Building resilience

A GUIDE TO FACILITATING COMMUNITY-MANAGED DISASTER RISK REDUCTION IN THE HORN OF AFRICA

CRS
CATHOLIC RELIEF SERVICES

IIRR
INTERNATIONAL INSTITUTE OF RURAL RECONSTRUCTION

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BUILDING RESILIENCE

A Guide to Facilitating Community-Managed Disaster Risk Reduction in the Horn of Africa

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The active participation of several communities across the Horn of Africa also enabled team members to better understand the dynamics of facilitating Community Managed Disaster Risk Reduction (CM-DRR) in the region. We deeply appreciate the role played by the Wajir and Tana River communities in Kenya, Baidid payam in South Sudan, Karatu and Longido communities in Tanzania, Bukwa community in Uganda and Harbu community in Ethiopia. Our time spent in these communities allowed us to finetune this set of instructions for community-based field practioners wanting to implement CM-DRR activities.

We are also thankful for the highly successful trainings conducted by IIRR and CRS staff for development partners in Ethiopia, Kenya, Somalia, Tanzania and South Sudan. As a result of these trainings, participants have facilitated Participatory Disaster Risk Analysis in their target communities and are carrying out preparedness and response activities so that households are able to better withstand shocks in the future.

Contents

Abbreviations

CM-DRR	Community Managed Disaster Risk Reduction
CRS	Catholic Relief Services
DRR	Disaster risk reduction
IIRR	International Institute of Rural Reconstruction
M&E	Monitoring and evaluation
PDRA&A	Participatory Disaster Risk Assessment and Analysis
PME&L	Participatory Monitoring, Evaluation and Learning

Glossary

Disaster	A serious disruption of the functioning of a society that causes widespread human, material or environmental damage and losses, which exceed the ability of the affected community to cope using their own resources
Hazard	A potentially damaging physical event, human activity or phenomenon that could cause injury or loss of life, property damage, social and economic disruption, environmental degradation or other effect
Impacts	Specific effects of hazards or disasters
Mitigation	Short-term and long-term actions, programs or policies implemented in advance of a hazard or in its early stages to reduce the degree of risk to people, property and productivity Also refers to pre-disaster activities designed to increase readiness levels or improve operational capabilities for responding to an expected emergency.
Response	Action taken immediately before, during or directly after a disaster to reduce impacts and improve recovery from disaster effects
Risk	The probability of harmful consequences or loss resulting from the correlation between natural and man-made hazards and the vulnerable conditions of property and people
Vulnerability	A set of prevailing or consequential conditions that adversely affect a community's ability to prevent, mitigate, prepare for or respond to hazard events Vulnerability can also be defined as the degree to which an area, people, physical structures or economic assets are exposed to loss, injury or damage caused by the impact of a hazard.

This field practioner's toolkit provides staff from local community-based organizations the tools needed to lead communities through CM-DRR activities.

Introduction

In recent years, the direction of global development has shifted from poverty reduction to disaster risk reduction. By viewing sustainable development through a lens of disaster risk reduction, communities worldwide can adopt a more proactive approach that supports long-term development planning as well as emergency interventions when needed.

This shift in focus is particularly relevant in the greater Horn of Africa. In this region, climate change and a growing number of natural and man-made disasters have led to an extensive loss of lives, livelihoods and property. Compounding problems, a majority of communities in the Horn of Africa lack sufficient coping mechanisms, making them highly vulnerable to hazards.

Disaster risk reduction (DRR) is a development approach that moves communities from reactive response to proactive action by helping residents to undertake preventive measures to better weather disasters. To support the adoption of DRR at the community level, Catholic Relief Services (CRS) and the International Institute of Rural Reconstruction (IIRR) trained field practioners from Ethiopia, Kenya, Somalia, South Sudan, Tanzania and Uganda to be facilitators of Community Managed Disaster Risk Reduction (CM-DRR). This field work served as the basis for developing this guide.

This manual instructs development workers on how to implement CM-DRR activities in their communities. ***The guide equips you to be a CM-DRR field practitioner*** *by providing you with the basic facilitation skills needed to help communities reduce disaster risk through a participatory and people-centered process.*

As part of the facilitation process, you will work with community members to apply the four CM-DRR minimum requirements:

- Complete a disaster risk analysis
- Implement disaster risk reduction measures
- Set up a functional community organization
- Institutionalize a Participatory Monitoring, Evaluation and Learning (PME&L) process

This manual is customized for use in the Horn of Africa, but development practitioners can use it to implement CM-DRR activities globally. **By undertaking disaster risk reduction activities, communities can significantly reduce their vulnerability to disasters and better achieve sustainable development.**

CM-DRR looks to communities to identify hazards and determine the best plan for addressing them through risk reduction measures.

Module 1

BASICS OF COMMUNITY MANAGED DISASTER RISK REDUCTION (CM-DRR)

For decades, aid agencies have spent many millions of dollars responding to disasters in the Horn of Africa. As drought and flooding hit the region with increasing intensity, aid agencies are recognizing the threat these recurring disasters pose to development. In response, many agencies now focus on helping communities to build their local capacity to reduce disaster risk, respond to hazards events themselves and bounce back from crises more quickly. For long-term impact and sustainability, however, these efforts must be led by community members.

Community Managed Disaster Risk Reduction (CM-DRR) is a comprehensive, community-driven development approach that seeks to empower communities in disaster-prone areas. CM-DRR activities enable community members to identify the hazards they face, analyze their vulnerability to these hazards, design and implement risk reduction measures, monitor performance and enhance future DRR activities through lessons learned. Communities subsequently experience fewer disasters and are better able to escape the cyclical nature of poverty. This module introduces you to five background concepts that serve as a foundation for the participatory CM-DRR process.

Objective

At the end of the module, you should be able to:

- Describe the basic concepts and principles involved in Community Managed Disaster Risk Reduction

1.1 Hyogo Framework

In January 2005 at the World Conference for Disaster Reduction, the international community formulated the *Hyogo Framework for Action 2005-2010: Building the Resilience of Nations and Communities*. This 10-year framework, adopted by 168 governments, provides a clear plan for systematically reducing disaster risks and losses and increasing resilience globally.

The Hyogo Framework recognizes the primary responsibility of state governments in implementing disaster risk reduction policies and coordinating with key actors. The framework also emphasizes the need to involve communities and their development partners in risk assessment, the identification of risk reduction measures and their implementation.

Five priorities are at the heart of the framework:

- Ensuring that disaster risk reduction is a national and local priority with a strong institutional basis for implementation
- Identifying, assessing and monitoring disaster risks and enhancing early warning systems
- Using knowledge, innovation and education to build a culture of safety and resilience at all levels
- Reducing the underlying risk factors
- Strengthening disaster preparedness for effective response at all levels

1.2 Disaster Risk Reduction

Disasters are costly on both an economic front and in terms of societal impact. In the Horn of Africa, many communities face chronic drought and flooding. These recurring crises can force families to sell nearly all of their household assets. As a result, even after the immediate crisis ends, residents may struggle to survive for months or years to come. To break this cycle, communities require better coping mechanisms.

A disaster occurs when a community is unable to manage the impact of a hazard event on its own, requiring residents to seek outside assistance. To lessen their vulnerability to disasters, communities need to reduce their risk by analyzing and addressing local hazards. Communities must also increase their own capacity to respond to hazard events and bounce back after the crisis ends.

Although DRR activities can require considerable resources, experience shows that each dollar invested in disaster risk reduction saves $7 in emergency response and recovery. A basic formula assesses disaster risk and guides risk reduction planning:

$$\text{Disaster Risk} = \frac{\text{Hazard x Vulnerability}}{\text{Capacity}}$$

The disaster risk of each hazard in a community depends on how vulnerable residents are to the hazard and how well equipped they are to cope with the impacts resulting from the hazard. If a hazard is quite likely to occur and have a significant impact, and if residents have few coping strategies, disaster risk is high. If the hazard is less likely to occur or if residents have a greater ability to weather its impact, disaster risk is lower.

By examining each hazard, communities can assess levels of disaster risk and undertake corresponding risk reduction planning measures. Four key measures drive disaster risk reduction:

- ***Prevention of hazards***: Helping to eliminate hazards through activities such as disease prevention or conflict management. (*Note*: Natural hazards cannot be prevented.)
- ***Mitigation of hazards***: Lessening the potential impact of a hazard before it occurs, such as building dikes upstream to divert stormwater runoff, not settling or building in hazard zones, and helping communities to better withstand disasters by improving their economic prospects.

- ***Reduction of vulnerability at an individual level***: Enhancing individuals' ability to survive and bounce back after a hazard occurs. Actions include diversifying income sources, increasing food stores and learning personal skills such as swimming.
- ***Reduction of vulnerability at community level***: Strengthening community systems and structures to lessen the impact of a hazard. Measures can include search and rescue systems, credit and savings initiatives, early warning systems and access to market information.

1.3 CM-DRR Principles

The target community is at the center of all CM-DRR activities.

Although different approaches and frameworks exist for participatory disaster risk reduction, CM-DRR places a primary focus on communities. Community members are recognized as the most important players in reducing disaster risk in their surrounding environment.

CM-DRR focuses on working with local residents to understand the types of hazards they face (for example, earthquakes, droughts, floods, pests and diseases), the factors that make them vulnerable to these hazards, and their causes. Together this information gives an indication of how 'at risk' communities are and which groups are most vulnerable. CM-DRR next helps communities to determine what capacities they have for reducing vulnerability. Finally, the approach empowers communities to take action themselves to reduce the risks they face.

The following principles are at the heart of CM-DRR:

- Communities have accumulated local knowledge in addressing hazard events.
- Community organization is key to successful disaster risk reduction initiatives.
- Communities must take responsibility for their members who are most at risk (for example, the poor, the most affected or those with less capacity to cope).
- A community should decide whether residents can cope on

their own or need external assistance, using this guideline as the basis for whether or not it is in a state of disaster.

- Resilience is not merely accumulated physical assets or secured livelihoods, but each individual's will and ability to survive and claim their rights as members of a just and equitable society.
- Community institutions should be strengthened to enhance preparedness for multiple disasters through access to and use of early warning systems and related climatic information.
- The CM-DRR process supports the mobilization of local resources and acts as a link between communities, governments and external development partners.

1.4 'Four Minimums' of CM-DRR

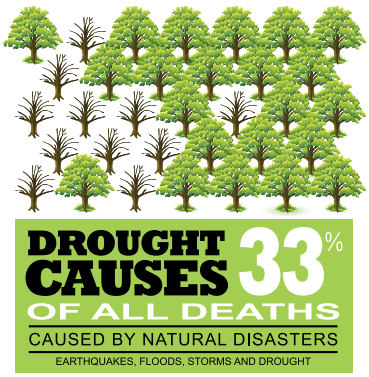
By implementing the 'four minimums' of CM-DRR, communities can greatly reduce their disaster risk.

Four key components form the foundation of the CM-DRR approach. These are commonly referred to as the 'four minimums' of CM-DRR:

1. **Participatory Disaster Risk Assessment and Analysis (PDRA&A)**
    a. Hazard and climatic trend assessment
    b. Vulnerability assessment
    c. Capacity assessment
    d. Disaster risk analysis
2. **Risk reduction measures**
    a. Disaster risk reduction plan
    b. Contingency plan
3. **Community organization**
4. **Participatory Monitoring, Evaluation and Learning (PME&L)**
    a. Non-formal ME&L tools
    b. Formal ME&L tools

1.5 Impact of Climate Change

Climate change increases disaster risk by placing additional pressures on a community's coping mechanisms. The environmental effects of climate change, which are also increasing in severity, include:



- Increased surface temperatures
- Rise in sea levels
- Melting of permafrost, which speeds global warming
- Retreat of glaciers and melting of sea and mountaintop ice
- Prolonged and severe droughts
- Expansion of subtropical deserts
- Changes in levels of precipitation
- Drops in agricultural yields
- Increase in the intensity of extreme weather events such as heat waves, tornadoes, hurricanes and heavy rainfall
- Loss of biodiversity, with certain species endangered by extinction
- Spread of vector-borne diseases due to increased range of insects
- Acidification of oceans, creating reduced fishing yields and the death of coral reefs

Like disasters, climate change has detrimentally impacted lives, livelihoods and property. Disaster risk management coupled with climate change adaptation measures can help reduce vulnerability.

Important Tip to Keep in Mind

- For sustainable development gains, all disaster risk reduction and development work should take climate change impacts into account as all are interrelated.

CM-DRR begins with a faciliator immersing himself or herself into the target community.

Module 2

FACILITATING CM-DRR AT THE COMMUNITY LEVEL

For a community to achieve each of the CM-DRR mimimums, they will need your guidance. However, it is essential for a given community to take charge of implementing CM-DRR activities; your role is simply to serve as a catalyst for proactive action.

The first step in the CM-DRR process is for you to build relationships with key community members who will support the implementation of future DRR activities. This module provides instructions on how to enter a new community successfully.

Objectives

At the end of the module, you should be able to:

- Establish basic criteria for selecting target communities
- Determine the information that needs to be gathered and studied before entering a community
- Identify the key stakeholders you should contact first and identify additional community members who play key roles
- Explain the principles that guide the behavior of a CM-DRR facilitator when entering a community, during immersion and while building rapport

2.1 Selecting Target Communities

Not every community is an ideal candidate for CM-DRR. To be successful, you should select a community that faces local hazards and has at least some coping mechanisms in place to undertake DRR projects. Although communities with few to no coping mechanisms can benefit even more from DRR, any activities would typically be part of an emergency response.

You will need to work with other staff members in your organization and your development partners to determine base criteria for target communities.

Criteria for Community Selection

Develop a checklist of basic criteria for identifying target communities. Possible factors may include the following:

a) ***Community statistics***: number of households, social and economic status, organizational structures

b) ***Livelihood systems***: key activities that community members undertake to earn a living

c) ***Use of natural resources***: how natural resources are accessed, shared and used

d) ***Profile of hazards***: natural, physical and social elements that make communities vulnerable, including current trends and the implications of their intensification

e) ***Current capacities***: both short-term coping capacities and medium- to long-term adaptation capacities

f) ***Factors limiting resilience***: reasons why a community is vulnerable and not able to cope with disasters

g) ***Intervention plans***: estimates of what needs to be done to enhance community capacities to reduce vulnerability to disaster risk, climate change and ecosystem degradation

2.2 Community Entry and Immersion

You are more likely to succeed if you research a community before entering it to make sure you adhere to social norms.

To succeed as a facilitator, you must build trust and have strong relationships in target communities. Your success will largely depend on how you first gain entry into a community and immerse yourself into it. As a result, it is important for you to take the following steps:

1. Familiarize yourself with the community's socio stratification and cultural norms to identify the best approach for gaining entry. Achieve this by reading about the culture, speaking with other agencies already working in the area and interviewing any initial local contacts you make.

By immersing yourself in a community, you can increase support for DRR activities.

2. Liaise with village leaders and highly regarded community members to inform them of your intended visit. Respect any community protocols, for example by paying courtesy calls to the local leaders and government officials to explain your mission before reaching out to other community members.
3. When first interacting with community members, identify yourself and your organization, clearly stating your objectives. This will enable the community to understand your intentions and aspirations. Communicate in the local language if possible.
4. Speak with community leaders and influential community members to determine if sufficient community support exists for DRR project activities.
5. Invest time building a strong rapport with key community members to win their support and respect:
    - Know them by name
    - Sit with them
    - Eat their food when invited
    - Invite them to tell you their history
    - Show interest in learning and doing their daily activities
    - Join them in community work
    - Ask about their culture
    - Learn a bit of the local language, using a local translator when necessary
6. Invest time securing the collaboration and support of local government authorities, being sure to make them part of the process so they won't become an obstacle to your efforts.

The Value of Immersion

- Immersing yourself into a community makes residents more empathetic to your mission.
- By learning about the community and its culture you can do your job better.
- Immersion deepens and strengthens personal commitment on the part of both the facilitator and the community.

Tips for Community Immersion

- Take daily routines and seasonal calendars into consideration when planning activities.
- Understand that engaging with a majority of the community does not always mean you will work with everyone at the same time. Ask local contacts when it is best to involve all genders and age groups in a given activity and when it is best and how to work with specific groups separately.
- Continue to participate in community activities so you can meet people from all socio and economic strata to better ensure that DRR plans address the interests of the entire community.

2.3 Selecting CM-DRR Community Representatives

After immersing yourself in a target community and determining that community members value and will support a DRR project, you can begin to implement DRR activities. Because the scope of your engagement is with the entire community, your outreach efforts will be demanding. To ease your workload, select a small and manageable group of CM-DRR community representatives who can help mobilize other community members.

Try to form a group of representatives that reflects the diversity of the community. The more inclusive you are, the greater the support will be for DRR activities community-wide. Consider the following categories of people and groups during selection:

- Geographical by village or neighborhood
- Equal representation of men and women
- Various age groups, including elderly and youth
- Socio-economic representation from different income levels, including the marginalized

- Local leaders, including village elders, religious leaders and influential community members
- Institutional representation from community development committees, religious groups, school committees and so forth

Once you have formed this group of community representatives, ask the group to determine one person to serve as your primary DRR community contact.

2.4 Building Rapport

You can build rapport with community members in many creative ways.

After successful entry into the community, you can deepen the rapport already built and meet additional residents by using the following tools:

A) *Socio-Resource Map*: A socio-resource map can help you and community members to take stock of important community features. The map will also provide valuable baseline information for later project evaluations. Facilitate creation of a socio-resource map by following these steps:

1. Invite community members to nominate one person to draw a general map of the community, beginning with the boundary areas and major landmarks such as rivers, mountains and roads. The map can be drawn on a large sheet of paper, a blackboard or even on the ground using a stick and natural elements such as flowers and rocks.
2. Ask community members to mark important structures, such as markets, clinics, schools and bridges.
3. Ask them to mark the settlement areas.
4. Ask them to mark natural resources such as forests, pasturelands, farmlands, salt licks, water sources, wild foods and medicinal plants.
5. Ask them to mark any other important community features.
6. Invite comments, allowing for discussions especially if there are disputes on boundaries.
7. If the map is drawn on the ground or a blackboard, nominate someone to transfer the map to a flip chart to create a paper version of the map for recording purposes.
8. If a camera is available, take a picture of the map for use in your future planning. Leave the map with the community.

B) ***Transect Walk***: Ask the community to identify members who can walk around the community with you to provide both a physical and social orientation to key aspects of village life. Not only will you familiarize yourself with the area geographically, you will also gain the opportunity to meet and bond with additional community members.

C) ***Historical Timeline***: Ask community members to share key events that have occurred over the years. Invite them to list both positive and negative events, including any changes in the availability of natural resources or community assets. Have someone from either your team or the community document the events and their respective years. Pick key hazard-related occurrences from the timeline to create a historical timeline of disasters and risk reduction measures.

Example of an Historical Timeline of Disasters and Risk Reduction Measures

Year	Event
1992	• Prolonged drought
1993	• Borehole agreement developed
1995	• Selling of livestock to raise borehole money
1996	• Community-sponsored drilling of a borehole
1997	• Settling in Dadajabulla • El Niño • Cholera • Livestock deaths
2005-2006	• Drought • Cholera • Livestock deaths
2008	• Solar eclipse • Attack on Dadajabulla
2009	• Sudden, mysterious overnight breakdown of boreholes resulting in lack of water for one week. Livestock given mineral water. • Incidences of insecurity resulting from attacks
2010	• Drought • Raid by enemies

Source: Dadajabulla community members, northern Kenya

D) ***Village History***: Identify a group of male and female elders. Ask them to share all of the key historical events that they can remember from the time of original settlement until the present day. The history can cover a wide range of events, including socio-economic happenings, disasters and other important moments. Ask the elders to also call out

any noticeable changes, such as population growth, rainfall patterns or other environmental changes.

E) ***Seasonal Calendar***: Develop a seasonal calendar by asking community members to review each calendar month. Start by asking them to identify both the rainy and dry season months. Then encourage participants to highlight the key socio-economic activities they are engaged in at any given time of the year, such as planting, harvesting or taking livestock out to pasture. Common hazard occurrences associated with a particular season should also be highlighted. Ask the group to also share any seasonal changes in natural resource usage.

Example of a Seasonal Calendar

Activities	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Rainy Season			X	X	X							
Dry Season	X	X										X
Migrations	X	X	X									
Land Preparation				X	X							
Planting/ Broadcasting					X							
Harvest								X	X			
Road Access	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Disease Occurrence				X	X	X	X	X	X	X		
Flooding				X	X	X	X	X	X	X		
Drought	X	X										
Cattle Raids					X	X	X	X	X	X	X	
Pasture			X	X	X	X	X	X	X	X	X	
Market	X	X	X	X	X							
Ceremonies	X	X	X	X	X	X						X
Schools	In	In	In	In	Out	In	In	In	Out	In	In	In/out

By assessing its hazards, vulnerability and capacity, a community can determine the best disaster risk reduction measures to undertake.

Module 3

PARTICIPATORY DISASTER RISK ASSESSMENT AND ANALYSIS (PDRA&A)

In order to determine appropriate disaster risk reduction measures, a community must first identify hazards and analyze disaster risk. This module introduces you to the Participatory Disaster Risk Assessment and Analysis (PDRA&A) methodology, which leads community members through hazard, vulnerability and capacity assessments. These assessments collect a wide range of data, including the physical characteristics of a community, demographic details, economic and sociopolitical factors, environmental issues and more. By analyzing this assessment data, a community can develop an effective disaster risk reduction plan.

Objectives

At the end of the module, you should be able to:

- Apply a variety of approaches to promote community participation in DRR activities
- Conduct hazard, vulnerability and capacity assessments
- Analyze and prioritize hazards

3.1 Encouraging Community Participation

To conduct comprehensive DRR assessments, you will need a broad cross-section of community members to participate. Start by asking your community representatives the best way to encourage other community members to participate in the

three DRR assessments. They will likely suggest holding either a Saturday workshop or meetings at convenient times that do not conflict with seasonal tasks such as planting.

Be sure to also determine ways to reach out to diverse community members, including leaders, teachers, businesspeople, farmers, women's groups, the elderly and youth. Take regular measures to promote equal participation of both men and women.

Promoting Participation

You can do a number of things to make community members feel comfortable and want to participate more fully:

1. Determine with your primary community contact the best program for the day, including how to sequence activities.
2. Increase community participation by asking DRR community representatives or other community members to serve as session leaders. This will also help to reduce the risk of you or your primary community contact dominating the conversation.
3. Create a relaxed environment by undertaking common rituals such as appointing someone to do prayers if appropriate and group introductions.
4. Share your mission with the group in simple terms, emphasizing that it is the community and not you that needs to drive all DRR activities.
5. Ensure that the meeting runs in an orderly, timely manner.

Comparing CM-DRR to a bus ride helps community members to better understand the importance of their role.

Getting Started

- Work with your community representatives to provide a very basic overview of the CM-DRR methodology so participants don't feel overwhelmed by the topic.
- Ask the community to provide local definitions of key terminologies such as hazard, disaster and risk to make sure basic concepts are understood by all.
- Be open to ideas shared from all participants, even when you have differing opinions.

Riding the CM-DRR Bus

One way to introduce participants to the CM-DRR methodology is to compare it to a bus ride:

1. Draw the outline of a bus without wheels on a blackboard, a large sheet of paper or the ground.
2. Ask participants what is missing from the picture and write down the answers (for example, a driver, riders, steering wheel, wheels).
3. Explain that the bus frame is the CM-DRR process.
4. Draw in each additional bus component, explaining its relation to the CM-DRR process:
    a) ***Four wheels*** representing the four CM-DRR minimums of PDRA&A, risk reduction measures, community organization and PME&L
    b) ***Bus driver*** representing the entire community
    c) ***Bus riders*** representing additional stakeholders, such as government agencies and development partners
5. Now ask participants to come up with a symbol for a great achievement, such as a star, medal or image of a warrior.
6. Draw this symbol in front of the bus along with an arrow showing the bus moving toward the symbol.
7. Ask participants to determine the ideal outcome of DRR activities, and write this next to the achievement symbol.

Reinforce the metaphor that the CM-DRR process is like a bus

the community climbs aboard to drive to the desired destination, which typically is resilience to disaster. You can refer back to this metaphor whenever helpful during future DRR activities.

3.2 Hazard Assessment

While natural hazards cannot be prevented, hazards based on human activities can.

The first PDRA step is to assess hazards in a community. This is done by identifying all hazards, ranking them based on their frequency and magnitude, and then analyzing priority hazards.

Hazard Identification

Defining Hazards

Before identifying hazards in a community, it is important to clarify the difference between 'hazards' and 'disasters.'

Explain that a hazard is a potentially damaging physical event, human activity or phenomenon that could cause injury or loss of life, property damage, social and economic disruption, environmental degradation or other effect. Some hazards can be problematic but are usually manageable, such as heavy rains. A hazard only becomes a disaster when it hits a community and the community is not able to cope with its effects on its own.

Next, explain the two categories of hazards:

- ***Natural hazards*** such as earthquakes, droughts, floods, fires, storms, avalanches, tornados, landslides, volcanic eruption, diseases and global warming. Note that natural hazards cannot be prevented, although communities can mitigate their impact.
- ***Man-made hazards based on human activities*** that can be prevented, although at times sufficient willingness or resources are not available. These hazards are further classified as:
    - **a) Violence**, including war, armed conflict, conflicts over scare resources and physical assault
    - **b) Deterioration**, including environmental degradation such as depleted farmlands and aging infrastructure

such as water systems and health, education and other social service facilities

c) **Failing of industrialized society**, such as oil spillage, factory explosions, fires, gas leakages and collisions

Mapping Hazards

Now it is time to have participants identify and map the hazards in their community:

1. Ask them to define 'hazard' in their local language.
2. Ask them to list the hazards that affect their community.
3. Invite them to come up with a symbol for each identified hazard, such as a picture of the sun for drought.
4. Draw a community map on the ground, blackboard or a large sheet of paper, marking all hazards using these symbols.

As part of this discussion, the community should also note any seasonal or long-term changes in resources or utilization patterns. For instance, different grazing areas may be used in dry and wet seasons, forest reserves may have shrunk or grown over the years, or different water sources may now be used.

Hazard Ranking

The highest ranked hazard happens most often and has the greatest impact.

Now that community members know existing hazards, they need to rank them. The magnitude and frequency of each hazard will guide its ranking. Facilitate hazard ranking by following these steps:

1. Discuss the importance of ranking hazards in order to first address those that pose the greatest threat.
2. Review the map of hazards marked by agreed upon symbols.
3. Brainstorm with the participants to come up with criteria to compare hazards. Examples include frequency, duration and scale of impact in terms of geographical areas hit and the number of people affected.
4. Divide participants into three groups: men, women and youth.
5. Ask each group to rank each identified hazard based on the

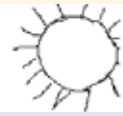
agreed upon criteria using the two main tools described below: proportional ranking and pair-wise ranking.

6. Have each group share their findings with the others.
7. Facilitate a discussion that compares the different group findings. (*Note*: Capture these differences in your reporting as they provide key data about the varying perceptions of different community members based on gender and age.)
8. Work together to negotiate agreement on hazard ranking across all three groups.

Hazard ranking tools

Two primary tools are used for hazard ranking:

Example of Proportional Ranking Chart

No.	Hazard	Symbol	# of Stones	Ranking
1	Drought		101	1
2	Human diseases		52	4
3	Conflict		90	2
4	Livestock diseases		76	3
5	Wild fires		23	5
6	Soil erosion on hill tops		19	6

A) ***Proportional Ranking*****:** Have participants collect a bunch of stones or other locally available material. Distribute them so each participant has five stones for each identified hazard. Then draw the symbols for the hazards on the ground or on a large sheet of paper.

Ask participants to place stones by the various hazard symbols based on order of importance, alloting more stones to hazards they feel have a greater impact and fewer stones to those of lesser magnitude. Then ask someone to create a Proportional Ranking Chart to rank the hazards based on the number of stones in each pile.

B) ***Pair-Wise Ranking*****:** Explain to participants that they will compare hazards in pairs to determine which hazard is more important. Create a chart (see example on next page) with the identified hazards listed horizontally and vertically. Then ask participants to compare each pair of hazards, listing the one agreed as more significant based on magnitude and frequency in the corresponding cell.

Next, count the number of times each hazard is deemed more important than another, and enter this number in the Total Wins column. Use these totals to determine final rankings as a group, breaking any ties by comparing those hazards again.

Example of Pair-wise Ranking Chart

	Drought	**Flood**	**Conflict**	**Env Deg**	**Pests/ Diseases**	**TOTAL WINS**	**RANKINGS**
Drought		Flood	Drought	Env Deg	Drought	3	4
Flood	Flood		Flood	Env Deg	Env Deg	5	2
Conflict	Drought	Flood		Env Deg	P&D	0	5
Environmental Degradation	Env Deg	Env Deg	Env Deg		Env Deg	9	1
Pests/Diseases	P&D	Flood	P&D	Env Deg		3	3

KEY Env Deg: Environmental Degradation P&D: Pests/Diseases

Analyzing priority hazards

After ranking its hazards, a community should select three priority hazards to analyze in greater depth in order to understand the nature and behavior of particular hazards. Specifically, the analyses should identify the following characteristics of hazards: cause, warning signs, forewarning, forces speed of onset, frequency, period of occurrence and duration.

The analyses can be done in three separate groups of men, women and youth, with each group analyzing one priority hazard. Alternatively, the analyses can be done in mixed groups if preferred. Each group should select a tool for analyzing their assigned priority hazard and then report their findings in the plenary session.

Tools for Prioritizing Hazards

Two primary tools are also used for prioritizing hazards:

A) *Hazard Force Tree*: Trees are common environmental features. By using the parts of a tree as a metaphor, community members can more easily identify the causes and effects of a hazard. Guide participants as follows:

1. Ask participants to make a list of the important parts of a tree and their uses.
2. Explain that they are going to use a drawing of a tree to analyze their assigned priority hazard. During the exercise, they should bear in mind that hazard trees bear bitter fruit, not sweet.
3. Ask them to draw a tree and label its parts as follows:
   - Label the trunk as the hazard being analyzed
   - Label the roots as various causes of the hazard
   - Label the branches as warning signs of the hazard
   - Label the fruits as the effects (or forces) of the hazard

Encourage community members who have lived through disasters to share their experiences.

B) *Hazard Behavior Storytelling*: By discussing the behavior of a hazard, participants can determine how hazards affect the community and what can be done to enhance the community's coping capacities. Ask a group member who has lived through the assigned priority hazard to share his or her experience by answering the following questions:

1. When and how did it happen to your community? (Causes)
2. Did the community understand that the hazard was going to happen before it occurred? How did the community understand that? (Warning signs)
3. How many minutes/hours/days/months did it take for community members to know that the hazard was likely to happen? (Forewarning)
4. What happened in the community when the hazard hit? What and who were affected by what and how? (Forces)
5. What was the speed of the hazard when it began? Did it happen suddenly or come on slowly? (Speed of onset)

Hazard Characterization Form		
Hazard: _____		
Hazard Characteristics	**How will it affect me (and other individuals)?**	**How will it affect my community?**
Causes/Origin		
Warning Signs		
Forewarning		
Forces (Effects)		
Speed of Onset		
Frequency		
Period of Occurrence		
Duration		

6. How many times in a year in the last three to five years has the hazard occurred? (Frequency)
7. In what particular time of the year/month/day did it happen? (Period of occurrence)
8. How long was the hazard occurrence? (Duration)

After the groups each present their analyses in plenary, use the Hazard Characterization Form on the next page to summarize all hazard findings.

3.3 Vulnerability Assessment

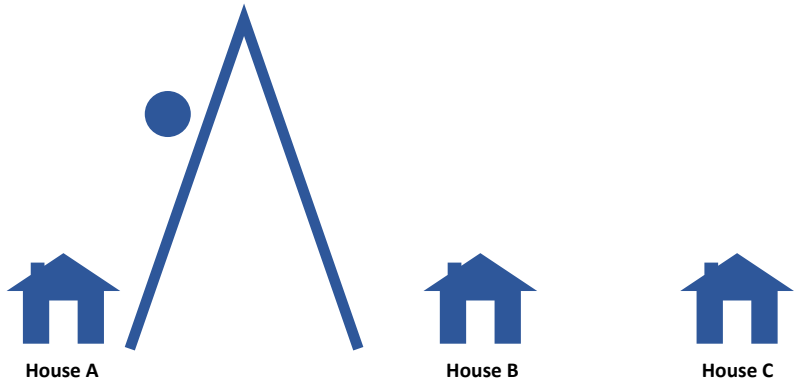
After assessing hazards, community members need to assess their individual and communal vulnerability to each hazard.

Understanding Vulnerability

Begin by explaining vulnerability in simple terms that allow participants to understand the concept in the local context. A very basic definition is exposure to potential harm from a given hazard. Two examples help to illustrate how community members can determine vulnerability based on risk levels:

A) ***Rolling a Stone from a Cliff***: Present the following picture, which shows a stone rolling off a cliff. Discuss how House A is

highly exposed (very vulnerable), House B is less exposed (less vulnerable) due to its location when the hazard occurs, and House C is not exposed (making it not vulnerable).



B) ***Flooding Zone***: Many communities regularly experience some type of flooding. Ask community members to draw a picture of any area that regularly floods after heavy rains. Invite them to indicate which areas of the flooding zone experience significant impact (high vulnerability), some impact (moderate vulnerability) and little to no impact (low vulnerability).

Now ask participants to review their socio-resource map and discuss how the physical location of various assets makes them more or less vulnerable to previously identified hazards.

Analyzing Vulnerability

You can determine vulnerability by examining a person's or asset's exposure to potential harm from a given hazard.

Now it is time for participants to analyze the community's vulnerability to priority hazards. Break participants back into the groups that each assessed a priority hazard. Then ask each group to use the following tools to analyze the community's vulnerability in relation to their assigned priority hazard.

A) *Trend Analysis*: By examining past occurrences of a given hazard, community members can understand the impact of the hazard on different people, assets, infrastructure and natural resources. Guide them as follows:

1. Ask participants to develop a timeline of their assigned hazard, recording each occurence over the past 2-3 years.
2. Ask participants who witnessed or experienced each occurrence to share how it affected different categories of people in different villages, such as the poor, elderly or children. Have them also describe the impact on assets (livestock, farming tools, natural resources) and facilities (schools, health units, markets, water systems, roads). List details in the Vulnerability Trend Matrix on the next page.
3. Using the matrix, have participants analyze the data across the different occurrences to draw conclusions about the community's vulnerability to the priority hazard. For example, they may find that all livestock has a high vulnerability to drought but only the poorest people and the elderly have a high vulnerability to drought due to an inability to purchase food supplies when crops fail.

Vulnerability Trend Matrix

Date of Hazard Occurrence	Effect on People (by category of people, lives lost, injuries, access to basic necessities, etc.)	Effect on Households (any trends at a household level)	Effect on Assets (numbers and types of assets lost, acreage impacted, etc.)	Effect on Critical Facilities (extent of damage, service disruption and duration, etc.)
Month/Year #1				
Month/Year #2				
Month/Year #3				

B) ***Vulnerability Ranking***: By examining additional community details, residents can rank vulnerabilities. Guide participants as follows to first complete the Vulnerability Ranking Matrix and then the Vulnerability Assessment Template (see next page).

1. Using the Vulnerability Ranking Matrix, ask participants to list details about categories of people within the community (by gender, age, health, physical ability, livelihoods and so on).
2. Have them determine the degree of vulnerability for each category in relation to the hazard: high, medium or low.
3. Have them also note the reasons why highly vulnerable groups are unable to move away from unsafe locations.
4. Complete the above steps for community assets and critical

Vulnerability Ranking Matrix		
Hazard: _____		
Elements at Risk	**Degree of Vulnerability**	**Factors Causing Highly Vulnerable Element to Remain in Unsafe Location**
Location/Village A: **Population Details** **Asset Details** **Facility Details**	**Highly vulnerable:** type of people and estimated number **Moderately vulnerable:** type of people and estimated number **Least vulnerable:** type of people and estimated number	
Location/Village B:		

Vulnerability Assessment Template					
Hazard: _____					
Elements at Risk	**Estimated Number**	**Location of Element at Risk vis-à-vis Hazard**			**Why Element Remains in Unsafe Location**
Human Elements		**High Vulnerability**	**Medium Vulnerability**	**Low Vulnerability**	
Children < 5 yrs					
Children 5-18 yrs					
Youth girls					
Youth boys					
Adult women					
Adult men					
Elderly					
Pregnant and lactating women					
People Living With HIV/AIDS					
Non-Human Elements					
Productive assets					
Cattle					
Camels					
Goats					
Sheep					
Donkeys					
Critical facilities					
Schools					
Health posts					
Roads					
Ponds					
Water sources					

facilities as well.

5. Repeat all steps for each location or village.

Return to plenary session, and ask each group to share their vulnerability asessments. Working together, ask participants to now complete the Vulnerability Assessment Template for each priority hazard. Encourage participants to build upon the work of the small groups, suggesting revisions and additions as appropriate until all agree on the degree of exposure for all elements at risk. Leave the templates with the community.

A disaster occurs whenever a community cannot handle the response on its own.

3.4 Capacity Assessment

When a hazard hits, the capacity of a community to respond determines if the occurrence is considered a disaster or not. To reduce disaster risk, residents must ensure that they have adequate capacity as individuals, by household and across the entire community to cope with, withstand, prepare for, prevent, mitigate and quickly recover from disaster.

Understanding Capacities

Communities possess a wide range of capacities:

- ***Human*:** knowledge, skills and attitudes
- ***Economic*:** livestock, farmland, farming tools, other livelihood equipment and savings
- ***Natural*:** forests, pasturelands, rivers and other water sources
- ***Physical*:** roads, bridges, hospitals and schools
- ***Social*:** institutional, cultural, political and ideological

When assessed from a CM-DRR perspective, these capacities are categorized by those that address hazards (hazard prevention and mitigation capacities) and those that address vulnerability (survivability and community readiness capacities).

Assessing Community Capacities

Communities need to first identify what capacities currently

exist. Using this information and previous hazard analysis data, community members can determine what additional capacities they require to cope with the expected impacts of a hazard. This will provide them with a clear picture of any capacity gaps.

Walk participants through the following steps to assess a community's capacity to cope with hazards:

1. Have participants review their socio-resource map.
2. Identify resources they can tap as individuals or as a community to cope with hazard events. For example, people with leadership skills can help direct response activities, and water sources can help extinguish fires. Review all five categories of capacities listed above.
3. Identify capacities they can use to address hazards before they strike:
   a) Capacities to prevent manmade hazards (*Note*: Natural hazards cannot be prevented.)
   b) Capacities that can be used to mitigate or reduce the impacts of both man-made and natural hazards

Capacities Addressing Hazards			
	Capacities		
	Existing	**Required**	**Gaps**
Hazard Prevention Measures (applicable for man-made hazards)			
Hazard Mitigation Measures (applicable for both man-made and natural hazards)			

Capacities Addressing Vulnerability				
	Time element	**Capacities**		
		Existing	**Required**	**Gaps**
Individual Survivability (consider gender and age)	Before hazard event			
	During hazard event			
Community Readiness	Before hazard event			
	During hazard event			

4. Identify capacities they can use to address vulnerability before and after the hazard:

a) Capacities that enhance individual survivability, such as swimming skills

b) Capacities that enhance community readiness, such as early warning systems and community support systems

5. Discuss any capacity gaps observed by participants.
6. Use the following charts to capture details.

Wealth Ranking

Wealth ranking can also be used to assess the individual and collective capacities within a community to cope with a hazard event. Wealthier families have larger asset bases to tap, while poor families may struggle considerably to cope with the adverse effects of a hazard.

Ask participants to agree on what the community regards as 'wealth,' as this meaning differs from one village or community to another. Then develop a ranking system to identify four basic wealth categories in relation to a family's capacity to cope with a hazard event: rich, middle, poor and the poorest of the poor. Discuss how the vulnerability of families—particularly the poorest—rises when they are located in a hazard zone.

Example of a Wealth Ranking System

Assets	Rich	Middle	Poor	Poorest	Remarks
Cattle	80+	~ 60	~ 20	5 of less	
Sheep	100+	~ 80	~ 30	15 or less	
Goats	100+	~ 80	~ 30	15 or less	
Poultry					Insignificant
Farmland	3 feddan	2 feddan	1 feddan	0.5 feddan	
Number of wives	10+	~ 6	~ 4	1 or no	
Personal assets (houses, bricks, tools, furniture)	Many	Some	Few	Least	
Children (by gender)					Depends on cultural norms

Partnership Analysis

Community members need to know of any partnerships that can help with disaster risk reduction measures or offer aid in the

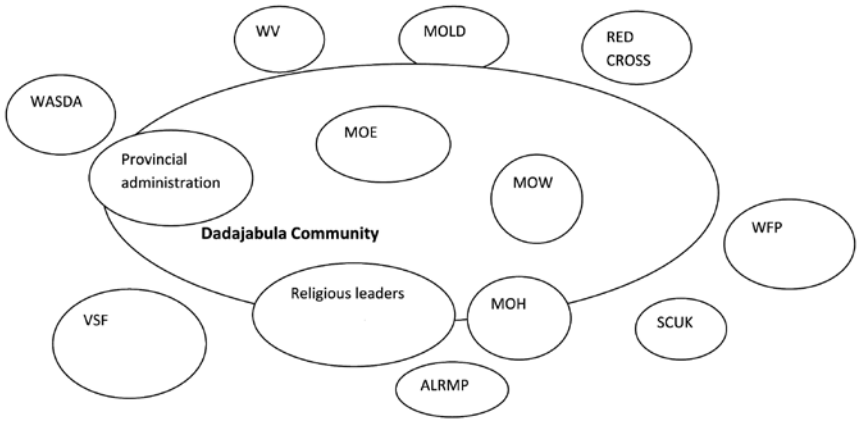
event of a hazard occurence. Discuss the following topics with community members:

- How resources are traditionally mobilized from within and outside the community
- The community's current development partners
- Other networks and potential partners to reach out to (*Note*: Contacts can be obtained through available databases.)
- Ideas for increasing available resources for specific disaster risk reduction measures (for example, building economic assets, increasing access to credit, bridging capacity gaps and reducing vulnerability, such as food supplements for children under 5 and for pregnant and nursing mothers)

Important Tip to Remember

- Always relate resource mobilization to a community's current capacities and risk reduction plan

A Venn diagram can help illustrate the partnerships a community already has in place. Ask community members to list all existing development partners and potential new partners. Then draw a Venn diagram that shows which partners are already working in the community, which work at times with the community, and which do not yet have a relationship with the community.



Source: Dadajabulla community members, northern Kenya

Using a diagram like the example on the previous page, participants can determine where there is a need for a stronger relationship between community institutions and external agencies. By improving these relationships, a community can enhance its readiness and capacity to cope with adverse hazard effects.

3.5 Disaster Risk Analysis

Now that the community has assessed its hazards, vulnerability and capacity, participants can undertake disaster risk analysis to determine which hazards are most critical to address. Working together, they will determine risk levels for each priority hazard by considering the probability of a hazard event, at-risk elements and the vulnerability of these elements.

As this analysis is done, perception of risk becomes very important. Some risks will be perceived as having an acceptable level of risk while others will be perceived as having an unacceptable level of risk.

Understanding Perception of Risk

There are four key factors involved in risk perception:

1. ***Exposure***, or the actual quantitative risk level
2. ***Familiarity***, or one's personal experience of a hazardous event
3. ***Preventability***, or the degree to which the hazard is perceived as controllable or its effects preventable
4. ***Dread***, or people's fear of the hazard, its scale and impacts

The key to a successful DRR program is to understand how various stakeholders—community members, government officials, political representatives and development experts—perceive the risk of local hazards. Each group may have differing perceptions, which will in turn affect the prioritization of related DRR actions.

Important Tips to Remember

- People's perception of risk for a given hazard may vary greatly, influencing DRR action plan decisions.
- Be sensitive to these varying opinions when analyzing disaster risk.
- Understand that sometimes community members will decide that the expected gains of an intervention are not worth possible negative impacts.

Analyzing Disaster Risk

By analyzing all of the data collected, communities can determine levels of disaster risk.

First, ask participants to review all of the prior assessments. Then, invite the group to use Scenario Mapping to draw conclusions about the degree of disaster risk for each priority hazard:

1. Have participants imagine that a hazard event has occurred, such as an earthquake of a large magnitude.
2. Ask them to estimate the epicenter and draw a map of the geographical distribution of expected losses based on local knowledge and past experience.
3. Encourage the group to review the socio-resource map to consider the impact to all community assets.

Now have participants complete scenario mapping for the other priority hazards. Then ask them to look at both vulnerability levels and capacity gaps to determine whether the risk is high, medium or low for each hazard. Once participants have come to agreement on disaster risk levels, ask them to enter the synthesized data on the Community Disaster Risk Analyis Form presented on the next page.

Additional Resources to Use

- Return to the community socio-resource map, with hazards marked with agreed upon symbols.
- Review the Vulnerability Assessment Template.
- Confirm available capacities from related charts and the partnership Venn diagram.

Community Disaster Risk Analysis Form

Hazard: _____

Elements at Risk (people, livestock, assets, facilities)	**Hazard**		**Vulnerability**		**Degree of Risk**		
	Prevention Capacity Gaps	Mitigation Capacity Gaps	Survivability Capacity Gaps	Readiness Capacity Gaps	High	Medium	Low
Element #1							
Element #2							
Element #3							

Summary of Findings:

Recommendation: Identify possible risk reduction measures for each element at risk, including organizations for possible partnership.

Communities should choose disaster risk reduction measures that are feasible and will have a significant impact.

Module 4

DISASTER RISK REDUCTION MEASURES

At this stage of the process, community participants will want to determine how they can reduce their exposure to disaster risks. This module provides instructions on how you can help them create a disaster risk reduction strategy.

Objectives

At the end of the module, you should be able to:

- Explain the disaster risk reduction strategy and its importance
- Facilitate the disaster risk reduction planning process

Quick Steps for Selecting Disaster Risk Reduction Measures

1. Revisit the vulnerability assessment that identified the human and non-human elements exposed to hazards.
2. Review existing coping capacities to determine the community's disaster risk level. The lower the capacity gaps, the lower the disaster risk and vice versa.
3. Develop a list of disaster risk reduction measures.
4. Together, determine which measures are most feasible.
5. Create a realistic, measurable implementation strategy.

4.1 Disaster Risk Reduction Strategy

To develop a disaster risk reduction strategy, a community first needs to identify a range of possible risk reduction measures. Then they analyze the options to determine which are feasible and will have the greatest impact. Based on this analysis, they can develop a strategy for implementing the agreed upon measures.

Selecting Risk Reduction Measures

Ask participants to list all of the community resources that can be used to reduce disaster risks, referring back to the socio-resource map. This may include items such as disaster funds, facilities, natural resources, other physical assets, time and labor. Then ask participants to come up with ideas of how these resources can be used to reduce the disaster risk of priority hazards through prevention, mitigation, individual survivability and community readiness.

List the suggested measures in the matrix below. Lead participants to discuss the following questions to identify the best measures to implement:

1. What impact will the risk reduction measure have?
2. What ways can it be implemented?
3. Does the community have the capacity to implement it? (Score from 1-10)
4. What external support is available? (Score from 1-10)
5. How feasible is implementation? (Score from 1-10)
6. Overall, which measures are best to implement?

Risk Reduction Measures Selection Matrix

Recommended Risk Reduction Measure	**Different Ways of Implementing the Measure**	**Selection Score**			**Outcome**
		Community Capacity to Implement	External Support Availability	Feasibility	Selected/ Not Selected
Hazard Prevention					
Hazard Mitigation					
Individual Survivability					
Community Readiness					

Strategy Formulation

After determining the best risk reduction measures to implement, the community needs to come up with a feasible DRR implementation strategy. This strategy should aim to:

- Improve the development of community programs
- Support the growth and development of a functional community organization committed to disaster risk reduction
- Support the development of a contingency plan to enhance disaster response

When creating a DRR strategy, be realistic about a community's implementation capabilities.

Characteristics of a Successful Disaster Risk Reduction Strategy

A clear implementation strategy is the ultimate goal of all of the prior disaster risk assessment work. Explain to participants that for their implementation strategy to succeed, it should:

- Make the best use of available resources to implement selected disaster risk reduction measures in the community
- Be realistic about implementation capabilites
- Include measurable objectives that can be easily monitored, evaluated and learned from

Strategy Visioning

Guide participants through two tools that will help them to envision their ideal disaster risk reduction goal:

A) ***Vision Mapping*****:** Have participants review their original hazard map, which can serve as a baseline for all DRR activities moving forward. Ask community members to create another map that reflects their future aspirations for hazard reduction. Encourage them to include an ideal vision for achieving each selected disaster risk reduction measure.

B) ***Visioning Matrix*****:** Ask community members to use the Visioning Matrix to capture a written overview of their desired disaster risk reduction goals. Have participants list the DRR measures they agreed to pursue. Then have them

describe the present situation related to each measure and a vision of what they want to see instead. Next have them list any barriers to attaining their desired vision and determine what needs to be done to overcome these barriers.

Visioning Matrix				
Selected Disaster Risk Reduction Measures	**Present Situation (baseline)**	**Aspired Situation (vision of desired future)**	**Barriers to Attaining Aspired Situation**	**What Needs to be Done Overcome Barriers**
Measure #1	The present condition in the community that the selected measure is meant to resolve	What the community wants to see after successful implementation of the selected measure	Obstacles the community needs to overcome to achieve the desired future vision	Community action plan based on aspirations and barriers to be addressed
Measure #2				
Measure #3				

Communities can also use this matrix for later planning, monitoring and evaluation purposes. The column describing the present situation provides a baseline, the column describing the aspired situation shows the target, the barriers column depicts challenges, and the final column shares core areas that need to be addressed in implementation plans.

4.2 Disaster Risk Reduction Planning Process

At this point, you have findings from the PDRA assessments, risk analysis, strategy selection and strategy visioning. Use this information to help the community formulate a detailed action plan for reducing disaster risk, plus a contigency plan.

Disaster Risk Reduction Plan

The disaster risk reduction plan is an action plan that details all of the steps the community agrees to take to reduce their vulnerability and increase their coping capacities. The plan:

By clearly delineating who will take what steps by when, communities can more easily achieve their DRR vision.

- Details the 5 Ws and 1 H of action: who, what, where, when, why and how
- Focuses on the delivery of short,- medium- and long-term strategies to address disaster risks
- Builds community resilience and reduces vulnerability by enhancing capacities to cope with future hazards
- Forms disaster-resilient communities through cooperation among community members, government agencies, development partners and other institutions and stakeholders. This coordination ensures that DRR interventions are incorporated into long-term development plans.

Invite participants to use the following form to create detailed courses of action for each DRR measure they agreed to undertake. Encourage community members to be as specific as possible.

Disaster Risk Reduction Action Plan					
Objectives	**Activity**	**When**	**Resource & Provider**	**Organization & Person(s) Responsible**	**Expected Change or Result**
Measure #1					
Measure #2					

Contingency Planning

In addition to taking DRR measures to reduce disaster risk, communities can increase their preparedness by undertaking contigency planning. Contingency planning considers the question 'what if?' By analyzing how a community could best respond to a range of possible hazard scenarios, community members can come up with specific response plans for the most likely hazard events.

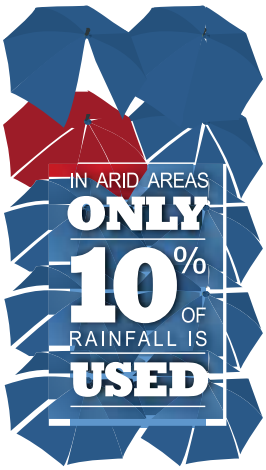
Guide participants through the following steps to develop a contigency plan:

1. Have participants come up with a best-case, intermediate-case and worst-case scenario for each priority hazard.

2. Create a set of assumptions for each about the likely impacts from the force and duration of the hazard.
3. Ask them to analyze the risk of the scenario based on known vulnerabilities and capacity gaps.
4. Ask them to determine what response actions would be needed, detailing each.
5. Determine what response systems are in place to drive response actions. This can include the DRR organization, community committees, government agencies and partners.
6. Identify key roles and related responsibilities.

Explain to participants that contigency plans can help inform future response plans after damage assessment in the event of a hazard occurrence.

Contigency Plan				
'What if?' Scenario	**Risk Analysis**	**Action Points**	**Response Systems**	**Defined Roles and Responsibilities**
Worst-Case Scenario		Warning signals		
		Evacuation area/ safe shelter		
		Food supplies		
		Medical supplies		
		Logistical supplies		
		Transportation		
		Communication		
		Community Managed Damage Assessment and Needs Analysis	*NOTE*: When a community's coping capacities are insufficient, the community should declare itself a disaster area	
Intermediate-Case Scenario				
Best-Case Scenario				



THE REST IS LOST TO EVAPORATION

Module 5

STRENGTHENING COMMUNITY ORGANIZATION

For long-term sustainable development, communities need to be able to implement disaster risk reduction and disaster response activities with or without the help of development partners. This module provides instruction on how to help residents form strong community structures that can support DRR activities into the future.

Objective

At the end of the module, you should have the skills to:

- Help strengthen an existing community organization or build a new one to support disaster risk reduction moving forward
- Help communities to build their skills and capacity

Helping Communities to Organize

The objective of community organizing is to encourage local people to act together to acheive common goals and to overcome any barriers hampering community action. To successfully implement DRR activities, community members need to commit to supporting the process over the long term. To help them make this commitment, guide them through the following steps:

1. Explain to community members the need for an organization to drive DRR planning, implementation, monitoring, evaluation and continued learning. This organization will also be tasked with lobbying the community at large to support and participate in DRR activities.

Remind them about the prior discussion of a bus with four wheels, emphasizing that an effective community organization is a critical wheel for resilience to be realized in the community.

2. Confer with community members to determine if it is best to form a new community organization or to strengthen an existing one to drive and support DRR activities. Give them time to consult widely until full concensus is reached.
3. Let community members determine how to strengthen an existing organization or form any new organization, whether an institution, a DRR committee or both.
4. Discuss how to ensure that the organization represents the interests of all community members and not just a select few, with equal gender representation.
5. Ask participants to list the qualities of a good leader.
6. Ask them to list the key roles that leaders would need to play in implementing their DRR and contingency plans.
7. Ask them to identify capable members and leaders for any new organization or to invite new members and leaders to participate in an existing organization. Note again the importance of equal gender representation.
8. Encourage them to clarify the DRR responsibilities of the given community organization, its leaders and its members.

Tips to keep in mind

- Do not rush participants into forming a community organization focused on DRR activities.
- In establishing a community organization where none existed before, it is important that you use a participatory process to ensure lasting support.
- Remember that marginalized community members often have difficulty having their voices heard. Take steps to ensure that they are part of the participatory process.

Building Capacity

While DRR measures often focus on the environment and infrastructure, capacity building focuses primarily on people and their actions. **Helping people to gain new skills enables communities to better respond to hazard events.**

For capacity building to succeed, it should be done in a layered manner:

1. ***Human resource development*** to increase individual skills
2. ***Organizational development*** to improve the functioning of community groups and organizations
3. ***Institutional development*** to create formal social structures with legal and regulatory authority to support the efficient functioning of groups and individuals across a community

Keep in mind that local communities often have the technology or knowledge required to reduce their own vulnerability to disasters but may be missing a key community or social structure that prevents them from doing so. As gaps in capacity are identified, invite the DRR committee or organization to plan for capacity building. For example, a community can decide to hold a workshop to teach leadership skills to improve disaster responses or to present hygiene and sanitation best practices to avert incidences of water-borne diseases.

Key Aspects of Capacity Building

To promote long-term success, the following actions should be part of any capacity building program:

- Coordination with all key stakeholders
- Documenting the context and the process
- Setting objectives
- Setting standards for program evaluation
- Measuring progress and sustainability

By continually checking how activities are performing against desired goals, communites can better achieve DRR success.

MODULE 6

PARTICIPATORY MONITORING, EVALUATION AND LEARNING (PME&L)

Participatory Monitoring, Evaluation and Learning (PME&L) is an essential component for the continued success, improvement and scaling of DRR activities in a community. This module presents how PME&L can be implemented with or without a formal framework, allowing for use in non-literate communities and in settings where time and resources are extremely limited.

Objective

At the end of the module, you should be able to:

- Build the capacity of a community to monitor, evaluate and learn from its DRR projects using informal or formal tools

Helpful Hints for PME&L

- Make sure participants understand the need for a systematic process of continuous action and reflection in regard to their risk reduction measures.
- Advise them against setting up sophisticated and complex systems that discourage community participation and are not sustainable.
- Encourage them to determine their own success indicators that are easily understood by all community members to evaluate the impact of DRR activities.

6.1 Conventional M&E vs. Participatory M&E

For many decades, conventional M&E personnel and systems were brought in from the outside to assess program success.

With the shift to community-managed development projects aimed at disaster risk reduction, there has also been a shift toward Participatory M&E that is designed and implemented by community members.

Differences Between Conventional and Participatory M&E	
Conventional M&E	**Participatory M&E**
Oversight	
Senior managers or outside experts from external agencies	Local people, project staff, managers and all other stakeholders
Outsiders are in control, often consisting of just one person or a few people	All community and other stakeholders are in control, working together to achieve their goals
Role of Community	
To provide information	To design, plan and adapt the methodology; collect and analyze data; share findings; and link them to action. The community is involved from the start to the end of the M&E process.
Role of Development Professionals	
To monitor and evaluate	To facilitate
How Success is Measured	
Indicators are defined by the outsiders	Indicators are defined by the community
Design	
Effectiveness and efficiency of external agency project	Focus on community learning, action and implementation

6.2 PME&L Methodology

Although some communities may choose to implement more formal ME&L systems, an informal approach can also be used successfully when well facilitated. Just ensure that you use the appropriate tools to help communities to identify both positive (contributing) and negative (hindering) factors to determine subsequent interventions.

Informal PME&L Tools

You can invite community members to use whatever informal PME&L tools they feel will best meet their needs:

- ***Periodic Review Meetings*:** The DRR organization and other community members review activity implementation and identify contributing and hindering factors.

- ***Open Space*:** Community members hold a meeting to openly discuss possible intervention changes based on the contributing and hindering factors they are noticing.
- ***Change Storytelling and Listening*:** A group of people share stories of changes observed while others (or facilitators) listen and record.
- ***PDRA Tools*:** Community members employ PDRA tools again, such as hazard ranking, to evaluate any improvement.
- ***Community Evaluation Workshop*:** The DRR community organization holds a simple workshop in the village to discuss and identify changes brought about implemented interventions.
- ***Changes Present to Past*:** Community members can create new socio-resource and hazard maps. They can then compare the new maps to the maps made at the beginning of DRR activities to evaluate any changes or improvements. The group can also evaluate the new maps against the desired changes outlined in the DRR Action Plan.
- ***Triangulation*:** Community representatives or the DRR community organization and the DRR facilitator collect data from various segments of the community and then compare notes. This better ensures the reliability and validity of changes observed.

Formal PME&L Tools

Some communities will prefer to use more formal frameworks for PME&L. In this case, simple forms can be filled out monthly and annually to help identify contributing and hindering factors. Whatever PM&E tools are used, encourage community members to apply the learnings to enhance future DRR activities.

Monthly Monitoring Form				
Planned Activities	**Done (√)**	**Not Done (X)**	**Learning Related to**	
			Contributing Factors	**Hindering Factors**
Activity #1				
Activity #2				

Yearly Evaluation and Learning Plan		
Goals of the DRR Action Plan (vision of desired changes)	**Situation at Start of Activities (baseline)**	**Situation After a Year of Implementation**
Goal #1		
Goal #2		

Additional Questions to Answer:

What key factors contributed to the achievement of identified positive changes?

_____

_____

What key factors hindered us from achieving desired changes?

_____

_____

What are the key lessons learned, and how will they be applied in the following month/year?

_____

_____

With some analysis and committed effort, communities can reduce their disaster risk and increase their coping capacities.

Conclusion

Community Managed Disaster Risk Reduction can successfully reduce disaster risk in communities. All that is needed is some key analysis, agreement on desired goals and a commitment by community members to implement the agreed upon action plan.

Your job as a facilitator plays an important role in getting community members started. Now it is their turn to take the lead on implementation, evaluation and the continued enhancement of DRR measures.

Working together, we can reduce the risk of disasters in the Horn of Africa and across the globe.

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