Module 4:

Village Disaster Reduction Plan

CBDP Refresher Course
Contents

1. 7 steps in formulating a Village Disaster Reduction Plan
   Step 1: Review and analyses the HVCA information
   Step 2: Prioritize the hazard
   Step 3: Prioritize the elements at risk
   Step 4: Identify the risk-identify why the element is at risk
   Step 5: Set disaster reduction objectives & develop alternative solutions
   Step 6: Select Disaster Reduction Measures
   Step 7: Develop Village Disaster Reduction Plan document

2. 3 steps for CRC-assisted Disaster Reduction Measures
   Step 1: Proposal Writing for 2 Disasters Reduction Measures
   Step 2: Micro-project planning for disaster Reduction Measures
   Step 3: Micro-project Monitoring & Evaluation

Comment [AO1]: Discuss about whether to change word “steps”
This session is meant as a guide for developing a Disaster Reduction Plan for the village. In the CBDP Program we call this the Village Disaster Reduction Plan (VDRP). This session outlines the steps required to progress from analyzing the HVCA information collected, towards developing a plan for disaster reduction measures that will address the prioritized needs and interests of the community.

By a “guide” we mean that facilitators and community members should consider these planning steps as merely suggestions; these can be adjusted or removed according to the realities or conditions in the community. You should, however, be careful not to take the planning steps in a way that is too fixed; you should feel free to modify the steps according to your situation and requirements.

Remember that the Village Disaster Reduction Plan (VDRP) must clearly reflect:

- what the community commits to do to protect itself from, prepare for, and mitigate against the hazards which affect it (disaster reduction measures);
- what resources & skills, households and the community will commit and mobilize to achieve these measures; and
- what resources & skills, the community will need to access from outside to achieve these measures.

### 7 steps in formulating a Village Disaster Reduction Plan

<table>
<thead>
<tr>
<th>Step 01:</th>
<th>Review and analyse the HVCA information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 02:</td>
<td>Prioritize the hazards</td>
</tr>
<tr>
<td>Step 03:</td>
<td>Prioritize the elements at risk</td>
</tr>
<tr>
<td>Step 04:</td>
<td>Identify the risk - identify why the element is at risk</td>
</tr>
<tr>
<td>Step 05:</td>
<td>Set disaster reduction objectives &amp; develop alternative solutions</td>
</tr>
<tr>
<td>Step 06:</td>
<td>Select Disaster Reduction Measures</td>
</tr>
<tr>
<td>Step 07:</td>
<td>Develop Village Disaster Reduction Plan document</td>
</tr>
</tbody>
</table>

Including commitment for action and agreements with relevant stakeholders

### 3 steps for CRC-assisted Disaster Reduction Measures

<table>
<thead>
<tr>
<th>Step 01:</th>
<th>Proposal writing for 2 Disaster Reduction Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 02:</td>
<td>Micro-project Planning for Disaster Reduction Measures</td>
</tr>
<tr>
<td>Step 03:</td>
<td>Micro-project Monitoring &amp; Evaluation</td>
</tr>
</tbody>
</table>

Comment [AO2]: Discuss about whether to change word “steps”
Step 01: **Review and analyse the HVCA information**

The RCVs and community stakeholders should collect together all the information from the HVCA (the results of the different participatory tools used, and the summary matrices for hazards, vulnerabilities and capacities). Then the community stakeholders should review in detail the HVCA information collected - so that they will have a better understanding of:

- what disaster reduction measures can be applied in their own community (i.e. measures for preventing, mitigating and preparing for disasters); and
- how these measures could (able to), or should (willing to), be applied.

The analysis and discussion on HVCA information should not start after the HVCA has been completed; it is better to begin discussion and analysis during the participatory tools and during the summary process for the Hazard, Vulnerability and Capacity matrices. For example, a community discussion on the effects and root cause of vulnerabilities can be initiated right after the vulnerability information is collected.

It will be necessary, however, to conduct a community stakeholder meeting (or series of meetings) to present all the HVCA information collected in order to:

- validate and cross-check the information; and
- find out and discuss stakeholder perceptions, opinions and ideas on community disaster risk reduction.

Arranging and summarizing the HVCA information according to the table below may help in presenting the summarized data and information to community stakeholders:

<table>
<thead>
<tr>
<th>Elements at Risk</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard</td>
</tr>
<tr>
<td>Who, or what, is at risk</td>
<td>Type &amp; characteristics of hazard affecting the identified elements at risk.</td>
</tr>
</tbody>
</table>

Each of these columns should be discussed and analyzed in greater detail. The previous module and sessions on Hazard, Vulnerability and Capacity assessments showed a number of ways to summarize and present this. You can use similar ideas from these previous assessments to make a new summary in the table above. If, during the discussions with the community, more data or information is required by the community and community stakeholders, then the other outputs from the participatory tools can also be presented.
**Step 02: Prioritize the hazards**

Ask the community to prioritize the major hazards that can affect the community using an appropriate ranking and scoring tool. You should make sure that a clear set of criteria are established - criteria that the community stakeholders themselves have discussed and decided upon.

Some of the possible criteria include:

- probability of the hazard happening - how likely is it to happen;
- severity of the impact of the hazard; and
- who and/or what is impacted by the hazard.

A table similar to the one below can be used to summarize the results:

<table>
<thead>
<tr>
<th>Criteria A</th>
<th>Hazard 1</th>
<th>Hazard 2</th>
<th>Hazard 3</th>
<th>Hazard 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL HAZARD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HAZARD PRIORITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also ask the community which hazards should be addressed - and how they should be addressed.

**Step 03: Prioritize the elements at risk**

Ask community to identify and then prioritize the elements at risk for each of the prioritized hazards (i.e. who and what is at risk) - again, using an appropriate ranking and scoring tool. To help reduce any personal bias - or group bias - use an appropriate method of ranking and scoring by formulating a set of criteria for which one element shall be considered more important than the other.

For example, some of these criteria could include:

- potential impact on the vulnerable elements if no action is taken;
- urgency or how quickly does the vulnerability need to be addressed in order to avoid further negative impacts; and/or
- extent of effect on the poorest (i.e. most vulnerable) households.
Remember: that by the word "risk", we mean:

- the likelihood of a specific hazard occurring (i.e. the probability); combined with
- the probable negative consequences (or negative impact) for people and things (property, assets and resources) that result from such a hazard occurring.

Tool or example table?

<table>
<thead>
<tr>
<th>Criteria A</th>
<th>Criteria B</th>
<th>Criteria C</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element at Risk 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element at Risk 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element at Risk 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element at Risk 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element at Risk 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Element at Risk 6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 04: Identify the risk - identify why the element is at risk

Based on the results of Steps 01 - 03, and on previous discussion and analysis of the HVCA information, facilitate the community stakeholders to identify the:

- **risks**: the problems and concerns related to the prioritized elements at risk - from Step 03 above; and
- **why**: these elements are at risk.

It is expected that a large number of problems and concerns will be identified - so it is important that you, the community and community stakeholders are able to conduct an extensive problem analysis process. For example, proper use of the problem tree method should lead to a clear grouping of related problems and issues - and thus help identification of the root causes of the problems. Other problem analysis tools and methods can also be used.
Step 05: Set disaster reduction objectives & develop alternative solutions

Based on Steps 03 and 04, you will need to “transform” each identified risk into a disaster reduction objective. Then, based on each objective, you then need to identify a range of different solutions that can contribute towards achieving the stated objective.

More simply, what this means is that for each problem you have identified – where you have identified a negative impact (effect or consequence), you will then need to change this into a statement that shows the positive impact (or effect) that you want to achieve: this is the disaster risk objective. Once the objective is clear, then you need to think about the many different ways, or activities, to bring about the required positive impact.

For example:

<table>
<thead>
<tr>
<th>Identified Risk</th>
<th>Disaster Risk Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>High frequency and severity of serious diarrhoea in flood season amongst children under 5 years old</td>
<td>Reduce the frequency and severity of serious diarrhoea in the flood season amongst children under 5 years old</td>
</tr>
</tbody>
</table>

Possible Solutions

- raised borehole or ring well
- borehole or well in safe areas
- flood-proof household latrines
- latrines in safe area
- rainwater catchment (guttering & storage)
- ceramic household filters
- chloramine tablet stockpile
- alum stockpile
- improved storage containers
- promote boiling drinking water
- safe firewood/fuel for boiling drinking water
- house-to-house visits by RCVs or VHWs
- hygiene education
- health education
- promote hand-washing
- promote use of soap
- promote use of ORS
- ORS stockpile
- mobile health clinic visits

You will need to repeat this process for each risk that you and your community have prioritized in Steps 03 and 04.

Once this task has been completed it is then necessary to consider in more detail the possible solutions identified through this process. In particular in CBDP Year 2 (and in following years), the CBDP program, will be encouraging communities to identify non-structural, as well as structural, disaster risk reduction measures.

In CBDP Year 2, when the Village Disaster Reduction Plan process has been completed, the CRC CBDP program will financially and technically assist each target village with the implementation of two disaster risk reduction measures: one structural and one non-structural.
Structural vs. Non-structural

Definitions:

**Structural Measures**

Structural measures refer to any physical thing or construction that reduces or avoids possible impacts from hazards. These include:

- ✔️ engineering measures; and
- ✔️ construction of hazard-resistant and protective structures and infrastructure

**Non-structural**

Non-structural measures refer the following measures that can reduce risk and related impacts:

- government laws, policies and guidelines;
- community awareness and understanding about hazards and disaster risks
- knowledge (& skills) to reduce risks
- household, community and local authority commitment to reduce risks;
- community mobilization;
- participatory mechanisms; and
- practice exercises and operating practices

**Examples**

**Structural**

1. raised borehole
2. de-siltation and rehabilitation of drainage canals
3. raised family safe areas
4. house strengthening
5. motor pumps for emergency irrigation
6. community evacuation boat
7. bamboo, mangrove or other reforestation
8. ORS or medicine stockpile
9. flood-proof latrines

**Non-structural**

1. flood forecasting and early warning systems
2. community disaster savings fund
3. evacuation plan and practice (drills)
4. search & rescue team formation and training
5. dengue prevention & preparedness campaign
6. HIV & seasonal migration awareness raising
7. child-care centre during high flood periods
8. livestock vaccination prior to flood season
9. training for drought and/or flood tolerant home-gardening practices and crop selection

You should use the following table to help facilitate the generation of a complete set of potential activities and projects to address solve the problem.

<table>
<thead>
<tr>
<th>Identified Risks (problem areas)</th>
<th>Disaster Reduction Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Structural</strong></td>
</tr>
<tr>
<td>1. Risk A</td>
<td>1. Measure 01</td>
</tr>
<tr>
<td></td>
<td>2. Measure 02</td>
</tr>
<tr>
<td>2. Risk B</td>
<td>1. Measure 01</td>
</tr>
<tr>
<td></td>
<td>2. Measure 02</td>
</tr>
<tr>
<td>3. ...</td>
<td></td>
</tr>
</tbody>
</table>
Note: In identifying possible solutions (possible disaster risk reduction measures), RCVs and the community should try not only to consider measures that will require outside (or external) financial or technical assistance - but should make determined efforts to identify measures that the community can do by themselves (using only their own skills, resources, mobilization and effort). The more that the community includes ideas and measures that the community can do themselves, the more quickly and the more effectively they will be able to cope with the disasters that they face.

The finalized Village Disaster Reduction Plan should therefore contain a series of disaster reduction measures - some of which require external assistance and some of which can be achieved by the community themselves; but all of which the community are committed to trying to implement - either in the short or longer-term.
**Step 06: Choose disaster reduction measures**

Facilitate a process where the community stakeholders decide which of the possible disaster risk reduction measures identified in Step 05 that they want to include in their Village Disaster Reduction Plan (VDRP).

The community should use a simple checklist of questions to guide this decision-making. The questions should have simple “yes” or “no” answers. To be acceptable, any measure included in the VDRP, should pass all the checklist questions.

<table>
<thead>
<tr>
<th>Questions to assess inclusion of possible disaster risk reduction measure in the Village Disaster Reduction Plan</th>
<th>Acceptable</th>
<th>Not acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the expected external funding required less than $2,500 ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Will the proposed measure <em>really</em> reduce the risk of disaster ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Will the proposed measure <em>really</em> benefit the most vulnerable ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Is the community able to contribute sufficient cash or in-kind resources (materials, skills, time and labour) ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Is the community willing to contribute sufficient cash or in-kind resources (materials, skills, time and labour) ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Is it likely that the community can access the necessary technical skills (either from within the community, or from outside) ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>When the measure is completed, is it likely that the community will be able to manage and sustain it - in the short and long-term - by itself ?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Will the measure have any important negative impacts or consequences within the village ?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Will the measure have any important negative impacts or consequences within the village ?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>