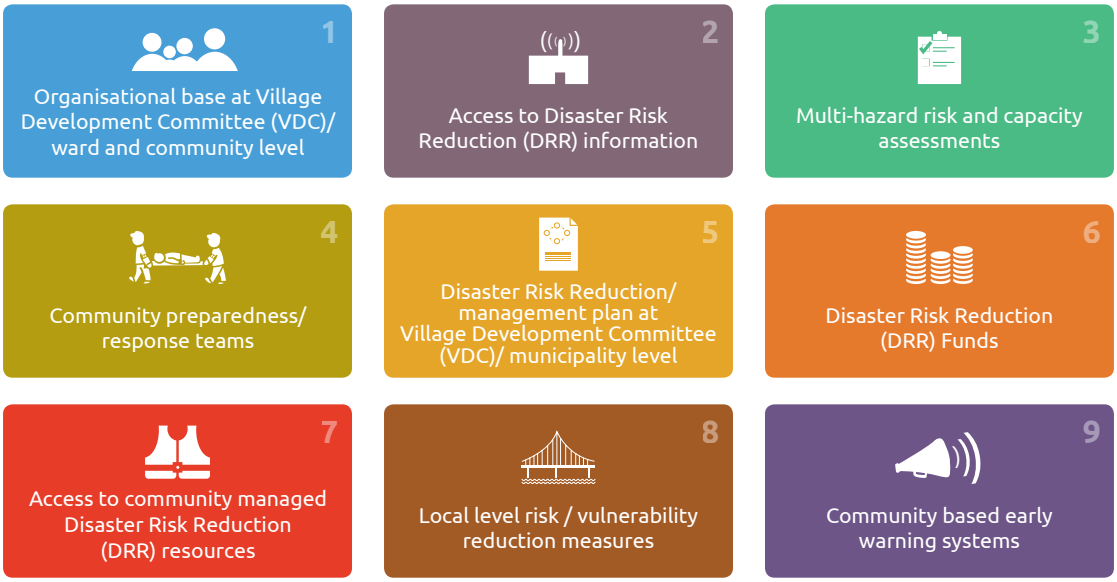
The minimum characteristics were developed over several Flagship 4 workshops in 2010 and 2011, in consultation with the Government of Nepal, INGOs, NGOs, UN, donors and Red Cross/Red Crescent movement.

The 9 minimum characteristics

As a result of this 2-year process, the following 9 minimum characteristics were agreed upon, and now form the baseline components of a disaster resilient community in Nepal.

Additional components promoting resilience are also encouraged to be incorporated into community based disaster risk reduction interventions.

Initially Flagship 4 encouraged interventions to last for at least 3 years; to encourage quality community engagement, allow an adequate handover and exit strategies to be enacted that supports sustainability. However it is recognised that this is only an ideal time period, and that those interventions that have a shorter timeframe are encouraged to capitalise on existing relationships and mechanisms in order to increase the sustainability of intervention outcomes.

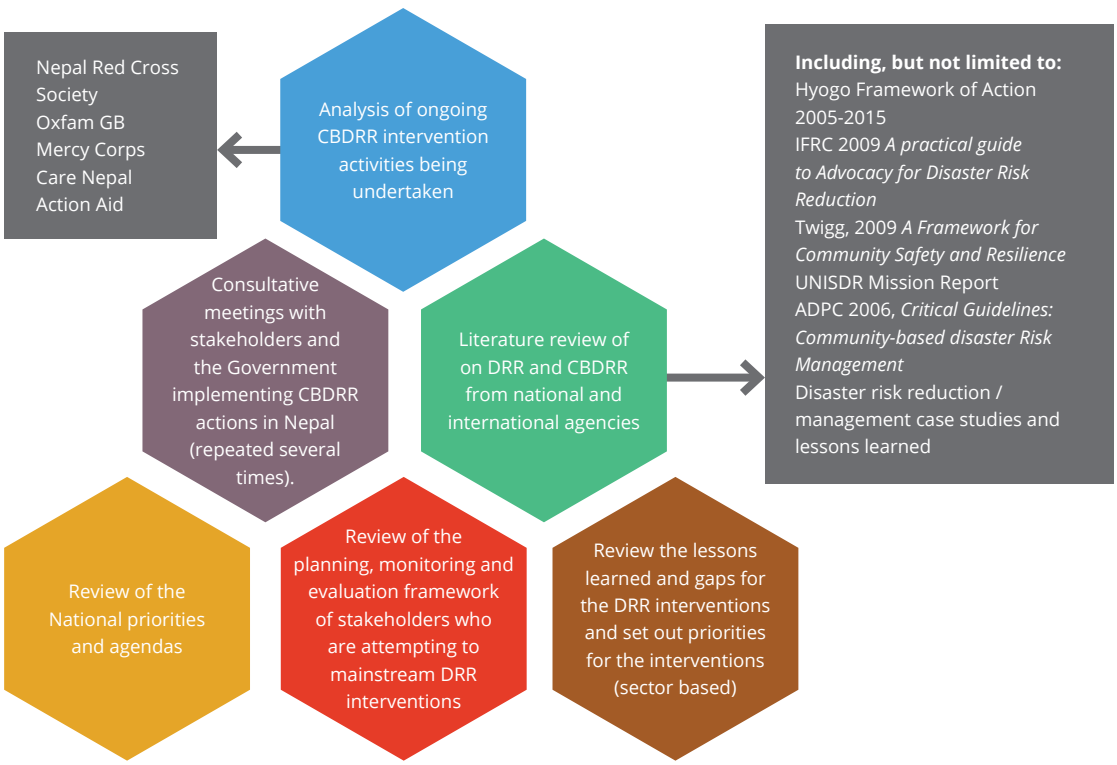


This logo indicates a project that is working in the urban context

Rural and Urban Contexts

The development of the minimum characteristics only took into consideration the rural context in Nepal. In order to address the ever-increasing risks in the Kathmandu valley, and other rapidly urbanising areas in Nepal, organisations have recently begun to take on the challenge of designing disaster risk reduction and management interventions in the urban context. Although some of the minimum characteristics are relevant for the urban context, we will continue to assess how accurately they reflect the components of a disaster resilient community in these urban contexts.

FIGURE 2: **Minimum Characteristics Development Process**



Operationalising the 9 Minimum Characteristics

Example Indicators

Since the 9 minimum characteristics were agreed too, implementing agencies have taken different approaches to including the characteristics into their intervention strategies. Stakeholders have been keen to hear how organisations are operationalising the characteristics, including what basic elements are being incorporated to meet the characteristics. With this in mind, and to aid discussions about the minimum characteristics with other sectors, the example indicators have been developed.

The indicators presented represent current conventional wisdom and attempt to provoke discussion on what is needed to build disaster resilience at the local level in Nepal. See annex 2 for a detailed list.

Parameters

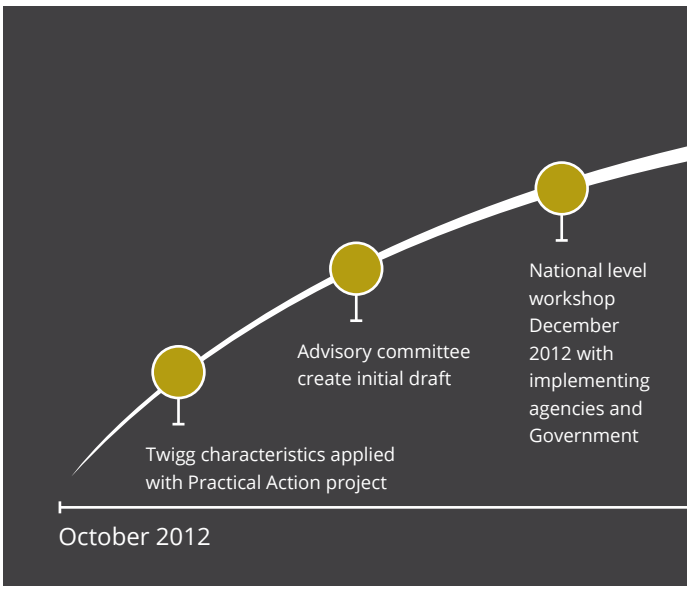
The indicators, are at the level of outputs, providing guidance on how to operationalise the characteristics at the VDC/municipality and community levels. Characteristic 5, however does include two outcome indicators. Outcome and impact indicators for the other characteristics will be developed at a later stage. The indicators have been developed primarily for the rural context, and it is expected that additional indicators will need to be developed for the urban context.

All indicators have been developed in line with the Government of Nepal's Local Disaster Risk Management Planning guidelines (LDRMP), recognising that the development of these plans at VDC/ municipality level plays a crucial role in the sustainability of disaster risk management activities at the local level.

Development process

The development of indicators as a measurement tool for disaster resilience at the community level has been a complicated process that has occurred over a 5 month

FIGURE 3: **Development of Example Indicators to date**



period. Figure 3 outlines the process of development.

The literature review included the following:

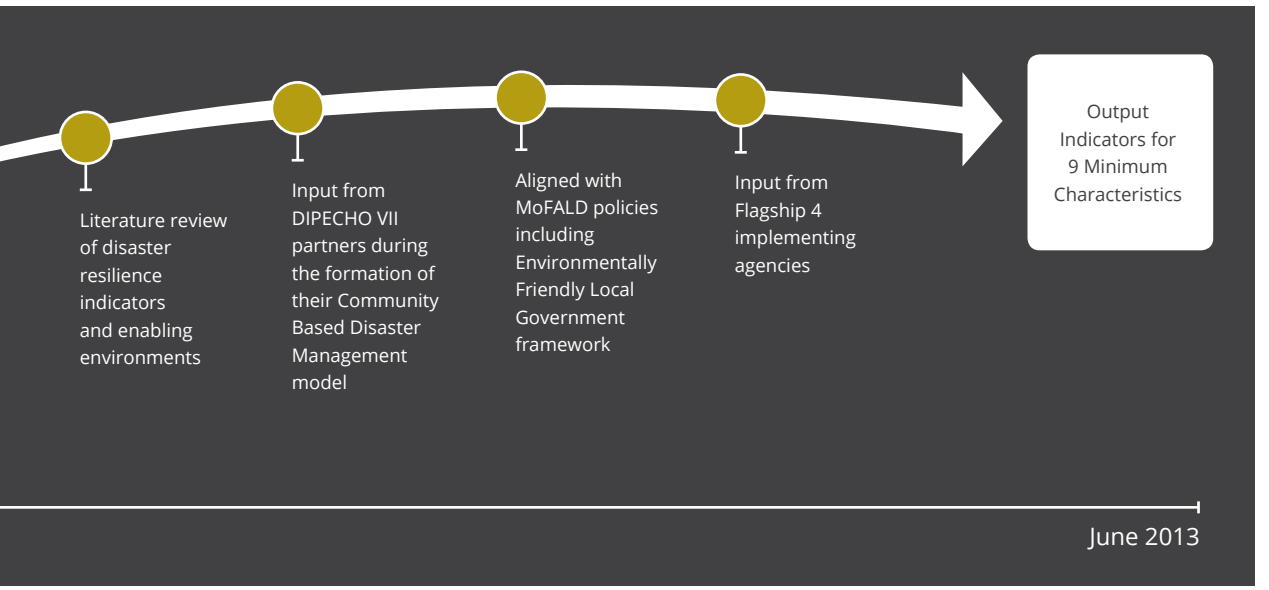
- Ministry of Federal Affairs and Local Development *2012 Local Disaster Risk Management Planning guidelines*
- Ministry of Federal Affairs and Local Development 2013 *Enviromentally Friendly Local Government framework.*
- ADPC 2006, *Critical Guidelines: Community-based Disaster Risk Management*
- DFID 2011 *Defining Disaster Resilience: a DFID approach*
- Sudmeier-Rieux, Jaboyedoff & Jaquet 2013 *Operationalising 'resilience' for disaster risk reduction in mountainous Nepal*
- IFRC 2012 *The road to resilience: Bridging relief and development for a more sustainable future*
- Twigg 2009 *Characteristics of a Disaster-Resilient Community: A guidance note (2nd edition)*
- Hyogo Framework for Action, 2005-2015

See Annex 2 for a detailed list of all example indicators developed.

How to use these indicators

When designing a disaster management/ risk reduction intervention it is recommended that:

- Interventions aim to include the majority of the indicators into their log frames.
- In some circumstances not all minimum characteristics or indicators will be applicable. In this case, the organisation should attempt to identify how these gaps will be managed (for example forming partnerships with other organisations).



Future Development

Flagship 4 will continue to collect and share lessons about how the characteristics have been applied, as well as seek feedback on the operationalisation of the characteristics and indicators with suggestions for modifications. This will include, but is not limited to:

- Testing how accurately each characteristic promotes the development of disaster resilience at the community level
- Assessing which characteristics and subsequent indicators are missing or need to be reframed, in particular looking at the urban context
- Developing outcome and impact indicators that reflect the efforts and work at the community level.

Background Note

More about Flagship 4

Since the adoption of the Hyogo Framework for Action at the World Conference on Disaster Risk Reduction (2005),the Government of Nepal has been leading a consultative process for the review of its institutional mechanisms and policy framework. In Nepal, the Government approved the National Disaster Risk Management Strategy in 2009, which outlines priority areas for actions on disaster risk reduction. With the Disaster Risk Management Act still pending approval, the Government has launched the Nepal Risk Reduction Consortium (NRRC) in order to implement the identified priorities, which are captured in the 5 Flagship areas. The strategy outlines priority actions such as the establishment of a national framework that includes multi-stakeholder national and district authorities for disaster risk management and the delegation of responsibility for local-level disaster risk reduction and emergency response to Village/ Municipality Development Committees (the lowest level of local government).

Flagship area 4 focuses on integrated Community Based Disaster Risk Reduction/ Management (CBDRR/M) across Nepal. It is a coordination and advocacy mechanism that aims to build a common understanding and approach among the many stakeholders contributing to CBDRR/M activities, to track progress against national targets and build communities' resilience to disasters across the country.

Flagship 4 expected outcomes

Flagship 4's strategy is to provide a technical framework and references to partners and to facilitate quality outcomes for on-going and planned CBDRR projects. The following seven outcomes have been identified so far:

1. Establish a functional mechanism for coordination & collaboration of CBDRR issues
2. Support development of common tools for CBDRR planning, implementation and monitoring and evaluation
3. Facilitate the process to identify hazard prone districts using secondary data
4. Support CBDRR advocacy in the planning, implementation and mainstreaming of disaster risk reduction / management into development at municipality, district & national levels
5. Information Platform for exchange of information on CBDRR in Nepal
6. Monitoring and evaluation of CBDRR progress nationally
7. Foster greater investment in CBDRR in Nepal

Who is involved in Flagship 4?

As of the beginning of 2013 Flagship 4 has over 100 partners and members including Government Ministries, NGOs, INGOs, UN agencies, Red Cross / Red Crescent Movement, Community Based Organisations, researches and others. For a full list of all the Flagship 4 members see Annex 1.

FIGURE 4: **Flagship 4 target**

How to become a Flagship 4 member
To become involved in Flagship 4, receive regular updates on Flagship 4 activities including workshops, register online at *www.flagship4.nrrc.org.np*

Criteria to be a Flagship 4 partner

Flagship 4 partners are those agencies implementing community based disaster risk reduction interventions in Nepal who meet the following criteria and make specific reference to being compliant with Flagship4:

- Registered their project with the online Project registration database. This database tracks who, what, where disaster risk management projects are happening across Nepal and can be downloaded on the website at **www.flagship4.nrrc.org.np/project-mapping-new**
- State in intervention proposals, how the minimum characteristics (and preferably output indicators) will be included. If the minimum characteristics are not able to be included, the organisation should attempt to identity how these gaps will be managed (for example forming partnerships with other organisations).
- Completed the project tracking survey after 12 months of implementation of their intervention *www.flagship4.nrrc.org.np/pts/load*

Flagship 4 Website

www.flagship4.nrrc.org.np or

Email the Flagship 4 Coordinator;

Becky-Jay Harrington *flagship4@nrrc.org.np*

Linkages with other Flagships

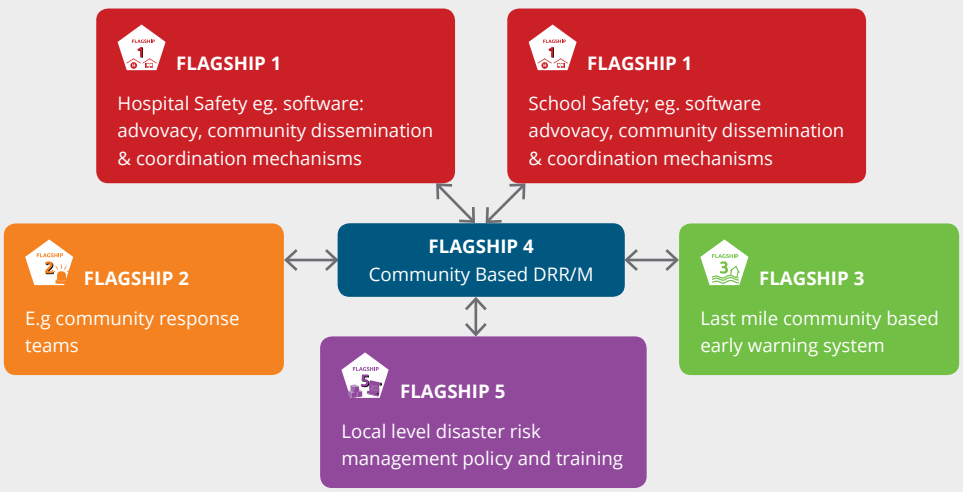
The Nepal Risk Reduction Consortium was formally established by the NRRC Steering Committee, chaired by the Ministry of Home Affairs, in 2011. For more information on the NRRC see *http://un.org.np/coordinationmechanism/nrrc*

The NRRC consists of 5 flagship areas, identified jointly by the Government of Nepal, NRRC, and international partners, in accordance with the National Strategy for Disaster Risk Management and Hyogo Framework for Action

1. School and hospital safety
   a. School safety – structural and non-structural aspects of making schools earthquake resilient (Ministry of Education / ADB)
   b. Hospital safety – structural and non-structural aspects of making hospitals earthquake resilient (Ministry of Health & Population / WHO)
2. Emergency preparedness and response (Ministry of Home Affairs / UNOCHA)
3. Flood management in the Kosi river basin (Ministry of Irrigation / World Bank)
4. Integrated community based disaster risk reduction/management (Ministry of Federal Affairs and Local Development / IFRC)
5. Policy/Institutional support for disaster risk management (Ministry of Home Affairs / UNDP)

Communities bear the brunt of disasters in Nepal; disasters that cost not only lives and property but also set back development gains. These same communities are also at the forefront of disaster risk reduction and preparedness. It is important that work undertaken by Flagship 4 partners in the community is coordinated at both the policy and operational level with the other flagships. This collaboration will create opportunities to capitalise on efforts already being made, increase coordination and information pathways at the community level and prevent the duplication of efforts.

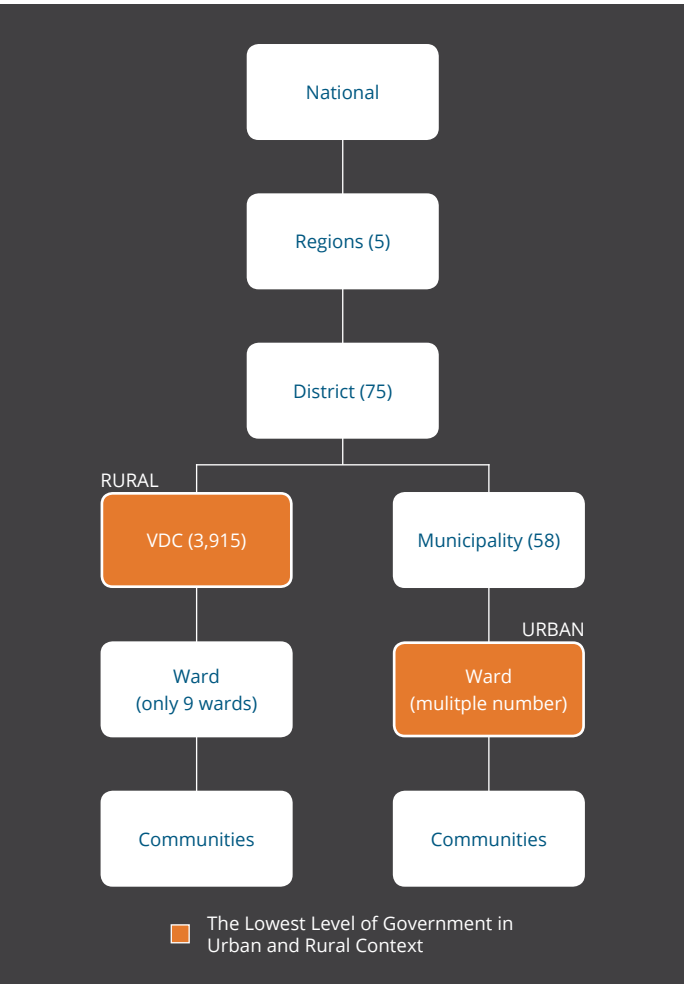
FIGURE 5: **Linkages between Flagship 4 and other Flagships**



Local Government Structures and Plans

Outlined below is a breakdown of the different local government structures involved in disaster management. Structures differ slightly for municipality and rural areas.

FIGURE 6: **Breakdown of Nepal's' Local Government Structure**



Local Disaster Risk Management Plans

The Ministry of Federal Affairs and Local Development finalised disaster risk management planning guidelines for local Government in 2012. All guidelines aim to provide direction to government agencies, non-government organisations and communities on how to formulate and implement disaster risk management plans, with the aim to include identified priority actions for disaster risk reduction / management into district development plans and budgets.

The plans include:

Local Disaster Risk Management Planning Guidelines (LDRMP)

The LDRMP guidelines provide direction and guidance on how to develop a disaster risk management plan at the VDC/ municipality level. The guidelines have become instrumental in formally providing guidance on how to establish institutional organisational bases at the local level such as disaster management committees at VDC/municipality, ward and community levels.

The LDRMP aims to link disaster risk management planning, and subsequent identified priorities, with existing Government planning and budgeting processes like the district development plan. This mainstreaming mechanism has helped to promote disaster risk management /

reduction as a priority area at the local level and works towards achieving the National Strategy for Disaster Risk Management and Hyogo Framework for Action.

For a copy of the plan visit *www.mofald.gov.np/mld/uploadedFiles/allFiles/LDRMP.pdf*

Community Disaster Management Committee (CDMC) Terms of Reference

The CDMC terms of reference provides guidance to local Government on how to formally establish a disaster management committee at ward level in a municipality. This will be included as annex to the LDRMP.

District Disaster Risk Management Plan (DDRMP)

The DDRMP provides guidance on how to develop a disaster risk management plan at the district level. A copy of the plan can be found at *www.mofald.gov.np/mld/uploadedFiles/allFiles/FINALDDMPGUIDELINE.pdf*

Photo Credit: NRRC

The poor construction quality of buildings is one of the contributing factors to Kathmandu's high risk to earthquakes.

Characteristic 1

Organisational Base at VDC/Ward and Community Level

Characteristic 1 requires a functional organisational base at VDC/ward and community level for the implementation and sustainability of DRR. This base addresses the issues of protection, social inclusion (including gender balance), community ownership and participation and follows DRR initiatives.

Disaster Management Committees create an important vertical and horizontal coordination mechanism at the community / ward and VDC level. Disaster Management Committee's also play a critical role in disseminating information and strengthening links within and outside the community.

In order to increase involvement and ownership of disaster management activities, the committee needs to include a wide representation of community members. Research suggests that there is a direct correlation between participatory approach and increased ownership of disaster risk reduction activities (The Asia Disaster Preparedness Centre, 2010). IFRC (2013) observed that '…community cohesion ie. relationships within the community were seen to contribute to resilience by facilitating collective action in response, organising activities and sharing assets'.

The Ministry of Federal Affairs and Local Development have now approved terms of reference for Disaster Management committees at VDC / municipality level and ward level (for municipalities only), in Annex 1 in the Local Disaster Risk Management Planning guidelines. These terms of reference provide local Government with a framework to establish a committee and outline actors to be involved (including marginalised groups), roles and responsibilities of the committee.

Establishing a specific organisational base for disaster management is not always possible at the community level. In this instance, other existing organisational structures are encouraged to include disaster management issues into their mandate.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
1.1*	VDC/municipality DM committee (LDMC) exists with roles and responsibilities in accordance with the LDRMP guidelines	Minutes of Meeting, ToR of the committee, VDC council minutes of meeting
1.2	Community DM committees (CDMC) or designated local level disaster management body exist with roles and responsibilities	Minutes of Meeting, ToR of the committee
1.3	Decisions by the committees are fed back to all VDC/ municipality / community groups and who have rights to modify decisions	Social audit, Posting meeting minutes in public areas
1.4	33% Committee membership at VDC / community levels are represented by vulnerable groups, and discussion include issues specifically related to vulnerable groups	Minutes of Meeting
1.5	Coaching and support is given to vulnerable groups representatives in the committees, like community leadership training.	Minutes of Meeting
1.6	% of other established community groups that have disaster risk management as regular agenda item	Minutes of meeting

Note these are only key example indicators, there have been further example indicators developed, see Annex 3 for more details.

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

Photo Credit: NRCS

CHARACTERISTIC 1

Disaster Management Committees in Kathmandu Valley

Nepal Red Cross Society (NRCS)/British Red Cross

Every day in Kathmandu Valley the risk of a catastrophic earthquake looms, a risk that is exacerbated by Kathmandu Valley rapidly growing with 6,000 new buildings constructed each year, often in a haphazard manner (World Bank, 2013). The Nepal Red Cross Society in partnership with British Red Cross are working in 46 Municipal wards and 20 VDCs in the Kathmandu valley with their Earthquake Preparedness and Safety project. The project includes supporting the establishment of Disaster Management Committees in 30% of Kathmandu Valley's municipal wards and VDCs. The establishment of local-level committees focused on disaster risk reduction/ management is one of Flagship 4's 9 minimum characteristics for a disaster resilient community. Specifically, characteristic 1: organisational base at the VDC/ward and community level.

The Earthquake Preparedness and Safety project has established community based Disaster Management Committees in 30% of the municipal wards and VDCs in Kathmandu valley alone

In order to institutionalise the establishment of ward-level committees in municipalities, the project developed, in partnership with the Ministry of Federal Affairs and Local Development, an annex to the Local Disaster Risk Management Planning guidelines. The annex provides a term of reference for the establishment of these Disaster Management Committees, specific to the urban context.

The Community Disaster Management Committee annex outlines the ward level structure, roles and responsibilities of the committee. The committee aims to be a coordination mechanism for ward level disaster risk reduction / management activities that engages not only disaster actors, but a broad range of actors from the community including representatives from parent teacher associations. It is also a focal point for disseminating disaster messages to the community. The committee formalises a vertical coordination structure on disaster management with municipal and district level governance and organisational bodies.

By April 2013 all 66 areas that the project is working in have established a Disaster Management Committee. These Committees are undergoing training on disaster related activities and will soon begin formulating local level disaster risk management plans.

The response capacity of the Disaster Management Committees will be tested during a national simulation planned for 2014. The simulation will test the links being developed between national and district-level response to the VDC/ward level.

FOR MORE INFORMATION

Bristish Red Cross Society and Nepal Red Cross Society. *Earthquake Preparedness and Safety Program: Review and Planning July 2012*

www.nrcs.org

CHARACTERISTIC 1

Building Confidence Through Disaster Management Committees

Photo Credit: ActionAid

ActionAID

Raising awareness of risk and its underlying causes is crucial in reducing vulnerability to disasters. Through the"Disaster Risk Reduction through Schools" project, ActionAID Nepal identified that in the areas they were working in, there was no organisational base responsible for disaster-related activities. To address this gap, ActionAID led the establishment of Disaster Management Committees at the school and community levels, focusing on the inclusion of poor and marginalised communities in Banke, Sunsari, Udayapur, Makwanpur, Rasuwa, Kaski, and Kathmandu districts. This aspect of ActionAID's project addresses characteristic 1 of Flagship 4's 9 minimum characteristics: an organisational base at the VDC/ward and community level.

In ActionAid's experience, the establishment of Disaster Management Committees has created a mechanism for the delivery of services to those affected by disasters. The committees have provided a tool for local-level resource mobilisation, allowing communities to prepare and respond to

Disaster Management Committees work as a coordination mechanism for VDC actors. In response to a fire that affected 25 families, the Disaster Management Committee in Matehiya, Banke, worked with the Nepal Red Cross Society district chapter and Banke District Disaster Committee, to raise 260,000Rs for recovery efforts.

disaster risks with a collective and organised approach.

In establishing Disaster Management Committees, ActionAid focused on ensuring the committees were socially inclusive with participation of men, women and marginalised groups. Women now have the opportunity and support to participate actively in the committee and decision-making process.

Committees established community-based disaster preparedness and contingency plans in order to promote sustainable disaster risk reduction at the local level. Committee members were also trained in skills such as first aid, search and rescue, and fire fighting to build their capacities for disaster response.More over, the committees have worked as active coordination mechanisms among a variety of organisations in the aim that disaster risk reduction activities are a collective effort. ActionAID has found that the established Disaster Management Committees are an effective accountability mechanism, resulting in increased buy-in and transparency of disaster risk reduction efforts.

One of the challenges experienced when establishing a Disaster Management Committee was the fatalistic attitude of community members and perceived ineffectiveness of preventative and preparedness measures. However over time, with training and capacity building initiatives, this attitude has changed with communities seeing the benefits in organising themselves and preparing for disasters.

FOR MORE INFORMATION

www.actionaid.org/nepal

Photo Credit: IFRC

CHARACTERISTIC 1

Community-Based Disaster Risk Management

Nepal Society for Earthquake Technology (NSET)

Acknowledging that neighbourhoods and communities are the first ones to help each other during any disaster situation, the Nepal Society for Earthquake Technology (NSET) implemented a project to address Community Based Disaster Risk Management in Alapot VDC, Kathmandu Metropolitan City Ward-18, and Lalitpur Sub-Metropolitan City Ward-12, with funding support from Lutheran World Federation. The aim of the program was to pilot an institutionalisation of disaster risk management efforts at the lower most administrative units of the local government

NSET supported the formation of local Disaster Management Committees in each of the three projectwards / VDCs, with a minimum of 30% of committee members being female. This initiative recognises that a resilient community is organised

A resilient community is organised; and has a functional organisational based that owns, discusses and acts on disaster risk management initiatives.

and has a functional organisational base that owns, discusses and acts on disaster risk management activities.

The project was initiated with a 5-day training program on Community Based Disaster Risk Management conducted for members of the three Disaster Management Committees, including the Heads of Ward/ VDC, who lead the Disaster Management Committees, and the concerned local authorities. Over the course of the preliminary training, the participants were introduced to basic knowledge and skills to allow them to enhance the quality of disaster risk management activities in their respective communities and initiate new, community-led disaster risk management projects.

The trained persons are now capable of planning and implementing community-based disaster risk management initiatives. Disaster Management Committees have planned to run community-level pilot activities, such as raising awareness in schools and masons' trainings, to enhance disaster resilience through local initiatives. Over the course of the NSET project, approximately 3500 people were direct beneficiaries of the trainings held by the Disaster Management Committees.

Disaster Management Committees establish:

- Coordination Mechanisms
- Sustainable Institutions
- Avenues for dissemination of information
- Provide mechanism to accessing resources for communities

FOR MORE INFORMATION

www.nset.org.np

CHARACTERISTIC 1

Community Disaster Management Committees

Photo Credit: IFRC

UNDP

To prepare communities for disaster, and potentially mitigate the potential impacts, UNDP is working with a local implementing partner, ECARDS, to facilitate the formation of a Disaster Management Committees in 6 DolakhaVDCs: Khare; Chankhu; Marbu; Suri; and Jhyaku.

Disaster Management Committees are comprised of at least 11 members nominated by the community; with each committee encouraged to have 40% membership of women and marginalised groups. UNDP worked closely with the Disaster Management Committee members to develop the community's resilience through the use of local resources, community mobilisation techniques, designing and implementing appropriate mitigation initiatives, and strengthening community before, during and after disasters. This collaborative initiative is being developed as per the Local Disaster Risk Management Plan guidelines developed by Ministry of Federal Affairs and Local Development.

UNDP is assisting the Community Disaster Management Committees in Dolakha

to become the centre for disaster risk reduction information and developing coordination mechanisms between the Community Disaster Management Committees and local government bodies, such as the VDCs. These collaborative approaches are helping to develop a sustainable institution in the community level and which lessons can be replicated in other areas. Committees for example, were able to access resources from the District Soil Conservation Office, which provided the community with more than 2500 different types of plants, including bamboo, badahar, kutmero, khaniyu, lapsi. Plants were planted as an agreed mitigation measure along high risk slopes to prevent recurrent landslides during monsoon season.

One Community Disaster Management Committee found after conducting a market study, that there was likely to be high demand for seasonable vegetables resulting from a new workforce being employed in the nearby construction of the Upper Tama Koshi Hydro Power Plant. The committee recognised the opportunity to develop market linkages and subsequently diversify livelihood options of the local people.

Through the Community Disaster Management Committee, there was wide consultation with local stakeholders (including the VDC secretary), which resulted in the access to financial and technical assistance from the VDC and the District Agriculture Development Office to organise vegetable farming trainings for poor and marginalised community members, specifically targeting women. The committee also identified fertile land for growing of plants and crops.

UNDP worked closely with the Community Disaster Management Committee members to develop the community's resilience through the use of local resources, community mobilisation techniques, designing and implementing appropriate mitigation initiatives, and strengthening community before, during and after disasters.

FOR MORE INFORMATION

www.np.undp.org

Photo Credit: IFRC

Characteristic 2

Access to DRR Information

Characteristic 2 institutes coordination mechanisms and partnerships to ensure all community members have access to disaster risk reduction / management information. It involves local, district and national level government structures, civil society organisations, the private sector, and vulnerable groups, while simultaneously including linkages to key institutions such as schools and hospitals.

Characteristic 2 promotes a number of aspects of resilience; community cohesion, connectedness and knowledge sharing. Community cohesion seeks to create positive relationships within the community, which in turn create an environment for collective action on disasters including mitigation, preparedness and response activities. This includes creating an environment where information is actively shared between community members and is socially inclusive.

Communities are more resilient when they have positive links within the community and with external stakeholders such as local government or non-government organisations. IFRC 2013 reports that connectedness promotes resilience, as community members are able to '…access technical expertise, specialist services and support and also external resources including funds'.

A formal example of this may include a representative from the School Management Committee being involved in the Community Disaster Management Committee and actively disseminating information and decisions learned back to the school and vice versa.

Strengthening these links within and outside the community can lead to increased connections, increased knowledge and information sharing on disasters and the eventual empowerment of communities.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
COORDINATION MECHANISMS AND PARTNERSHIPS		
COMMUNITY LEVEL		
2.1	CDMC, or designated local level disaster management body, is represented at LDMC by ward level representative	Minutes of meeting
2.2	CDMC representative, or representative from designated local level disaster management body, is connected to National network CDMC	Certification from national network & participation in network meetings
VDC LEVEL		
2.3	Every LDMC has representation at district level, through district level disaster management committee	Minutes of meeting
2.4	LDMC have facilitated discussion between neighboring communities and the potential support they can offer each other/receive during a disaster	LDRMP, Minutes of meeting
DISSEMINATION OF INFORMATION		
2.5	Messaging on hazards is consistent with NRRC communications group agreed messaging	Partner report, NRRC Communications group
2.6*	# communication mediums established by LDMC to reach communities, including identified vulnerable groups	KAP study
2.7	Community members aware of their rights and entitlements according to the provision in Natural Disaster Relief Act including rights of socially excluded	KAP study
2.8	LDMC connected with VEECCC (village energy and Environment Climate Change committee), if established	Partners report, VEECCC
2.9	LDRMP / community DRM Plan is disseminated and understood by the community members, including vulnerable groups	KAP study

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 2

Earthquake Safety in Schools

Photo Credit: NRRC

UNICEF

It is estimated that there are approximately 82170 public school buildings in Nepal, of which over 50% require extensive retrofitting (NRRC 2012). In the instance of an earthquake of IX intensity during school hours, the fatalities in school children alone is estimated to be over 110,000 with another 300,000 injured in Nepal (NSET 2008).

In 2011 UNICEF, in collaboration with the Department of Education and Nepal Society for Earthquake Technology (NSET) initiated the 'School Earthquake Safety Program' that supported 360 schools in Kathmandu, Lalitpur, and Bhaktapur districts. The objective of the programme was to create institutional linkages with schools in Kathmandu Valley to ensure

Since the 18 September 2011, earthquake demand for earthquake drills from teachers and students has increased. Schools have started reporting news on earthquake incidents during morning assembly through Student Safety clubs.

When the earthquake struck, I was first confused about what exactly it was, but I realised that it might be an earthquake which I have been learning in school. So, I remembered everything and covered myself under the table in my room. Twelve year old– Anish Adhikary

community members, particularly education workers, teachers, students, and parents, have access to information on the hazards, vulnerabilities, and risks associated with earthquakes.

Through this process, a total of 713 school supervisors and teachers (45% female) received training and went back to their schools, organising School Earthquake Safety Program orientation sessions in their respective schools for staff and school committee members. With support from other teachers and staff members, the trained teachers followed-up by conducting orientation meetings for school children. With support from children's clubs, trained teachers also organised earthquake simulation drills for the identified schools with the goal of making all students aware of facilities and services available pre-, during, and post-earthquake and how to access them.

Ensuring information is communicated in a child-friendly manner is essential to promoting earthquake risk awareness and safety within the school system. Age-specific information and education materials for children from pre-primary children to junior grades on earthquake safety are currently being developed to help communication efforts.

This intervention has provided an opportunity to connect school and community through children. This model has the potential for replication in other regions to reach more schools. An assessment on how the students coped with the September 2011 earthquake found that most students utilised the knowledge of 'drop, cover and hold on' during the last earthquake. Although regular monitoring and evaluation of all schools has proven challenging; drills and discussions on earthquake safety are planned to take place on a reoccurring basis to ensure quality implementation.

FOR MORE INFORMATION

UNICEF. *Children's Charter for Disaster Risk Reduction.* 2012.

www.unicef.org/infobycountry/nepal.html

Photo Credit: UNDP

CHARACTERISTIC 2

Environmental Conservation and Disaster Risk Reduction Clubs

UNDP

Since the earthquake hit eastern Nepal on 18 September 2011, there has been an increase in the number of community-run initiatives implemented to strengthen disaster resilience at the local level.UNDP has increased its awareness-raising activities implemented by a variety of student-led groups,aiming to provide disaster risk reduction information to all community members.

With financial assistance from the UNDP, the Nepal Public Awakening Forum formed community Environmental Conservation and Disaster Risk Reduction (ECO-DRR) clubs in Choukhawang, Bhalakkcha, Peugha, Khare, Muru, and Chhiwang VDCs of Rukum district. The Clubs are comprised of 10 to 20 boys and girls (with 50% female participation in most clubs). ECO-DRR clubs have initiated a number of awareness activities, publish regular wall magazines, and campaign door-to-door to disseminate information on issues such as environment conservation, climate change adaptation, and disaster risk reduction.

In the past, we were not very aware about environmental conservation, climate change adaptation and disaster risk management issues. As students, the school and community often did not listen to us, but after we established the ECO-DRR club, we are aware of how we can prepare and respond to these issues and our community is now listening to us. Deepak Oli, Chairperson of the Yuwa Janajagaran ECO-DRR Club, Jhulneta.

ECO-DRR clubs have become an effective avenue for knowledge and information dissemination and sharing in their communities. The clubs work closely with community stakeholders and local government, including the District Soil Conservation Office, District Forest Office, and VDC Office to ensure messaging is accurate and coordinated. The clubs have also initiated a number of community-run plantations to prevent landslides and have encouraged school administrations to incorporate various disaster and climate risk reduction / management activities, such as disaster simulations and exercises into school calendars.

The members ECO-DRR clubs have not only become agents of change, but have provided a means to strengthen communities'awareness of the hazards, vulnerability, and risks unique to their location. Working with student groups such as ECO-DRR clubs is a replicable model to increase access to DRR information in many districts across Nepal. Students are essential actors in the goal of strengthening a community's disaster resilience.

Student's activities on these issues compelled us to think more about these sensitive issues and we are now making our school safer .We lost five students last year due to landslides and now after this awareness campaign, this year thankfully we have not suffered any losses, Mr. Deependar Kumar Oli, Principal, Yuwa Janajagarna Secondary School, Jhulneta, Khara, Rukum.

FOR MORE INFORMATION

www.np.undp.org

Ensuring all partners communicate consistent messages with the public is crucial for raising awareness and limiting confusion in disaster risk reduction. The NRRC Communications Group brings partners together to agree on common messages for communications. How those messages are communicated can vary (such as songs) but the core message must remain consistent to reduce conflicting messages and enhancing collective efforts in raising awareness to reduce risk

NRRC Communications Group

Chaired by the Ministry of Home Affairs with BBC Media Action as Technical Lead, the Nepal Risk Reduction Consortium (NRRC) Communications Group was established in 2012. The purpose of the NRRC Communications Group is to bring together stakeholders working in disaster management / risk reduction to coordinate communications activities and promote consistent messaging. The aim is to prevent publication of conflicting messages to communities and maximise public awareness efforts. This is being achieved by agreeing on common messages for identified hazards. So far, this has included agreed common messages for earthquakes, landslides, and floods. Moving forward, the Communications Group will finalise common

messages for fire hazard and provide a list of 10 key multi-hazard messages.

The purpose of these common messages it to provide partners a list of agreed messages that can be customised for communications efforts. By working collectively, organisations can communicate consistent messages with the public and share good practices to strengthen efforts to raise awareness on mitigating, preparing and responding to risk.

Where to find agreed messages?

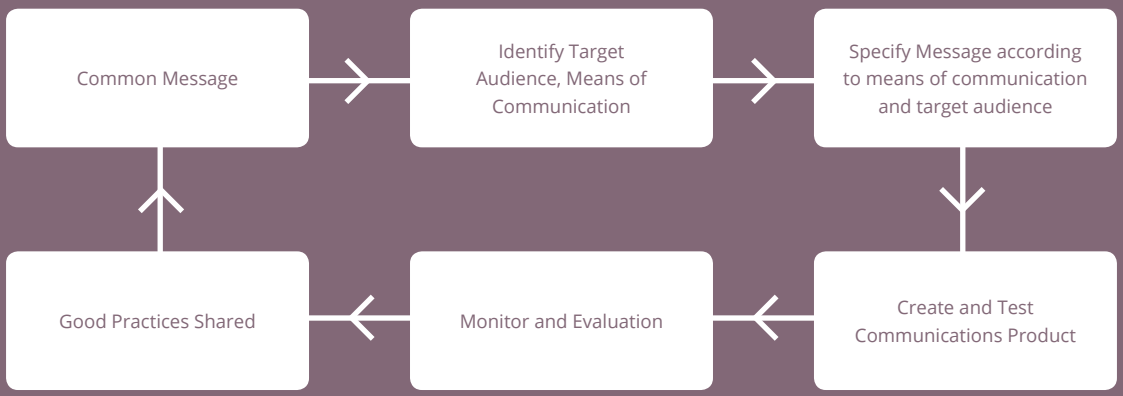
These common messages can currently be accessed at **www.un.org.np/coordiationmechanism/nrrc**

or contact Giovanni Congi, Public Information Coordinator for the NRRC at **giovanni.congi@one.un.org.**

How to Get Involved

Any disaster management and media stakeholders at the local and national levels are encouraged to use the common messages and provide inputs on improving the effectiveness of these messages. Those interested in becoming involved can email Giovanni Congi, Public Information Coordinator for the NRRC at **giovanni.congi@one.un.org**

FIGURE 8: **Standard Framework for Communicating DRR and response**



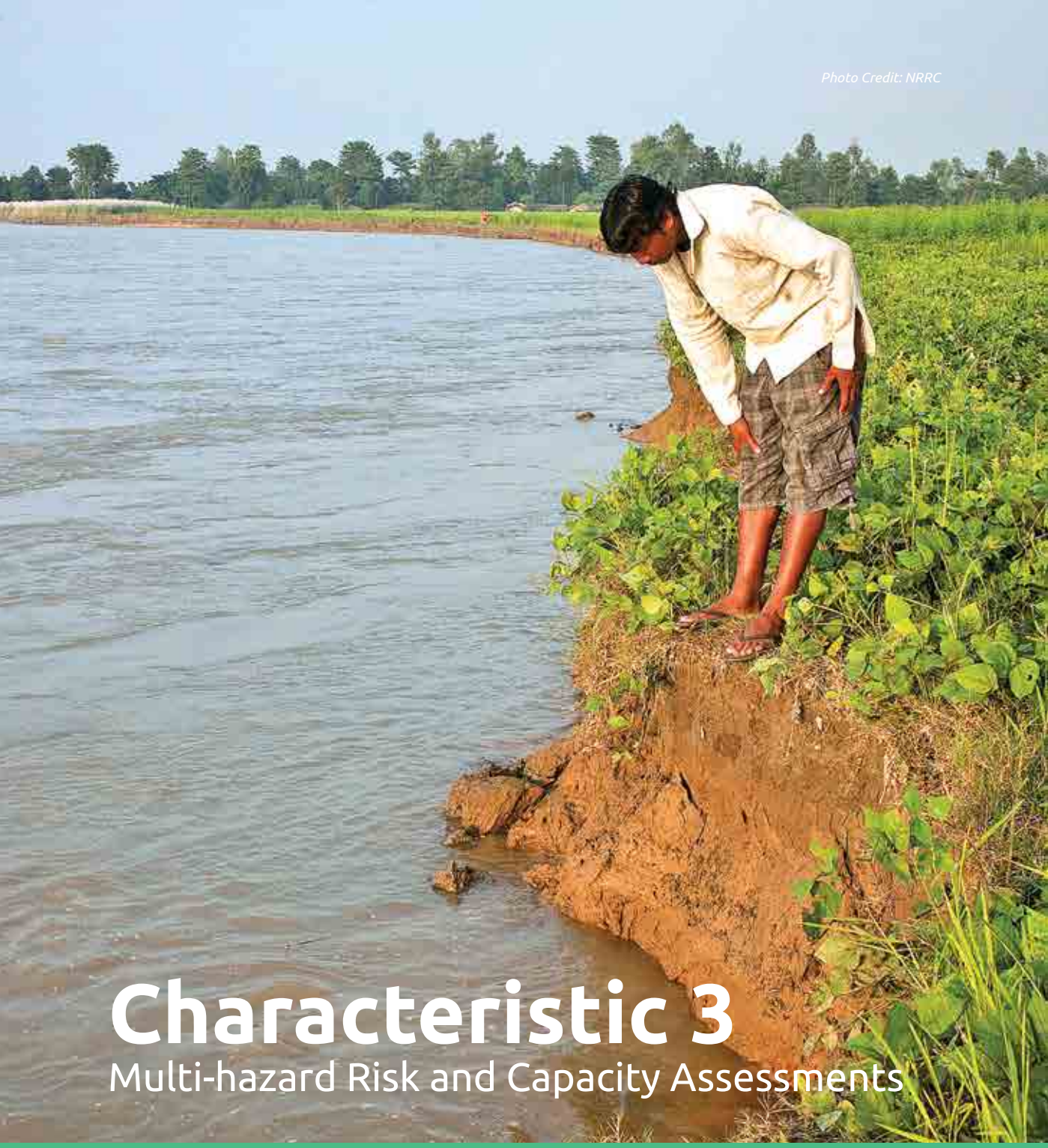


Photo Credit: NRRC

Characteristic 3

Multi-hazard Risk and Capacity Assessments

Characteristic 3 requires systematically ongoing, participatory, multi-hazard risk and capacity assessments to enable monitoring and evaluation of disaster risk reduction / management at the VDC/ward and community level. These assessments link into district and national monitoring and evaluation systems.

Multi-hazard risk and capacity assessments (otherwise referred to as vulnerability and capacity assessments or VCAs) provide a comprehensive picture of a communities hazards, vulnerabilities, risks and their current level of capacity to prepare, respond and recover from disasters. The step by step analytical framework outlined in the Ministry of Federal Affairs and Local Development's Local Disaster Risk Management Planning guidelines, provides a common foundation for organisations in Nepal to undertake assessments at the VDC and ward level.

Multi-hazard risk and capacity assessments allow communities, together with local government and organisations to identify the different aspect and causes of risk, identify cross cutting issues such as gender, power dynamics and climate change impacts and increase awareness and recognition of vulnerabilities and hazards on resilience capacity. It is important a participatory approach is used in the assessment as this increases the ownership of assessment findings by the community. As part of this process it's crucial that the most vulnerable members of the community are actively involved.

At the end of a multi-hazard risk and capacity assessment the community is provided with an in depth analysis of their hazards, risks and vulnerabilities. This assessment then directly feeds into the development of disaster management plans at the local level, which use this information to identify and prioritise activities to mitigate risks and prepare for disasters.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
3.1	Skills to carry out local level VCAs are established and maintained through support and training	Partners report, KAP study
3.2*	VCA conducted in accordance to the LDRMP guidelines	Partners report
3.3	VCA´s are conducted by community members and include people from vulnerable groups.	Partners report, KAP study, LDMRP
3.4	Climate variability or climate change projection information considered in community risk assessment	LDRMP

Note these are only key example indicators, there have been further example indicators developed, see Annex 2 for more details.

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 3

Assessing Community Risk in Remote Nepal

Photo Credit: Mission East

Mission East

Humla district, with an elevation ranging between 1500 and 7300m, is ranked 73rd of 75 districts in development indicators (Mission East, 3), making the remote mountainous district one of the most vulnerable in Nepal. With the majority of communities only accessible after days of walking, and limited helicopter transport, the district is largely cut off from humanitarian and development assistance. Numerous hydrological hazards regularly have a significant impact on communities, destroying fragile assets (land, livestock and shelter) without drawing national attention due to their small scale and isolated character. Mission East estimates that over two thirds of disaster events are not reported (Mission East, 4). Mission East has been working with humanitarian and development projects in Humla, in partnership with the local NGO KIRDARC, since mid-2007.

To address the isolated nature of the district, Mission East uses Vulnerability and Capacity Assessment called the Comparative Risk Assessment Tool, designed to require only minimal expertise so a community can perform it with little external guidance.

The Comparative Risk Assessment Tool is a low-cost Vulnerability and Capacity Assessment that allows easy replication in subsequent years.

The Comparative Risk Assessment Tool falls under characteristic 3 of Flagship 4's minimum characteristics: multi-hazard risk and capacity assessments.

The Comparative Risk Assessment Tool has an exhaustive data collection process conducted by expert geologist and hydrologists and locally trained personnel who collect data at the household level. Once the initial assessment is completed, updates do not require either equipment or professional expertise, meaning the cost to update the multi-hazard Comparative Risk Assessment Tool yearly is extremely low. This allows the trained community members to provide updates on the vulnerability and capacity of their respective communities both systematically and in an on-going manner, creating a self-sustained flow of disaster risk reduction information.

31 communities across Humla participated in the risk assessment process by identifying the experiences of hazards, observations of hazards, and historical data of disasters over the past 30-50 years. The communities, in collaboration with Mission East and partners, were then able to identify areas of the risk, based on the vulnerability data along with a hazard and vulnerability picture. The risk situation was then discussed at VDC level to formulate an evidence-based Community Disaster Preparedness Plan, which is used to inform planning and link to district and national-level monitoring and evaluation systems. Mission East is currently supporting Humla to devise a District Disaster Preparedness Plan based on the findings of the risk assessment performed in the 6 south Humla VDCs.

Regrettably, the results of the multi-hazard risk assessments across VDCs in the hilly and mountainous contexts produced similar risk rankings, making it difficult to decide which communities' activities to prioritise. Other challenges identified by the project was expanding this data collection process to both summer (high altitude) and winter (lower altitude) settlements of a same community and aligning with Flagship 4's approach of focusing CBDRR initiatives at the VDC level. As the mountainous region of Nepal is uniquely different from all other geographical regions, it requires a set of tools designed to address the specific context of the area. Though this challenge is a difficult one to overcome due to the isolated nature of these areas, Mission East has been working to address this through further testing.

FOR MORE INFORMATION

Mission East Nepal. *A review of vulnerability, hazards and disasters and in Southern Humla.* 2010.

www.miseast.org/en/nepal/home

Photo Credit: ActionAid

CHARACTERISTIC 3

Working with Schools to Assess Disaster Risks

ActionAID

The Disaster Risk Reduction through Schools project was implemented by ActionAID Nepal to involve communities from Bageshwori and Matiaya VDC in Banke district, Shyaphru and Ramche VDC in Rasuwa district, Kathmandu Metropolitan City, and Hetauda Municipality to build their resilience to disasters through active participatory means. ActionAid has developed their Participatory Vulnerability Analysis, a multi-hazard risk and capacity assessment that complies with the Vulnerability and Capacity Assessment from the Local Disaster Risk Management Plan.

The Participatory Vulnerability Analysis approach has communities identify and analyse the natural hazards facing them, and aims to empower community members to take action in partnership with other key stakeholders through a phased process of planning and decision-making. Participatory Vulnerability Analyses also help build accountability and increase community buy-in by ensuring information is shared transparently, and by putting in place mechanisms for checking progress and revising plans at regular intervals.

The Participatory Vulnerability Analysis approach has communities identify and analyse the natural hazards facing them, and aims to empower community members to take action in partnership with other key stakeholders through a phased process of planning and decision-making.

Using a Vulnerability and Capacity Assessment as a starting point to identify community vulnerabilities, the Disaster Risk Reduction through Schools project framework then focused on three key elements: people, power, and change. The ability to make tangible, lasting, and sustainable differences in the lives of vulnerable people is generated by interrelated developments: in their awareness and knowledge, in their capacity to organise and mobilise, and in their ability to influence policies and institutions. By using this framework, the project was able to empower vulnerable communities to implement holistic and systemic solutions stemming from the information gathered from a Vulnerability and Capacity Assessment.

ActionAID decided to make schools the centre of the programme as they recognised that they are hubs of community life. Through them, programmes can reach a wide constituency, mobilise people for action, and improve lives and livelihoods. ActionAid also focused on helping raise awareness and increase knowledge of disasters among the vulnerable, building a culture of prevention, encouraging multi-faceted dialogue about prevention and sensitising people to the effects of climate change and other people-made threats; poverty increases vulnerability to disasters, which, in turn, induces a state of powerlessness by those affected. One of the major challenges of the project was changing the manner in which community members approached disaster to one where risk reduction activities were seen as beneficial.

The experience gained through the Disaster Risk Reduction through Schools project demonstrates that when citizens and their institutions gain a deeper awareness and understanding of risks and hazards, threats and vulnerabilities can be tackled in a meaningful manner. Concrete positive changes can also be brought about in both the immediate and longer term, including providing better education and improved livelihoods for the most vulnerable.

FOR MORE INFORMATION

ActionAid International. *Participatory Vulnerability Analysis: A step-by-step guide for field staff.* 2005.

www.actionaid.org/nepal

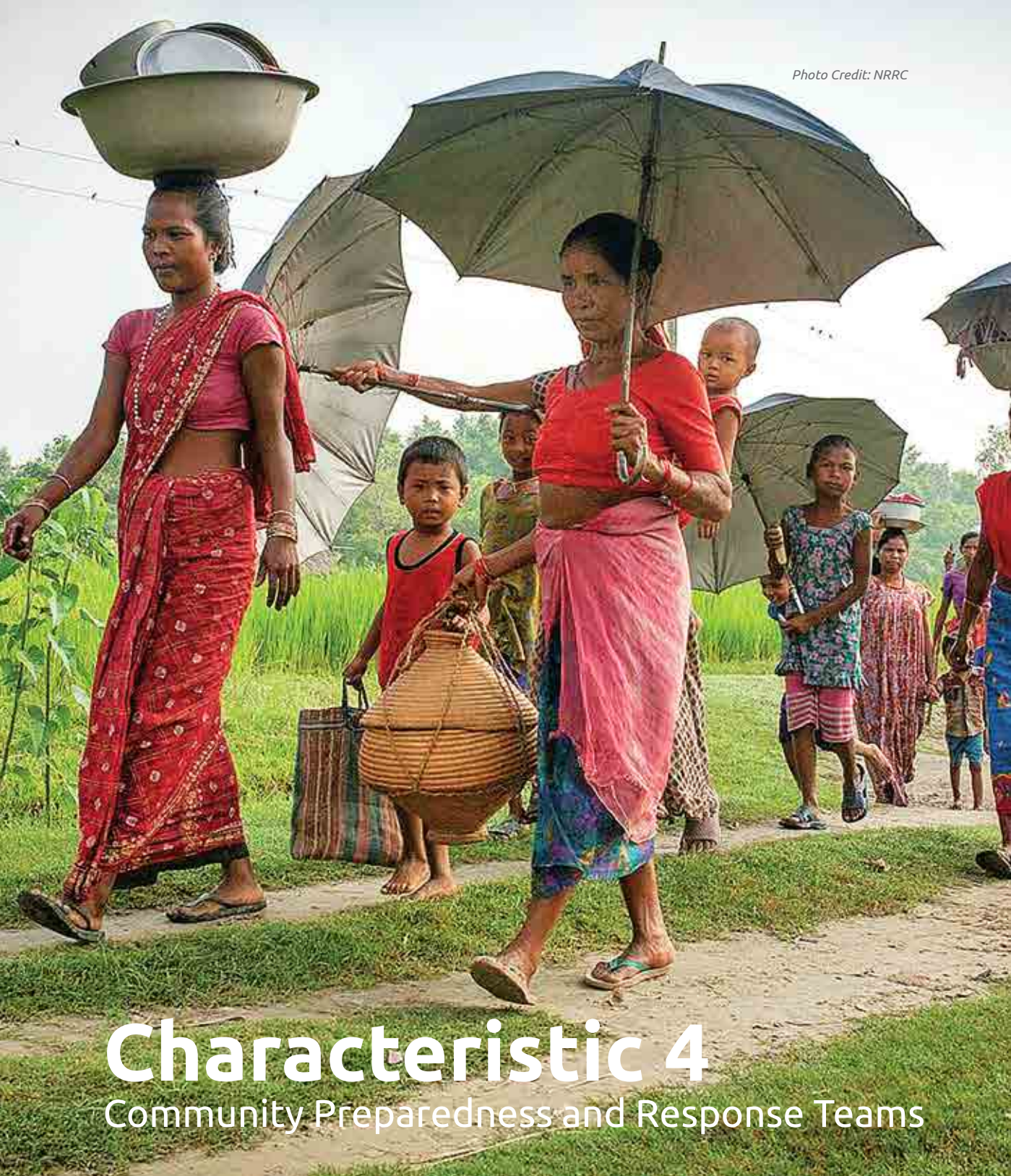


Photo Credit: NRRC

Characteristic 4

Community Preparedness and Response Teams

Characteristic 4 involves the establishment of community teams trained and equipped to provide hazard warning and evacuation information, light search and rescue, and basic first aid.

When a disaster strikes, the community and often those from neighbouring areas are the first to respond. To increase the capacity of those responding at the community and VDC level, its critical to provide members of pre-identified teams / taskforces with the appropriate skills to do so.

Establishing taskforces and providing the appropriate training and equipment empowers communities to undertake response activities. This preparation to respond to disasters is an important aspect in building a community's resilience and self-reliance in disaster preparedness and response. In addition, it supports the development of informal networks within and between communities, which is shown to increase social cohesion and subsequent community resilience.

The Local Disaster Risk Management Planning guidelines set out the roles and responsibilities of potential taskforces including; light search and rescue, 1st aid and WASH, information and early warning systems, relief management and rehabilitation and damage assessment and need analysis. Having a common standard of roles and responsibilities for taskforces allows greater collaboration between communities and VDCs when responding; as taskforces have received comparable training and equipment.

Simulation exercises have proven to be an effective way for communities to test their preparedness measures. They also increase community interest in preparing and developing knowledge on how to adequately prepare for their community and households for disasters.

Key Example Indicators

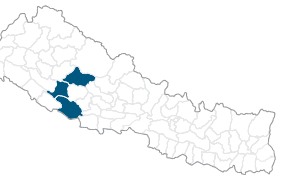
These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
4.1	# of task forces established at community / ward level	LDRMP, simulation exercise
4.2*	Task forces formed according to LDRMP guidelines (with roles and responsibilities) trained in preparedness and response, composing of at least 33% vulnerable groups	LDRMP, simulation exercise
4.3	Trained task forces have been acknowledged by VDC and district, with names and contact details included in respective DRM plans	LDRMP / DDMP / DPRP
4.4	Community and taskforces receive support from security forces in preparation for and during emergencies	LDRMP simulation exercise

Note these are only key example indicators, there have been further example indicators developed, see Annex 2 for more details.

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

Photo Credit: NRRC



CHARACTERISTIC 4

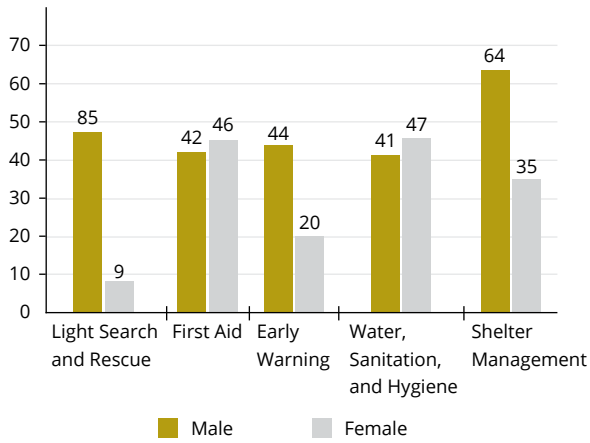
Establishing Community Taskforces in Mid-Western Nepal

ADRA Nepal

Between June 2011 and October 2012, ADRA Nepal implemented the "Strengthening Disaster Risk Reduction Capacities at community and district level in Nepal" project in Dang, Salyan, and Rukum districts in partnership with Nepal Red Cross Society. The objective of the project was to strengthen

"There were 8 people at the other side of the river. The flood had widened the river and current was increasing tremendously each hour. The Light Search and Rescue team was activated and the Community Disaster Management Committee immediately managed the rescue materials, followed their procedures and rescued those 8 stranded people. If local youth had not been mobilised, those 8 people would have lost their lives. Dev Kumar Chaudhary, CDMC chairman, Sonpur VDC, Raniyapur, Dang"

FIGURE 9: **Number of people trained**



There would have been more loss of life and property if ADRA had not implemented the disaster risk reduction project in the community and provided skills to the community members to save property and lives. Manni Chaudhary, community facilitator, Sonpur VDC.

the community's capacity to respond to disasters, particularly floods.

Five taskforces were formed in each of the project areas: Early Warning; Light Search and Rescue; First Aid; Water, Sanitation, and Hygiene; and Shelter Management. Each of the taskforces had criteria for member eligibility and vulnerable groups were included in every phase of the project activities including community selection, taskforce selection, planning, monitoring, and evaluation.

On August 3, 2012, Raniyapur community of Sonpur VDC, Dang experienced a flood and the community disaster management committee and its taskforces were activated. When the flood entered the community, members of the light search and rescue taskforce assisted community members to the designated safer place, prioritising elderly, children, differently-abled, and pregnant women. The First Aid task force members performed first aid to the injured and referred more serious cases to the health post. Among other duties, the Water, Sanitation, and Hygiene team ensured the water supply remained uncontaminated and safe to drink. The Shelter Management Team managed the settlement for the people in the shelter and available amenities such as toilets and clean drinking water.

There were three major challenges in implementing the community taskforces: the lack of equipment for all taskforce members; ensuring regular refresher training for all taskforce members; and the migration of the taskforce members for employment purposes. Despite these challenges, the community felt that the training provided to the taskforces was an essential part in protecting lives during and after the flood. It was felt that the taskforces, along with the community disaster management committee members help to manage panic and facilitate evacuation procedures in a calm manner.

Photo Credit: NRRC

Training Community Members to Respond

CHARACTERISTIC 4

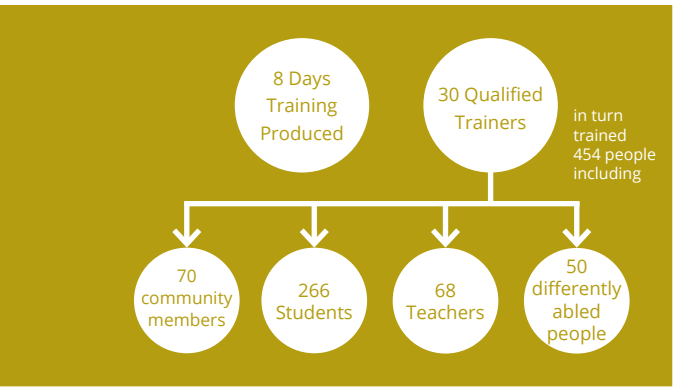
Merlin

Merlin Nepal is implementing a consortium project "Enhancing Emergency Health and Rehabilitation Response Readiness Capacity of Health System in the Event of a High Intensity Earthquake in Kathmandu Valley" in partnership with National Society for Earthquake Technology and Nepal Red Cross Society.

15 schools surrounding three hospitals (Tribhuvan University Teaching Hospital, Civil Service Hospital, and Sree Birendra Hospital of the Kathmandu Valley) were selected to pilot the project which aims to enhance knowledge, skills, and awareness around earthquake preparedness and response through the establishment of community taskforces.

An eight-day Training of Trainers course on first aid and search and rescue course was provided for 30 participants. These trained trainers then conducted three-day workshops in the 15 identified schools across Kathmandu Valley. Over the course of the pilot project, 454 people, 200 males and 254 females, received training including 70 community members, 50 differently-abled people, 266 students, and 68 teachers. These trainings have not only strengthened the capacity of the targeted population to address problems following

FIGURE 10: **NUMBER OF PEOPLE TRAINED IN 1ST AID AND SEARCH AND RESCUE**



a high intensity earthquake and established trained community teams, but have also increased motivation within communities to strengthen general earthquake preparedness.

In addition to their community taskforces, all qualified trainers are acting as facilitators in their schools and communities, running educational entertainment activities and participatory learning groups. This allows the trainers to continue practicing their new skills as well as enhance their volunteerism to NRCS and other community-based groups working in emergency preparedness and response.

As the project focuses on urban areas such as Kathmandu, ensuring community participation has proven to be extremely difficult. The transient population, lack of social cohesion, and time pressures have made it challenging to ensure community members participate in activities such as these. The training activities targeted within schools were much better attended; most of the school teachers and members of school management committees participated in the orientation, training, and other project activities.

Merlin is working to expand this project to Lalitpur and Bhaktapur districts and plans to expand the activities are currently underway at the community level. This includes: a Basic First Aid training; Light Search Rescue training; capacity support to six health facility management committees to enhance coordination and communication; expanding health professionals training to include ambulance drivers; and developing a set of emergency referral guidelines.

> **We cannot prevent an earthquake from happening, but can prepare ourselves for earthquake. We are living in an underdeveloped and poor country and do not have access to expensive equipment. However, we have conducted orientation and first aid training in our school and the community to help people to stay calm. First Aid and Light Search & Rescue training participants.**

FOR MORE INFORMATION

www.merlin.org.uk/nepal

CHARACTERISTIC 4

Establishing and Testing Taskforces

Photo Credit: Practical Action

Practical Action/ActionAID

Working together, ActionAid and Practical Action initiated a project in April 2012 focusing on increasing the resilience of poor and vulnerable people to mitigate, prepare for, and respond to multiple hazards in Pokhara sub municipality. The project is taking a multi-layered approach that includes strengthening institutional capacity in the municipality, building awareness and skills of the vulnerable community members and the disaster risk reduction actors, mainstreaming disaster risk into planning processes, and training community members in disaster preparedness and response.

In implementing these activities, the project is working in line with Flagship 4's 9 minimum characteristics for a disaster resilient community. The objective is to train community members in activities such as search and rescue and first aid, which falls under characteristic 4, community preparedness and response teams. This community-level action is being rolled out in line with the district disaster preparedness and planning process.

After implementing Disaster Management Committees in 18 Pokhara Sub–

The established taskforces are also linked to relevant municipal and district level task forces and institutions, such as the Nepal Red Cross Society and various security forces, to work together in emergencies

Metropolitan City wards, Practical Action and ActionAid worked together to define the role and responsibilities of different actors to respond to a disaster by forming taskforces under each of the Disaster Management Committees. Each ward-level Disaster Management Committee is comprised of five taskforces who were provided training on: search and rescue, early warning, first aid, water and sanitation, and shelter and food management. In the case of an emergency, other taskforces will be formed to align local level actions with district and national humanitarian clusters. Over one third of the taskforce members were women from the communities.

The established taskforces are also linked to relevant municipal and district level task forces and institutions, such as the Nepal Red Cross Society and various security forces, to work together in emergencies. In coordination with these groups, the Disaster Management Committee taskforces will run mock drills and simulation exercises to reinforce disaster response procedures, including the roles and responsibilities of each group and their interrelationships. These simulations are planned for 2013 and also provide volunteers the opportunity to practice using the rescue equipment provided to the respective Disaster Management Committees.

As many of those living in urban areas like Pokhara, are relatively new to the localities, the understanding of the hazards and connection with their neighbours is limited. However, local governments and stakeholders are working together to overcome this information gap actively working together to increase the profile of disaster management, increasing the dissemination of disaster information and increasing the capacity of the community to prepare and respond to disasters.

Over one third of the taskforce members were women from the communities.

FOR MORE INFORMATION

www.practicalaction.org/practical-action-nepal-office-1
www.actionaid.org/nepal

CHARACTERISTIC 4

Urban Community Preparedness and Response Teams

Photo Credit: NRCS

Nepal Red Cross Society (NRCS)/British Red Cross

As part of the Earthquake Preparedness and Safety project, the Nepal Red Cross Society and British Red Cross are working together on an ambitious training program in the three Kathmandu Valley districts: Bhaktapur, Lalitpur, and Kathmandu. This project is being implemented in 46 wards and 20 VDCs in the Kathmandu Valley.

Examining data from past First Aid and Light Search and Rescue trainings in the three districts, it was evident that the trainings provided were not proportional to the population of each municipality, leading to severe discrepancies in their respective response capacity to a major earthquake. To overcome this challenge, the Earthquake Preparedness and Safety project devised a training programme based on the ward populations and predicted impact of an earthquake. These estimations have led to a total project goal of training 15,000 people in First Aid and 5,000 in Community Action for Disaster Response (Light Search and Rescue) over the course of 3 years.

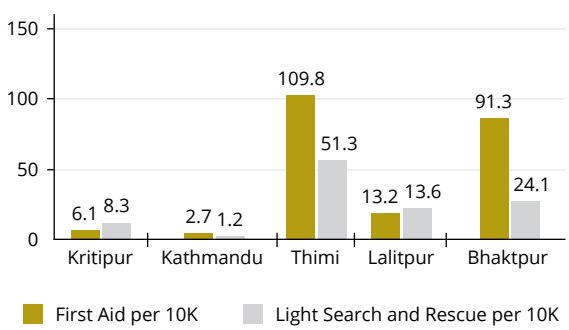
The focus in the project's first year was the development of trainers. Over the course of

The project aims to train;
- 15,000 people in First Aid, and
- 5,000 in Light Search and Rescue over a 3 year period

2012, 48 people were trained to teach first aid and 48 were trained to teach Community Action for Disaster Response. This capacity was in addition to the roster of trained trainers in Kathmandu Valley. Over 2013 and 2014 the goal is not only to complete the technical First Aid and Community Action for Disaster Response trainings, but also to link these community teams with their ward-level Community Disaster Management Committees, provide these committees basic equipment, and, in its last year, run a national simulation linking national mechanisms through to ward-level response groups.

In the past, trainings had developed human resources, but updating the database of participants to be activated in case of an emergency remains a challenging task. While planning the trainings, the Earthquake Preparedness and Safety project will support the Nepal Red Cross Society district chapters to maintain a roster of trained persons for all three Kathmandu Valley districts.

FIGURE 11: **COMMUNITY MEMBERS BEING TRAINED**



Thimi Municipality has the highest number of people trained in First Aid and Light Search and Rescue at 109 and 51 per 10,000, respectively.

FOR MORE INFORMATION

Nepal Red Cross Society:
Measuring cost benefits of community disater risk reduction in Ilam, Nepal

www.nrcs.org

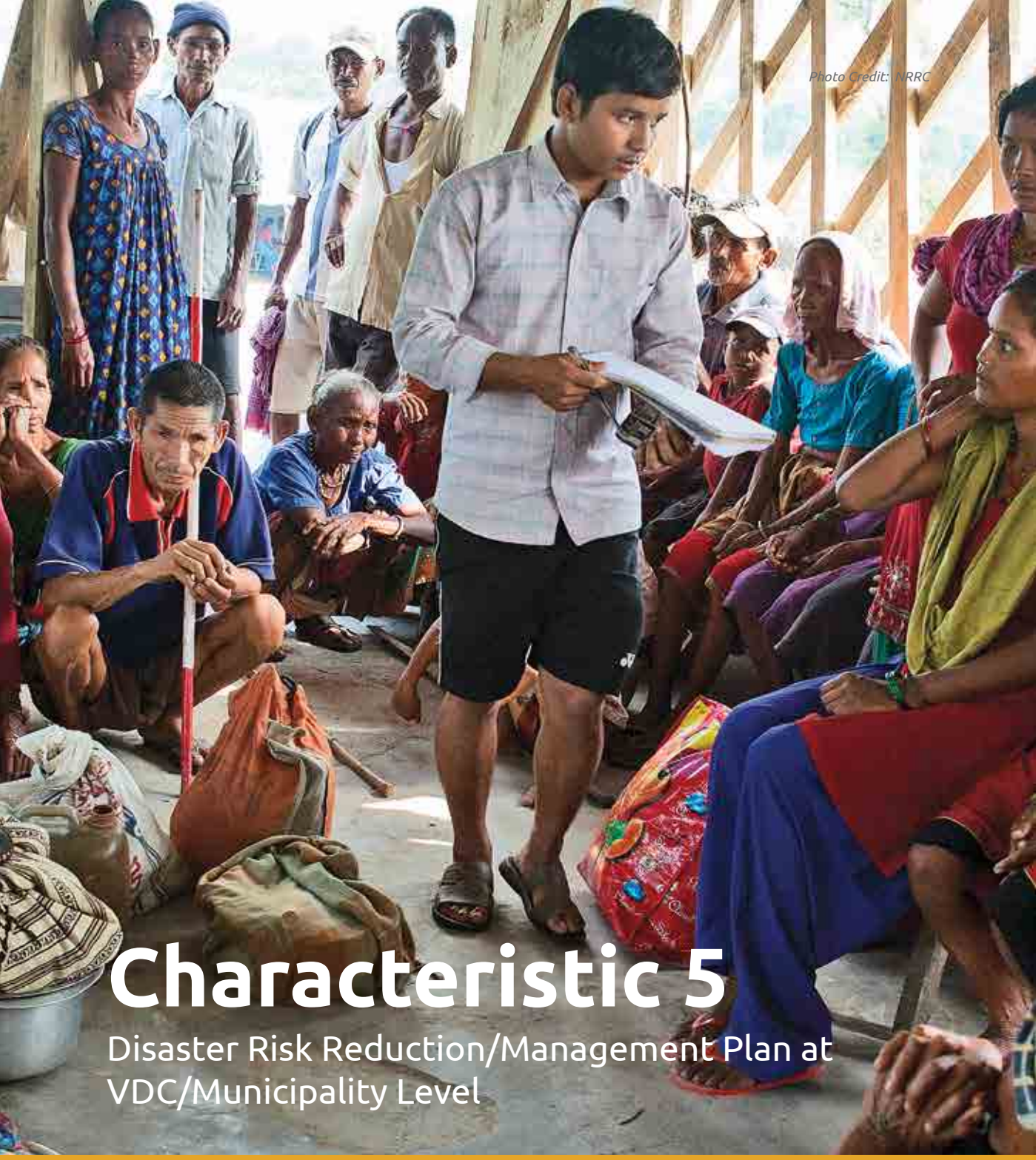


Photo Credit: NRRC

Characteristic 5

Disaster Risk Reduction/Management Plan at VDC/Municipality Level

Characteristic 5 implements a Disaster Risk Reduction and/or Management plan at VDC level, which meets the Flagship 4 minimum requirements and is fully implemented, regularly updated, and frequently tested.

Clear mandate to engage with local government

The Local Development Risk Management Planning guidelines provide VDCs and municipalities instructions on how to create a disaster risk management plan. This plan is owned by the local government and creates a sustainable framework for disaster management issues, long after the support from an implementing agency has been withdrawn. This planning process builds consensus on mitigation and preparedness activities and strengthens vertical and horizontal relationships and coordination mechanisms between VDC / municipality stakeholders (including line ministries). It is intended that the disaster risk management plans created link into the district development processes and budgets; mainstreaming disaster mitigation and preparedness activities into local government processes, and subsequently increasing the ownership and long term viability of disaster risk management at the local level.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
5.1	LDRMP based on results of VDC's multi hazard risk and capacity assessment	LDRMP
5.2	LDRMP planning subcommittee includes at least 2 representatives from the most vulnerable groups	LDRMP
5.3*	LDRMP has been completed at VDC/municipality level and linked to DDRMP (if exists)	LDRMP
5.4	Ward risk profile completed and linked to LDRMP Plan	CDRMP
5.5	A minimum of 5% of DRM activities identified by the LDRMP, and cover the DRM cycle (preparedness, response, recovery and mitigation) are implemented, and include activities that specifically address the needs of the most vulnerable groups	MoUs for activities, pictures of activities
5.6	LDRMP and ward risk profile are regularly updated	LDRMP
5.7	# simulation exercises takes place to test VDC / municipality / community's DRM plan	Partner reports
OUTCOME INDICATORS		
5.8*	# DRR activities prioritised and mainstreamed in District Development Plan by DDC	DDP
5.9*	At least 5% of VDC budget allocated to implement DRR activities	VDC council minutes, VDC budget

Note these are only key example indicators, there have been further example indicators developed, see Annex 3 for more details.

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

Developing and Implementing the Local Disaster Risk Management Planning Guidelines

Photo Credit: Flagship 4

CHARACTERISTIC 5

Oxfam

One of the biggest challenges facing disaster risk reduction/management in Nepal is the institutionalisation and prioritisation of the issue at the local level. With so many challenges at the local level, it can be difficult to access the necessary support and budget, to implement risk reduction/management activities that inevitably protect hard-fought development gains. To address this problem, Oxfam Nepal supported the Ministry of Federal Affairs and Local Development to develop local level guidelines to mainstream disaster risk reduction into the development planning process.

The Local Disaster Risk Management Plan guidelines provide guidance to VDCs and municipalities on how to develop a

> **LDRMP guidelines are circulated to change to all 114 VDCs and 1 municipality of Saptari District with official letter attached to it to implement the guidelines. We anticipate that at least 90 LDRMPs will be prepared this year. Krishna Prasad Sapkota, LDO, District Development Committee, Saptari**

disaster risk management plan, including how to conduct a Vulnerability and Capacity Assessment, establish a Disaster Management Committee, identify actions to address disaster risk reduction and assemble taskforces to respond to disasters.

For example in district x, Oxfam supported VDCs in Sarlahi, Rautahat, Nawalparsi, Dadeldhura and Saptari districts to undertake Local Disaster Risk Management Plans (LDRMPs), including conducting vulnerability and capacity assessments and identifying and prioritising disaster risk reduction activities.

In Dadeldhura, Oxfam supported local VDCs, like Jogbuda, to develop a LDRMP, in coordination with the community. Corroboratively, disaster risk reduction and mitigation activities were identified. The LDRMP was then endorsed by both the VDC and the Districts Development Committee (DDC). Jogbuda VDC then allocated 100,000NPR from its 2013-2014 budget for implementation of identified activities. The DDC has stated its intention to include other identified activities in the District Development Plan with an attached budget of 400,000NPR for implementation.

The LDRMPs have also been an affective tool in engaging district line agencies in disaster risk reduction. For instance, VDCs in Dadeldhura, armed with their LDRMPs, requested support for implementation of activities from the District Soil Conversation Office, who have committed 500,000NPR to river bank reinforcement.

Oxfam's local partners supported local government in Sarlahi, Rautahat, Nawalparasi, Dadeldhura, and Saptari districts to conduct Vulnerability and Capacity Assessments and identify disaster risk reduction activities. Based on 2011 reports, VDC and municipal level authorities updated their plans for 2012, and will update again this year. Oxfam will extend its support to facilitate for preparation of Local Disaster Risk Management Plan in other districts of Nepal in the days ahead, which will ultimately contribute to the mainstreaming of DRR into local development plans.

> **Orientation on the LDRMP guidelines has been accomplished in 99 VDCs. In 40 VDCs we have disaster management committees and different taskforces. In this initiation, Oxfam has supported us to a great extent. Pushlar Mani Ghimire, Programme Office, DDC, Sarlahi**

FOR MORE INFORMATION

Oxfam *Framework and Recommendations for Mainstreaming Disaster and Climate Risk Management into the District Development Planning Process of Nepal*

www.oxfam.org/en/nepal

Photo Credit: CARE

Supporting communities to Create Disaster Risk Management Plans

CHARACTERISTIC 5

CARE Nepal

Pathariya VDC is one of the most vulnerable VDCs in Kailali district. Flooding, the VDC's primary hazard, regularly causes extensive damage to agricultural land, crops, human settlements, and infrastructure. The high impact of flooding is due to the high-risk areas that many of the communities reside in. Acknowledging the serious risk this poses to community members, Pathariya was one of 3 VDCs selected in Kailali district by CARE Nepal for a community-based disaster resilience project focusing on strengthening the institutional capacity in the VDCs.

CARE Nepal supported the VDC to develop a Local Disaster Risk Management Plan that identifies and prioritises risk reduction and preparedness issues that require action. This project falls under characteristic 5 of Flagship 4's 9 minimum characteristics: a Disaster Risk Reduction/ Management plan at the VDC/municipality level.

The findings from the initial KAP study, conducted by Samrakshan, indicated a large gap between district and VDC levels of disaster management. In response to this and in line with the directives of the Local Disaster Risk Management Plan guidelines, CARE Nepal focused on building the capacity of the Pathariya VDC and other local stakeholders to lead

Parthariya VDC KAP anaylsis:

- 98% of VDCs in Kailali have no Disaster preparedness and response plans
- 97% of VDCs have no Evacuation and Contingency Plan
- 92% of VDCs have no taskforce groups for rescue operation during emergency
- 95% of VDCs are not equipped with even the basic emergency equipment.

To help Parthariya VDC find funds to carry out risk management planning at local level, CARE Nepal is working to strengthen the linkage between the Local Disaster Management Committee and the District Disaster Committee

the disaster risk management initiatives through the 5-step Local Disaster Risk Management Plan process.

Based on the recommendations of the vulnerability and capacity assessments conducted at VDC/community level, disaster management committees developed an action plan that prioritised activities into a timeline for implementation and integrated it into the VDC annual development plan. Through regular monitoring and evaluation, it is expected that any gaps found in the plan or planning process are identified and addressed when the plan is reviewed in the next fiscal year.

As the Local Disaster Management Committee had no fixed budget, substantial time was required to mobilise resources for the planned activities. To help Parthariya VDC find funds to carry out risk management planning at local level, CARE Nepal is working to strengthen the linkage between the Local Disaster Management Committee and the District Disaster Committee. Furthermore, CARE Nepal is working to establish a better network with other government line agencies at the district level to solicit their support as well as maximise resources for disaster risk reduction activities.

In coordination with its community-level counterpart, the Parthariya Local Disaster Management Committee facilitated the formation of taskforces at VDC and community level. The trained trainers from the taskforces facilitated the training of community members, promoting the participation of women, children, elderly, and socially excluded groups.

FOR MORE INFORMATION

CARE Nepal: *SAMADHAN Building disaster resilent communities*

www.carenepal.org

Photo Credit: UNDP

Characteristic 6

Disaster Risk Reduction/Management (DRR/M) Fund

Characteristic 6 requires funds to be allocated to communities for priority disaster risk reduction activities. These funds are accessible at the VDC/ward level and/or through community resource mobilisation efforts.

Establishing a local funding mechanism that specifically puts aside funds for disaster management issues is an important element in creating resilience at the local level. Fund mechanisms do not necessarily need to be established independently, but can be incorporated into existing local funds, that agree to use the funds for disaster management issues as well.

The community's capacity to manage its own resources and meet their own basic needs are important elements of community resilience. Twigg (2009) notes that the costs of disasters that are shared through collective ownership, such as a disaster fund mechanisms, create community ownership and empowerment.

It is however important that any fund mechanisms established or existing funds that are used for disaster management are transparent, have accountability measures in place and have an agreed management and reporting structure.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
6.1*	Emergency Management Fund exists at VDC / municipality level to implement activities that cover the disaster risk management cycle (preparedness, response, recovery and mitigation)	Social / public audit
6.2	# mechanisms established to ensure awareness of fund use, transparency and distribution	LDRMP, Social / public audit

Note these are only key example indicators, there have been further example indicators developed, see Annex 3 for more details.

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

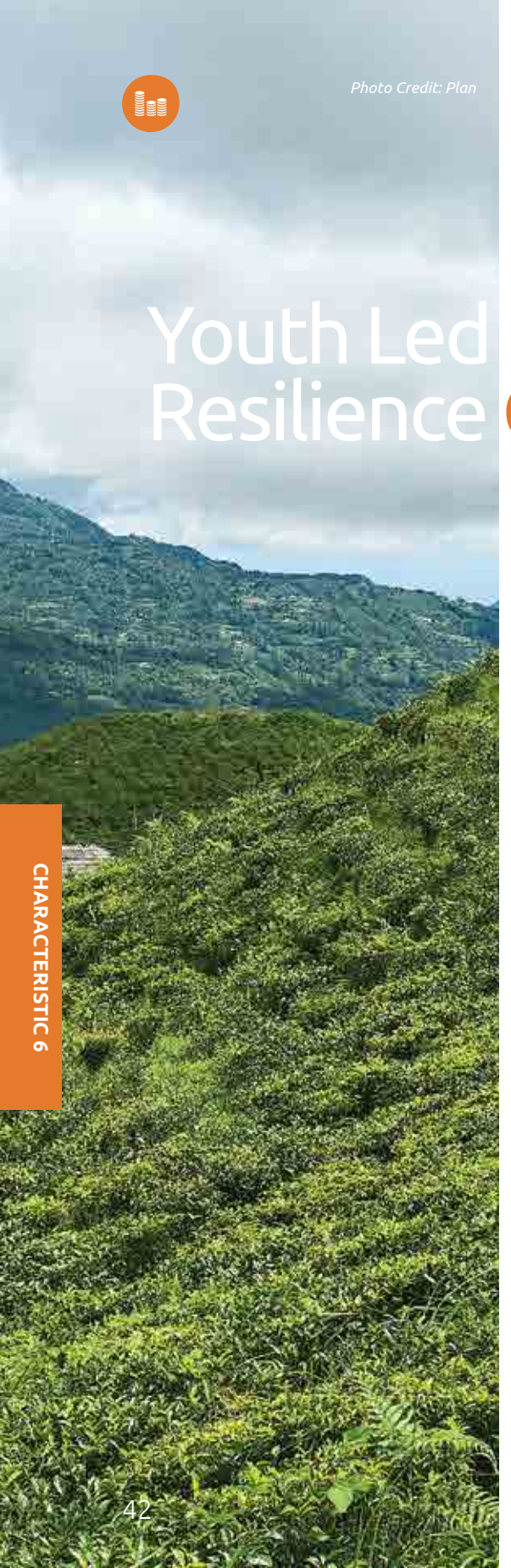


Photo Credit: Plan

Youth Led Resilience Cooperatives

Plan Nepal

Plan Nepal launched the Child-Centred Disaster Risk Reduction project in July 2010, focusing on three VDCs in Sunsari District: Mahendranagar, Harinagara, and Barahachhetra. The project focused on child-centred preparedness, mitigation, and response over an 11-month period. Plan Nepal's project, which worked to establish youth-led savings and credit cooperatives in each of the three VDCs, falls specifically under characteristic 6: disaster risk reduction funds.

With 15,000Rs in grant support from Plan Nepal to serve as seed money, the youth cooperatives established emergency funds in their VDCs. The money was used to provide loans to disaster-affected families with a longer and more flexible payback schedule. While a portion of the monthly savings is designated as an emergency fund, the rest is leveraged for endeavours such as starting up micro enterprises on local markets and, on occasion, to invest in agriculture and animal husbandry.

To encourage contributions from community members, Plan Nepal undertook a number of advocacy programs on disaster risk reduction in the targeted VDCs. The community members became aware of the importance of disaster risk reduction

CHARACTERISTIC 6

Establishment of emergency fund promoted solidarity and a desire to help others. We intend to increase the fund so that we do not have to rely on support from outsiders. We've had no difficulty in raising money because our rules and regulations are flexible and because we operate our fund following community decisions. People are ready to pay, because the risk of flooding is very real - DRR cooperative member youth, Basanta Ritu Secondary School, Sunsari

funds and the majority of the community were willing to contribute. For community members too poor to contribute as much as their neighbours, Plan Nepal is working to include them in the fund by discussing the possibility of a lower contribution amount or the donation of time during projects that require non-skilled labour, such as retrofitting or construction.

The youth-led savings and credit cooperatives established were directly linked to the Disaster Management Committees in the respective VDCs, allowing them to effectively coordinate the collection, allocation, and distribution of emergency funds. Plan Nepal also worked with the youth cooperatives in considering issues of gender and social inclusion including representation of differently-abled, Dalit and Janajati.

Plan Nepal's objective in establishing the cooperatives was to build sustainability by capacitating youth. However, the main challenge in incorporating disaster risk reduction/management through youth-lead cooperative is the high mobility of youth populations, which frequently move one place to other for employment and/or other opportunities. This project has increased their connection to the community, making it more likely to increase their engagement before, during, and after a disaster.

Overview of Funds Collected

Cooperatives	Total Savings (NPR)
Bipad, Mahendranagar VDC	**273,000**
Samabesi, Harinagara VDC	**40,000**
Toribari, Barahachhetra VDC	**20,000**

FOR MORE INFORMATION

Plan Nepal. *Child-Centred Disaster Risk Reduction: Project Evaluation and Learning.* 2012.

www.plan-international.org/where-we-work/asia/nepal

Community Seed Bank: Saving Time and Money

Photo Credit: Flagship 4

CHARACTERISTIC 6

Lutheran World Federation

The Lutheran World Federation implemented a Disaster Preparedness and Climate Change Risks Adaption project in Shankarpur VDC of Kanchanpur District, an area susceptible to flooding from the Doda River. The Lutheran World Federation's project addresses Flagship 4's minimum characteristic 6: establishing a disaster risk reduction fund, by setting up a seed bank in Shankarpur VDC.

By ensuring the availability and reliability of seeds at the right time, community seed banks decrease the vulnerability of the communities to hazards, which is crucial for poor farmers. The genetic diversity of crops preserved in seed banks enables farmers to adapt in changing environmental conditions which is happening more unpredictably due to climate change.

The community undertook a number of activities, such as the creation of embankments, expansion of plantations, and raising plinths of houses, to strengthen their resilience to floods. In the past, those living in Shankarpur VDC were dependent on stores located outside their community to acquire quality seeds needed to replant crops following floods, leading to delays in crop planting and, subsequently, cultivation. With financial and technical assistance

We have taken this seed bank as a step to reduce the effects of disaster and climate change. This will encourage the locals to preserve the indigenous seeds in the coming days too, remarks Shankar Bahadur KC, a member of the Shankarpur Disaster management Team.

from Lutheran World Federation Nepal and their local partners – Local Initiatives for Biodiversity, Research and Development and the Nepal Environment and Education Development Society – Shankarpur VDC established a local, community-managed seed bank.

The Shankarpur VDC seed bank was constructed as a flood-resistant building and a committee selected by the community ensures the regular operation and management of the bank. With a capacity to store 1000 quintal of seeds, the seed bank has stored 25 species of paddy, 12 species of wheat, 1 of turmeric and 2 species of lentils and provides direct service to 225 households. After the massive flooding of the Doda River on September 18 and 19 2012, the community were able to replace the destroyed paddy seed in close coordination with Kanchanpur District Agriculture Office and seed banks of nearby areas. The poor and vulnerable members of Shankarpur VDC are able to buy quality seeds from the bank at a lower than market price.

Being able to get seeds from the local seed bank has saved community members' time and money. The community is planning to diversify the bank and preserve different varieties of seeds including the seeds of cereal crops and vegetables. Following the success of the project in Shankarpur VDC, the Lutheran World Federation Nepal and its partners have been discussing implementing more seed banks with other communities.

We look for seeds that can withstand heavy rain and floods and that yield better harvest. In the past we had the feeling that one must go to the stores in town to get better seeds but the concept has changed now, says Shree Krishna Rana, a member of the Balmi Seed Bank.

FOR MORE INFORMATION

www.lwfnepal.org

CHARACTERISTIC 6

Establishing Disaster Risk Reduction Fund

Photo Credit: Flagship 4

CHARACTERISTIC 6

Nepal Red Cross Society (NRCS)

Disaster Management in Rural Development, an initiative of the Danish Red Cross in partnership with the Nepal Red Cross Society, was implemented between 2007 and 2012. An important part of the Disaster Management in Rural Development initiative is the institution of community-based disaster risk reduction funds, which addresses characteristic 6 of Flagship 4's 9 minimum characteristics for a disaster resilient community: Disaster Risk Reduction Funds.

After agreeing on the amount to be donated, members of the Khajegaun community in Lamjung started to collect 5Rs/month or seasonal crops (which are stored and sold at the end of the season or provided to disaster-affected families) from every household for their disaster risk reduction fund. To encourage households to donate, the Nepal Red Cross Society ran a disaster sensitisation program and a number of activities such as light search and rescue and first aid programs for participating households. Ensuring those too poor to financially contribute are included in the

> **"Disasters don't separate people by caste, or rich from poor. It affects us all, local community member.**

At the beginning, it was challenging to convince some households to join and contribute to the fund. After seeing the transparency of the fund and witnessing how community benefits from having the fund, members have been motivated to contribute to the fund, says the chairperson of Community Disaster Risk Reduction Management Committee in Lupugaun.

benefits from the established fund, NRCS has encouraged the community disaster management committees to develop alternative means to contribute, such as labour donations.

To ensure the disaster risk reduction funds are properly managed, the community also established a fund committee under their Community Disaster Risk Reduction Management Committee to ensure the fund is sustainable and all transactions are performed in a transparent manner. Nepal Red Cross Society provides a two-day, basic account training to the committee members and provides book- and record keeping material so the committee can manage their income and expenses independently.

In many communities such as Khajegaun, women are traditionally considered to be more responsible with handling money, leading to the majority of the 5-7 fund-committee members selected in the community-wide meeting being female. The Khajegaun fund committee members were also trained in bookkeeping and record keeping. The disaster risk reduction funds also undergo an annual audit to increase transparency and information sharing.

The community-driven manner that the NRCS has used in establishing the funds and the policies under which they function has increased confidence amongst community members in Khajegaun to face and respond to disasters. It has also encouraged community wide buy-in and reduced refusals to donate. With a relief fund, the community is better prepared to quickly respond and assist affected families in a coordinated manner with cash or in-kind donations, strengthening their resilience as well as response capacity to disasters.

FOR MORE INFORMATION

www.nrcs.org/

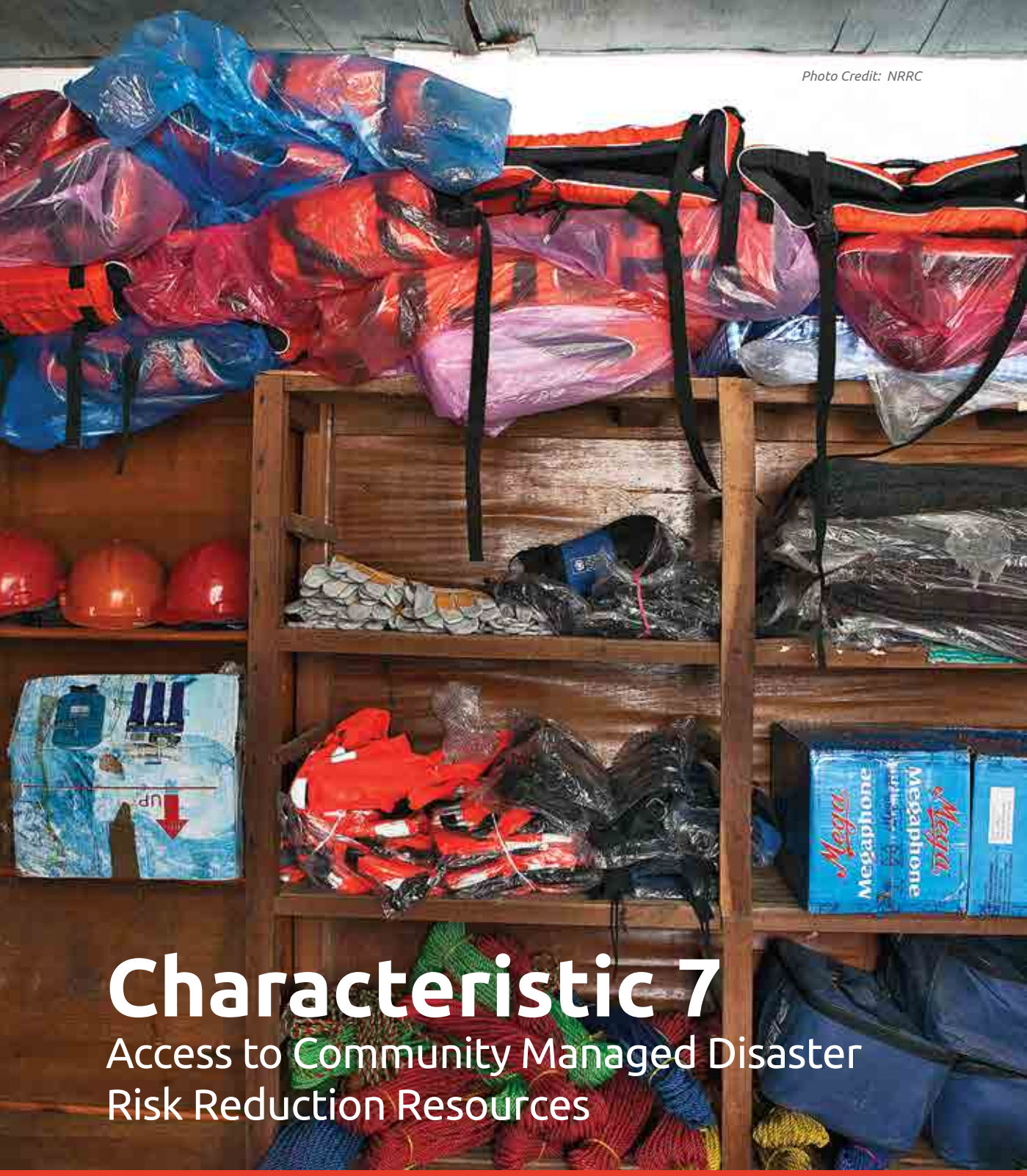


Photo Credit: NRRC

Characteristic 7

Access to Community Managed Disaster Risk Reduction Resources

Characteristic 7 necessitates access to community-managed resources, such as trained human capacity and appropriate equipment and materials, at VDC/Ward levels for DRR initiatives.

As mentioned previously, the community is the first to respond to disasters and as such it is critical that they have immediate access to resources that allow them to prepare, respond and take measures to mitigate identified risks. Sudmeier-Rieux et a. 2013 observed in their work that communities 'know which resources are necessary to overcome adversity and which resources are needed to improve everyday lives'.

Community assets and resources can take the form of social, technological, physical, economic and environmental. Having access to technical disaster risk management resources and knowledge at the local level supports the community to incorporate disaster risk reduction into other decision making processes. Easily accessible communications infrastructure and emergency equipment are also essential resources in building a community's capacity to deal with disasters.

Ensuring these resources are managed at the local level promotes local ownership and engagement of this process, allowing those most affected by disasters to be involved in strengthening their resilience to disaster.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	KEY EXAMPLE INDICATORS	VERIFICATION
HUMAN AND MATERIAL RESOURCES		
7.1*	VDC / municipality / community are aware of any technical DRR resources (at the district level) and have access to these(such as an engineer and / or DRR focal person in line agencies)	Participations in DMC by technical person
7.2	Any response equipment is maintained by the community / VDC	Simulation exercise
7.3	Regular community and stakeholder updates on the DRR resources are made available to all community members	Included in posted CDMC minutes
Community resources allocated to DRM		
7.4	# of community managed resources contributing to disaster risk management activities e.g. Forestry resources, sand mining, stone mining, local taxes etc	LDMRP
7.5	% of VDC / municipality budget allocated to maintaining and upgrading community DRR resources	VDC budget
Note these are only key example indicators, there have been further example indicators developed, see Annex 3 for more details.		

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance Framework

Photo Credit: NRRC

Earthquake Resources in Ilam and Taplejung

Save the Children

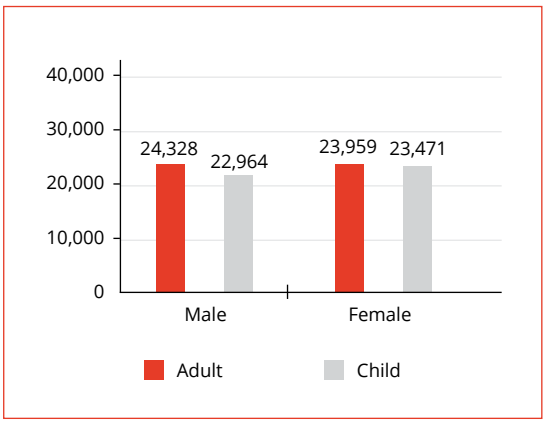
After the September 2011 Earthquake in the Sikkim, India, Save the Children worked in Taplejung and Ilam implementing its "Earthquake Early Recovery and Disaster Disk Reduction" project. The project aimed to reconstruct and retrofit earthquake-damaged schools and improve community resilience through community based and school based DRR measures. In line with Flagship 4's 9 minimum characteristics for a disaster resilient community, Save the Children conducted substantial work under characteristic 7: access to community-managed resources.

Save the Children helped establish Village and Community Disaster Management Committees as well as School Based disaster risk reduction Committees to act as mechanisms through which the various community-managed resources could be effectively channelled to reach the vulnerable communities.

Providing the community with necessary emergency equipment such as first aid kits and light search and rescue apparatuses as well as seed money to help in the start up of emergency funds, Save the Children provided resources to communities in Ilam

After my house was destroyed by the fire, I did not have means to renovate it. However, the CDMC provided me with money (from the emergency fund] and I was also given 20 kgs of rice...this support was really helpful. I also learnt through the various interaction programs that banana leaves and other saplings can be very useful in controlling fires and so I have now planted banana trees near my new house. Dhan Bahadur Kami is a farmer from Dhuseni VDC in Illam. Dhan Bahadur accessed emergency funds to repair his home after it caught on fire and was severely damaged in November 2012.

FIGURE 12: **DIRECT BENEFICIARIES**



and Taplejung. Ensuring the equipment was accompanied by the necessary training helped strengthen the community's human resources allowing them to respond to disasters.

Save the Children's project incorporated gender and social inclusion aspects by ensuring the active participation of traditionally marginalised groups, women, children, dalits, and differently-abled people into both the committees as well as the training activities that were held throughout the project.

Through access to community-managed resources, the communities in Ilam and Taplejung have become better prepared to deal with potential disasters, and hence, an increase in the disaster resilience of the communities.

FOR MORE INFORMATION

Save the Children. *Staying Alive and Well: Child health and disaster risk reduction.* 2012.

www.savethechildren.org/site/c.8rKLIXMGIpI4E/b.6150545/

CHARACTERISTIC 7

Strengthening Disaster Risk Reduction Capacities

Photo Credit: NRRC

CHARACTERISTIC 7

ADRA Nepal

In partnership with Nepal Red Cross Society, ADRA Nepal implemented "Strengthening Disaster Risk Reduction Capacities at community and district level in Nepal" project in Dang, Salyan and Rukum districts between June 2011 and October 2012. The objective of the project was to reduce disaster risk by strengthening local capacities, as community members are both the first responders and those most affected by a disaster. This project falls under characteristic 7 of Flagship 4's 9 minimum characteristics of a disaster resilient community, access to community-managed disaster risk reduction resources.

During implementation, ADRA Nepal worked closely with members of Mulkhola VDC, one of the most vulnerable communities in Salyan district, to reduce the community's risk of landslides. The project worked first to educate community members on their role in reducing disaster risk through a number of community based disaster risk management skill activities.

Once community members had developed an understanding of the local-level risk mitigation measures available, resource mobilisation became a primary focus. As much of the community had never visited

ADRA facilitated and encouraged our community to do this work. The project team also helped us start the collaboration and get funds from the District Soil Conservation Office to complete the work. We have been bearing this landslide problem for last fifteen years; the problem has minimised so I am very happy. Mr. Keshar Rana, chairperson of CDMC.

the district headquarters, there was limited knowledge of the government offices working in the sector and how to connect VDC projects to district funds. ADRA worked to facilitate and connect the Mulkhola Community Disaster Management Committee with district level government offices.

After a visit from the Community Disaster Management Committee, officers from the District Soil Conservation Office visited the landslide areas of Mulkhola. In an agreement between the community, ADRA, and the District Soil Conservation Office, ADRA committed to provide 80000NPR for skilled manpower and the District Soil Conservation Office committed to provide 70 meters of graphene wire and technical support to design small-scale risk reduction measures in the community.

Over the course of the one and a half month project, one person from every household collected stones and carried graphene wire from roadside to the mitigation work site. The Mulkhola Community Disaster Management Committee used 72000Rs of project's money to pay for skilled manpower from the community for the work. The community members decided to keep the remaining project money in an emergency fund. In this way, the community has done a lot of their contribution to minimise the losses from possible disaster in the community.

FOR MORE INFORMATION

www.adranepal.org

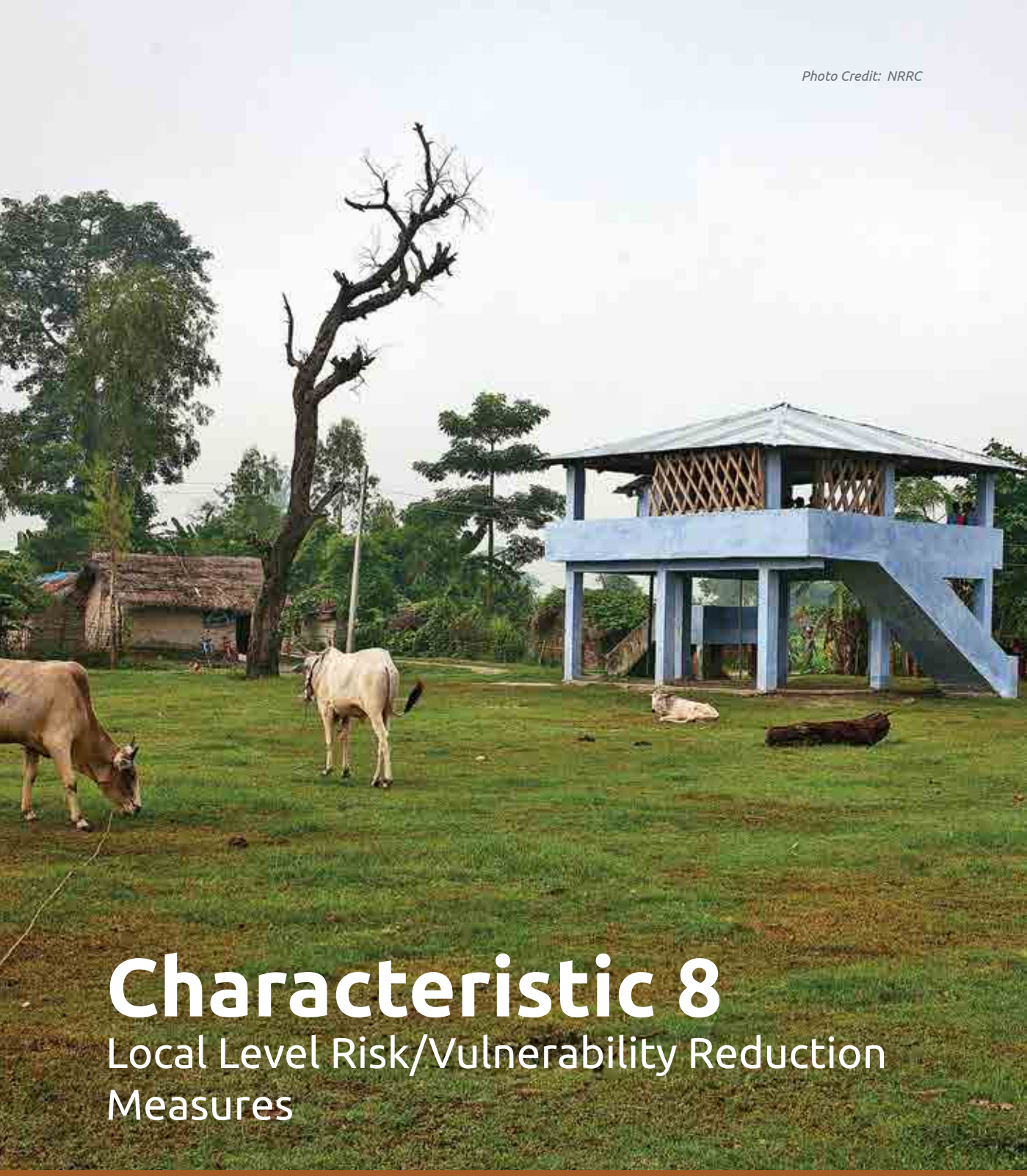


Photo Credit: NRRC

Characteristic 8

Local Level Risk/Vulnerability Reduction Measures

Characteristic 8 establishes the identification, prioritisation, and application of risk and vulnerability reduction initiatives at the local VDC/ward level.

Minimising the impact of disasters on communities and strengthening their ability to recover is the optimal outcome of increased community resilience. Risk reduction measures not only save lives, but have the added incentive of protecting hard fought development gains. It has been demonstrated that investing in risk mitigation and preparedness is a cost-effective approach that can save required investment in disaster relief and response.

Mitigation measures can take a structural and non-structural (or operational) form. Structural mitigation involves any physical construction to avoid the possible impact of hazards (NRRC, 2012). Non-structural includes any measures that are not physical and uses knowledge, practice or agreement to reduce risks and impacts such as policies, plans, awareness raising, training and education (NRRC, 2012).

Structural and non-structural mitigation are complementary approaches that, when done in tandem, can significantly strengthen resilience. To prepare for disasters at the community level, projects can combine structural mitigation such as constructing river embankments, with non-structural measures, such as education and awareness raising on evacuation routes.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	RECOMMENDED INDICATOR	VERIFICATION
8.1*	Safer places are identified, agreed and disseminated to the community, of which at least 1 is tailored to vulnerable groups of the community	DRM plan, Kap survey
8.2*	Evacuation routes have been identified and at least 1 is able to be used by vulnerable groups and pre-identified assistance addressing the accessibility of the routes has been completed	DRM plan, Kap survey
8.3	VDC / municipality and community aware of best practices leading to and maintaining good health e.g. aware of disease prevention activities	Health contingency plan
8.4	# DRR/M trainings conducted to build awareness on disaster risk reduction and preparedness	LDRMP, KAP surveys
OTHER EXAMPLE INDICATORS		
* VDC / municipality and community aware of link between natural environment, ecosystems and disasters and take measures to incorporate sustainable environmental practices		
% of agricultural land that have adopted hazard-resistant agricultural practice for food security		
% of VDC's drinking water / sewage / waste water systems retrofitted / implemented to be flood resilient		
Establishment of emergency food grain storage and seed bank at community level (Either in cash or food)		
Access to and provision of crop/ livestock/ enterprise insurance schemes or other micro-finance schemes at the community level		
* # of structural mitigation measures in place to protect against major hazards including retrofitting		
# of non-structural mitigation measures in place to protect against major hazards		
* Establishment and maintained a socially inclusive community emergency shelter		
* Building codes are incorporated into all new building structures		
* Development and implementation of risk sensitive land use planning		
Note these are only key example indicators, there have been further example indicators developed, see Annex 2 for more details.		

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

Photo Credit: Oxfam

Connecting WASH and Disaster Risk Reduction

Oxfam

With its topography ranging from the high hills, inner valleys and the flat plains from north to south, Nawalparasi district experiences a multitude of hazards; in the monsoon season this is water-induced disasters. To address this issue, Oxfam in collaboration with UNDP and the Asian Disaster Preparedness Centre included disaster risk reduction into Water, Sanitation, and Hygiene Promotion activities. This project falls under characteristic 8 of Flagship 4's 9 minimum characteristics for a disaster resilient community: local level risk/vulnerability reduction measures.

Rampurwa VDC in the south of Nawalparasi district is at high risk of flooding; the Jharahi and Dhanewa Rivers encircle the community, resulting in flooding every year during monsoon season. The flooding not only has an immediate impact on the lives and livelihoods but also results in secondary disasters, such as widespread water contamination from the open defecation practices and inundation of the latrines.

Through its DRR-WASH project, Oxfam collaborated with local authorities in Rampurwa VDC, to conduct a participatory risk assessment in 2010, from

I will make our communities resilient to water induced disasters which are the primary cause of diminished health conditions of people in the areas. I have also advised other VDCs namely; Harpur, Khadauna and Bhujahawa; those who are also facing similar flood risks to sensitise community, make community based plan and allocate resources to implement these plans. Our plan is to strengthen the WASH sector this year making it a DRR friendly. Mr. Paras Nath Verma, Rampurwa VDC secretary

DIPECHO funding support. This assessment identified that water contamination, water borne diseases and epidemics were the biggest risks for the community once the flood waters had receded. To reduce the identified risks Oxfam created a community sensitisation campaign against open defection, constructed raised latrines and worked with the local government authorities to prioritise latrine construction in the 2012-2013 VDC development plan.

Members of the Rapurwa VDC recognised the value of the latrine construction in their community. So much so that the community contributed 80% of the construction costs to build raised latrines, making it a 'community driven' initiative.

Integrating disaster risk reduction into Water, Sanitation, and Hygiene Promotion in Nawalparasi has raised the profile of the importance of disaster risk reduction activities as they link with other sectors. The attention to safer faecal disposal in the most flood prone communities has reinforced the need for community members to consider the secondary impacts of disasters as well as the primary ones.

To reduce the identified risks Oxfam created a community sensitization campaign against open defection, constructed raised latrines and worked with the local government authorities to prioritise latrine construction in the 2012-2013 VDC development plan.

FOR MORE INFORMATION

www.oxfam.org/en/nepal

Making Community Based Disaster Risk Management Inclusive

Photo Credit: NRRC

Handicap International

Between 2011 and 2012, Handicap International implemented a DIPECHO VI-funded pilot project across South Asia with the objective of reducing the effects of natural disasters on the most vulnerable. Handicap International Nepal members and communities implemented the project to assist over 1800 persons with disabilities in 15 VDCs of Dadeldhura, Kanchanpur, and Dang districts.

The priority was to ensure all the community-based disaster risk management projects are inclusive with provision of appropriate equipment and infrastructure accessible to all members of the community, regardless of their capabilities. Handicap International has incorporated characteristic 8 – local level risk/vulnerability reduction measures – into their project with a specific focus on social inclusion measures.

Prior to the implementation of the project, an accessibility audit was carried out for the existing community shelters in the proposed pilot project areas. The audit identified that the needs and capacities of persons with disabilities were not taken into considerations when the centres are built resulting in inaccessible structures not only for the persons with disabilities but also for other vulnerable groups like elderly, children, pregnant women.

Implementing a plan of action with a range of inclusive warning signals and inclusive participatory processes have not only contributed to reduction of the vulnerability of persons with disabilities, but has also increased awareness of the wider community to disasters and the needs and capacities of persons with disabilities.

Handicap International worked with District Development Committees, who provided full time engineers free of cost to prepare the design and estimate the cost for accessible safe shelters. Two community shelters with accessibility features were constructed in Dang and Dadeldhura districts, and can accommodate approximately 300 people. Assistive devices identified during the vulnerability and capacity assessment – such as walkers, wheel chairs, crutches and walking sticks, adult and child sized wheelchairs, mobile toilets chairs and white canes – were stockpiled at the shelters to increase the mobility of persons with disabilities during disasters.

Communities also received guidelines for inclusive early warning systems, where both visual and hearing mediums were utilised in messaging. In addition to the sirens and megaphones, coloured flags, that provide visual cues, and drums, which have vibration that can be felt, were also provided to communities. Implementing a plan of action with a range of inclusive warning signals and inclusive participatory processes have not only contributed to reduction of the vulnerability of persons with disabilities, but has also increased awareness of the wider community to disasters and the needs and capacities of persons with disabilities.

Together with CARE and Nepal Red Cross Society, Handicap International ran two simulation exercises in each of the four pilot projects before the monsoon season. Depending on the findings of the initial vulnerability assessment of each community, the simulations exercises covered one flood scenario and one either fire or epidemic situation. The social inclusion activities and subsequent simulation exercises ran in the pilot communities have provided a strong model for future identification, prioritisation, and application of risk and vulnerability reduction initiatives at the local VDC/ward level in Nepal.

FOR MORE INFORMATION

Handicap International
Mainstreaming Disability into Disaster Risk Reduction: a training manual

www.handicap-international.org.uk/where_we_work/asia/nepal

Implementing National Building Codes

Photo Credit: NSET

Nepal Society for Earthquake Technology (NSET)

As construction of residential buildings in Nepal is primarily carried out by the informal sector, the prevailing construction practice does not incorporate earthquake resistant components.

A conservative estimate is that more than 90% of the buildings in Kathmandu Valley are constructed without the knowledge on how to make them earthquake resistant, making them highly vulnerable to partial or full collapse from earthquakes. As masons are in charge of the primary construction of buildings, there is a need to provide knowledge and skills on how to build

FIGURE 13

according to the Government code to this group. NSET's project, which works to train masons in safe construction practices falls under characteristic 8 of Flagship 4's minimum characteristics, local level risk/ vulnerability reduction measure.

CHARACTERISTIC 8

Mason training is effective and the impact is remarkable. The methodology is cost-efficient with high replication potential.

NSET developed a 5-day masons' training program that combines classroom training with hands-on field exercises to build technical knowledge on new advances in safe building procedures. To date, NSET runs an average of 20 masons' trainings per year in Kathmandu Valley. In recognition of the specific barriers faced by women working in construction and as most of the masons' training are attended by men, NSET also developed and ran a female masons' training in 2012.

The positive impact of the masons' trainings can be clearly observed at three major levels; in the community, in the attitude of the masons trained, and, most important, in the construction quality and safety level of the buildings being constructed. The community members now have a better understanding of the construction technology and methodology required to construct an earthquake-resistant building.

One of the major challenges to the project is the sheer number of masons and contractors in Nepal. Disseminating knowledge and skill through masons' trainings still leaves enormous gaps in building code adherence. To overcome this, trained masons have been advocating implementing earthquake resistant construction techniques through local-level government structures and Disaster Management Committees. In addition, trained masons are paid better wages, leading more people to seek the training. NSET is also working to create demand for safer construction by providing information and awareness activities to homeowners. NSET advocates to homeowners the importance of following building codes when constructing new buildings, to ensure their safety and the safety of their family.

FOR MORE INFORMATION

www.nset.org.np

Photo Credit: NRRC

Characteristic 9

Community-based Early Warning Systems

Characteristic 9 institutes inclusive, community-based Early Warning Systems (EWS), which are integrated with the VDC/ward, district, regional and national early warning system network.

Over the past few years, there has been an increase in investment at both the local and national levels in early warning systems. Early warnings give people time to move away from possible disaster such as floods, enable local authorities and volunteers to mobilise and evacuate those who are vulnerable and enable a faster response to disaster (HFA). Providing people with warning ahead of the disaster gives them the opportunity to prepare and take the necessary actions to reduce the impact of a disaster (such as moving livestock to safer places). Even a few minutes of warning can save hundreds of lives from floods (World Bank, 2010).

Previous attempts in Nepal for early warning did not utilise or engage communities. As a result, the early warning systems established often were not understood, did not use local knowledge and became untrustworthy. These lessons have resulted in a new approach of community based early warning systems. Community based systems actively engage communities to participate and take ownership of the early warning systems resulting in increased trust and compliance with early warnings.

In order for early warning to be successful, it must be part of an overall community based approach to disaster risk reduction. This is why it is one component of the 9 minimum characteristics. Early warning can only work when communities have the capacity to act on that warning; this means having the training, capacity and resources available to prepare and respond effectively.

Key Example Indicators

These indicators are not intended to form a checklist, but provide guidance on how the characteristic could be included into interventions which are intended to be compliant with Flagship 4.

	RECOMMENDED INDICATOR	VERIFICATION
MECHANISMS FOR EMERGENCY INFORMATION		
9.1	VDC / municipality / community is linked to a Early Warning system (for appropriate hazards)	LDRMP / DDMP, simulation exercise
9.2	At least 2 channels (paths) for communicating early warning messages established (from information source to community such as Gauge reader to community)	LDRMP / Community DRM Plan, simulation exercise
9.3	At least 2 mediums (mechanisms) established so information reaches all groups, including isolated & most vulnerable groups E.g. Flags, radio, telephone	KAP study, simulation exercise
LINKS TO EMERGENCY STAKEHOLDERS		
9.4	VDC / municipality and Community is linked to relevant line agency department to receive hazard information, including DEOC (if exists). Links are tested regularly	Minutes of Meeting of DDRC, ToR of District EWS committee, Simulation exercise
9.5	Where appropriate specific hazards are monitored and EWS dedicated personal appointed to monitor hazard & disseminate messages	LDRMP / Community DRMPlan
9.6	Early warning messages are contextualised and community understands and practices actions to be taken	KAP study, simulation exercise

Note these are only key example indicators, there have been further example indicators developed, see Annex 3 for more details.

Photo Credit: Flagship 4

Capturing in Real-time Kanchanpur's Early Warning System

Mercy Corp

Mercy Corps project in Kanchanpur aimed to strengthen community preparedness and resilience to floods in Nepal, including establishing an Early Warning System during 2011/12. This project falls under Flagship 4's characteristics 9: community-based early warning systems.

During implementation, Mercy Corps aimed to establish threshold values for upstream river or rainfall levels that would result in downstream flood. Due to a lack of historical data available, the project supported active monitoring and recording of real-time data to gauge the effects of upstream rainfall on downstream communities.

September 18-19, 2012 recorded heavy rainfall over much of the Far Western and Western regions of

The early warning system was recognised as helping downstream communities to protect lives and livelihoods by providing community members enough time to move to a safer place.

CHARACTERISTIC 9

The following timeline provides an overview of how the early warning system worked in Kanchanpur during this time.

23:51 (September 18, 2012)	SitaramChaudhary, a gauge reader on the Machheli River at Bayelkundi called the Mercy Corps staff member responsible for EWS support in the areas to report flood water entering the community. The community member responsible in neighbouring Tilki, was advised to be on alert.
+00:05 (September 19, 2012)	Bayelkundi DMC sounded the first siren alarm and to inform households of the flood. The community immediately began to evacuate the area. At this time, 30 houses were reported affected in Bayelkundi.
+00:35 (September 19, 2012)	The first siren was sounded in Tilki to alert the community. The floodwaters from the Machheli River had begun to enter the community.
+1:20 (September 19, 2012)	The river level in Bayelkundi was measured at 1.90m and 5 households in Tufaandanda, 25 houses in Surja, and 96 houses in MuktaKamaiyabasti were flooded.
+1:25 (September 19, 2012)	The river level in Tilki was reported at 3meters. The community made warnings by megaphone.
+2:20 (September 19, 2012)	The river level in Bani was reported at 1.75m and still rising.
+3:00: (September 19, 2012)	The Tilki gauge reader informed that nearly all the community memberswere gathered together in a safer place in the community, but could not evacuate to higher ground as Tilki had become an island between two rivers (this regularly occurs during major floods).

Nepal leading to steadily rising river levels in many downstream locations. In the newly established Kanchanpur gauge reading station, river levels were being actively monitored and rising steadily.

No casualties were incurred and only a few animal losses were reported during the flood. The early warning system was recognised as helping downstream communities to protect lives and livelihoods by providing community members enough time to move to a safer place.

However, the performance of the system over the two days also demonstrated some challenges in the EWS: stakeholders were unreachable due to incorrect contact information; gauge readers not understanding the necessity in keeping in constant contact with communities; and while certain communication channels had worked well in testing, their reliability during extreme weather conditions illustrated that they needed further improvement. The need for communities to have alternative contact numbers and communication systems was identified as essential in order to improve Kanchanpur's early warning system for future flooding events. CDMA phones demonstrated their reliability as critical back-up systems and NCELL is working to improve its network in those communities.

Following the success of the Early Warning System in the selected VDCs, Mercy Corps is working to expand the network in 5 more communities in the Machheli(Doda)/Banhara River watershed; three in Pipaladi VDC and two in Shankarpur VDC of Kanchanpur.

Mercy Corps also plans to further strengthen the communities already covered. New staff gauge readers will be established in upstream communities so the downstream communities have more time for preparation and getting to safe place during emergencies.

The need for communities to have alternative contact numbers and communication systems was identified as essential in order to improve Kanchanpur's early warning system for future flooding events.

FOR MORE INFORMATION

Mercy Corps Nepal *Community Based Disaster Risk Reduction: Good Practices and* Mercy Corp Nepal: *A cost benefit analysis for community based disaster risk reduction in Kailali, Nepal*

www.mercycorps.org/nepal

CHARACTERISTIC 9

Photo Credit: Mercy Corp

Road washed away by flooding

Preparing Rajapur for the Annual Floods

Photo Credit: Practical Action

Practical Action

Floods in Nepal have a devastating impact on the communities they affect; in addition to destroying paddy seedlings and standing crops, floods erode arable land, deposit silt, claim livestock, and cause an average of 300 human casualties per year (MoHA, 2009).

As a part of characteristic 9 of Flagship 4's minimum characteristic, Practical Action's 'Strengthening Capacity of Communities for Disaster Risk Reduction through Early Warning in Nepal' project adopted a community-centred approach for establishing early warning systems in 7 Banke VDCs along the West Rapti River: Holiya, Betahani, Fattepur, Gangapur, Kamdi,Binauna, and Mattaiya. The early warning system was tested in August 2012 when the water level of the West Rapti River reached 7.24m over the course of 13 hours. This flood marked one of the most severe in the area; with water surpassing the danger level, 5.4m, in less than 5 hours after rain began.

Despite the flood reaching the communities in late evening, communities were given enough time through early warning messages to evacuate themselves, their valuables and their livestock to safer places. There were no deaths and livestock lost in any of the affected VDCs.

3 water levels are pre-identified and displayed widely in the community. When the river levels reach these pre-identified

levels upstream, communities downstream know how to respond and approximately how much time they have to do so.

The communication channels developed to disseminate flood information worked effectively during the flood; information from the gauge reading station was automatically updated to a sign board in the local police station, who were then able to use sirens and megaphones to initiate evacuation procedures, local radio stations broadcasted flood information, and phone were used to disseminate information from gauge readers to early warning system taskforces and local authorities.

The 2012 flood of the West Rapti River demonstrated the importance of ensuring vulnerable communities have access to information through an early warning system network linked with river monitoring stations and emergency service providers. Additional support, through the training and equipping of response teams, institution

> **This is a great achievement; despite the huge flood, there were no human causalities. I was able to communicate with our Indian counterparts to open all 14 doors of the Laxmanpur Barrage because of the timely information.** **Mr.Dhundi Raj Pokharal, Chief District Officer,Banke**

> **Everyone was aware of the approaching flood. It is because of our early warning system.** **Mr. Agya Ram Barma,inhabitant of BetahaniVDC**

of small-scale mitigation measures, and stockpiling of emergency items and valuable belongings such as land right certificates and citizenship cards, helped to reduce the vulnerability of the flood-risk communities. The project also aimed for full integration of gender, disability and social inclusion issues in capacity building with due consideration to specific needs of children, pregnant and lactating women, and local cultural aspects.

Setting up of community-based early warning systems for flood with hazard detection, indication, monitoring, communication, and evacuation of vulnerable population has made the Banke VDCs safer and more resilient.

FOR MORE INFORMATION

Practical Action Nepal. *Strengthening Livelihood Capacities to Disaster Risk Reduction in Nepal.* 2011; Practical Action Nepal. Early Warning Saving Lives - *Establishing community based early warning systems in Nepal.* 2009.

www.practicalaction.org/practical-action-nepal-office-1

Annexes

ANNEX 1
A list of Flagship 4 members

List is current as at March 2013

Action Deutschland Hilft; ActionAID Nepal; ADRA Germany; ADRA Nepal; American Red Cross; Australian Red Cross; Backward Society Education Nepal; British Red Cross; Bagmati Welfare Society Nepal; Care Nepal; Caritas Belgium; Caritas Germany; Caritas Nepal; Catholic Relief Services; Canadian Cooperation Office Nepal; Community Development and Environment Protection Forum; CEEDF; Centre for Development and Disaster Management; Centre for Social Development and Research; Chhatrapati Free Clinic; Conscious Society for Social Development; Dalit Welfare Association; Danish Church AID; Danish Red Cross; Department for International Development; Department of Hydrology and Meteorology; Danish Missionary Council Development Department; Department of Soil Conservation and Watershed Management; Department of Water-Induced Disaster Prevention; Ecology, Agriculture and Rural Development Society; European Community Humanitarian Aid Office; Environment and Child Concern Organization Nepal; United Nations Food and Agriculture Organization; Finnish Church Aid; Finnish Red Cross; Forum for Human Rights and Disabilities; Green Society Nepal; Handicap International; Hong Kong Red Cross; Human Development and Environment Protection Forum; International Federation for the Red Cross and Red Crescent Societies; Indreni Rural Development Center; Jagaran Media; Japanese Red Cross; Janaki Women Awareness Society; Karnali Integrated Rural Development and Research Centre; Koshi Victim Society; Least Developing Countries Fund; Local Mothers Group; Lutheran World Federation; Multipurpose Community Development and Awareness Forum; Malika Development Organisation; Mercy Corps Nepal; Merlin; Ministry of Foreign Affairs Finland; Mission East; Ministry of Environment, Science, and Technology; Muna Saving & Credit Cooperative; Nawaprabhat Nepal; National Disaster Risk Reduction Center Nepal; Nepal Environment and Education Development Society; Nepal National Social Welfare Association; Nepal Public Awakening Forum; Nepal Red Cross Society; Nepal Rural Self Reliance Campaign; Nepal Society for Earthquake Technology; Oxfam; Oxfam Hong Kong; Partnership Aid Center Nepal; Participatory Effort at Children Education and Women Initiative Nepal; Plan Nepal; Plan Norway; Plan Sweden; Practical Action; RadhakrishnaTharuJanasewa Kendra; RajghatJanakalyanManch; Reach Out to Asia; Rara Human and Environmental Resource Development Initiative; Rural Reconstruction Nepal; RukmeliSamajVikashManch; Rural Community Development Organization; SABAL; Strengthened Actions for Governance in Utilization of Natural Resources; SAHAMATI; Sahara Nepal; Save the Children; Strengthening capacity of communities for disaster risk reduction through Early Warning in Nepal; Siddhartha Club, Social Development and Research Center; Society for community Development; Swiss Red Cross; Tharu Women Upliftment Centre; UNDP – CDRMP; UNICEF; Ward Civil Forum; World Vision; World Vision Switzerland.

ANNEX 2
Minimum Characteristics Example Indicators

CHARACTERISTIC 1
Organisational base at Village Development Committee/ward and community level

1	A functional organisational base at VDC/ward and community level for the implementation and sustainability of DRR, which addresses the issues of protection, social inclusion (including gender balance), community ownership and participation and follows DRR initiatives.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
1.1*	VDC/municipality DM committee (LDMC) exists with roles and responsibilities in accordance with the LDRMP guidelines	Minutes of Meeting, ToR of the committee, VDC council minutes of meeting
1.2	Community DM committees(CDMC) or designated local level disaster management body, exists with roles and responsibilities	Minutes of Meeting, ToR of the committee
1.3	Decisions by the committees are fed back to all VDC/ municipality / community groups and who have rights to modify decisions	Social audit, Posting meeting minutes in public areas
1.4	33% Committee membership at VDC / community levels are represented by vulnerable groups, and discussion include issues specifically related to vulnerable groups	Minutes of Meeting
1.5	Coaching and support is given to vulnerable groups representatives in the committees, like community leadership training	Minutes of Meeting
1.6	% of other established community groups that have disaster risk management as regular agenda item	Minutes of meeting
	OTHER EXAMPLE INDICATORS	
	Protection issues are discussed in committee meetings at all levels	Minutes of Meeting
	Community is aware of budget and expenditure of DRM/DRR projects	Public audit, KAP

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 2

Access to Disaster Risk Reduction Information

2	Coordination mechanisms and partnerships to enable access to DRR information involving local, district and national level government structures, civil society organisations, private sector and vulnerable groups, including linkages with key institutions such as schools and hospitals.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
COORDINATION MECHANISMS AND PARTNERSHIPS		
COMMUNITY LEVEL		
2.1	CDMC, or designated local level disaster management body is represented at LDMC by ward level representative	Minutes of meeting
2.2	CDMC representative, or representative from designated local level disaster management body is connected to National network CDMC	Certification from national network & participation in network meetings
VDC LEVEL		
2.3	Every LDMC has representation at district level, through district level disaster management committee	Minutes of meeting
2.4	LDMC have facilitated discussion between neighboring communities and the potential support they can offer each other/receive during a disaster	LDRMP, Minutes of meeting
DISSEMINATION OF INFORMATION		
2.5	Messaging on hazards is consistent with NRRC communications group agreed messaging	Partner report, NRRC Communications group
2.6*	# communication mediums established by LDMC to reach communities, including identified vulnerable groups	KAP study
2.7	Community members aware of their rights and entitlements according to the provision in Natural Disaster Relief Act including rights of socially excluded	KAP study
2.8	LDMC connected with VEECCC (village energy and Environment Climate Change committee), if established	Partners report, VEECCC
2.9	LDRMP / community DRM Plan is disseminated and understood by the community members, including vulnerable groups	KAP study
	OTHER EXAMPLE INDICATORS	
COORDINATION AND PARTNERSHIPS		
	DEOC, if established in the district, is linked to NEOC (and link is tested)	Simulation exercise
	DDRC & DPRP outline coordination mechanism and roles with LDMC and CDMC	DPRP
	Disaster information readily available from DEOC, if established or DDRC	DEOC
	Disaster management awareness is included into school curriculum and where appropriate extra circulars	School curriculum
	School and health disaster preparedness activities linked with CDMC/ LDMC preparedness activities and included in simulation exercises	LDRMP, simulation exercise

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CIVIL SOCIETY COORDINATION AND PARTNERSHIPS		
	Community committees exchange information with the LDMC, DDRC and national network of CDMCs	NNCDMC report, simulation exercise
DISSEMINATION OF INFORMATION		
	Messaging on preparedness activities consistent with other sectorial messaging e.g.. Health contingency plans and school safety plans	Messaging
INCLUSION (INCLUDING SOCIAL, DISABILITY AND GENDER)		
	Preparedness, early warning and response messages are easily understandable and available in local languages	KAP study

CHARACTERISTIC 3

Multi hazard risk and capacity assessments

3	On-going, systematic, participatory, multi-hazard risk and capacity assessments which enable the monitoring and evaluation of DRR at VDC and community level and which link into district and national monitoring and evaluation systems.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
3.1	Skills to carry out local level VCAs are established and maintained through support and training	Partners report, KAP study
3.2*	VCA conducted in accordance to the LDRMP guidelines	Partners report
3.3	VCA´s are conducted by community members and include people from vulnerable groups.	Partners report, KAP study, LDMRP
3.4	Climate variability or climate change projection information considered in community risk assessment	LDRMP
	OTHER EXAMPLE INDICATORS	
ON-GOING, SYSTEMATIC, PARTICIPATORY MULTI HAZARD RISK AND CAPACITY ASSESSMENT		
	Baseline survey at the start of community DRR projects	Partners report
LINKS WITH OTHER SECTORS / SYSTEMS		
	Assessment of possible impact on food supply during emergency assessed	LDMRP
	Public health related issues and causes during disaster are identified	LDRMP
	Risk assessment identifies vulnerable livelihoods and optoins identified for livelihood diversification	LDRMP
	WASH infrastructure at risk due to hazards identified	LDRMP
	Participatory Monitoring and Evaluation system established	LDRMP
INCLUSION (INCLUDING SOCIAL, DISABILITY AND GENDER)		
	Differences in gender roles/relations and local power dynamics that increases risk are recognized in risk assessment	LDRMP

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 4

Community preparedness/response teams

4	Community teams which are trained and equipped to provide hazard warning and evacuation information, light search and rescue and basic first aid.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
4.1	# of task forces established at community / ward level	LDRMP, simulation exercise
4.2*	Task forces formed according to LDRMP guidelines (with roles and responsibilities) trained in preparedness and response, composing of at least 33% vulnerable groups	LDRMP, simulation exercise
4.3	Trained task forces have been acknowledged by VDC and district, with names and contact details included in respective DRM plans	LDRMP / DDMP / DPRP
4.4	Community and taskforces receive support from security forces in preparation for and during emergencies	LDRMP simulation exercise
	OTHER EXAMPLE INDICATORS	
	Community teams trained (such as Search and resuce and First aid)	Training documentation, pictures
	First Response teams are aware of response plan and most vulnerable households who require specific assistance emergencies	KAP, training reports, post emergency protection survey

CHARACTERISTIC 5

Disaster Risk Reduction/ management plan at Village Development Committee/Municipal Level

5	A DRR/M plan at VDC level which meets the Flagship 4 minimum characteristics and is regularly updated, implemented and tested.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
5.1	LDRMP based on results of VDC's multi hazard risk and capacity assessment	LDRMP
5.2	LDRMP planning subcommittee includes at least 2 representatives from the most vulnerable groups	LDRMP
5.3*	LDRMP has been completed at VDC/municipality level and linked to DDRMP (if exists)	LDRMP
5.4	Ward risk profile completed and linked to LDRMP Plan	CDRMP
5.5	A minimum of 5% of DRM activities identified by the LDMRP, and cover the DRM cycle (preparedness, response, recovery and mitigation) are implemented, and include activities that specifically address the needs of the most vulnerable groups	MoUs for activities, pictures of activities
5.6	LDRMP and ward risk profile are regularly updated	LDRMP
5.7	# simulation exercises takes place to test VDC / municipality / community's DRM plan	Partner reports

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

OUTCOME INDICATORS		
5.8*	# DRR activities prioritised and mainstreamed in District Development Plan by DDC	DDP
5.9*	At least 5% of VDC budget allocated to implement DRR activities	VDC council minutes, VDC budget
	OTHER EXAMPLE INDICATORS	
	LDRMP planning subcommittee understands the rights of socially excluded.	Minutes of meeting
	DRM	
	Disaster risk reduction activities identified in LDRMP included in ward level planning workshop (as part of participatory district planning process).	Minutes from Ward level meeting
	LDRMP / community DRM plans link with other sectorial contingency plans e.g.. Health and education	LDRMP

CHARACTERISTIC 6

Disaster Risk Reduction Funds

6	Funds accessible to communities for priority disaster risk reduction activities which are available at VDC/ward level and/or through community resource mobilization efforts.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
6.1*	Emergency Management Fund exists at VDC / municipality level to implement activities that cover the disaster risk management cycle (preparedness, response, recovery and mitigation)	Social / public audit
6.2	# mechanisms established to ensure awareness of fund use, transparency and distribution	LDRMP, Social / public audit
	OTHER EXAMPLE INDICATORS	
	% fund expended per year	End of year report

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 7

Access to community managed disaster risk reduction resources

7	Access to community-managed resources such as human and materials at VDC/Ward levels for DRR initiatives.	
	KEY EXAMPLE INDICATORS	**VERIFICATION**
HUMAN AND MATERIAL RESOURCES		
7.1*	VDC / municipality / community are aware of any technical DRR resources (at the district level) and have access to these(such as an engineer and / or DRR focal person in line agencies)	Participations in DMC by technical person
7.2	Any response equipment is maintained by the community / VDC	Simulation exercise
7.3	Regular community and stakeholder updates on the DRR resources are made available to all community members	Included in posted CDMC minutes
Community resources allocated to DRM		
7.4	# of community managed resources contributing to disaster risk management activities e.g. Forestry resources, sand mining, stone mining, local taxes etc	LDMRP
7.5	% of VDC / municipality budget allocated to maintaining and upgrading community DRR resources	VDC budget
	OTHER EXAMPLE INDICATORS	
ACCESS TO RESOURCES		
	Preparedness & response equipment incorporate needs of vulnerable groups (including assistive devices specific to vulnerable groups)	LDRMP
	Pre identified safe water sources to be used in emergencies are known and able to be accessed by all	KAP study
MANAGEMENT OF RESOURCES		
	Emergency supplies (buffer stocks) in place, managed by community, alone or in partnership with other local organizations (including grain/seed banks) KAP study	KAP study

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CHARACTERISTIC 8

Local Level risk/vulnerability reduction measures

8	VDC/Ward level initiatives on identification, prioritization and application of local level risk/ vulnerability reduction measures.	
	RECOMMENDED INDICATOR	**VERIFICATION**
8.1*	Safer places are identified, agreed and disseminated to the community, of which at least 1 is tailored to vulnerable groups of the community	DRM plan, Kap survey
8.2*	Evacuation routes have been identified and at least 1 is able to be used by vulnerable groups and pre-identified assistance addressing the accessibility of the routes has been completed	DRM plan, Kap survey
8.3	VDC / municipality and community aware of best practices leading to and maintaining good health e.g. aware of disease prevention activities	Health contingency plan
8.4	# DRR/M trainings conducted to build awareness on disaster risk reduction and preparedness	LDRMP, KAP surveys
	OTHER EXAMPLE INDICATORS	
*	VDC / municipality and community aware of link between natural environment, ecosystems and disasters and take measures to incorporate sustainable environmental practices	KAP survey
	% of agricultural land that have adopted hazard-resistant agricultural practice for food security	DOA report
	% of VDC's drinking water / sewage / waste water systems retrofitted / implemented to be flood resilient	WASH plan
	Establishment of emergency food grain storage and seed bank at community level (either in cash or food)	
	Access to and provision of crop/ livestock/ enterprise insurance schemes or other micro-finance schemes at the community level	VDC level report
*	# of structural mitigation measures in place to protect against major hazards including retrofitting	LDRMP
*	# of non-structural mitigation measures in place to address disaster risks	LDRMP
	Establishment and maintained a socially inclusive community emergency shelter	LDRMP
*	Building codes are incorporated into all new building structures	VDC report
*	Development and implementation of risk sensitive land use planning	VDC report

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

CHARACTERISTIC 9

Community based early warning system

9	Inclusive, community based early warning systems which are integrated with VDC/ward, district and national early warning systems.	
	RECOMMENDED INDICATOR	**VERIFICATION**
MECHANISMS FOR EMERGENCY INFORMATION		
9.1	VDC / municipality / community is linked to a Early Warning system (for appropriate hazards)	LDRMP / DDMP, simulation exercise
9.2	At least 2 channels (paths) for communicating early warning messages established (from information source to community such as Gauge reader to community	LDRMP / Community DRMPlan, simulation exercise
9.3	At least 2 mediums (mechanisms) established so information reaches all groups, including isolated& most vulnerable groups E.g. Flags, radio, telephone	KAP study, simulation exercise
LINKS TO EMERGENCY STAKEHOLDERS		
9.4	VDC / municipality and Community is linked to relevant line agency department to receive hazard information, including DEOC (if exists). Links are tested regularly	Minutes of Meeting of DDRC, ToR of District EWS committee, Simulation exercise
9.5	Where appropriate specific hazards are monitored and EWS dedicated personal appointed to monitor hazard & disseminate messages	LDRMP / Community DRMPlan
9.6	Early warning messages are contextualised and community understands and practices actions to be taken	KAP study, simulation exercise

* This indicator aligns with the disaster management indicators in the Ministry of Federal Affairs and Local Development's Environmentally Friendly Local Governance framework

ANNEX 3
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