



GOVERNMENT OF THE PEOPLES REPUBLIC OF BANGLADESH

A FACILITATORS GUIDEBOOK FOR
**COMMUNITY RISK ASSESSMENT
AND
RISK REDUCTION ACTION PLAN**



**DIRECTORATE OF RELIEF AND REHABILITATION
MINISTRY OF FOOD AND DISASTER MANAGEMENT**

This guidebook has been developed based on following two models/ process.

**Community Risk Assessment Guideline Developed by Comprehensive
Disaster Management Programme (CDMP)**

and

**Participatory Action Plan Development (PAPD) process advanced by CNRS,
ITAD – UK, University of Newcastle & University of Durham UK with
assistance from NRSP/DFID.**

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FORWARD

In January 2005 the World Conference on Disaster Reduction delegates endorsed the Hyogo Framework for Action (HFA) to guide countries in their risk reduction efforts. Among other priorities, the HFA called on countries to mainstream risk reduction within development and operational planning and also, to ensure that scientific inputs influence community risk assessment processes.

This guideline has been designed to assist Bangladesh to meet the HFA commitments related to the above issues. The guidelines also provide the critical inputs towards assisting in the achievement of the national vision and mission for disaster management. Successful mainstreaming can only be achieved through a broad range of strategies including top down policy reform and awareness raising interventions and bottom up (community driven) risk assessment and planning activities. The CRA Guide play an important role in assisting communities and disaster management committees to identify “all hazards” risk, together with the most appropriate range of risk reduction options that can be introduced to either eliminate or reduce risk to more manageable levels.

The CRA process currently being used vary across agencies and in the main do not consider scientific hazard and risk analysis information, nor do they consider climate change variables and the potential these issues would have to change the risk environment. This means that current CRA processes are able to identify community risk and vulnerability factors based on what has happened previously, however they do not necessarily assist the communities in identifying what may happen in the future.

Uniform CRA guide that ensure appropriate consideration of both traditional and scientific factors are therefore viewed by the majority of stakeholders as being a common sense approach to addressing the issue of community risk.

I therefore extend my deepest appreciation to the facilitators guide development team for their great efforts in producing this best practise guide.

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Key to symbols used in this Guide

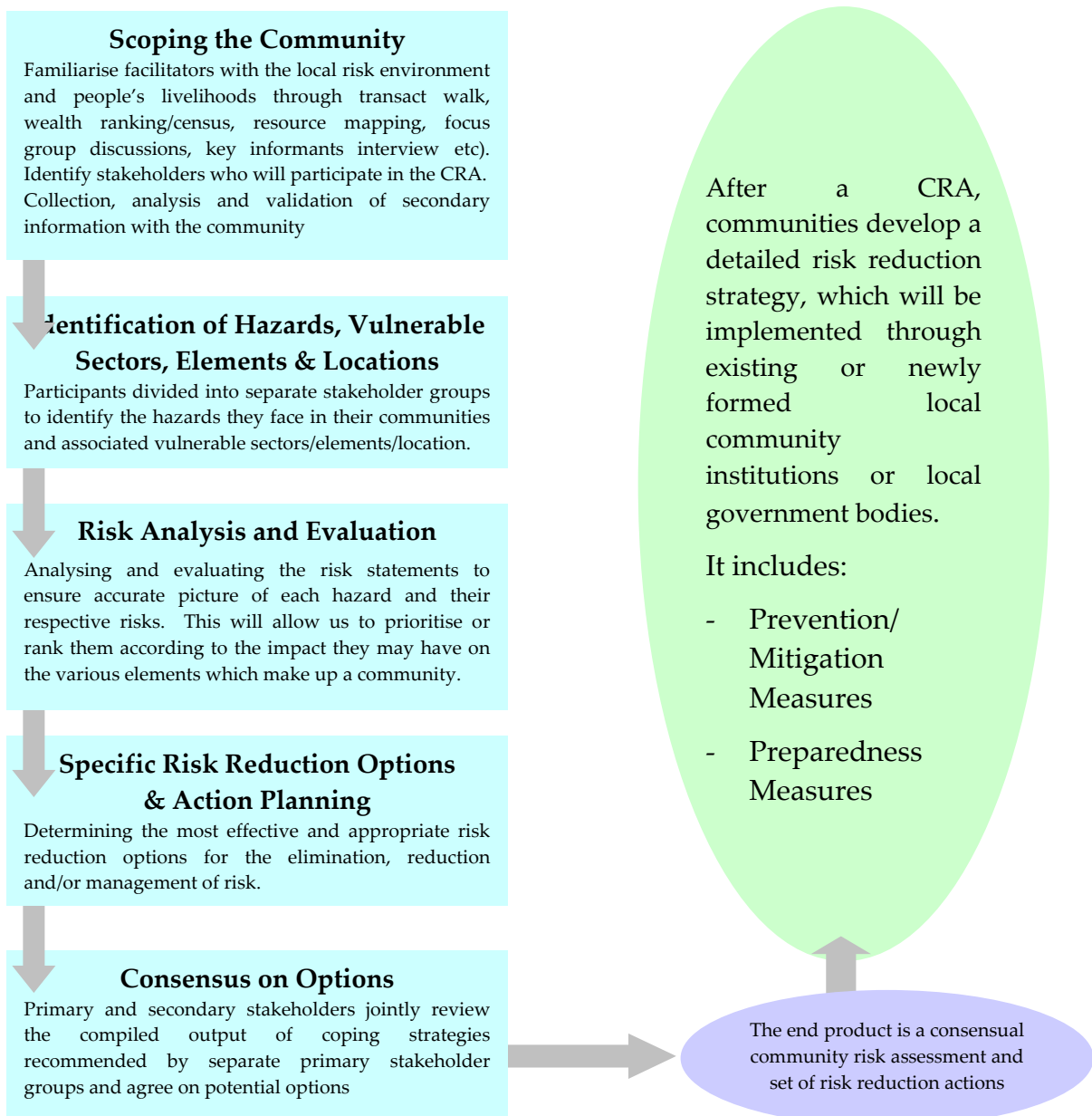
 Objective	Explains what should be achieved by the end of the session
 Time	Indicates the amount of time that could be allocated for the session
 Materials	Specifies what materials (for example, pens, paper) are needed for the session
 Method	Specifies which method to use
 Preparation	Explains what you need to do BEFORE the session commences (sometimes this may require preparation a few hours before the session starts)
 Processes	Explains the steps in the method

Chapter 1 : Introduction to this Guide

What is CRA?

CRA (Community Risk Assessment) is a participatory process for assessing hazards, vulnerabilities, risks, ability to cope, preparing coping strategies and finally preparing a risk reduction options implementation plan by the local community. CRA uses scientific information and predictions and participatory discourses to identify, analyse and evaluate risk environment of a particular community, reach consensus amongst the community on actions that are needed to manage the risk environment. The method recognizes that the vulnerability, loss, reduction or mitigation strategy and coping mechanism vary from community to community and group to group (women, person with disability, landless, farmers-fisher folks, etc) of a same community. So it ensures representation of professional, community and other groups and that their points of views are reflected. CRA encourages community participants to respect others' concerns. A flowchart below shows the CRA process sequentially.

Figure 1: Flow chart showing major steps of CRA



In the CRA processes the participating representatives will list down all hazards, identify all vulnerability aspects, causes and prepare consensual actions on risk reduction, coping and preparedness measures through analysing each of the prioritised options. Risk reduction actions are then developed with the participation of all stakeholders' (both primary and secondary). The method requires active participation of stakeholders from different occupational groups and social classes giving an opportunity for their opinions and concerns to be discussed and recognised. The method can potentially reduce conflict among stakeholder groups and interests of individuals during project implementation and if the situation arises can assist the local people with resolving it. Through the process people understand the importance of their participation in all the steps starting from identification of hazards, deciding upon risk reduction options, coping and preparedness measures, preparing an outline work plan and in implementation. This enables them to feel a sense of ownership and play a more effective role during implementation of actions.

When is CRA used?

Rural people, especially the poor, landless, fisher-farmers, women and disabled are highly vulnerable to hazards. The increasing frequency of hazards and subsequent loss of lives and resources makes them more vulnerable. Considering all these factors, the need to practice wider participation in preparing risk reduction actions is inevitable, where all the stakeholders and their representatives participate in planning and implementation processes through consensus.

At present both non-government and government sector projects emphasise the participation of local stakeholders for hazard and vulnerability reduction in a sustainable manner. Government agencies in Bangladesh are central to any hazard response and risk reduction activities. There are also many national, international and UN organizations involved in hazard response and risk reduction initiatives, which aim to benefit the poor and other vulnerable groups. CRA will be an appropriate method for all these organisations. CRA can ensure effective participation of vulnerable communities to achieve their risk reduction goals. CRA can be used at all levels to involve stakeholders from professional groups, agencies and departments and specialists from various disciplines, to prepare long-term risk reduction actions. It is expected that organizations involved in similar types of activities will be benefited using CRA.

Who is the guide for?

CRA is a comprehensive method to be used by organisations involved in hazard management and risk reduction activities particularly the CDMP and its partners where participation is a central consideration. It is also relevant to organisations involved in community based planning and management at local, regional or national levels.

The guide is a refresher for those who have already been trained in PRA approaches, disaster risk assessment and mitigation planning. It is a basic guide for those who wish to learn about and practice CRA.

Who are the Participants of CRA?

Participation of both primary and secondary stakeholders of any locality is considered important and essential in CRA. Primary stakeholders are those who reside within the locality and are directly impacted by any hazards (e.g. women, disabled, farmers, fishers, landless). Secondary stakeholders may not be directly impacted but are involved in providing support to them, and they may have some influence (e.g. administrative, legal) or be affected (either positively or negatively) by decisions made by primary stakeholders. Participation of secondary stakeholders in CRA is therefore very important. Types of participants might vary depending on the locality, occupational groups etc. and the objectives of conducting CRA.

The table below shows examples of primary and secondary stakeholders in the context of Bangladesh.

Stakeholder	Impacted	Supportive
Primary Stakeholders	Fishers Fish farmers Farmers (land owner and share croppers) Landless Women Disables Adolescent, etc.	Union Parishad Union Disaster Management Committee (UDMC) Upazila DMC Involved NGO staff Local Forest Officer; Upazila Cooperative Officer; Money lenders, local elites; Involved NGO staff
Secondary Stakeholders	UP Chair, members; Local Administration Public and Private service Providers Local Influential (policy/social – having influence on power structure) Member of Parliament, and Local institutional Network	Local Physicians Local CBOs and Networking Bodies etc. Scientific Organizations including Bangladesh Meteorological Department, Institute of Water Modelling (IWM), Center for Geographic Information Services (CEGIS), Climate Change Cell of Department of Environment, BUET, Dhaka University, and others.

Participating stakeholders' types and numbers for CRA will depend on its goal and objectives and the social and physical boundary of the locality, extent of command area and other related factors.

How to use this Guide?

This guide has been prepared for CRA practitioners. The Guide attempts to highlight the practical aspects of conducting CRA at the field level. The Guide contains 3 chapters and an Annex.

Below is a sequential description of *'where to find what'* in the Facilitators' Guide.

- Chapter 1** contains general description of CRA, its use and how to use this guide. This gives a preliminary concept of CRA and its usefulness. It also helps prospective facilitators to use this guide. Time, resources and skills required for conducting CRA are also found in Chapter 1.
- Chapter 2** describes the tasks that related with community risk assessment. The methods to conduct those activities are already widely in use in the country and the choice of methods depends on the goals and scope of the organisations or projects.
- Chapter 3** contains the steps for conducting a CRA. Objectives, time, materials, preparation, processes and expected outputs for each of the fourteen CRA activities are described through 7 sequential steps. This chapter also presents proposed daily activities, timetables, and daily working schedules (Chapter 1 is nevertheless important for conducting the whole process).
- Annex** The annex provides formats for CRA activities.

What Resources are Needed?

Time and other resources required to conduct CRA are not fixed. These can vary considerably depending on the objectives; hence this guide does not prescribe a structured timetable and resources. Instead the guide provides scenarios based on the field experience of CNRS.

The facilitators must have basic knowledge and some experience on PRA and have properly gone through this guide. Besides a clear idea of the locality, its livelihood options, local tone, conflicts, history of entitlement, physical situation of the resources, present hazard management initiatives, etc. will help the facilitators conduct a successful CRA.

In Bangladesh the dry winter season is suitable for conducting CRA, though the schedule should be synchronized with the farming system and local practices. Rice planting and harvesting times should be avoided. In rural settings of Bangladesh, schools, NGO offices, and UP offices can be used as venues.

Chapter 2 : Scoping the Community

Introduction

CRA is a method that involves local stakeholder groups to come together and prepare a consensual risk reduction strategy (action plan) through identification, assessment and analysis of hazard specific risks in different vulnerable sectors. It is therefore important that representatives of the relevant social and occupational groups are identified and participate in the CRA process. The CRA facilitators should have a basic understanding of the local social and biophysical situations, people and their livelihoods, type and extent of hazards in the locality, and traditional preparedness and coping strategy for the existing hazards.

Climate (and variability) change compounds risk environment

The global climate is changing, impacting all spheres of the earth including physical, natural, social and economic domains and life and livelihoods of people. Bangladesh is particularly vulnerable to the impacts of climate change and already experiencing climate related hazards like floods, droughts, cyclones and others, which are being aggravating following climate change (and variability). A significant part of the coastal region is threatened by salinity intrusion and submersion due to sea level rise. All these hazards have the potential to turn in to disasters depending on the degree, intensities and magnitudes in one hand and the resilience of the people on the other and the preparation at all level to treat these risks. The climate (and variability) change impacts are likely to increase risks of disasters and as such disaster management through reduction of risks must deal appropriately with climate change issues adequately while assessing risks through CRA and RRAP.

The general predictions of climate change (and variability) impact for Bangladesh are risks of:

- Erratic rainfalls shifting precipitation pattern severely interfering agriculture
- Heat spells over the threshold level of certain crops and even human health
- More floods, untimely floods
- Increased river bank erosion
- More drought events and prolonged
- Increased and prolonged drainage congestion
- Salinity intrusion in to the surface water, ground water and soil
- More cyclones, storm surges with higher intensities
- Reduced water availability for households and agricultural consumption

The extent, intensity and magnitude of impacts are not known exactly. However, they will definitely increase hazards and compound existing risks. In the context of overall risk management, climate risk management is a substantial area to deal with. Accordingly present climate hazards and trends (past hazards) for specific water systems and corresponding livelihood systems shall allow us to assess climate risks at this point in time and can be used in risk reduction initiatives of the country. There shall also be climatic hazards scenarios (future hazards) following global warming at local level, which shall be used to initiate risk reduction initiatives in the coming future. These hazards scenarios shall

also be used to deal with climate risk management in the development process of the country.

Climate change therefore threatens both previous achievements and future efforts to reduce poverty in Bangladesh, particularly by threatening water and food security and damage to essential infrastructure during more frequent disaster events.

To cope and adapt with climate change (and variability), it is necessary to know the location, nature, intensity and magnitudes of hazards and then a comprehensive risk assessment shall enable designing and implementing action plans to reduce risks. Scientific information related to hazards necessary has been recorded in annex1 shall be validated in one hand and enable the CRA team to refresh participants' experience of hazard trend in to their locality and develop RRAP addressing these risks.

Considering the above, the activities in this chapter are targeted to gather relevant primary information (also validating secondary information and maps from relevant sources e.g. DMIC) on the area, which will potentially help in action planning for managing the risk environment. Relevant data can also be gathered from the concerned offices (e.g. IWM, CEGIS, WARPO, BMD, SPARSO, GSB and DOE (CCC) etc.) using various data collection tools. However, it may not be necessary to collect all this information at this stage if the information is already available at project level or secondary sources. This might require considerable time depending on undertaking organization being locally institutionalised or ex-situ operations.

The commonly asked scientific secondary information, forms of information and possible sources are described in the following table.

Table 1: Scientific and modelling Information Required from Secondary sources

Information	Level of Detailing
Rainfall Trends over the seasons for last years	Union level, Upazila Level, District Level
River Bank Erosion Trend and Prediction	Union Level, Basin Level
Land Elevation	Union Level, Upazila Level, District Level
Groundwater table and quality of water information (including discharge and recharge rate)	Union Level, Upazila Level, District Level
Water level/water extent /duration of last floods/	Union Level, Upazila Level, District Level
Drought trend and Prediction Information	Union Level, Upazila Level, District Level
Cyclonic surge predictions/ or past inundation	Union Level, Upazila Level, District Level
Information about hail storms trends and (prediction if possible)	Union Level, Upazila Level
Salinity Prone Areas and Degree of Salinity in Surface and Ground Water including Agri Land	Union Level, Upazila Level, District Level

Information	Level of Detailing
under salinity	
Trends of the incidences of Tornados and if possible predictions	Union Level, Upazila Level, District Level
Number of continuous rain (more than 3 days) in past over the crucial season and predictions (if possible)	Union Level, Upazila Level, District Level
Trends of Heat Spell that affect (stress) livelihoods and projections (if possible)	Union Level, Upazila Level, District Level
Trends of Cold Wave that affect (stress) livelihoods and life and predictions (if possible)	Union Level, Upazila Level, District Level

After collection of the above mentioned scientific information, there is also need of some other secondary information to be collected from the local sources: Union Parishad, Upazila Parishad or other local sources. The common information to be collected before field activities of CRA are mentioned in the following table with possible sources.

Table 2: Socio-economic Information Required from Secondary sources

Information	Probable Sources
Location, Type and Area	Union Parishad, LGED
Population (Male/ Female)	Union Parishad, Upazila Statistics Office
Education (rate – primary, secondary)	Union Parishad, Upazila Primary Education Office
Health and Family Planning	Union Health Complex, Upazila Health and Family Planning Office
Communication (roads, bridge, culverts, sluice gates etc)	Union Parishad, LGED
River, Canal, Wetland (beels) etc.	Union Parishad, Bangladesh Water Development Board (office at district level)
Economic Activities (livelihood options)	Union Parishad, Local NGOs and Knowledgeable
Social – Religious Groups	Union Parishad
Institutions: educational, religious, government offices, UP, NGOs, local clubs, cultural institutions, flood/cyclone shelters	Union Parishad, Upazila social Welfare Office, Upazila Education Office
Common Places: hat – bazaar, playground	Union Parishad
Land use (commercial/business, settlement, infrastructure, forest, wetland, fish culture, cultivable/ non-cultivable, single cropped, double cropped, triple cropped etc)	Union Parishad, Upazila Land Office, Sub Assistant Land Officer, Upazila Agriculture Office, Sub Assistant Agriculture Officer, Upazila Fisheries officer, NGOs, Upazila Sub-Registrar Office
Soil Type	Union Parishad, Upazila Agriculture Office
Food and Agriculture	Upazila Agriculture Office, Upazila Food Office
Forestation	Union Parishad, Upazila Forest Office
Biodiversity	Union Parishad, NGOs, Forest Department
Water and Sanitation	Union Parishad, Tube well Supervisor, NGOs, Upazila DPHE Office, Sanitary Inspector

Information	Probable Sources
Poultry – Livestock	Union Parishad, Upazila Livestock Office
Fisheries	Union Parishad, Upazila Fisheries Officer
Electricity	Union Parishad, Polli Biddut Shomity
Union Map	Union Parishad, DMIC, Disaster Management Bureau

After collection and processing of the above mentioned information, an organization will start the validation process of the information with local people and union disaster management committees. The validation process should be well thought and well prepared. There should be a checklist made by the CRA conducting organization to get the feedback on the secondary information. After validation of the secondary information, CRA team will conduct transect walk, hold a few focus group discussion sessions, develop participatory social mapping, mapping venn. Activities to be performed in this stage are briefly described in the following sections.

Task 1: Validation of Relevant Secondary Information



Objective: Validation of relevant secondary information with the community.



Time: 2 hour.



Materials: Relevant secondary information/maps (Annex 1 & 2), notebook, colour marker, pen.



Participants: UDMC members, Local *Amin*, Local knowledgeable persons having idea about Mouza map, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation:

- Contact with Union Disaster Management Committee (UDMC), local knowledgeable people and others mentioned above to ensure participation in the session
- A suitable venue for conducting the session should be identified. The venue should have a medium sized room with capacity for sitting 10 – 15 people.
- Contact each individual one day before of the session mentioning date, time & venue.
- Arrange all necessary materials required for conducting the session.
- Collect necessary secondary (scientific and socio-economic) information from respective persons, offices or organizations listed in Annex 1 & 2..
- Analyse available information to produce easily understandable graphs or charts.
- Arrange a large envelope (A4 size brown colour) for filing the outputs to use at a later stage in the workshop.
- The facilitator should make all necessary arrangements before the participants come to the venue.
- A co-facilitator should take notes of discussion.

 **Process:**

1. The Facilitator welcomes all the participants (6 – 10, including one female member from each old ward, and three male members from the new wards) for the session and requests them to sit together in a large group.
2. Ice breaking through introduction of participants (name, respective ward/village, occupation etc).



3. The Facilitator will explain the purpose and the detailed tasks of the session so that the participants can freely participate in the session.
4. The Facilitator then presents secondary maps and information to participants in such a manner that everybody can understand and authenticate them.
5. The Facilitator will document necessary changes on the map or graphs in front of the participants or request any of the participants to draw the changes.
6. Co-facilitator will take notes of discussion in a systematic manner.



Output: Community validated secondary information or maps.

Task 2: Transact Walk (Familiarization Tour)



Objective: to gain clear understanding of the locality and its natural resources, land use, local problems, prospects etc.



Time: 3 – 4 hours



Materials: Union map with common physical features, notebook, pen /pencil



Participants: Local *Amin* (land surveyor), knowledgeable persons having idea about Mouza map, local professionals viz. school teacher and representatives of primary stakeholders (6 – 8 persons)



Preparation:

- Try not to walk through the common communication routes because you will not get most of the features (e.g. ponds, crop fields, homesteads, bushes) along the walkway.
- Walk slowly to know each of the issues/features clearly e.g. benefits of biodiversity, use and benefits of medicinal plants etc.
- Try to be familiar with the local terms e.g. *salun* (curry), *pokkhi* (birds), *kavua* (crow), *foshol* (field crop including fish), *hamildar* (pregnant women) etc.



Process:

- The Facilitator will build rapport with the community through frequent field visit and informal discussion prior to the task.
- Ask them about walking through which way you can get clear idea about the locality and its natural resources, land use, plant and wildlife biodiversity etc.
- To know each of the specific issues mentioned above take advantage of 6 question i.e. what is it? when occurs? where takes place? who does? why do they do? through which process?

কৃষি ব্যবহার	সংস্করণ/অধি	সেচের পদ্ধতি	প্রকার	প্রকার (আছে পোনা চাষ)	সাজের পিছন (আমি জানি)	বাড়ী-ঘর, গাছ, অনেক গাছ, গোমায়	সামান্য (চেনাচেনা)	সংস্করণ/অধি
গাছ	চো-আগ	চো-আগ	চো-আগ	চো-আগ	চো-আগ	চো-আগ	চো-আগ	চো-আগ
গাছ-পান			আম, বাঁশ, কামড় গাছ		বাঁশকাড়, ডালগাছ, আম-কামড়, বেঁচ, মেস্তা, ফুট কড়ি	কম্বা-আগ, ডাল, কামড়, আম		
সংস্করণ, সংস্করণ	আম-ইরি-২৪ সান, ডোলা, আম মারিচ, বেগুন		ডাল, কামড়, বাঁশ		বাঁশ, ডাল, ডোলা, কামড়, বেঁচ, মেস্তা, (আম), কামড়	ডাল, কামড়, আম		আম-ইরি-২৪ সান, ডোলা, মারিচ, বেগুন
গাছ		কামড় (সিঁ), আম, (কামড়)		আম, কামড়, কামড় (সিঁ), কামড়, কামড়, কামড়, কামড়		(কামড় সোনা-আম, কামড়, কামড়, কামড়)		
সংস্করণ	আম কামড়-আম, সেচের পান-আম, আম-আম	সুকনা		প্রকারের সংস্করণ সংস্করণ সংস্করণ সংস্করণ	কামড় আম	সোনা (কামড়), কামড়, কামড়, কামড়, কামড়, কামড়, কামড়, কামড়	কামড়, কামড়, কামড়, কামড়, কামড়	সেচের সংস্করণ
সংস্করণ সংস্করণ	সংস্করণ: উদ্যোগ, কামড়, কামড়	নিজের উদ্যোগ		নিজের উদ্যোগ প্রকারের সংস্করণ	নিজের উদ্যোগ সংস্করণ	নিজের উদ্যোগ সংস্করণ	উদ্যোগ, কামড়, কামড়, কামড়	সংস্করণ সংস্করণ সংস্করণ

- Start walking with 6 – 8 local knowledgeable persons from one side of the area and try to focus on every related issue during the walk and take notes.
- Talk with everybody you met during the walk.
- Once the walk comes to an end, display the notes/information to the accompanying persons so that they can provide further input for necessary addition, modification, alteration or deduction.



Output: Cross sectional information on the locality and its natural resources, land use, plant and wildlife biodiversity etc.

Task 3: Focus Group Discussions



Objective: To gain information about the locality, people, their livelihoods, local risk environment (hazards) and local/traditional preparedness and coping strategy.



Time: 3 hours



Materials: FGD checklist (Annex 3), notebook, marker, brown paper, board, tape, pen



Participants: UDMC members, Local knowledgeable persons, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation:

- Contact with the union disaster management committee (UDMC) to ensure their support and participation in the CRA process
- Finalise the participants (UDMC members and local knowledgeable people) and contact each individual one day before of the FGD mentioning date, time and venue.
- A suitable venue for conducting FGD should be identified. The venue should have a medium sized room with capacity for sitting 10 – 15 people.
- Arrange all necessary materials required for conducting FGD session and check whether the materials are in adequate quantity.
- Prepare copy of checklist to be used in the session before the start of FGD, see (Annex 3).
- Arrange a large envelope (A4 size brown colour) for filing the outputs to use at a later stage in the workshop.
- The facilitator should prepare himself with all necessary arrangements before the participants come to the venue.
- A co-facilitator should take preparation for taking notes of discussion.



Process:

1. Facilitator welcomes all the participants (6 – 10, 1 male member from each ward, and 3 female members) for the session and requests them to sit together in a large group.
2. Self introduction of participants (name, respective ward/village, occupation etc).
3. The Facilitator explains the purpose and the detailed tasks of the session so that the participants can freely participate in the session.
4. The Facilitator will then give an introduction to the disaster risk environment and features & benefits of comprehensive disaster management approach (Annex - 4).



5. The Facilitator will start discussion in line with the prepared checklist (Annex 3) to gain information about the locality, people, their livelihoods and local risk environment and local/traditional preparedness and coping strategy.
6. Co-facilitator starts taking notes of discussion in a systematic manner.



Output: Information on the locality, people, their livelihoods and institutional arrangements.

Task 4: Social Mapping



Objective: Collect information on the topographical, villages/settlement, physical infrastructure, institutions, commonplaces, land use, disaster prone and impacted areas and natural drainage of the area. This information will be recorded on maps.



Time: 3 – 4 hours.



Materials: Brown paper, union map, multi-coloured pens, adhesive labels, scissors, pencil.



Participants: UDMC members, Local *Amin*, Local knowledgeable persons having idea about Mouza map, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation:

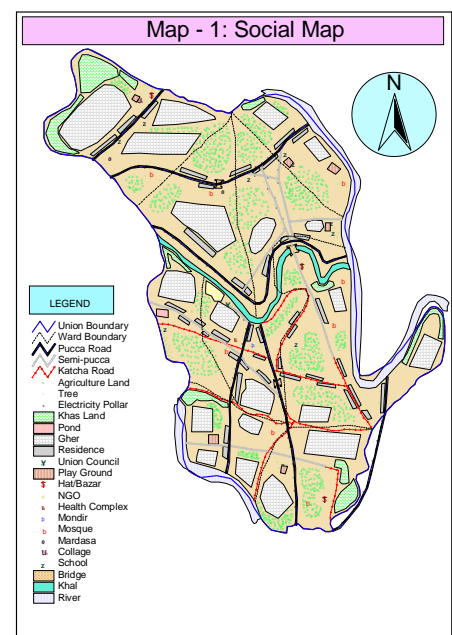
- The facilitator should prepare himself with all necessary materials before the participants come to the venue.
- A co-facilitator should take preparation for taking notes of discussion.
- Prior to the session the facilitator will study the LGED Thana Base Map to get an in-depth idea about the locality.



Process:

1. At the orientation session, the facilitator will explain the objectives of the activity. Participants should be encouraged to clarify any doubts regarding the purpose of the task and the role of the participants in the exercise.
2. Participants will be provided with the drawn perimeter and common physical features of the Union and they will record topographical, settlement, physical infrastructure, institutions, commonplace, land use, disaster prone and impacted areas and natural drainage of the area.
3. In circumstances where there emerged contrasting or diverse perceptions, information would be recorded only when participants reach consensus.
4. The Facilitator refrains from taking part in the

Example 1: Social Map



discussions; their role would be limited to facilitating and coordinating the sessions only (light facilitation).

- In some cases, first hand information from community will be checked with concerned departments' viz. Upazila Government Offices, District level government offices, if required.



Output: Social Map showing villages/settlement, physical infrastructure, institutions, commonplaces, land use, disaster prone and impacted areas and natural drainage of the area

Task 5: Hazard Venn



Objective: To identify and analyse the common hazards in the locality, their magnitude and likelihood.



Method: Venn diagram.



Time: 1 hour.



Materials: Brown paper, art paper pieces of different size and colour, marker, adhesive.



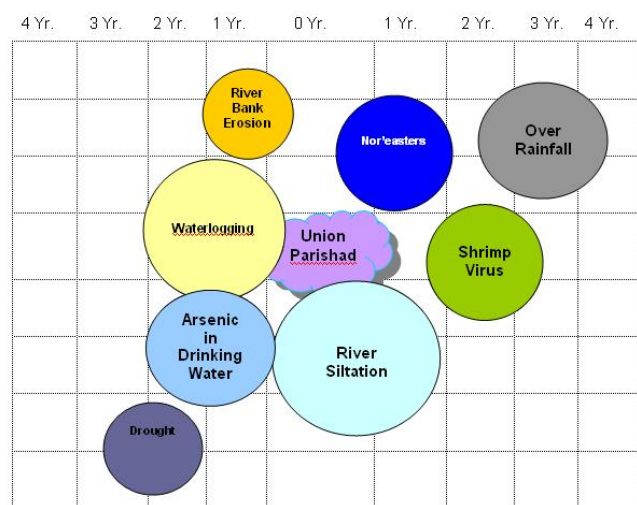
Participants: UDMC members, Local knowledgeable persons, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation: The facilitators need to take following preparation beforehand:

- Gain idea on common hazards, their frequency, damage caused, and risks.
- The venue should be as suggested by the participants.
- Invite the participants at least day before.

Example 2: Hazard Venn Diagram



- Prepare all the materials and carry them to the venue before the participants arrive.



Process:

- The facilitator will request the participants to prepare a list of common hazards that takes place in the locality.
- One of the participants will read out the list. The facilitator will ask if there are omissions.
- The participants will be requested to select round shaped art paper pieces (prepared earlier by the facilitator) for each of the hazards, size will depending on the intensity and damage caused by the hazard, bigger size paper for the most intensive and most damaging hazard. They will write down the hazard on the selected piece.

4. Now the participants will be requested to put a piece of art paper in the middle of the big brown paper writing the name of their locality/word and mark the upper side of the brown paper as north, then they will put the hazards on the brown paper around their locality depending on the direction they come into the locality.
5. At this time they will consider the frequency of occurrence of each of the listed hazards, most frequent one should be placed closest to their locality and so on. Now they will discuss among themselves and agree about the position of each of the hazards. The participants will do this exercise for each of the hazards they listed
6. The facilitator will ask some questions like: why do they think in this way? Why they are putting one close and another faraway place?
7. During the discussion, if they want to change place for any hazard, they can do it. After agreement they will plot them on the places they agreed.
8. Throughout the session allow participants to discuss and come to consensus, carefully note down the points.



Output: A consensual Venn diagram of hazard based on their consequences, likelihood and the vulnerable people.

Task 6: Hazard Mapping



Objective: To locate the affected areas by specific hazards within the union



Method: Hazard Map.



Time: 2 hours.



Materials: Large size Union boundary map with general physical features (e.g. river, canal, major road, culvert/sluice gate, location of Union Parishad etc.), colour pencil, marker.



Participants: UDMC members, Local *Amin*, Local knowledgeable persons having idea about common hazards, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation: The facilitators need to take following preparation beforehand:

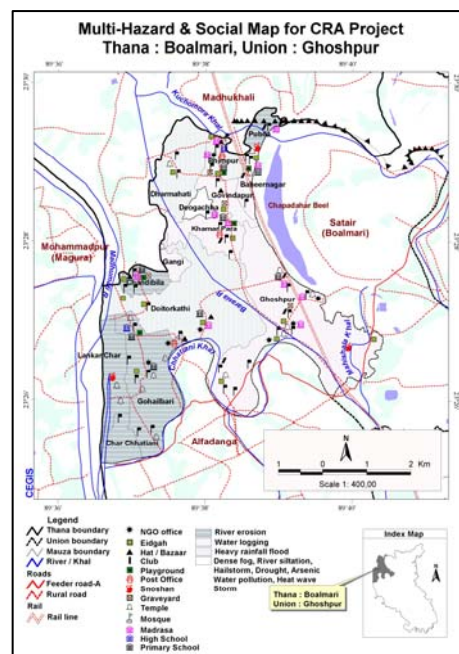
- Gain idea on the local hazards, their intensity and frequency, damage caused, and risks etc.
- The venue should be as suggested by the participants.
- Invite the participants at least a day before.
- Prepare all the materials and carry them to the venue before the participants arrive.



Process:

1. The facilitator will present the list of common local hazards that takes place (developed under Task 5) and will describe the process of identifying locations affected by specific hazards in the locality.
2. The Facilitator will then discuss about the Union boundary map along with common physical features so that the participants can easily identify locations in the map.
3. The facilitator will then request participants to draw hazard maps (one for each hazard) within union boundary.
4. Throughout the session allow participants to discuss and come to a consensus, carefully note down the points.
5. The participants will do this exercise for each of the hazards they listed.

Example 3: Hazard Mapping



Output:

A consensual hazard map for the union.

Task 7:

Livelihoods Seasonal Calendar



Objective: Local livelihood options and its seasonality dimensions.



Method: Livelihoods Seasonal Calendar.



Materials: Brown paper, scale, colour markers, board, and adhesive tape.



Time: 1 hour.



Participants: UDMC members, Local *Amin*, Local knowledgeable persons, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation: The facilitators need to take following preparation before hand:

- Gain idea on the local livelihood options, their seasonality, changing trend and intensity etc.
- Select a suitable venue and invite the participants at least day before.
- Prepare brown paper formatted with months at the top and place to write the livelihood options on the left hand side.
- Prepare all the materials and carry them to the venue before the participants arrive

**Process:**

1. The facilitator will initiate the discussion by asking questions around the topic. S/he will then encourage participants to state what they are going to do and why. Questions may be: livelihood options available in their locality and their seasonality
2. After creating an enabling environment and preliminary understanding the facilitator will invite all the participants to prepare a list of livelihood options in their locality. He can then hang the prepared format or prepare a format in discussion with the participants.

Example 4: Livelihoods Seasonal Calendar

Livelihoods	Boi	Joi	Ash	Sra	Vad	Ash	Kar	Ogh	Pou	Mag	Fal	Cho
Crop Cultivation												
Fish Culture (Gher)												
Fish Catch												

3. The participants will be requested to identify the months of operation of each of the options take place in the locality.
4. The participants will discuss among themselves and agreed up on and accordingly the facilitator or a participant will put colour under the months as per agreement and finalize the seasonal calendar of the local livelihood options.
5. The participants will then graphically represent the intensity of the operation throughout the selected months by options as in Example 4.
6. By this way the participants will present each of the options identified by them.



Output: A consensual seasonal calendar of livelihood options with its seasonality dimensions.

Task 8: Hazard Seasonal Calendar

Objective: the occurrence and intensity period of listed hazards and their changing trend due to 'climate change' in the locality.



Method: Seasonal Calendar.



Materials: Brown paper, colour markers, board, and adhesive tape.



Time: 1 hour.



Participants: UDMC members, Local *Amin*, Local knowledgeable persons, local professionals viz. schoolteacher and representatives of primary stakeholders (6 – 10 persons)



Preparation: The facilitators need to take following preparation beforehand:

- Gain idea on the physical setting, common hazards, their seasonality, changing trend and intensity.
- Select a suitable venue and invite the participants at least day before.
- Prepare brown paper formatted with months at the top and place to write the local hazards on the left hand side.
- Prepare all the materials and carry them to the venue before the participants arrive



Process:

1. The facilitator will hang the list of the hazards identified in the previous session (Task 5 & 6) and share with the participants. One of the participants will read out the list. The facilitator will ask if there is anything left, if any thing comes new that will be added.
2. The facilitator will initiate the discussion by asking question around the topic, he will than assist one of the participant to state what they are going to do and why. Questions may be: In which months do flood take place in their locality? In which months the situation worst?
3. After creating an enabling environment and preliminary understanding the facilitator will invite all the participants to prepare a seasonal calendar of the listed hazards for their area. He can than hang the prepared format or prepare a format in discussion with the participants.

Example 5: Hazard Seasonal Calendar

Hazards	<i>Boi</i>	<i>Joi</i>	<i>Ash</i>	<i>Sra</i>	<i>Vad</i>	<i>Ash</i>	<i>Kar</i>	<i>Ogh</i>	<i>Pou</i>	<i>Mag</i>	<i>Fal</i>	<i>Cho</i>
Flood												
Cyclone												
Drought												

5. The participants will be requested to identify the months of occurrences of each of the hazards; they will also identify the months when the situation is worst.
6. The participants will discuss among themselves and agree and accordingly the Facilitator or a participant will put colour under the months and finalize the seasonal calendar of the hazards in the area.
7. Now the facilitator will ask some questions to the participants, especially he will draw the attention of the elderly participants. The questions might be - what was the intensive flooding period 20/30 years ago, do you observe any change in the occurrence period and intensive period of flood, if any difference found that also should be marked on the seasonal calendar after agreement using different colour or sign.
7. The participants will then graphically represent the variability of the hazards throughout the selected months by options as in Example 4.
8. By this way the participants will present each of the options identified by them.



Output:

A consensual seasonal calendar of hazards with its seasonality dimensions.

Task 9: Key Informants Interview



Objective: to gain information about the locality, people, their livelihoods, past and potential future hazard impacts.



Time: 1 hour.



Materials: KII checklist (Annex 4), notepad, pen.



Informants: Key informants interviews should be with individuals who have involvement with a particular issue of interest, (Key informant for cyclone related issue may be a cyclone affected individual, a doctor – who experienced in providing medical support to cyclone affected households) UP chairman, Upazila level officers (e.g. Agriculture, Fishery, LGED etc. depending on the subject of interest) and local knowledgeable.



Preparation:

- Inform the respondent well in advance.
- Go through the KII checklist carefully.
- Take all the required materials to the interview and be on time.



Process:

1. The Facilitator/interviewer will introduce himself and explain precisely what he is going to do and why.
2. The interviewer will ask the respondent if he has anything to ask.
3. The interviewer will ask questions based on the checklist to gather responses from the respondent.
4. The facilitator will review the checklist to see if there is any thing left or if any area needs further clarification.
5. The facilitator will conclude the interview by thanking the respondent for his/ her time and useful inputs.



Output: Information on the locality, people, their livelihoods and institutional arrangements.

Note: *To complete all these tasks might require a week to a month depending on the local institutional capacity and facilitators' skills.*

Any specific issues identified in the above exercises can be shared with the stakeholder groups during CRA workshops.

Some of the tasks could possibly be done in one long session e.g. information validation and FGD in one session, all the mapping tasks including social mapping, hazard mapping, hazard venn, hazard seasonal calendar, and livelihoods seasonal calendar in another session. Transact walk can better be done with the same individuals in mapping tasks, if possible.

Select Participants for CRA

Based on the information collected above as well as that available from secondary sources, the participants for the CRA workshop can then be selected. Whilst selecting the participants it is important to ensure that all concerned stakeholders for whom the management plan would be developed are included. Household socio-economic features and hazard vulnerability are the main source of information for identifying stakeholders. The database related to social and institutional systems will help identify the social groups and local institutional settings needed for participatory development of the community plan and implementation of the proposed actions.

From all the available data sources, a preliminary list of stakeholders (both primary and secondary) can be developed. A list of households can be collected from UP or from Primary Education Officer (list of household under primary school catchments area) or a quick census can be undertaken to have a list of households. Once the preliminary list is developed then other relevant attributes can be overlaid to assess whether all the relevant issues are covered. It should ensure inclusion of representation from relevant social and occupational groups for CRA.

It is important to note that once the participants are selected they should not be changed or replaced after the start of CRA workshops. Inclusion of new participants in the middle of CRA workshop will break harmony between different sessions and create problems for other participants that may lead to produce poor results. At the end of this stage the following preparations need to be undertaken for the better management of sessions:

- A suitable venue for conducting CRA workshop sessions should be identified. The venue should have capacity for sitting 12 - 15 people. Sessions will run concurrently. Ideally the venue should also have a room that can accommodate around 40 people for holding the plenary sessions.
- Finalise the participating stakeholder groups (primary and secondary) and contact each individual mentioning the dates, times and venue.
- Arrange all necessary materials required for the workshop and check whether the materials are in adequate quantities.
- Prepare all necessary forms and formats to be used in different sessions before the start of next sessions.
- Brief the whole processes of CRA to the facilitators' team and orient the Co-Facilitators and Session Assistants of their specific roles during the whole course of CRA workshops.
- Arrange large envelopes (A4 size brown colour) in required quantities for filing each of the session outputs for compilation and use at a later stage in the workshop.
- The facilitators' team should prepare themselves with all necessary arrangements before the participants come to the venue on session days.
- Special attention should be paid to personal choices (preferences) of food and snacks if participants are of mixed religious classes.
- Check the toilet facilities in the venue with special attention for women participants.

Chapter 3 : CRA Workshop

Introduction

This chapter describes the core activities of CRA for building consensus among the different concerned stakeholders on identified actions (interventions) relevant to hazard management and mitigation. This Chapter details the steps in the Planning stage of CRA (Figure 1).

Step-1: Hazard Identification

Step-2: Vulnerable Sector Identification

Step-3: Risk Statement and Prioritisation

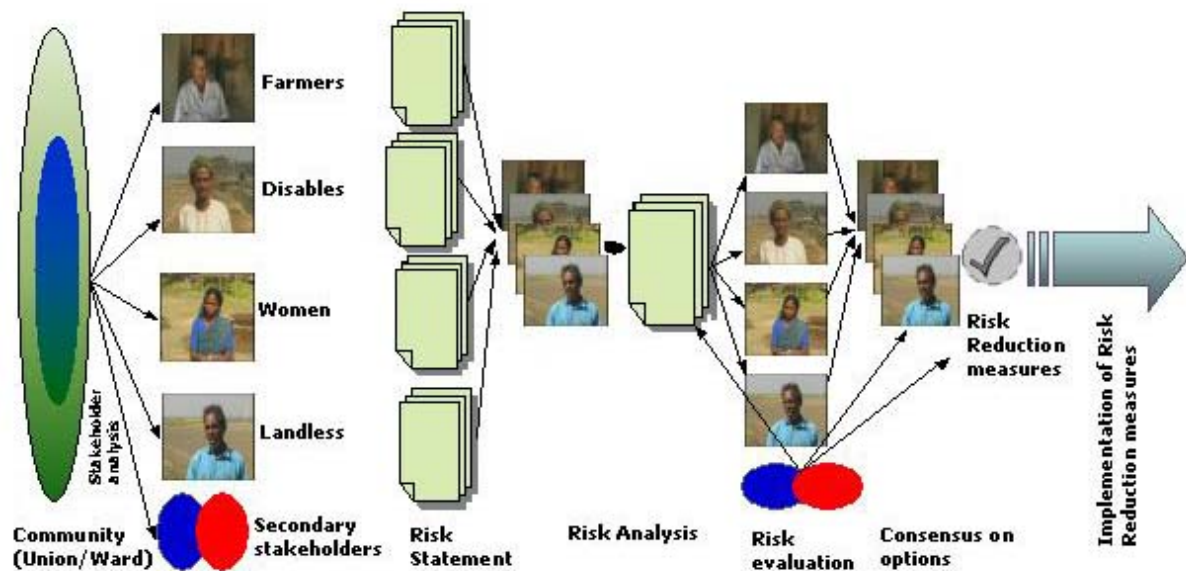
Step-4: Risk Analysis and Evaluation

Step-5: First Plenary: Consensus on Risks

Step-6: Specific Risk Reduction Options

Step-7: Final Plenary: Consensus on Options

Figure 2: CRA Activity flow chart



Planning for CRA

As described earlier, for conducting a full CRA at micro level, a total of 7 consecutive days will be required if a team of two facilitators conduct the sessions concurrently with 4 stakeholders' groups. It is important that the facilitators prepare a detailed work plan for each of the activities to be carried out in 7 days, before starting the CRA. The work plan should include the daily activities, materials needed, time requirement and responsibility of facilitators, co-facilitators and session assistants. For assisting the CRA facilitators, daily activities, time requirement, participants (stakeholders) for each day and other related aspects are presented in Figures 3 and 4 below.

Figure 3: Daily Activity Schedule for conducting CRA

Day and Time	Session	Description	Participants
Pre-CRA			
Ranging from a week to a month depending on local institutional capacity of conducting organization	Scoping the community	Tasks: Relevant secondary information (both scientific and socio-economic) collection and validation, Transact Walk, Focus Group Discussions, Social Mapping, Seasonal Calendar of Hazards and Livelihood Options, Hazard Mapping and Key Informants Interview	FGD, Social & Hazard Mapping, Seasonal Calendar: 8 – 10 persons from the union including UDMC, Knowledgeable, and Professionals etc.
1 to 10 days based on the individual PNGO's capacity	According to the PNGO's convenience	A draft report preparation based on the Pre-CRA findings	PNGO staff
01 Day: 06 hours session	Time agreed by the UDMC	Validation of the information collected from the different sources and means as the part of "Scoping the Community" .	24-36 members from Union/ Municipality/ City Corporation DMC
1-5 days depending on the PNGO's capacity	Before commencement of the CRA workshop	Finalization of the Pre-CRA report based on the validation session with the DMC members	PNGO staff
<p>Preparation for the CRA workshop: Thorough review and analyze the Pre-CRA data and take preparation for CRA accordingly. This is very important for effective facilitation and helping in preparation of Risk Statement.</p> <p>A. Getting ready for CRA workshop; Task 1: Prepare a draft list of Hazard, Vulnerable Sectors, Elements and specific risk statement based on the Pre- CRA results.</p> <p>B. Getting ready for CRA workshop; Task 2: Make four copies of hazard map (big size- easily visible to the CRA participants) based on the data found in the Pre- CRA.</p>			
CRA Workshop			
Day-1 (Ward 1/2/3) 9 am to 5 pm	Step – 1 & 2 Activity 1 - 3	Conduct three concurrent sessions in three venues at old three words by three facilitators' team.	2-3 participants from each of the socially disadvantaged group (disabled, women, farmer/ weavers/ fishers, landless) is a must. Include participants from each of the new words; equal number from each new word. Total participants should be in between 15-20.
Day-2 9 am to 5 pm	Step – 3 Activity 4 - 6	Conduct three concurrent sessions in three venues at old three words by three facilitators' team.	Same as Day – 1 Participants
Day-3 9 am to 5pm	Step – 4 Activity 7 - 8	Task # 07 would be carried out by the PNGO facilitators in consultation with the officials of relevant GO/NGO and local elderly and experienced persons.	Facilitators, Field Officers and Assistants
		Task # 08 would be carried out by the PNGO facilitators in consultation with the respective GO/NGO department.	Facilitators, Field Officers and Assistants
	Compilation of findings of task 07 & 08	Prepare necessary posters and get ready for the final day session	Facilitators, Field Officers and Assistants

Day- 4 9 am to 2 pm	Step - 4 Activity 9 (Final Plenary)	Fix all the posters prepared in Day 3 in the venue before the session starts. All the participants will observe the display out puts in small groups and then reach in to a consensus in the plenary after necessary corrections	Day 1 participants and 15-18 from secondary stakeholders (altogether around 25-38 participants).
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Figure 4: CRA Daily schedule

(* =full day (9 am – 5 pm), * =half day (5 pm–10 pm), † =half day (9 am–1 pm)

Participants	Day-1 (Ward 1/2/3)	Day-2 (Union)	Day-3 (Union)	Day-4 (at office)	Day-5 (Union)	Day-6 (at office)	Day-7 (Union)
Landless / Farmers/ Women / Disables/ Adolescent	Step 1, & 2, Representatives *	Step – 3 Representatives *					
Facilitators, Project staff & Assistants			Step 4, Tasks 7 & 8 would be carried out by the Facilitators, Project staff & Assistants *				
Primary and Secondary stakeholders				Step 4, Task 9 Final Plenary *			

- Landless, Farmers, Women and Disable to attend 3 full days (Day 1 for everybody and Day 2 & 5 for group representatives) and 2 half day (Day 4 & 7)
- Secondary Stakeholders (UDMC and Upazila level officials) to attend 2 half days (Day 5 and Day 7)



Special note for the facilitators:

- Participants registration
- Participants: numbers, types and social and occupational classes
- Day: Detailed activities of this step
- Session Introduction and Ice Breaking
- Each facilitator should work with a specific stakeholder group throughout the workshop progress.

CRA Step 1: Identification of Vulnerable Sectors, & Community Elements

Activity1: Identify All Vulnerable Sectors & Community Elements



Objective: Identify the key sectors within the community (e.g. agriculture, housing, livestock, lifelines, industry), key elements (e.g. people, Lifelines/Essential services, infrastructure, livelihoods, houses and personal property, community buildings) that could potentially be affected by any of the hazards identified in Pre-CRA sessions.



Time: 1 Hour.



Materials: Poster paper, marker pen, display board (wall, paper), pushpin, both side tape and A4 size Process Documentation Format (Annex 7, 8 & 9).



Method: Open discussion in large group



Preparation: Facilitators be prepared with the following:

- Collect all the materials needed for the sessions as stated above.
- Explain and guide the Co-facilitator to take notes on the whole process
- Facilitators should have a clear understanding of the key risks for the hazards so that he/she can assist the participants to identify the right risks relevant to the community elements and sectors.



Processes:

1. The Facilitator welcomes all the participants (8-10) in a stakeholder group for the session and asks them to sit together in a “U” shaped large group.
2. The Facilitator explains the purpose and the process of this exercise so that the participants can respond freely in it.
3. The Facilitator now clearly explains the understanding of community elements, risk location and the relevant sectors to be affected by the hazards and asks the participants to respond accordingly.
4. Once the community elements/sectors/ are identified (one after another) the facilitator will write in the specific format placed in Annex 7, 8 & 9 accordingly.

Example 6: Vulnerable sectors

Sector	Elements	Hazards									
		Flood	Drought	Hailstorm							
Agriculture	Aman Paddy, Jute										
	Vegetable										
Fish Farming	Fish farms are flooded										


Sector	Elements	Hazards									
Infrastructure	Homesteads houses, Educational and religious institutions										




Output: A list of all hazards, vulnerable sectors and elements relevant to the community is prepared.


CRA Step 2: Identification of Hazard Specific Risks in Each Vulnerable Sector


Activity 2: Risk Statement associated with Hazards in each Vulnerable Sector

 **Objective** : Listing all the risks that result from the interaction of the hazard with a vulnerable element, also identify the less obvious risks that are associated with many of the hazards.

 **Time** : 2 Hours.

 **Materials** : VIPP (Visualization In Participatory Programs) Cards, Poster papers, marker pens (sketch pen), display board (wall, paper), pushpin, both side tape and A4 size Process Documentation Format (Annex 10).

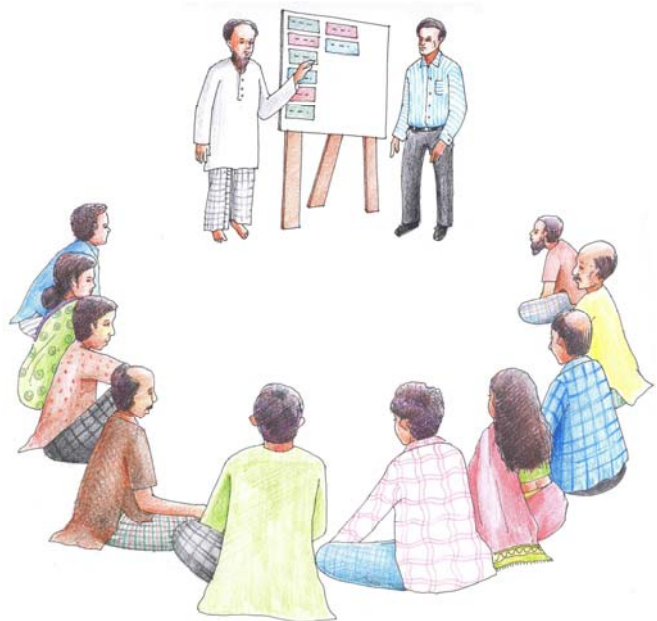
 **Method** : Small group discussions and presentation in large group and open discussions.

 **Preparation** : Facilitators be prepared with the following:

- Should have prior knowledge on locality, relevant hazards (identified in Pre-CRA), social and physical conditions that are gathered in Task 1 - 9 (described in chapter 2 of this Guide).
- Collect all the materials needed for the sessions as stated above.
- Explain and guide the Co-facilitator to take notes on the whole process
- Facilitators should have a clear understanding of the definition of hazard specific risks so that he/she can assist the participants to identify and write the right kind of risks.
- Ensure presence of 2/3 primary school children from the village to help participants writing hazard specific risks if there is none among them can write.

 **Processes:**

1. The Facilitator welcomes all the participants (8-10) in a stakeholder group for the session and asks them to sit together in a “U” shaped large group.
2. The Facilitator explains the purpose and process as well as the detailed tasks of this session so that the participants can freely respond in it.
3. The Facilitator describes the reasons for forming sub-groups and asks the participants to sub-divide into 2–3 small groups (3-4 members in a small group). The facilitator supplies necessary materials to the sub-groups.



4. The Facilitator explains the activities to be done in the sub-groups and explains some of the principles of working in groups. If assistance (such as school children) is needed to help with writing, then the available people should be distributed amongst the sub-groups.
5. The Facilitator now clearly explains the hazards and probable effects and then asks the participants to identify hazards specific risks for all the hazards relevant to the locality through discussion among them.
6. The Facilitator will also clearly explain the ways of writing specific risk statements so that the outputs become very specific, not generic. (Example 8)

Example 6: Risk Statement

Flood: 3000 lives may be lost and over 5000 people will be injured if a major flood event above 3 metres occurs

Flood: A major flood above 2 metres will cause water inundation of approximately 300 buildings.

Flood: Satellite health centres and the EPI centres will be closed if a major flood like 1988 occurs.

Fertilisers & pesticides contamination: Contamination of drinking water may result from inappropriate land use management and the indiscriminate use of fertilisers and pesticides.

Cyclone: In excess of 25% of the buildings will be seriously damaged or destroyed by cyclones with wind speeds greater than 200 kph and the people with disability, women, elderly and children living in those households are most likely to be affected seriously.

7. In this way, the participants will write risk statements against each of the selected hazards.
8. After identification of risks in small groups, the participants will again sit in a “U” shaped large group.
9. Now one person from a small group will display their VIPP cards and present the risks they identified in their small group.
10. While one group will present their hazards specific risks, other groups should carefully listen and put ticks (√) on similar hazard related risks, which they also identified in their small groups.
11. Once the presentation of the first small group is over, other groups will sequentially present their identified risks except the common ones, which marked with ticks (√).
12. The presenter of each group will answer the questions from other groups, if any and explain the reasons for selecting the said hazards specific risks.
13. The Facilitator now prepares a risk statement list compiling all the risks identified by the small groups without duplication according to Annex 10.

14. If any risk associated with the vulnerable sector/elements/locations is missing after listing, the Facilitator will ask the participants for gap filling in large group and add with the list after agreement.



Output: A primary list of hazards specific risks relevant to all vulnerable sectors/community elements/locations are prepared from the perspective of different stakeholder groups.

Activity 3: Hazard Specific Risk Selection



Objective: To select hazard specific risks from the primary list of risks.



Time: 30 Minutes.



Materials: Primary risk list (VIPP cards), brown paper, display board, push pin, tape, marker.



Method: Large group discussions



Preparation: Facilitators should take preparation on following aspects:

- Facilitator should have a clear idea about the objectives of the project, the intended goal and activities, the scope of work of the project/organisation and the extent of use of CRA outputs in the area.
- Clear understanding of the type and nature of hazards specific risks the project or organization will address.



Processes:

1. The facilitator will explain the participants about the goal of the project or organization and potential future actions to be undertaken from the project.
2. Facilitator will then display and fix two separate cards side by side of which one showing '*Hazard Related Risks*' and the other '*Non-Hazard Risks*'.
3. The participants are then asked to categorise the risks under '*Hazard Related Risks*' and '*Non-Hazard Risks*'.
4. Once the problems are categorised, the Facilitator will then explain to participants that CRA will address only the '*Hazard Related Risks*' in the next steps.

Example 7: Risk Selection

Hazard Related Risks	Non-Hazard Risks
Flood: 3000 lives may be lost and over 5000 people will be injured if a major flood event above 3 metres occurs	Limited Scope of Work: during lean period 50% population of the locality becomes unemployed.
Cyclone: In excess of 25% of the buildings will be seriously damaged or destroyed by cyclones with wind speeds greater than 200 kph	
Flood: A major flood above 2 metres will cause water inundation of approximately 300 buildings.	



Output: List of '*Hazard Related Risks*' and '*Non-Hazard Risks*' (if any) based on the opinion of the participants.

Activity 4: Risk Assessment



Objective: Analysing and evaluating the risk statements to have an accurate picture of each risk and their respective potential consequences. This will allow us to evaluate them according to the impact they may have on the various sectors/elements, which make up a community.



Time: 2:30 hours.



Materials: Risk statement list, filled in vulnerable sector/elements/location list, brown paper, marker/sketch pen, tape, pushpin, display board, A4 size Process Documentation Format (Annex 11), and clip board.



Method: Large group discussions



Preparation: Facilitators should take preparation on following aspects:

- Facilitator should have a clear idea about defining the very specific risk consequences, impacts, vulnerability, and affected population in the area.
- Collect copies of the Risk Matrix using Pair Ranking



Processes:

1. The facilitator will present the hazard specific risks to the participants and explain them how to identify specific potential consequences against each of the risk statements.
2. Display the format according to Annex 11 on board or wall and write the sector/element/location potential consequences at respective cell as per the community perception.
3. Write potential consequences one by one against each of the risk statements listed in Activity 4
4. The facilitator will then explain the likelihood and consequence descriptors and fill the respective cell against each of the risk statements depending on the potential consequences they might have upon happening (see Annex 12 for descriptors).
5. At last, based on the likelihood and level of consequences of specific risk statements the facilitator will use risk matrix to evaluate the risks depending on their extremity in the community.
6. After risk rating the facilitator will let the community to talk about whether the potential consequences for specific risk are manageable by the community (i.e. acceptable risk) or require external help (i.e. unacceptable risk) based on the risk evaluation. (Annex 13)



7. For better understanding of the participants, life examples can be given. However, examples should not be related to any of the risks they identified, which may bias (or influence) the participants opinion.
8. Facilitator will then write two separate lists of acceptable and unacceptable risks and will discuss with the participants that the CRA process will analyse the unacceptable risks during the next sessions.
1. This is the end of the day. However, the Facilitators will select 2-3 representatives from the participants to attend sessions on Day-2 (for selection of representatives see Appendix 14) and close the session for the day thanking everybody.

Example 8: Risk Assessment

Risk	Potential consequences	Consequence	Likelihood	Rating	Acceptability
1) There is risk that flooding in the delta will destroy crops and livestock	Loss of cash crops and livestock. Shortage of food. Damage to property.	Major	Possible	High	Un-acceptable
2) There is a risk that the airport and nearby town will be flooded resulting in loss of lives	Relocation Sell assets/borrow money Increase in anti-social behaviour Outbreak of communicable diseases – health hazards Family income will suffer	Moderate	Likely	Moderate	Un-acceptable
3) There is risk that the 90% satellite health clinic and EPI centres will be closed for four weeks due to severe flood.	Pregnant women and children under 6 years of age will be deprived from the essential health services.	Major	Possible	High	Un-acceptable
4) There is risk that most of the thatched houses / shanty will be destroyed by tidal surge.	Loss of life among the people with disability, women, elderly and children will be high.	Major	Possible	High	Un-acceptable



Output: List of potential consequences by the specific risk statements, its likelihood and whether the risk is acceptable to the community and its members or unacceptable requiring actions to either eliminate or reduce the impact of the risk.

Activity 5: Causal Analysis



Objective: To identify the potential causes of specific risk statements in line with the vulnerable sector, community elements and the locations and possible options for risk reduction.



Time: 4 Hours.



Materials: Prioritised risk statement list (10 risks), vulnerable sectors/community elements/locations, (Annex 16), brown paper, marker/sketch pen, tape, pushpin, display board, A4 size process documentation format, and clip board.



Method: Large group discussions and answering questions.



Preparation: Facilitators should take preparation on following aspects:

- Draw at least 5 formats on brown papers as suggested in Annex 16.
- Should have clear understanding of causes and effects of specific risk statements.



Processes:

1. Display and discuss the list of prioritised risk statements (at least 10) once again.
2. Display the causal analysis format on board or wall for participants' reference while identifying the causes of prioritised risks and possible options for reduction.
3. The Facilitator will discuss about different levels of causes and options i.e. immediate, intermediary and ultimate cause/options for any specific risk statement.
4. Identify options for each of the causes or group of causes. While identifying options let the participants be very specific regarding what to do and where.
5. For better understanding of the participants, life examples can be given. However, examples should not be related to any of the priority risks they identified for analysis, which may bias (or influence) the participants' opinion.
6. Once the participants identify any cause or option the facilitator will write down their opinions in the format.

Example 9: Causal Analysis of Risk Statements

Identified risk	Reason/Cause			Possible Options		
	Immediate	Intermediate	Ultimate	Immediate	Intermediate	Ultimate
Death of 50 no. of people in ward no. 3	Lack of timely warning message Lack of interpretation of message	Lack of Warning System Lack of access to warning message	Less priority and national investment	Dissemination of warning messages with clear interpretation	Dissemination of warning to wider community within shortest possible time	Policy adoption & budgetary allocation
25% of severely injured person can be disabled	Lack of proper treatment	Lack of money or income	Lack of accountability of care providers	----- ----- -----	----- ----- -----	----- ----- -----

Socially disadvantaged people particularly children will suffer from malnutrition related diseases due to sever flood	Excessive rain fall in the upstream and opening / releasing sluice gates in the neighbouring countries	Interruption in the drainage system and siltation in the major rivers/ canals	Absence of treaty/ agreement with the neighbouring country in managing flood water.	-Early warning on flood with clear interpretation. - Provision should be in place to rescue marooned people (Specially people with disability, women, elderly)	Provision of safety net program for the socially disadvantaged group of people	(A) Country should have flood management treaty / agreement with the neighbouring country. (B) No development project which may create obstruction in drainage system (C) Each UDMC should have updated Preparedness Plan in hand.
---	--	---	---	---	--	--



Output: Potential causes of specific risk statements and possible options.

Activity 6: Risk Priority for Management



Objective: Management priority for community unacceptable risks.



Time: 1 Hour.



Materials: VIPP Cards, filled in risk analysis format, required new format (Annex 17), marker/sketch pen, tape, pushpin, display board, process documentation format, and clip board.



Method: Large group discussions and answering questions.



Preparation: Facilitators should prepare the following:

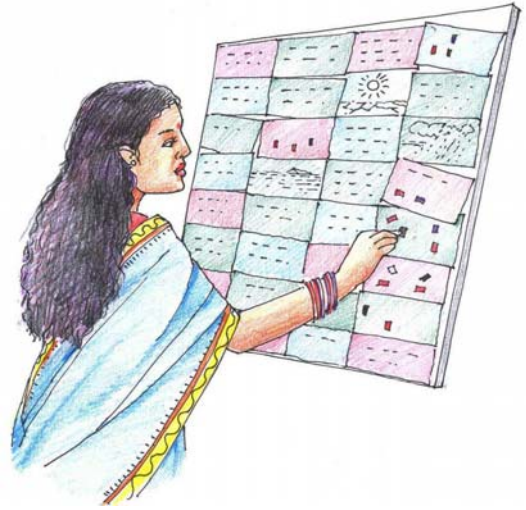
- Draw 1 format on brown papers as suggested in Annex 17.
- Write down prioritised unacceptable community risks in VIPP cards.
- Colour the zip sticks with different colours
- Arrange the relevant materials as stated above
- Arrange 5 zip sticks per participants



Processes:

2. Facilitator will display the unacceptable risk statements in the VIPP cards plotted on brown paper.
3. The facilitator will then explain them how to use zip stick for scoring the risks.
4. Read out every risk to the participants at least 2 times so that everybody understands and recognizes each of the risks.
5. Provide 5 zip sticks to each participant and ask them to score the risks according to their own choice. In doing so, each participants can fix all the 5 zip sticks on one risk statement or 1, 2, 3, 4 zip sticks on risks of their own choice/priority.

6. The facilitator will request the participants to consider cause and options for each risk statements while scoring for management priority.
7. All participants will put zip sticks on VIPP cards as per their own priority and order by turns. Once the scoring is over, count the zip sticks and write it on the VIPP cards.
8. Arrange VIPP cards (with scored risks) in ascending order according to the score and write it on a separate poster.
9. Facilitator will seek participant's opinion if more than one risk gets same score to prioritise these risks through consensus among themselves.
10. Facilitator will then write the risks according to their management priority in the format (Annex 17).
11. This is the end of the day. However, the Facilitators will invite participants to attend sessions on Day-4 for half day at selected venue (9 am – 1 pm).



Output: Management Priority for unacceptable community risks.

CRA Step 4: Specific Risk Reduction Options

Activity 7 : Selection of Risk Reduction Options and Management Priority



Objective: To identify the appropriate risk reduction options for the elimination, reduction and/or management of risk.



Time: 1 hour.



Materials: Compiled output of causal analysis (compiled output of Activity 7), marker/sketch pens, display board, tape/pushpins, and at least 3 copies of risk reduction measures format



Method: Large group discussions and answering questions.



Preparation: Facilitators should take preparation on following aspects:

- Bring compiled output of Activity 7 and display on a big poster paper before participants come to the venue.
- Prepare at least 3 copies of risk reduction Options format (Annex 18) on big brown papers. Also bring some brown papers, which the facilitator may require to draw any matrix/format instantly, if required.



Processes:

1. Display and read the compiled output of causal analysis and options identification on display board and write if the participants have any addition, modification, deduction or change in the compiled output list in terms of preparedness, response and/or recovery for the specific risk statements.
2. Explain the subjects of discussions according to the format so that the participants can effectively participate in session.
3. Then the Facilitator will invite the participants to rank the options against each of the risk statements for management priority upon discussion putting numbers after each option e.g. (1), (2), (3).....
4. After the options ranking is finished the facilitator will take 5 options (2 priority options from the first management priority risk statement, 2 priority options from the second management priority risk statement and 1 priority option from the third management priority risk statement) for further analysis.
5. The facilitator will then write the selected risk reduction options against the first 3 risk statements in the format (Annex 18).
6. Identify and write the ongoing measures already in ground against each of the selected options and possible constraints for success through detailed discussion with the participants.



Output: Identified prioritised risk reduction options against each of the prioritised unacceptable risks according to its management priority and existing associated actions in place and its success constraints.

Activity 8: Impact Analysis of Risk Reduction Options



Objective: Evaluate prioritised risk reduction options through analysing sector impacts of implementation.



Time: 2:30 Hours.



Materials: List of priority options identified in A4 size paper, and 10-12 A4 size blank paper with Tables (Annex 19) drawn on to note down the Impact analysis information, pens and pencils etc.



Method: The facilitators/ field Managers of the respective PNGO will prepare the list in consultation with the GO/NGO officials and local experienced persons.



Preparation: Facilitators should take preparation on following aspects:

- Share the selected options (output of Activity 10)
- Prepare 10-12 copies of the options impact analysis format (Annex 19) on A4 size white paper.



Processes:

1. Share and discuss the options impact analysis format to analyse 5 selected options.
2. Explain the subjects of discussions according to the format so that the participants can effectively give their thought full opinion.
3. Basically, information in this activity will be collected through questions and answers. Following questions can help to fill the matrix (facilitator can cite suitable examples for lively discussion):

Alternatives:

- Is there any alternative option to meet the objective (either fully or partially)? Cite examples to assist participants understanding about alternative solutions (e.g. bread is an alternative for rice, etc).

Political/social:

- Will the proposed options benefit the socially disadvantaged group?
- Would any occupational /social group might be affected due to the implementation of the proposed option?
-
- Would any occupational /social class oppose this option?
- Would any assistance from others be required for implementation of this intervention?
- Would prior permission required for implementation of this intervention from any agency?

Technical/financial:

- Would any technical/economic considerations be required for implementation?
- Would any anybody loose or gain by this intervention?

- When is the suitable time (month) for carrying out the said intervention?
- Would any committee be helpful for smooth functioning of implementation? Who will be the committee members?
- What is the source of funding, approximate cost to complete the work.

Environmental:

- Would there be any positive impact on environment after project implementation? If yes, what impacts?
- Would there be any negative impact on environment? If yes, then what impacts and how it could be reduced?

Sustainability:

- How long this option could be sustained if implemented?
- What steps could make this option more sustainable?

Example 10: Impact Analysis of Options

Option	Purpose	Alternative	Political/Social	Technical/Financial	Environmental	Sustainability
Construction of submersible embankment	- Reduce flood vulnerability -- Protection of rice from water logging - Reclaim land for <i>Aman</i> rice	- Construct sluice gate on the river	- Govt. assistance for dredging equipments - Form local committee - Discuss with local chairman and members	- Use dredging machine for excavation - Financial assistance from Govt. and donors - Plantation on the slope of embankment	- Reduce water logging problem	- Construction of submersible embankment for crop security flow and less siltation.
Alternative site selection for the satellite health clinics and EPI centres	- Ensure continued immunization program/ health services. - Reduce health hazards	Provisions of floating health clinics and EPI centres (in Boats) if no flood free room is available.	-UDMC's assistance for alternative site selection and to communicate with the general people/ community.	-No such technical support is needed - Financial assistance from govt. / donor/ community.	Reduce health hazard and ensure environment conducive to health.	Involvement of UDMC will ensure the availability of alternative rooms for continuous health services.



Output: Impact analysis of 5 priority options.

Activity 9: Options Implementation Strategy selection in Final Plenary including alternative options



Objective: To build consensus among the participants on proposed options and implementation strategy.



Time: 4-5 Hours.



Materials: Meter scale, marker, note pad, pen, prepared posters, brown paper, display board, fluid pen, flip chart, Social Map developed in Pre CRA stage (Task 4)



Method: Discussions, exchange of views, display of posters and open discussions.



Preparation: Facilitators should take preparation on following aspects:

- Invite secondary stakeholders (including Upazila Local Government and specially the representatives from line agencies e.g. agriculture officer, fisheries officer, etc. depending on the type of options identified as management priority)
- Write the compiled findings from all groups on posters so that they can be displayed. Prepare the posters using large fonts with coloured marker pens so that everybody can read them easily.
- Check whether posters are displayed in specific locations before the session starts.
- Check whether all necessary materials are taken to the venue in time.
- Prior to starting the session, ensure that at least 2 co-facilitators are available to document the processes, discussions and comments or suggestions that arise during the discussions.
- Prepare 5 copies of options implementation format as per the Annex 20.
- Display the output matrix for Activity 11 (impact analysis of risk reduction options)
- Check whether all necessary materials are taken to the venue.



Processes:

1. At the outset, the Facilitator will explain the activities to be carried out in this session to the participants.
2. Facilitator explains the findings of all the sessions conducted over the last few days and all the preparatory works to the participants (primary and secondary stakeholders) so that they can understand what activities have been done so far and what activities to be carried out.
3. The facilitator then helps dividing the participants both secondary and primary into three different groups. Identify one participant from each group to read out all the posters displayed. The facilitator should be careful to ensure that the participants concentrate on displayed posters and clearly understand the contents.
4. Show them a sample format (Annex 20).
5. Cite an example related to implementation strategy format so that they can fill the format properly in group and refer the list of the priority risk identified in activity # 06.
6. The participants in group work will locate proposed interventions on map (use Social Map, Task 4)
7. After the group work each group will present their work in poster paper.
8. When the group presentations are completed, the Facilitator then ask the participants about any differences in opinion on any proposed options/ or interventions and implementation strategy. If there are any, then the facilitator will ask them to explain the reasons and will build consensus among them.

9. The facilitator will request the secondary stakeholders to comment on the consensual list of options and strategy developed in groups.



10. The Facilitator will then invite primary stakeholders to comment on the same.
11. The co-facilitator will take detailed notes on the discussions and comments.
12. This is the end of the CRA workshop and the Facilitator will close the session thanking everybody for their participation.

Example 11: Draft strategy development

Option	Who will do	When	How	Where	Estimated cost	Considerations
Construction of submersible embankment	BWDB, LGED	December – March, dry season	Implement through the LCS (labour contracting society) Engage local labours Formulation of implementation committee including Union Parishad members	0.9 km from x to y section. 1.8 km from xx to yy section	Tk 5,000,000 – 6,000,000	Width of embankment – base 25' and top 8' Land owners of earthwork lands might ask compensation Compaction should be done properly
Implement safety net projects for the socially disadvantaged people.	UDMC	During normal time (Non disaster period)	Keeping provision in the Union / Upazila Annual Development Plan.	Areas vulnerable to identified Hazards	TK.....	NGOs working locally can be the technical and financial support provider.



Output: An implementation strategy is developed on proposed consensual options by the participants (primary and secondary stakeholders).

ANNEX: CHECKLISTS, GUIDE AND FORMATS FOR CRA

Annex 1: Information Required (socio-economic)

Information	Probable Sources
Location, Type and Area	Union Parishad, LGED
Population	Union Parishad, Upazila Statistics Office
Education (rate – primary, secondary)	Union Parishad, Upazila Primary Education Office
Health and Family Planning	Union Health Complex, Upazila Health and Family Planning Office
Communication (roads, bridge, culverts, sluice gates etc)	Union Parishad, LGED
River, Canal, Wetland (beels) etc.	Union Parishad, Bangladesh Water Development Board (office at district level)
Economic Activities (livelihood options)	Union Parishad, Local NGOs and Knowledgeable
Social – Religious Groups	Union Parishad
Institutions: educational, religious, government offices, UP, NGOs, local clubs, cultural institutions, flood/cyclone shelters	Union Parishad, Upazila social Welfare Office, Upazila Education Office
Common Places: hat – bazaar, playground	Union Parishad
Land use (commercial/business, settlement, infrastructure, forest, wetland, fish culture, cultivable/ non-cultivable, single cropped, double cropped, triple cropped etc)	Union Parishad, Upazila Land Office, Sub Assistant Land Officer, Upazila Agriculture Office, Sub Assistant Agriculture Officer, Upazila Fisheries officer, NGOs, Upazila Sub-Registrar Office
Soil Type	Union Parishad, Upazila Agriculture Office
Food and Agriculture	Upazila Agriculture Office, Upazila Food Office
Forestation	Union Parishad, Upazila Forest Office
Biodiversity	Union Parishad, NGOs, Forest Department
Water and Sanitation	Union Parishad, Tube well Supervisor, NGOs, Upazila DPHE Office, Sanitary Inspector
Poultry - Livestock	Union Parishad, Upazila Livestock Office
Fisheries	Union Parishad, Upazila Fisheries Officer
Electricity	Union Parishad, Polli Biddut Shomity
Union Map	Union Parishad, DMIC, Disaster Management Bureau

Annex 2: Information Required (scientific)

Information	Level of Detailing
Rainfall Trends over the seasons for last years	Union level, Upazila Level, District Level
River Bank Erosion Trend and Prediction	Union Level, Basin Level
Land Elevation	Union Level, Upazila Level,

Information	Level of Detailing
	District Level
Groundwater table and quality of water information (including discharge and recharge rate)	Union Level, Upazila Level, District Level
Water level/water extent /duration of last floods/	Union Level, Upazila Level, District Level
Drought trend and Prediction Information	Union Level, Upazila Level, District Level
Cyclonic surge predictions/ or past inundation	Union Level, Upazila Level, District Level
Information about hail storms trends and (prediction if possible)	Union Level, Upazila Level
Salinity Prone Areas and Degree of Salinity in Surface and Ground Water including Agri Land under salinity	Union Level, Upazila Level, District Level
Trends of the incidences of Tornados and if possible predictions	Union Level, Upazila Level, District Level
Number of continuous rain (more than 3 days) in past over the crucial season and predictions (if possible)	Union Level, Upazila Level, District Level
Trends of Heat Spell that affect (stress) livelihoods and projections (if possible)	Union Level, Upazila Level, District Level
Trends of Cold Wave that affect (stress) livelihoods and life and predictions (if possible)	Union Level, Upazila Level, District Level

Annex 3: FGD Checklist

Livelihood Options, Challenges & opportunities: What are the major occupations in this area? What are the new occupations that have been adopted by the people of this area for their livelihood? What are the occupations gone lost? What are the challenges faced by the existing occupations? Do you predict any future challenges for the existing occupations? If so, do you think there might be new occupations evolved? What might be those new occupations?

Hazard (past, present and future): In the past (Ten / twenty years before from now) what sort of hazards caused disastrous situation in your area? What are the hazards currently causing the same? If the hazards are the same do you notice change of magnitude of causing damages? Or they are the same as before? From your experiences do you predict that the type of hazards might be changed in future (ten to twenty years from now)? If so what might be the new hazards?

Here are some examples of different type of hazards as ready reference: natural (Cyclone, flood, erosion, heat stress, storm surge, storm, strong winds (tornado), earthquake, drought (monga)), human induced (River bank erosion, pollution of water supply), biological (Spread of disease, pests or contaminants among plants, animals or people), and technological (Failure of socio-technical systems related to agriculture, food processing and storage, communications, industrial sites, infrastructure and transportation)

Local coping strategy: What are the traditional preparedness and coping mechanisms against disaster risks already exists in the locality? What are the challenges of those traditional preparedness and coping mechanisms? What is the need to overcome those challenges?

Annex 4: Key Informants Interview Checklist

Features of comprehensive disaster management approach

Getting the risk reduction and emergency management balance right – risk assessment (using and traditional hazards and risk analysis)

All, hazard, all risk, all sectors and all geographic area approach

Shift from generic to specific risk programmes – based on risk assessment

Mainstreaming risk reduction into national and local development programmers

Empowering stakeholders, partners and communities in decision making process of risk reduction

Benefits of comprehensive disaster management approach

As the comprehensive disaster management approach insists us to design programmes and activities of risk reduction based on risk assessment, therefore, it helps to removes the guesswork as to what should be done and where to be done.

A comprehensive approach ensures coverage of all geographic areas, all hazards, all risks, and all sectors and ensures mainstreaming of risk reduction into development programme, which will lessen the duplication of investment for national development and will help the sustainable development initiatives of Bangladesh.

Annex 5: Key Informants Interview

Respondent Name (s) _____ Village _____ Date _____

Interviewer (s) _____

1. What are the main changes that have taken place in the locality in the last few years? When did they take place (approximately what year)? What are the causes of these changes? What have been the effects of these changes on the community?
2. Have you noticed changes in (i) flooding, (ii) rainfall, (iii) drought (*monga*), (iv) cyclone, (v) tornado, (vi) storms, (vii) river bank erosion and (viii) salinity intrusion in the last few years?
3. If yes, ask for each of the changes -
How is it (are they) different from original situation?
How measured (indicator)?
When did you first notice the change (year, if possible) and Where?
What do you think are the main causes or reasons for the change?
What are the effects of the change that you have seen so far?
What areas in the union/ aspects of life will be vulnerable to this change?
What will be the likely effects in the medium to long term? How would you rate the consequence of this change (Not Bad, Bad, Very Bad, Plenty Bad)?

What do you think is/are the best way(s) to cope with such change?
 What should Government/ UP council do? What should Community groups do (specify)?
 What should family/individuals do? How have people coped with such change(s) in the past?
 Can such traditional coping mechanisms be applied in the present context (Elaborate)?

4. List 5 practices, which contribute to increase the vulnerability of our environment. Detail the effect of each practice. What can be done to increase public awareness of the negative effects of such practices?
5. List 5 practices/ cultural values/institutions, which can contribute to increasing the robustness and resilience of the Union to the impacts of climate and other changes? Detail how each can be harnessed to the Union adaptation efforts

Annex 6: All Hazards

SL	Hazard	SL	Hazard
1		4	
2		5	
3		6	

Annex 7: Vulnerable Sectors

Vulnerable Sectors	Hazards							

Annex 8: Vulnerable Community Elements

Community Elements	Hazards							

Annex 9: Vulnerable Locations

Vulnerable Locations	Hazards							

Annex 10: Risk Statement associated with the Hazards

Hazard	Risk Statement

Annex 11: Risk Assessment

Identifier	Potential consequences	Consequence	Likelihood	Risk Rating	Acceptability
1					
2					
3					
4					
5					

Annex 12: Likelihood and Consequence Descriptors

The **Likelihood** or occurrence needs to be explored and defined to ascertain the frequency of the risks. This should be done both through the use of both Technical (Scientific) and Social (Participatory) data. Both data sets are equally important and ensure that not only do we have accurate and factual information (which can be validated); we also have the perceptions and local knowledge of the community members on how these events have impacted on them at a local level.

Likelihood Descriptors

- **Almost Certain** : **Happens every year**
- **Likely** : **May happen each year**
- **Possible** : **At least once in 3 to 5 years**
- **Unlikely** : **Once in every 10 years**
- **Rare** : **Once in every 20 years**

The **Consequences** also need to be defined to establish a set of rules that assist with measuring the impact of an event.

Consequences Descriptors

(1) Very Minor (low)

Some damage. Little disruption to community. Some impact on environment, with no lasting effects. Little impact on livelihood.

(2) Minor (not very bad)

Medical treatment for injuries required. Small number displaced for a short period. Some damage. Little disruption to community. Some impact on environment, with no lasting effects. Some impact on livelihood.

(3) Moderate (a more severe situation)

Medical treatment for injuries required. Minor temporary displacement. Significant damage. Some community disruption. Serious impact on environment with no long-term effects. Significant impact on livelihood.

(4) Major (severe, very bad)

Loss of life is low. Numerous injuries requiring medical treatment. Significant numbers displaced for short periods. Significant damage requiring external assistance. Community functioning with difficulty. Severe impact on the environment with long term affects. Serious impact on revenue capacity.

(5) Catastrophic (extremely bad impact)

Numerous fatalities. Extensive injuries requiring medical treatment. Large numbers displaced for a significant duration. Severe damage that requires external assistance/resources. Major disruption to community. Severe permanent damage to the environment. Severe impact on livelihood.

Annex 13: Risk Matrix Using Pair Ranking

CONSEQUENCES	Catastrophic					
	Major					
	Moderate					
	Minor					
	Very Minor					
		Rare	Unlikely	Possible	Likely	Almost Certain
LIKELIHOODS						
	Extreme Risk	Immediate Action is Needed without any delay				
	High Risk	Immediate Action needed with proper consultation				
	Medium Risk	Frequent observation and measures needed				
	Low Risk	Annual observation needed, measures could be taken				

Annex 14: Format for Selection of Participants for the Planning Workshop

S L	Name of Participant	Father's name/ Husband name	01	02	03	04	05	06	07	08	09	10	11	12	Total Vote	Positio n
1.			0													
2.				0												
3.					0											
4.						0										
5.							0									
6.								0								
7.									0							
8.										0						
9.											0					
10.												0				
11.													0			
12.														0		

Annex 15: Risk Prioritisation

Hazard	Risk Statement	Identifier

Annex 16: Causal Analysis

S. Risk Statements	Reason/Cause			Possible Options		
	Immediate	Intermediate	Ultimate	Immediate	Intermediate	Ultimate

Annex 17: Risk Priority for Management

Identifier	Risk Statement	Priority for Management

Annex 18: Risk Reduction Options

Risk statement	Risk reduction options	Existing measures	Constraints

Annex 19: Options Impact Analysis (STEPS)

Option	Purpose	Alternative	Social/ Political	Technical/Economic	Environmental	Sustainability

Annex 20: Draft Strategy Development

Options	Who will do	When	How	Where	Estimated cost	Considerations

Annex 21: Analysis of Consensus Building Indicator

Subject	Ranking
Mutual trust and confidence	
Social solidarity and dignity	
Use influence to avoid resistance	
Mutual cooperation	
Considering others interest	
Social cohesion and unity	
Compromising feeling	
Willingness to work for all	

1. Very important, 2. Important, 3. Moderately important, 4. Not important.

Annex 22: List of Material used in CRA

SL	Items/Particulars	Quantity	Cost (Tk)/unit	Total Amount (Tk.)
1	Writing pad	24		
2	Pencil	12		
3	Sharpener	04		
4	Eraser	04		
5	VIPP card	200		
6	Permanent Marker, Flat tip, 4 color	24		
7	Permanent Marker Fine tip, 4 color	12		
8	Spiral note pad	12		
9	Fluid pen	02		
10	Sketch pen, 4 colour, 25 sets	48		
11	White board marker fine tip 4 colour	12		
12	Adhesive label	02		
13	Ruler	02		
14	Mount board	10		
15	Art paper	10		
16	Flip chart (50 page)	02		
17	Oho Stake	02		
18	Anti cutter	02		
19	Scissor	02		
20	Knife	02		
21	Poster paper	20		
22	Scotch tape 1" (with cutter)	02		
23	Both side tape (size 1 :)	04		
24	Blank name card	04		
25	Post it (large size: 73 X 123)	06		
26	Masking tape	20		
27	Thumb tacks	02		
28	Film and processing	04		
29	Banner	02		
30	Envelope (A3)	25		
31	Envelope (A4)	25		
32	Envelope (4.25x 4.5)	02		
33	Still Scale	02		
34	Plastic clip file	24		
35	Ball pen	24		
36	Blue tac	04		
37	Paper KPM A4	01		
38	Paper offset A4	01		
39	Safety pin	20		
40	Brown paper	100		
41	Battery for Camera	04		
42	Gunny bag	04		
43	Clip board	04		
44	Name tag	04		
45	Tissue paper	04		
46	Brown clip file	12		
47	Binder clip (..)	08		
48	Binder clip (Small)	01		
49	James clip	02		
50	Thread ball (Big)	06		
51	Stapler and staples	02		
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DRAFT
GENDER AND SOCIAL EXCLUSION ANALYSIS FRAMEWORK
FOR
COMPREHENSIVE DISASTER MANAGEMENT

1. INTRODUCTION

This document is designed to provide guidance on gender and social exclusion analysis issues to organisations or people working in the field of disaster management (which includes risk reduction and emergency response) and to draw operational lessons from our increasing understanding of the inter-relationship of gender equality and social inclusion issues, risks and disasters.

This document is based on a review of reports, published sources and stakeholder consultation. It sets out questions to be asked and issues to explore during designing and implementing risk reduction and emergency programmes. It will evolve with feedback and new inputs. It assumes that participatory approaches are more effective than top-down initiatives and that both women and men, socially important people, and socially excluded people (i.e. person with disability, ethnic minorities, lower caste, *hizra*, sex workers, etc.) must be involved in risk reduction and emergency response.

2. BACKGROUND

2.1 Gender Equality and Social Inclusion Mainstreaming – Definitions

Gender equality and social inclusion have been adopted as a vital goal for development cooperation, with mainstreaming used more and more as a strategy to support that goal.

Gender and Gender Roles: "Gender refers to the socially constructed roles and responsibilities of women and men. [It]... includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). These roles and expectations are learned, shared, changeable over time, and variable within and between cultures."

Gender equality requires equal enjoyment by women and men of socially-valued goods, opportunities, resources and rewards. Gender equality does not mean that men and women become the same, but that their opportunities and life chances are equal. The emphasis on gender equality and women's empowerment does not presume a particular model of gender equality for all societies and cultures, but reflects a concern that women and men have equal opportunities to make choices about what gender equality means and work in partnership to achieve it.

Because of current disparities, equal treatment of women and men is insufficient as a strategy for gender equality. Achieving gender equality will require changes in institutional practices and social relations through which disparities are reinforced and sustained. It also requires a strong voice for women in shaping their societies.

Social Inclusion requires equal access and due entitlements (economic, social, political, etc.) enjoyment by socially excluded people like person with disability, women and men of socially-valued goods, opportunities, resources and rewards. Social inclusion does not mean that all people become the same, but that their opportunities and life chances are equal. The emphasis on social inclusion does not presume a particular model of equality for all societies and cultures, but reflects a concern that socially disadvantaged people have equal opportunities to make choices about their livelihood and life.

Mainstreaming is a strategy to support the goal of gender equality. It has two general dimensions:

- _ the integration of gender equality and social inclusion concerns into the analyses and formulation of all disaster management related policies, programmes and projects; and
- _ initiatives to enable women as well as men and socially excluded people as well as socially important people to formulate and express their views and participate in decision-making across all risk reduction and development issues.

Thus mainstreaming gender and social exclusion issues in risk reduction initiatives involves a concern for increasing women's and socially excluded people's participation, but it also goes further than that. This strategy looks at how to promote more equitable gender relations (political, economic, and social), class, caste, ethnic and social relations, and the differential impact of risk reduction and development interventions on women, men, boys, girls as well as socially important and socially excluded people.

2.2 The Maturity of the Concern in International Context

The last few years have seen increased international attention to the issues of women, risks and disasters.

For example, the United Nation's Security Council passed a ground-breaking resolution (1325) in October 2000 that recognized that maintaining and promoting peace and security required women's equal participation in decision-making and called on all actors to adopt a gender perspective. A coalition of NGOs, headed by International Alert, launched an international campaign to promote women's participation in risk reduction. Efforts have been made to 'engender' the Sphere Project's Humanitarian Charter and Minimum Standards. As well, the UN's 'consolidated appeal process' chose 'women and war' as its theme for 2001.

Social exclusion is an important missing link in past in disaster management, however interests on social inclusion issues is increasing recently in international conferences, forums and discourses. Yet in many ways, this attention appears to be at the margins of mainstream thinking on risk reduction.

Initiative after initiative is planned and implemented without attention to how the needs and priorities of women, men, boys and girls in one dimension and socially important and socially excluded peoples' needs and priorities in other hand differ. There is an ongoing need to sharpen our analysis, learn lessons, listen to women and socially excluded people involved in building resilience to natural hazards and develop methodological tools. But more is required.

Political leadership, investments in advocacy and resources are required to act on what has been learned and to use the tools that are increasingly available.

2.3 Why Look At Gender Equality and Social Inclusion Issues in Risk Reduction Initiatives?

It is important to ensure that gender equality issues are taken into consideration in risk reduction initiatives because:

- Gender is a relevant dimension in risk reduction. Risk is a gendered activity. There is a strong gender division of labour, women and men have differential access to resources (including power and decision-making), during hazards men and women experience disasters differently. This was recognized by the Hyogo Framework of Action that reduce the underlying risk factors should be one of the key strategy for disaster reduction. International community also highlighted in the final document of the Fourth World Conference on Women (Beijing, 1995) the Platform for Action (PFA) that: while entire communities suffer the consequences of armed conflict and terrorism, women and girls are particularly affected because of their status in society as well as their sex (para 135). Same thing is applicable to natural hazard induced disasters. Therefore understanding the gender dimensions of a situation is an important dimension of understanding the overall risk reduction paradigm.
- It is also observed that socially excluded people are the worst sufferer in any disastrous events (hazard). Many study also suggested that socially excluded people has very low capacity and resilience to combat negative susceptibility to be caused by hazards. Therefore, the vulnerability of socially excluded people is extremely low and thus they are most at risk among the wider community.
- Women (as well as men) and socially excluded people (as well as socially important people) have a fundamental stake in building communities resilience to natural hazards.
- Their contributions to risk reduction should be encouraged and supported (given women's and socially excluded peoples' economic and political marginalisation, they are not always well-placed to play an effective role).
- Bangladesh has a formal commitment to gender equality, disability sensitivity and, subsequently committed to a gender and disability perspective should be part of risk reduction initiatives
- Resilience to hazards is a prerequisite to achieve the goal of gender equality and marginal peoples' empowerment and some would argue that gender equality and social inclusion is necessary for a true safer world.

2.4 Gender and Social Inclusion Issues in Disaster and Risk Situations

Each disaster/risk situation is different and there is always a need for a specific analysis.

Factors such as gender, religion, age, class, nationality, ethnicity, physical and mental ability, race and sexual orientation will come together in different ways. Table 1 highlights ways gender and social differences and inequalities may be relevant in risk and disaster situations. This is not a complete list; rather it provides examples and is intended to provoke additional reflection.

Table 1: Elements of Comprehensive Disaster Management and Possible Gender and Social Inclusion Dimensions

<i>Elements of CDM</i>	<i>Possible Gender and Social Inclusion Dimension</i>
Defining Risk Environment	
Develop Criteria	When a risk evaluation criterion is developed, is particular gender and social need and their specialty is considered? Women and girls have certain differences of risks; as well as person with disability and person with non-disability have certain differences of risks; women's vulnerability to hazards might be different from those of male, ethnically minority groups vulnerability to hazards might different from those of ethnically majority groups; therefore by single criteria, risk environment should not be defined.
Identify Hazards	It is important to differentiate the perception of hazards (ranking, severity) and also definition of hazards from the viewpoint of male and female, able and less able persons, ethnic minority and majority people, rich and landless people; even in particular cases, girls perceive the hazards different from than of boys, as well as poor people different from rich people.
Assess Vulnerabilities	It is important that vulnerabilities are more dependent on the nature of gender relationship of the particular socio-cultural, economic and political construction. One of the vulnerability aspect of a person is his/her particular entitlement status, in that terms a big question, "is female/poor/person with disability can avail same entitlement than of male/rich/person with ability?" and more progressively is women and males vulnerability to flood is same? Is there any a cultural aspect or element makes a woman and ethnic minority people more vulnerable to flood than of a man and ethnic majority people? or is there any social customs which makes person with disability less vulnerable than of able person? Such type of negative and positive aspects certainly important to assess vulnerabilities.
Analyze Risks	Is risk analyzed by gender and social class/caste segregation? Risk Matrix usually differs by sex and social class/caste identity.
Evaluate Risks	This is a very important aspect of risk reduction. Most of the time risk evaluation criteria are developed by gender and social biasness. Which seems to male/rich/able body important, always come as dominant evaluation criteria. Is criteria developed in light of the practical and strategic needs of women and socially excluded and vulnerable people?
Risk Prioritization	In many cases, during prioritization, existing power structure ignores the risks of less powerful people. May high risks of the women and person with disability therefore become ignored and get less priority during decision-making. Women and socially excluded peoples' stake into the decision making process is very important during risk prioritization.
Managing Risk Environment	
Participation	Participation of women and men, landlord and landless, ethnic minority and majority, person with disability and non-disability, higher caste/class and lower caste/class is very crucial to manage risk environment. Can women, poor, person with disability, lower caste people participate equally as of men, rich, person with non-disability, higher caste? Is participation of female, poor, person with disability, landless, lower caste people were encouraged or ensured?
Risk Reduction Options	In most cases risk reduction measures are determined by the dominant representation and by the needs of the male, rich, non-disable and higher caste people. Also in many cases, determined risk reduction options disempower the women, person with disability, lower caste and poor people

<i>Elements of CDM</i>	<i>Possible Gender and Social Inclusion Dimension</i>
	and increase inequality between advantaged and disadvantaged people. This also depends on the quality of participation of two ends of gender and social hierarchy.
Prioritization of Options	Hierarchy of risk reduction measures also dominated by existing gender and social based power structure. Like prioritizing risk, prioritizing risk reduction options under managing risk environment is also male, rich, non-disable, higher caste biased and need to be more sensitive to the needs of the women, poor, person with disability and lower caste.
Implementation and Monitoring	Is women and socially excluded people have stake in implementation process? Can women and socially excluded people have stake also into the monitoring and evaluation process of management of risk environment? Does the risk reduction programme consider the gender and social equity based monitoring? Are the monitoring tools women and vulnerable people friendly and participatory? Can change in programme be made by the gender and social equity based monitoring?
Responding to the Emergency	
Warning Dissemination	Most of the women, person with disability, lower caste and poor people have less education and despite of this fact, are warning system friendly to women and socially excluded people? Are the messages of warning understandable to female and socially excluded people? Are there community based warning dissemination system, which can easily, effectively and sensitively warns women and socially excluded people?
Evacuation and Shelter	Is evacuation route is prepared based on the need of women and socially excluded people as well as men and socially advantaged people? can women and socially untouchable group get shelter in centers? are they safe in the centers? are their reproductive health and other specialty needs are considered during designing of the shelter center?
Search and Rescue	Are volunteers and rescuers representing adequate female members in the team? Are they sensitively handle the specific gender needs during search and rescue?
Need Assessment	It is many times observed that during a disaster situation, humanitarian assistance agencies come with very generic relief goods. Most of the time such relief goods fail to address the need of lactating mother, breast-feeding children, reproductive and hygienic needs of women. Even when need assessment is conducted, in most cases, do not conceptualize these needs.
Post Hazard Shelter	In many cases, women are not quite willing to share same shelter center along with male. There is a need of privacy of women in shelter center. This is a special need of women during evacuation and post hazard shelter.

3. WHAT TO DO?

What are the implications of our increasing understanding of both the gender and social inclusion dimensions of risk and disaster and the role of development assistance in facilitating risk reduction processes? There are two fundamental dimensions:

First, **all initiatives should:**

- incorporate a gender and social exclusion analysis into the assessment of the situation;

- ensure that gender and social equality considerations are present at the level of results (in other words, gender and social equality issues should not be restricted to one component of a project, rather they should be part of and influence the primary direction of the initiative);
- increase women and socially excluded people's participation in conflict resolution at decision-making levels;
- promote women and socially excluded people as actors and protagonists (rather than a 'vulnerable group'); and
- provide, where feasible, sex and social category based disaggregated data (of participants, beneficiaries, etc.).

Second, there is also a **need for specific initiatives** to strengthen women and socially excluded people's capacity to participate in risk reduction initiatives in a meaningful fashion, to improve the capacity of organisations to deal with gender and social differences and inequalities and to reduce vulnerabilities and gender and social inequalities. This could involve initiatives and/or components that directly target women and socially excluded people (including skills training, capacity and development for women and socially excluded people's organisations).



An ounce of prevention is better than ten ounce of cure

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