

# Coaching session on Hazard Assessment

## Slide 2 House rules

- Raise your hand if you have a question
- Keep your mic turned off
- Keep your camera on

**Comment** Ask participants to raise their (virtual) hand if they have question and listen when another participant/ the facilitator is speaking.

If someone raises their hand make sure you call on that person shortly, at a suitable moment, so that he/she can ask a question or give a comment.

Ask participants to keep their mic turned off while not speaking and only turn it on when they say something, e.g., after you have called on them for raising their hand. This keeps noise levels and distractions down.

If participants have an instable internet connection, they can keep their camera off.

## Slide 3 Table of Contents

1. Learning objectives
2. Purpose of Hazard Assessment
3. Hazards
4. Assessing Hazards
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6. PRA Tools to use
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8. Hazard Assessing in CCCD

## Slide 4 1. Learning objectives

At the end of this session the trainee is able to

1. Distinguish different types of hazards
2. Understand different characteristics of a hazards
3. Assess and understand hazards in his/her program community
4. Describe how Hazard Assessment links to CCCD

## Slide 5 2. Purpose of Hazard Assessment

Hazard assessment helps to

- Recognize and understand hazards
- Identify knowledge gaps
- Identify risks to the project form natural hazards
- Make decisions about how to deal with those risks

Learning objectives  
1, 2, 3

**Slide 6** **Identifying** and understanding the threats a community faces are prerequisites to **address disaster risk** effectively and create suitable interventions, in turn **aiding our mission** to provide a future for children and their entire community.

**Slide 7 & 8** **3. Hazards**

**A hazard is a threat** - A physical (natural) or human-made event that has the **potential to cause injury to life**, or **damage** to property, livelihood, and environment and can potentially trigger a disaster. Examples: flooding, explosion, civil war, drought.

Learning objectives 1 & 2

**Comment** → Ask who remembers what a hazard is from e-course.

**Slide 9** **Classification on hazards**

There are two main types of hazards: Natural and Man-made.

Natural hazards might be:

1. Earth related.           E.g., Landslide
2. Weather related        E.g., Flood
3. Climate related         E.g., Drought
4. Biological                E.g., Covid

Learning objective 1

Other classifications for natural hazards possible. They are similar but these four do cover all there are and are easy to remember. Other classifications often found are: Geophysical, climatological, hydrological, meteorological, biological.

**Comment** Give or ask for one or two examples for each (More can be found in table below).

**Slide 10** Man-made hazards might be:

1. Conflict and civil unrest   E.g., Riots
2. Industrial accidents        E.g., Oil spill
3. Transport accidents        E.g., Train derailing
4. Other accidents             E.g., Gas explosion at home

Learning objective 1

**Comment** Give or ask for one or two examples for each (More can be found in table below).

**Slides 11 - 13** **Small Exercise**

Let participants think of examples of hazards for each category and list them.

This table shows an overview of possible hazards, but is not exhaustive:

Learning objective 1



	Earth-related	Weather-related	Climate-related	Biological
Natural	Earthquake Landslide Rock fall Soil erosion	Extreme temperature Floods Rain, Hail Storms Mudflow	Drought Wildfire	Epidemic Pest invasion Insect infestation
Men-made	Civil war and unrest	Industrial accidents  Chemical/Oil spill Collapse Explosion Fire Gas Leak Radiation	Transport accidents  Car accident Ships colliding Train derailing Plane crash	Miscellaneous accidents  Collapse Explosion Fire

**Comment** Set a time limit. This exercise can be done individually, in the big group, or in small groups. At the end of this document there is an empty table that participants can fill out.

**Possible options**

Online:

1. Use a whiteboard tool like Padlet or Mural. Fill out collaborative as a group
2. Hold a group discussion, participants give examples fit, you fill in the table
3. Use breakout groups
4. Everyone works individually on it.

Offline:

5. Provide a handout to fill in
6. Use a flipchart in group discussion

**Slide 14 Hazards Recap**

- There are many different types and examples of hazards.
- Hazards can be natural or man-made.
- It is Important to consider the impact of human action even on natural hazards: environmental damage and degradation such as deforestation and soil depletion may lead to increased likelihood of landslides, floods, or failed cropping.

Learning objective  
1

**Slide 4. Assessing Hazards**

**Slide 15 & 16** Hazard Assessment helps to

- Identify and understand the hazards people face
- Identify and understand the likelihood and behaviour of these hazards
- Design suitable interventions

Learning objectives  
2 & 3

**Comment** The Power Point includes here a vote for the right/wrong statement. Additional wrong statement: "Hazard Assessment helps to identify weaknesses in a community".

**Slide 17 Hazard Characteristics**

Each hazard has various characteristics. These 10 you want to identify and assess during a hazard assessment.

Type	Duration	Forewarning
History and Timing	Location	Trends
Frequency	Warning signs	Speed of onset
Severity		

Learning objective  
2

**Comment** Below, each characteristic is highlighted individually.

**Slide 18 Hazard Assessment**

- Each characteristics has an accompanying question to be asked to find out what you want. Ask these questions for every hazard a community faces individually.

**Question:**

- **Type:** What hazards/disasters commonly affect your community?
- **History/Timing:** What was the last significant disaster event to affect this community, and when was it?
- **Frequency:** How often does this hazard occur? **Severity:** How do you measure the severity of the hazard (e.g. depth of water, wind speed, lack of rain, damage)? What would you observe in a good year and a bad year?

Learning objectives  
2 & 3

- **Severity:** How do you measure the severity of the hazard (e.g., depth of water, wind speed, lack of rain, damage)? What would you observe in a good year and a bad year?
- **Duration:** How long does the hazard persist (hours, days, weeks)? Period of time the impact is being felt.
- **Location/area:** Which parts of the community area worst affected?
- **Warning signs:** Any early warnings, traditional or from government? How quickly (or slowly) does the hazard appear?
- **Forewarning:** How much time passes between the first warning signs and the actual occurrence of hazard event?
- **Trends:** What changes are happening to the frequency, duration, or severity of the hazard? Any new hazards?

**Comment** Questionnaire can be found in separate document *Hazard assessment questionnaire*.

<b>Slide 19</b>	<p><b>Hazard type:</b> What hazards commonly affect your community?</p> <ul style="list-style-type: none"> <li>• Flood</li> <li>• Drought</li> <li>• Landslides</li> <li>• Civil war</li> <li>• Epidemic</li> </ul>	<p>What is the force of the hazard?</p> <ul style="list-style-type: none"> <li>• Wind</li> <li>• Water</li> <li>• Rocks, Soil</li> <li>• Earth movements</li> <li>• Mud, Lahar</li> </ul>	<p>Learning objectives 2 &amp; 3</p>
<b>Slide 20</b>	<p><b>History/Timing:</b> What was the last significant disaster event to affect this community?</p> <ul style="list-style-type: none"> <li>• When was it?</li> <li>• When does it “normally” occur?</li> <li>• An historical timeline or seasonal calendar could be used here</li> </ul>		<p>Learning objectives 2 &amp; 3</p>
<b>Slide 21</b>	<p><b>Frequency:</b> How often does this hazard occur?</p> <ul style="list-style-type: none"> <li>• How many times per years, decade?</li> <li>• Once every XX years?</li> <li>• An historical timeline could be used here</li> </ul>		<p>Learning objectives 2 &amp; 3</p>
<b>Slide 22</b>	<p><b>Severity:</b> How do you measure the severity of the hazard?</p> <ul style="list-style-type: none"> <li>• E.g., depth of water, wind speed, lack of rain, damage?</li> <li>• Damage: decrease in yield? Decrease in income? How much was destroyed?</li> <li>• Difference between a good and a bad year</li> </ul> <p>Here, extra questions help to generate a more accurate picture</p>		<p>Learning objectives 2 &amp; 3</p>
<b>Slide 23</b>	<p><b>Duration:</b> How long does the hazard persist?</p> <ul style="list-style-type: none"> <li>• Period of time impact is being felt.</li> <li>• Hours, days, weeks</li> </ul>		<p>Learning objectives 2 &amp; 3</p>
<b>Slide 24</b>	<p><b>Short Recap</b> Type, Timing, Frequency, Severity, Duration</p>		
<b>Comment</b>	<p>Ask what the first 5 Characteristics of a hazard were?</p>		
<b>Slide 25</b>	<p><b>Location/area:</b> Which parts of the community are worst affected?</p> <ul style="list-style-type: none"> <li>• Could show on map</li> <li>• Community mapping</li> </ul>		<p>Learning objectives 2 &amp; 3</p>

- Slide 26** **Warning signs:** And early warning, traditional or from government?  
  - Indicators which alert you something is about to happen
  - E.g., animals dying, less rain, rising water level
Learning objectives 2 & 3
- Slide 27** **Forewarning:** How quickly does the hazard appear?  
Period in between warning signs and actual occurrence of the hazard event  
Learning objectives 2 & 3
- Slide 28** **Trends:** What changes are happening to the frequency, duration, or severity of the hazard?  
  - Any new hazards?
  - Historical timeline
Communities can only talk about past hazards, but new hazards may arise e.g., through climate change or bad agricultural practices.  
Consult secondary data for input on possible new hazards. Will talk about in later slides.  
Learning objectives 2 & 3
- Slide 29** **Speed of onset:** How fast is the hazard approaching?  
  - Slow, fast, creeping
    - Rapid onset: E.g., earthquakes, flash flood
    - Slow onset: hazards develop over time, it's possible to prepare. E.g., drought.
Closely related to forewarning  
Learning objectives 2 & 3
- Slide 30** **Assessing Hazard Characteristics**  
Overview of hazard characteristics you want to find out during the Hazard Assessment:  
Learning objectives 2 & 3

Type	History/Timing	Frequency	Severity	Duration
<ul style="list-style-type: none"> <li>○ Flood</li> <li>○ Drought</li> <li>○ Landslides</li> <li>○ Civil war</li> <li>○ Epidemic</li> </ul>	<p>Which months, season?</p> <p>When did hazard strike in the past?</p>	<p>How often does it occur?</p> <p>How many times per year, decade century?</p>	<p>How do you measure the impact of the disaster?</p>	<p>Period of time the impact the being felt</p>
Location/area	Warning signs	Forewarning	Trends	Speed of onset
<p>Area where the hazard hits</p>	<p>Indicators which alert you something is about to happen</p>	<p>Period in-between warning and actual occurrence of hazard event.</p>	<p>Changes to pattern of hazard</p>	<p>Slow, fast, creeping?</p>

- Slide 31** Show Hazard Questionnaire as found the end of this document. During an assessment the format could look like this.  
If more than one hazard afflicts the community, you can do a ranking exercise to identify the most significant hazard. Look at PRA toolbox for a suitable ranking exercise.  
Learning objective 3

**Comment** *"Hazard Assessment Questionnaire"* file provides this overview. → hand out to participants.



To visualize the tool, you can do a ranking exercise with the participants at this point. Online you can use a white board tool like Mural or Padlet.  
Give each participant 3 votes and let them vote among different options for the most pressing disaster for them, best movie, best song, or anything else. What they vote on does not matter as much as getting an idea for the ranking exercise

Slide 32

**Participatory tools to use**



- Historical timeline
- Seasonal calendar
- Transect Walk
- Focus groups
- Community mapping

More to be found in PRA toolbox

Learning objective 3

Slide 33

**Secondary data**

Use secondary data to complement community data and create an accurate picture of hazards. E.g.

- Government and UN statistics
- Government reports
- Research
- Other organisations

Community might face new hazard it is not aware off e.g. due to climate change  
Share final results with the community

Learning objective 3

Slide 34

**Remember**

- A community might face multiple hazards.
  - If more than one hazard occurs, do a ranking exercise to identify the most significant and urgent hazard to address
  - Assess each hazard individually.
- Share final findings with the community
- Locals might prioritize other hazards than outsiders
- Focus group discussions are a great way to identify and assess local hazards.

Ranking exercise can be found in PRA Toolbox.

Focus groups are a great way to assess local hazards. E.g., in SHGs

Learning objective 3

Slide 35 - 38

**5. Exercise**

Watch the video “Ethiopia: worst drought in 50 years” and identify the different characteristics of the hazard presented in the video.

[https://www.youtube.com/watch?v=-kCX4\\_2SYs8](https://www.youtube.com/watch?v=-kCX4_2SYs8)

Learning objectives 1, 2 & 3



**Possible answers:**

Type	History/Timing	Frequency	Severity	Duration
Drought/Long dry spell	Worst drought in 50 years	This bad, rarely	- Increased price of food - Decreased market price for animals - Dead livestock - Loss of meat and milk	2-3 Years
Location/area	Warning signs	Forewarning	Trends	Speed of onset
Ethiopia's Somali region	No rain for a longer period.	?	Getting worse	Creeping

- Comment**
- This can be done individually or in breakout rooms/groups.
  - In MS Teams: The video should work when you just click on it during the presentation. You will have to had shared your “computer audio” when sharing your screen so that everyone can hear the audio, too.
  - If the internet connection is not good enough and participants can’t hear anything, you can just share the link in the chat function of MS Teams for everyone to watch the video on their own.

**Slides 39 & 40**

**6. Recap**

- Hazard can be natural or man-made
- Communities might face several hazards and might priorities different disasters than outsiders would
- Hazard Assessment helps to identify and understand local hazards, their characteristics and behaviour
- Various PRA tools help with the assessment

**Slide 41 7. Hazard assessment and CCCD**

How can Hazard Assessment be used in, help, and contribute to CCCD?

Learning objective 4

**Comment** Let participants give ideas and discuss together before looking at the stages of CCCD.

Hazard Assessment

- May be applied during Needs Assessment stage
- May be applied during community challenge
- Helps identify and understand threats that impact on community
- Helps understand threats and obstacle to children’s well-being and future.
- In SHGs
- Other ideas?

Hazard assessment can be undertaken when focus groups are gathered for other activities and needs assessment during the CCCD project. There is no need to schedule an additional gathering but include it in existing activities and assessments.

**Slide 42 Preparation Phase**

Learning objective 4

PREPERATION	
<b>Phase 2: Preparation:</b> Analyse disaster risk on country, area, and sector level. Collect general vulnerabilities and capacities on broader context.	
<b>Activities</b>	<b>Knowledge outcomes</b>
<ul style="list-style-type: none"> <li>• Collect basic information including natural hazards data. Use secondary data</li> <li>• Determine general significance of hazards in and affecting project areas</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of significant natural hazards in project area</li> <li>• Understanding of information gaps and needs</li> <li>• Understanding whether hazards will have a negative impact on programme implementation or not</li> </ul>

**Comment** For context analysis. Only broad. Not yet with community.

**Slide 43** Community Challenge

Learning objective 4

PREPERATION	
<i>Phase 3: Community Challenge:</i> Assess local community capacities and vulnerabilities.	
<b>Activities</b>	<b>Knowledge outcomes</b>
<ul style="list-style-type: none"><li>• Participatory Hazard Assessment using different PRA tools</li><li>• Production of hazard and land use maps</li></ul>	<ul style="list-style-type: none"><li>• Detailed information on local hazards: Knowledge of location, severity, probability of occurrence and other hazard characteristics</li><li>• Identification of critical hazard related issues and constraints likely to affect the project</li></ul>

**Comment** Most important time for VCA is during community challenge. Done together with the community as discussed above. Combine it with existing assessments done with the community.

**Slide 44** Project implementation

Learning objective 4

PROJECT IMPLEMENTATION	
<i>Phase 4 – Phase 9:</i> Continuously monitor changing nature of hazards.	
<b>Activities:</b>	<b>Knowledge Outcome:</b>
<ul style="list-style-type: none"><li>• Continuously monitor of local hazards</li><li>• Continuously monitor of natural hazards' impact on project and beneficiaries</li></ul>	<ul style="list-style-type: none"><li>• Knowledge of changing and new hazards</li><li>• Knowledge of changing hazard characteristics</li></ul>

**Comment** In the implementation phase it has a monitoring role to see whether anything is changing. As mentioned above, VCA can be used to track changes over time.

**Slide** Short Quiz

**45 & 46** A short quiz about the content of this session can be found under <https://www.onlinequizcreator.com/hazard-assessment/quiz-478247>  
Share the link with the participants in the chat function.  
Tell participants to click at the beginning on “view my result without an account” under “Start without an account”.

**Slides** Conclusion

**48 & 49** Ask for and answer remaining questions.

**Comment** You can ask all participants to write one sentence of what they take away from this session and share it with the group using the chat function.

# Hazard Assessment Questionnaire

This questionnaire can be used for assessing hazards in e.g., focus group discussion. Notes will have to be taken separately as the space here will most likely not be sufficient.

Question	Hazard 1	Hazard 2	Hazard 3
<b>Type:</b> What hazards/disasters commonly affect your community?			
<b>History/Timing:</b> What was the last significant disaster event to affect this community, and when was it?			
<b>Frequency:</b> How often does this hazard occur?			
<b>Severity:</b> How do you measure the severity of the hazard (e.g. depth of water, wind speed, lack of rain, damage)? What would you observe in a good year and a bad year?			
<b>Duration:</b> Period of time the impact is being felt. How long does the hazard persist (hours, days, weeks)?			
<b>Location/area:</b> Which parts of the community area worst affected?			
<b>Warning signs:</b> Any early warnings, traditional or from government? How quickly (or slowly) does the hazard appear?			
<b>Forewarning:</b> Period in between warning and actual occurrence of hazard event			
<b>Trends:</b> What changes are happening to the frequency, duration or severity of the hazard? Any new hazards?			

<b>Natural</b>	
<b>Earth-related</b>	
<b>Weather-related</b>	
<b>Climate related</b>	
<b>Biological</b>	
<b>Man made</b>	
<b>Conflict and civil unrest Mass evictions</b>	
<b>Industrial accident</b>	
<b>Transport accident</b>	
<b>Miscellaneous accident</b>	