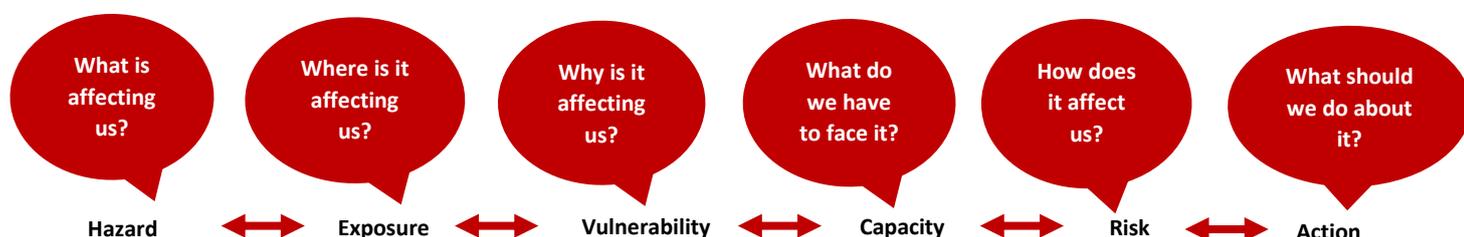


Level Three: Facilitate the assessment

At this point, you must have identified where you will do the EVCA and have taken the steps to prepare for it. You should by now know the community well through visits or secondary data and have all the materials, logistics and team ready. You should also have sent the invitation for the assessment, including date and venue, and explained the purpose to the community and stakeholders.

The assessment is structured in such a way to enable you to assist the community to identify and analyse the determinants of risk: i.e. hazards, exposure, vulnerability and coping capacity. In each step along the way, you analyse the information gathered and then synthesise it in order to identify the priority risks to be addressed. The list of the priority risks will then inform the development of a community risk reduction action plan in Level 4.



Source: Adapted from PASSA Youth

Suggested sequencing of the assessment & planning process

Below we propose a sequence of the assessment process which suggests specific tools that can be used to gather required information for each step. This contributes to a more focused data collection process. This is only a suggestion as tools can be often used in more than one way. Experienced facilitators may also adapt or bring in new tools as needed. What is important to keep in mind is that, as a facilitator, you should always be clear about the overall process and for what purpose you are using the selected tool. During the assessment, your most important role as a facilitator is to encourage the community to critically analyse the causes and consequences of the risks they face – keep probing “*why and how*”! Be sensitive of different views and the needs of different vulnerable groups within the community and aim to connect people rather than divide them. Detailed explanations on each of the tools can be found in the toolbox.

Remember that the quality of your plans and projects will only be as good as the quality of the data gathering effort. In other words, the community cannot come up with a good analysis of the situation in the community and find appropriate solutions if the data and information gathered on the hazards, exposure, vulnerabilities and capacities are incomplete and/or inaccurate. Data quality relies on trust from those providing the information; therefore community members and volunteers need to understand the importance of building trust. Data quality also depends on carefully capturing or recording the data in a way that can be later understood and used by someone not present. If the data collected are not accurate, the conclusions based on the information will not be valid. It is also vital that the right tools be chosen and applied in the proper way.

The below sequence suggests analysing the findings at each step and then combining the results before the risk reduction action plan is developed. This approach makes the analysis less complicated,

more manageable and allows the community to participate in the analysis and synthesis of each one of the aspects more easily. Do not leave the data analysis to the end as it might be overwhelming.

The below process could roughly take three to four days: one day for hazard and exposure assessment, one day for vulnerability and capacity assessment, and half a day for final analysis and conclusion on the risk levels. This would then be followed by one to two days for planning and reflection (explained in Level 4).

Steps	Sub-step	Suggested tools / methods	Suggested minimum time
Step 4. Introduction with the community			
4.1 Clarify the objective and expectations		Presentation and discussion	30-45 min
4.2 Explain the schedule			
4.3 Re-confirm availability and consent			
Step 5. Set the foundation			
5.1 Introduce, translate and adapt key concepts		Pictures, story Optional: games, video (done in plenary or focus groups)	60 min
5.2 Verify and update the community profile		Community profile (completed on the basis of secondary data and key informant interviews)	30-40 min
Step 6. Hazard and exposure assessment			
6.1 Identify the main hazards	6.1.1 Brainstorming	Brainstorming and discussion in plenary	40 min
	6.1.2 Historical profile	Historical profile / disaster history (completed on the basis of group discussion, key informant interviews, secondary data review)	30-60 min
	6.1.3 Emerging and changing hazards	Secondary data review	30 min
	6.1.4 Prioritize the hazards	Hazard ranking (via plenary and/or focus groups)	30 min
	6.1.5 Characterise priority hazards	Summary table	60 min
6.2 Identify the exposure	6.2.1 Hazard and exposure mapping	Mapping (via group discussion and/or focus groups)	60 min
	6.2.2 Transect walk / direct observation	Transect walk	2-4 hours
6.3 Synthese the hazards and exposure		Ranking/scoring, focus group analysis	60 min
Step 7. Vulnerability and capacity assessment			
7.1 Assess vulnerability	7.1.1 Remind key concepts	Brainstorming, story, game (in plenary)	30 min
	7.1.2 Seasonal calendar	Seasonal calendar (via group discussion and/or focus groups)	60 min
	7.1.3 Vulnerability brainstorming	Brainstorming	30 min
	7.1.4 Vulnerability mapping	Mapping (via group discussion and/or focus groups)	30-60 min
	7.1.5 Underlying causes	Historical visualisation (via group discussion and/or focus groups)	60 min
	7.1.6 Assess the impacts and root causes	Problem tree or causes & impact table (via focus groups)	2 hours
	7.1.7 Transect walk	Transect walk / direct observation	2-4 hours
	7.1.8 Go deeper	- Livelihood analysis	1-2 hours

		- Household/ neighbourhood vulnerability assessment - Safe and unsafe settlement - Gender Coweb - Connectors/ dividers	
	7.1.9 Summarize vulnerability	Synthesis vulnerability table	60 min
7.2 Assess capacity	7.2.1 Identify human and social capacities	Secondary data, key informant interview	30 min
	7.2.2 Capacity brainstorming	Brainstorming	30 min
	7.2.3 Capacity mapping	Mapping	60 min
	7.2.4 Assess community organisations	- Venn diagram - Institutional social network analysis - SWOT analysis	60 min
	7.2.5 Summarize capacities	Synthesis capacity table	60 min
Step 8. Analyse and conclude on risk levels			
8.1 Synthesize exposure and vulnerability		Summary table	1-2 hours
8.2 Conclude on the risk levels		Risk ranking, talk to the wall	30 min
8.3 Consolidate information on high-risk elements		Summary table	1-2 hours

Step 4. Introduction with the community

Introduce who the EVCA team members are and let the community or their representatives introduce themselves in the way they choose.

4.1 Clarify the objective and expectations

Check if the objective of the assessment is clear to everyone in the community. Clarify that the goal is for them to create a risk profile for their community and, based on this, for them to formulate and implement a risk reduction action plan. Ideally the risk assessment should inform and feed into the community's already existing development plans.

Clarify the expected role of the community and the roles of the different actors in the assessment and planning process. If the community has questions, take your time to address those questions and concerns before proceeding to the assessment.

Make sure you don't create false expectations. It is important to clarify from the start whether there is funding available for the action plan or if the implementation will depend on the community's ability to mobilise resources themselves.

4.2 Explain the schedule of the assessment

Clarify how long it will take, when the assessment will take place and what the expected outcome will be. Explain practical aspects, for example if lunch or pocket money and transport will be provided during and after the assessment.

4.3 Re-confirm the availability and consent of the community



Re-confirm community members' availability – this may differ depending on gender, age, livelihood and other considerations. If certain vulnerable groups are not able to participate or be represented, ensure that members of the EVCA team consult them separately.

Remember that, depending on the culture and situation in the area, you may need to divide the community into different groups based on gender, age, disability, socio-economic group, power dynamics and other considerations for the different parts of the EVCA assessment. Following these group based assessments, it is important to bring together the outputs of the different groups to build consensus and ensure the commitment and active contribution of each community member.

Ask if the community members have any questions and are happy to proceed with the assessment and confirm their consent to document the results of the EVCA and to take photographs/videos if needed. If you are going to work with school children, the advance written consent of teachers and parents is required, and a teacher/school official must be present throughout. This point is non-negotiable. If it is not possible to obtain consent or supervision, the exercise must be cancelled and, where possible, rescheduled.

Explain available options for complaint and feedback mechanisms set up by the local EVCA team (e.g. daily debrief session, complaint & suggestion box, phone line) - [see CEA Tool 15 for more guidance](#). You may check whether the community has been involved in similar assessments in the past and ask what their experience was, what worked well and what they would like to see changed.

If communities express clear interest in engaging in the EVCA, then proceed to the next step. If they express doubts, you may need to adjourn the meeting and try to find out the reasons for their reluctance and document the lessons for future consideration and discussion. Based on the reasons, you may need to plan a follow-up meeting with the community and its leaders to explore under which conditions they may be interested to engage at another time or whether it would be helpful for the EVCA objectives to be revised.

Step 5. Set the foundation



5.1 Introduce, translate and adapt key concepts

It is important to introduce and discuss the [key terms](#) and translate them into the local language for better understanding. This can be done in a fun way through a story or game. Limit it to a few key concepts – hazard, exposure, vulnerability, capacity and risk. Others, such as the [characteristics of community resilience](#), can be clarified later in the process.

The aim is for the community to understand the key determinants of risk by linking the different concepts to their local expressions and world views. There may not always be an exact translation of the terms in another language, in which case a description and practical examples may be helpful.

Proposed tools: brainstorming, pictures, video, games. Optional (advanced): present risk formula.

5.2 Verify and update the community profile

At this point, you should verify the general information about the community you collected through the secondary data collection during the preparation phase. This can be done through key informant interviews while the assessment is being carried out.



Step 6. Hazard and exposure assessment

Purpose: to identify all the natural or man-made hazards experienced by the community and prioritise them. To gain a thorough understanding of the nature and behaviour of the top prioritised hazards and an understanding of the different exposure levels within the community.

6.1 Identify the main hazards

Purpose: for the community to identify what hazards are affecting them

Tools: Hazard brainstorming, [historical profile](#), [secondary/scientific data](#) and [direct observation](#)

6.1.1 Brainstorming

Brainstorm all hazards community members can think of that are relevant to them: What are they most afraid of? What affects them? Remind the community what a hazard means and clarify the definitions as needed. Use [symbols/icons](#) to represent key hazards for illiterate community members to effectively participate.

6.1.2 Historical profile/disaster history



For the historical profile, gather basic information on what disasters have occurred when in the community. Based on the timeline, analyse and discuss if certain hazards are increasing in frequency. Supplement the timeline with information from key informants (especially the elderly) and secondary data.

The focus of the historical profile should be on the hazards but it can also capture other major events and developments in the community which you can come back on later in the analysis to discuss if they have contributed to create vulnerabilities or capacities in the community. The historical visualisation tool can be used later when discussing vulnerabilities.



If different hazards are mentioned by different groups, find out the reasons and start to build consensus.

6.1.3 Emerging and changing hazards



The RCRC has the responsibility to also highlight risks that the community may not be aware of or does not prioritise (e.g. the presence of an earthquake fault line, mortality statistics in the area, industrial hazards, climate change predictions, etc.). Present and discuss any additional hazards (beyond what the community has raised) based on secondary data. Probe and challenge the community with statistics (e.g. on health, mortality) and your knowledge of the humanitarian consequences. Consider in particular any emerging and changing hazards because of climate change. You may need to explain climate change and extreme weather events to the community in simple language. It is important to explain the difference between weather and climate and ask them what changes in the climate they have observed over the years in their area. Also consider 'silent' hazards - those that often don't attract so much media attention but persistently exist and seriously affect the community.

Tip: If necessary, invite an expert or run a short awareness raising session on a less well-known hazard.

6.1.4 Prioritise the hazards

Communities may face various hazards and may not be able to address all of them because of resource or other limitations. They should do an initial prioritization of the most important hazards that are



affecting them to be further analysed as part of this EVCA. Different criteria can be used to prioritise the hazards:

- Impact on the community (e.g. number of people killed, affected, displaced; extent of damage to infrastructure): this is the most common criteria used for this purpose;
- Frequency of occurrence.

The RCRC has the responsibility to remind the community of hazards that have significant impacts based on secondary data. Probe and challenge the community with statistics (e.g. on health, mortality) and your knowledge of the humanitarian consequences.



It is advisable to divide the community into different age, gender and social groups to do the prioritisation (or if it's a very large group, select a few representatives of each different group). Use symbols for the hazards and give each person ten beans/stones and ask them to choose four most important hazards – the more beans they allocate the more important that hazard is to the community member/group (in terms of impact/concern). Consolidate. In the case that different groups prioritise different hazards, ask them to justify, and finally facilitate the discussion to reach a consensus on the top priority hazards based on plausible justifications.

It is recommended to limit the number of priority hazards to a maximum of four.

Tip! Managing different priorities: The interest/concern of the majority may not be the concern of the most vulnerable (minority) group. Be aware of power structures and underlying tensions. Ensure the most vulnerable are represented - they may not have the time or means to get to the meeting so you may need to go to them. You may also verify it in a bigger community meeting (e.g. fish fry, church meeting, etc.) and by consulting key stakeholders and group representatives. If time and resources allow, verify the ranking by checking it against baseline surveys and secondary data, or conduct a quick household or online survey to get better representation. In that case, ensure random sampling (e.g. every 10th household) from the wider community.

6.1.5 Characterise the priority hazards



This is the step where the local EVCA team and community representatives synthesise and describe the nature and behaviour of the top priority hazards which includes the cause, warning signs, lead time, period of occurrence, duration of occurrence and frequency. This is very important information to gather to prepare a community contingency plan (see step 10).

For this step, the facilitators should triangulate the community information with external expertise – for instance, relevant specialists at universities or the meteorological agency – and bring the information into the discussions with the community. For example, the community may report more severe floods than in the past – so it is easy to blame climate change – but if local weather records do not show any change in rainfall intensity, perhaps changes in the management of the watershed upstream is a more likely reason for the changes in floods.

Tools: Secondary sources (refer to your secondary sources to understand the scientific causes of the hazard, scientific warning signs and signals, duration, frequency, period of occurrence) and focus group discussion

Use the following guiding questions:

- What is the cause/origin of that specific hazard?
- What are the traditional and scientific/modern warning signs of the hazard?
- What is the lead time (i.e. how long does it take between the warning signs and its arrival)?

- When (which months) does the hazard occur?
- How often does the hazard repeat itself – what is its frequency?
- What are the changes in frequency and severity in the last decade(s)? Do you expect any changes in the next five to ten years (considering climate change or other factors)?
- For how long does the hazard tend to last?



List the information in the following format. This should be done for each priority hazard separately.



Hazard: _____

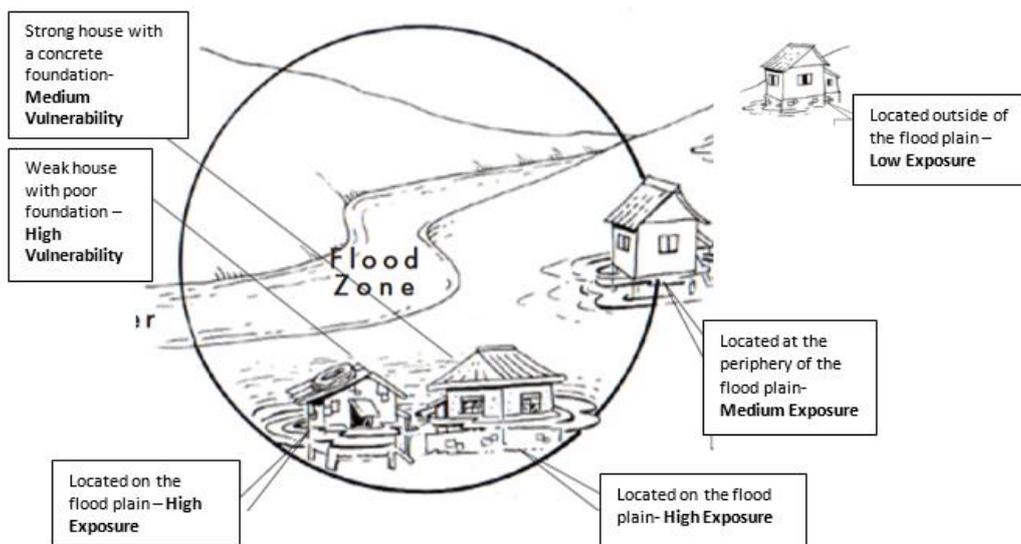
Characteristics	Description
Cause/Origin	
Warning signs	
Lead time ⁹	
Frequency ¹⁰ (and changes)	
Period of occurrence ¹¹	
Duration ¹²	

6.2 Identify the exposure

Purpose: for the community to identify where and when hazards affect them

Tools: [Hazard and exposure map](#), [transect walk](#)

Exposure: People, property, systems or other elements present in hazard zones that are subject to potential losses. As shown in the picture below, it does not matter whether the two houses are well-built or poorly built, if they are in the same location in the flood zone, they are equally exposed to flood risk. Houses located outside of the flood zone have lower exposure.



⁹ Time between warning and impact or time between warning and arrival

¹⁰ Does the hazard occur seasonally, once a year or every x number of years?

¹¹ Does it occur during a particular time of the year (e.g. wet or dry season)?

¹² How long is a hazard felt (days/weeks/months)?

6.2.1 Hazard and exposure mapping

Indicate the locations affected by hazards on a spatial map and delineate high, medium and low exposure areas and the elements/features in those areas (what and who). One of the most popular and fun ways to analyse how and where hazards affect the community is the hazard mapping and transect walk. If you don't have one already, jointly create a spatial map and then ask community members to locate the different hazards on the map and mark high, medium and low exposed locations for each one of the hazards based on their experience (you may use different colours or symbols for different hazards). For hazards such as droughts or storms that may be difficult to locate on the spatial map, list them on the side of the map. Don't spend too much time on identifying all the elements/features in low exposure areas - while your risk reduction efforts won't focus on low exposure areas, it might help you to see the spectrum of what is in different exposure areas and it might help you later (during the capacity assessment step) to identify safe areas.



Discuss changes of hazard locations (e.g. changes in flood zones) as shown in the picture below and possible future risk locations due to climate or other environmental changes. You might also want to widen the map to include wider river catchment area or other influencing factors.



Flood zones – left picture indicates current and potential flooding; right picture shows the sources of flash floods in watershed above the community (sources: Nepal and Danish Red Cross, Google Earth).

Tip: Ask the community to come up with an icon or symbol to represent each hazard to make understanding easier for illiterate people. Make sure the final map is made available and displayed in the community.



Optional: several digital tools now exist that can be used for hazard mapping (e.g. PASSA youth mapping, etc.). Digital mapping tools might be especially relevant in large urban areas and an interesting method to engage younger community members. See additional details in the toolbox.

6.2.2 Transect walk/direct observation

Based on information collected in the hazard and exposure map, identify specific locations in the high and medium exposed areas to investigate further. The purpose is to ground truth your hazard and exposure map, check if you missed anything and get more details. Focus on the physical environment at this stage - i.e. cross-check the borders of the exposure areas and information on who/what is in the exposure areas. You will do another more in-depth transect walk to collect information on vulnerability in section 7.1.

Split into smaller groups to visit several areas at the same time. Ideally, try to be accompanied by someone who knows the area. After the walk, ask everyone to include additional information on hazards and risk locations on the hazard map.

6.3 Synthesise the hazards and exposure

Purpose: Synthesise and analyse the information collected regarding hazards and exposure

Tools: Ranking/scoring, [focus group analysis](#)

By reading the hazard and exposure map, analyse and list who and what is located in high, medium and low exposure areas in the below table. Include human, physical (houses, infrastructures) and natural assets.

Determine if, overall, most of the ‘who and what’ are in the high, medium or low exposed areas and, on that basis, provide a score of high, moderate or low for each hazard. The local EVCA team can summarize the information in the table ahead of time, and then bring together the community to review/endorse the summary and agree on a score for each hazard.

Kindly note that an EVCA report template is available on ifrcvca.org and that this table is included in it.

Table 1: Summary of hazards and exposure

Hazard	High exposure – what and who	Medium exposure – what and who	Low exposure – what and who	Score (High, moderate, low)
<i>e.g. Flood</i>	<ul style="list-style-type: none"> - 55 houses in low-lying area by the river - 1 health post - 1 market - 1 school - 1 km of road - 56 hectares of crops - 78 people 	<ul style="list-style-type: none"> - 10 houses near the river - 5 shops - 2 km of road - 9 hectares of crops - 123 people 	<ul style="list-style-type: none"> - 20 houses built on stilts with strong cement structure; 100 houses on high ground - 1 school - 4 km road - 1 natural spring - 241 people 	<i>High</i>
<i>e.g. Dengue</i>				<i>Moderate</i>
<i>e.g. Conflict</i>				<i>Low</i>

Step 7. Vulnerability and capacity assessment

A disaster occurs when a hazard strikes a community that is vulnerable. Physical, economic, human, social, natural and political factors determine people’s level of vulnerability and the extent of their capacity to resist, cope with and recover from hazards. Clearly, poverty is a major contributor to vulnerability. Poor people are more likely to live and work in areas exposed to potential hazards, while they are less likely to have the resources to cope when a disaster strikes. In the vulnerability assessment, we are trying to answer the question “what makes the community, or particular groups within the community, vulnerable to each hazard?”

In addition to vulnerabilities, a disaster-prone community will also always possess capacities at the community, household and individual level. The capacity assessment tries to answer the question “what strengths are available at individual, household and community levels that can be mobilised and accessed to reduce the impact of a specific hazard?” What capacities (human, social, economic,

physical, natural and connectedness) mainly within the community, but also outside it, can be mobilised and accessed to reduce the negative impacts of the hazard?

Vulnerability and capacity are on the opposite sides of the same coin. Vulnerability covers weaknesses while capacity covers strengths.

7.1 Assess vulnerability

Purpose: for the community to reflect on how and why a hazard affects them

Tools: [Seasonal calendar](#), [mapping](#), [historical visualization](#), [problem tree](#), [transect walk](#). Optional (sectoral/thematic tools): livelihood analysis, gender co-web

7.1.1 Remind the community what vulnerability means and how it is different from capacity

Ask the community for equivalent local translations of vulnerability and capacity. If you have not done so yet, introduce the [six characteristics of community resilience](#) and briefly discuss examples of possible vulnerabilities and capacities for each characteristic (see the comparative table in [key terms](#)).

7.1.2 Seasonal calendar

Start a seasonal calendar, asking community members to identify which hazards occur during which month(s) currently and in the past (10-30 years ago). Analyse and discuss if the timing and intensity of hazards has changed which could be due to climate change. It is not one past event but rather *patterns* in the past that are interesting. Some hazards such as earthquakes can happen anytime in the year so mark them equally for every month.

Add to the calendar other key events that will highlight aspects of exposure and vulnerability. Add periods when many health issues occur (e.g. malaria), crop and livelihood patterns, lean periods, social events including school events and migration periods, etc. Based on the overlaps with the hazard timing, identify what and who may be vulnerable to a hazard (e.g. harvesting season during flood time, flooding during school exam period). Discuss and analyse what and who is vulnerable and when.

Tip: Ensure key events of different groups are captured in the seasonal calendar. Exposure might differ depending on the type of livelihood/crop calendar, gender, age, etc.

7.1.3 Vulnerability brainstorming

Identify vulnerable groups in your community (e.g. women and girls, people with disability, low-income households, minority/marginalized groups, migrants, older people, youth etc.) and specify for each group what their particular vulnerabilities are. Put this in a table - you will come back to it in step 7.2.2.

7.1.4 Vulnerability mapping

Going back to the hazard and exposure map, now identify whether highly vulnerable people are living in high and medium exposed areas and if so, where. Identify other elements that are vulnerable that might have been missed earlier (e.g. open water sources, livelihoods, health facilities, etc.). You can mark the vulnerabilities on the hazard/spatial map by using different colours. However, it may be better to draw them on a transparent paper and then overlay it onto the hazard/exposure map for analysis. Community members know well which hazards are affecting them most and should be addressed as a priority.

7.1.5 Underlying causes: historical visualization

Use a historical visualization to show changes in vulnerability in the community over time. Select elements of the characteristics of community resilience: e.g. changes in human population, types of



houses, types of economic opportunities, access to infrastructure & services, natural assets. Discuss and analyse what changes might have contributed to increasing vulnerabilities and what has provided resources and capacities that reduce risks.

7.1.6 Assess the impact and root causes: problem tree

For each of the priority hazards, ask the community to discuss the question: what is the impact of each hazard and why is it affecting them? The aim is to find out what is causing the impact and why it might have different impacts on different vulnerable groups. Draw a problem tree and if possible try to cluster the roots (causes) and branches (impacts) according to the six characteristics of resilience (human health and basic needs, economic/livelihoods, social, infrastructure & services, and natural assets).

7.1.7 Transect walk

Undertake another transect walk, this time focused on social aspects/vulnerability. The purpose is to ground truth the information that has been collected on vulnerability, check if you missed anything and get more details. Split into smaller groups to visit several areas at the same time. Ideally, try to be accompanied by someone who knows the area. After the walk, ask everyone to consolidate the information.

7.1.8 Go deeper



If one or more of the vulnerabilities or root causes are related to a specific sector or issue and there is not enough information yet from the EVCA assessment to adequately explain it, you can go deeper into the issues using additional sectoral or issue-based assessment approaches. This could be sector specific such as livelihoods, shelter and settlements, health, and WASH assessments, threat specific analysis (e.g. floods or epidemics), or further analysis of issues such as gender dynamics or conflict. Relevant sectoral teams from the National Society or from other entities identified in the stakeholder mapping (government, NGOs or commercial entities) could be requested to conduct this deeper analysis. Alternatively, a more in-depth sectoral assessment could be identified as an activity to be done as one of the first actions in the community's risk reduction action plan. Connect the community to potential experts or partners and accompany them through the process.

Examples of methodologies/ tools which can be used to gather more in-depth information are:

- Shelter: [Household/neighbourhood vulnerability assessment \(RRS10, p. 105\)](#) and [Participatory Approach to Safe Shelter Awareness \(PASSA\)](#)
- Livelihoods and food security: [Livelihood impact analysis](#)
- Health: [Community based health and first aid \(CBHFA, Module 3\)](#)
- WASH: [WatSan Assessments](#); [Participatory hygiene and sanitation transformation \(PHAST, Step 1-3\)](#); for urban areas: [Community-led urban environmental sanitation](#) or [City-Wide Sanitation planning](#)
- Gender: [Gender Coweb \(p.49\)](#)
- Conflict context analysis: [Identify connectors/dividers \(BPI Step 1\)](#)
- [Flood resilience measurement tool](#)

7.1.9 Summarise vulnerabilities

It is important now to summarise your vulnerability findings in the following table according to each hazard and characteristic, and to determine what makes the community most vulnerable to each

hazard. Based on the number of vulnerabilities identified and their severity, allocate a score for each characteristic (high, moderate or low) that gives an overall sense of how vulnerable the community is from the perspective of that characteristic. The local EVCA team can summarize the information in the table ahead of time, and then bring together the community to review/endorse the summary and agree on a score for each characteristic.

Table 2: Summary of vulnerabilities

Hazard	Dimensions	Impact (past and future)	Vulnerability aspects with their causes (why the impact is happening and what the root causes are)	Score (high, moderate, low)
<i>e.g. Flood</i>	Risk management	<i>Death, injuries</i>	<i>No early warning, lack of swimming skills, people with disabilities living in the exposed houses</i>	<i>High</i>
	Health			
	Water & sanitation			
	Shelter			
	Food & nutrition			
	Social cohesion	<i>Displacement</i>	<i>Ethnic division among the community members</i>	<i>Low</i>
	Inclusion			
	Economic opportunities	<i>Loss of crops</i>	<i>No alternative livelihoods for most of the community</i>	<i>Moderate</i>
	Infrastructure & services	<i>Cut-off road, damaged buildings</i>	<i>Poor drainage lines, poor building standards</i>	<i>High</i>
	Natural resource management	<i>Loss of fertile soil Increased flash flood risk</i>	<i>Serious deforestation on the upper stream of the floodplain</i>	<i>High</i>
	Connectedness	<i>Lack of timely support from external organisations following crisis</i>	<i>Community has no connections with the district disaster management office</i>	
<i>e.g. Dengue</i>	Risk management			
	Health			
	Water & sanitation			
	Shelter			
	Food & nutrition			
	Social cohesion			
	Inclusion			
	Economic opportunities			
	Infrastructure & services			
	Natural resource management			
	Connectedness			

7.2 Assess capacity

Purpose: for the community to identify what resources are available to cope with a hazard or reduce its impact

Tools: [secondary data](#), [mapping](#), Venn diagram.

Reminder: Vulnerability and capacity are hazard-specific and the assessment should be done for each of the priority hazards individually.

7.2.1 Review secondary data on human and social capacities

Review secondary sources, such as the stakeholder mapping done in the preparation phase (section 3.3), and determine what skills, knowledge and capacities are available in the community. If secondary sources do not provide enough information, you may consider sending some of the community members or volunteers to go and get information on the type and number of people that have different skills or capacities in the community, including from the different government and non-governmental organisations working in the community.

7.2.2 Capacity brainstorming

For each hazard, brainstorm the different capacities according to each resilience characteristic. Remember that you should think about the different capacities that might be available to the whole community but also in specific households and individuals (e.g. if a member of the community is associated with the agricultural extension service).

In addition, going back to the table you drew up in step 7.1.3, add a column in which you specify for each vulnerable group what their particular capacities are. This will help you ensure that you do not miss any specific capacities for vulnerable groups.

7.2.3 Capacity mapping

It is very likely that you already mapped out key infrastructure and buildings in the community on the spatial map during step 6.2.1. Now it is time to assess those structures or resources and consider if they are capacities. For example, a hospital can only be considered a capacity if it is functional (with medical personnel working and medicines to treat its patients). The capacity or resource mapping should be done to locate and review the strength of the infrastructures and services (roads, schools, health facilities, water facilities, police stations, government offices, telecommunication, sport facilities, financial institutions etc) and the natural environment (farm land, grazing land, rivers and springs, forest etc). You may also wish to map out where individuals with key capacities live (e.g. community disaster response team leaders/members). This helps the community to identify which resources and services might help them in times of disaster or what support they might be able to get from which institution to implement their resilience action plan. Make sure to consider what capacities might not longer be available after an emergency, if they are in high or medium exposed areas.

You can mark the capacity/resources on the hazard/spatial map using different colours. However, if it looks messy, it is better to draw them on a transparent paper that can then be overlaid onto the hazard/exposure and vulnerability map for analysis.

7.2.4 Assess community organisations

Identify different organisations and institutions (community-based organisations, government offices, private sector, civil society organisations etc.) working in the community and use a Venn diagram to analyse their importance to, and influence on, the life of the community. Communities use their own criteria (mainly power or influence and importance to the community) to map the different institutions. You might want to do this exercise separately for each hazard (e.g. institutions that can help with drought such as agricultural department might be different to organisations that might be able to help with floods such as public works engineers).

7.2.5 Summarise capacities

Summarise the capacity assessment in the following table. Complete the table with capacities for each hazard, according to each resilience characteristic. Based on the number and strength of capacities identified, allocate a score for each characteristic (high, moderate or low) that gives an overall sense of how capacitated the community is from the perspective of that characteristic. The local EVCA team can summarize the information in the table ahead of time, and then bring together the community to review/endorse the summary and agree on a score for each characteristic.

Table 3: Summary of capacities



Hazard	Dimensions	Capacities (community, household, individual)	Score (high, moderate, low)
E.g. Flood	Risk management	- People have access to weather forecasts on their mobile (but limited knowledge on how to interpret it and what actions to take) - Two well-experienced swimmers who could train others	Low
	Health		
	Water & sanitation		
	Shelter		
	Food & nutrition		
	Social cohesion	- Community has good leadership; Culture of people sharing physical resources they have in times of need	Moderate
	Inclusion		
	Economic opportunities	- One social group has savings and loans scheme with low-interest loans available	Low
	Infrastructure & services	- Availability of one protected borehole - A health station with 1 health officer and 1 nurse as staff	
	Natural resource management	- Forest on top of the hill is a protected community forest	
E.g. Ebola	Connectedness	- Red Cross branch has connection with the district disaster management office - Mobile network and all weather road available	
	Risk management		
	Health		
	Water & sanitation		
	Shelter		
	Food & nutrition		
	Social cohesion		
	Inclusion		
Economic opportunities			
Infrastructure & services			

	Natural resource management		
	Connectedness		

Step 8. Consolidate and conclude on risk levels



Purpose: for the community to consolidate the results of the assessment and identify who and what is at high, medium and low risk

Now it is time to bring the results of exposure, vulnerability and capacity for each hazard together to start to make sense of it. As you will remember, risk is directly proportional to the hazard and level of exposure and vulnerability, and is inversely proportional to the capacity to withstand the shocks and stresses of the hazard (i.e. exposure x vulnerability / capacity).

8.1 Synthesise exposure and vulnerability

In this step, the team facilitates the process for the community to consolidate analysis on exposure and vulnerability, and try to agree on an overall score per characteristic. Using the table below and the scores from the summary tables for exposure and vulnerability, determine a score for the combined levels of exposure and vulnerability for each hazard and characteristic. Fill out table 4.



Exposure x Vulnerability	Vulnerability		
Exposure	Score		
Score	Low	Moderate	High
Low	Low	Low	Moderate
Moderate	Low	Moderate	High
High	Moderate	High	High

So, for example, for floods, the exposure score (from table 1) is high so you would apply that for each of the vulnerability characteristics (from table 2). So the scores for the human, social and economic characteristics would be high, moderate and high, respectively. If the exposure score for floods was moderate, the scores for the human, social and economic characteristics would be high, low and moderate, respectively.

Table 4: Combined level of exposure and vulnerability per hazard

Hazard	Dimensions	Score (High, Moderate, Low)
<i>e.g. Flood</i>	Risk management	<i>High</i>
	Health	
	Water & sanitation	
	Shelter	
	Food & nutrition	
	Social cohesion	<i>Moderate</i>
	Inclusion	
	Economic opportunities	<i>High</i>
	Infrastructure & services	
	Natural resource management	
<i>e.g. Dengue</i>	Connectedness	
	Risk management	
	Health	
	Water & sanitation	
	Shelter	

	Food & nutrition	
	Social cohesion	
	Inclusion	
	Economic opportunities	
	Infrastructure & services	
	Natural resource management	
	Connectedness	
<i>e.g. Conflict</i>		

8.2 Conclude on the risk levels

Remind the community about the risk formula and the fact that the risk of disaster is a factor of hazard, exposure, vulnerability and capacity. Clarify that the **risk level is the highest when exposure and vulnerability are high and capacity is low**. On the contrary, the risk level is low when the exposure and vulnerability are low and capacity is high.

Purpose: to identify the risk levels by consolidating the analysis results of exposure, vulnerability and capacity for each hazard

Tools: talk to the wall (ask the community to put up on a wall or table the results of the different exercises, such as the mapping and the synthesis table of vulnerability and capacity assessments. By putting the results side by side for each hazard, you can compare, triangulate and consolidate the findings)

Using the table below, assign a risk score for each hazard and its characteristic in table 5 below.

Risk	Exposure x Vulnerability		
Coping Capacity	Score		
Score	Low	Moderate	High
High	Low	Low	Moderate
Moderate	Low	Moderate	High
Low	Moderate	High	High

So, continuing with the same example, for floods, the 'exposure x vulnerability' score for the human characteristic is high (table 4) and capacity for the human characteristic is low (table 3), so the risk score would be high. Along the same vein, the 'exposure x vulnerability' score for the social characteristic is moderate and capacity for the social characteristic is moderate, so the risk score would be moderate. And so on...

Table 5: Risk scores

Hazard	Dimensions	Score (High, Moderate, Low)
<i>e.g. Flood</i>	Risk management	<i>High</i>
	Health	
	Water & sanitation	
	Food & nutrition	
	Shelter	
	Social cohesion	<i>Moderate</i>
	Inclusion	
	Economic opportunities	<i>Moderate</i>
	Infrastructure & services	
	Natural resource management	
<i>e.g. Dengue</i>	Connectedness	
	Risk management	
	Health	
	Water & sanitation	

	Food & nutrition	
	Shelter	
	Social cohesion	
	Inclusion	
	Economic opportunities	
	Infrastructure & services	
	Natural resource management	
	Connectedness	
<i>e.g. Conflict</i>		

8.3 Consolidate information on high risk elements



For each characteristic identified at high risk (and potentially medium risk), the local EVCA team should help the community consolidate them in a table (template below) with their respective exposure, vulnerability and capacity information. The conclusion on the key risks will require a subjective judgement by the community, beyond the information that was collected.

Table 6: Consolidated information on high risk elements

Hazard	High and medium exposed elements (copy from exposure summary)	Dimensions	Vulnerability aspects (copy from the vulnerability summary)	Capacity aspects (copy from the capacity summary)	Summary of key risks (high exposure + high vulnerability + low capacity)
E.g. Flood	-55 houses in low-laying area by the river (H) - 1 health post (H) - 1 market (H) - 56 hectares of farmland (H) - school near the river (M)	Risk management	- No early warning system - Lack of swimming skills - 5 people with disabilities living in the exposed houses	<i>People can access weather forecasts on their mobile (but limited knowledge on how to interpret it and what actions to take)</i>	<i>Children who don't know how to swim that go to school in the flood risk area are at high risk of death and injury</i> <i>People with disabilities in houses by the river would need help to evacuate</i>
		Infrastructure & services	- Poor drainage lines - Poor building standards		
		Natural resource management	- Serious deforestation on the upper stream of the floodplain		

Both vulnerability and capacity change over time, which is why the EVCA process should be repeated periodically (ideally, around once a year).

Once you have a clear idea of what are the most at-risk elements in the community according to their exposure, vulnerability and capacities, you are ready to start the planning phase.

8.4 Turn your assessment results into a baseline resilience measurement

In order to reduce risks and strengthen the resilience of a community, it is important to have a sense of the extent to which it is already resilient. Later on, you may want to know whether your risk reduction and resilience-building efforts did in fact lead to a more resilient community. So you will need some way of assessing the 'state of resilience' at the outset and of tracking resilience over time.

Now that you have undertaken the EVCA, you will be able to easily turn your assessment results into a resilience measurement baseline. The overall risk scores for each dimension for each priority hazard compiled in Table 5 can be turned into a 'score' (0-1) and turned into a resilience measurement 'star'. Efforts are currently ongoing to develop an IFRC resilience measurement dashboard, which will allow you to analyse and visualize your resilience measurement data. By uploading your EVCA report (template available on ifrcvca.org) to the VCA repository (vcarepository.info), the resilience measurement dashboard will automatically be able to turn your results into a resilience measurement 'star'.

Step 14 provides additional information for how to track any changes in community resilience over time, as part of monitoring and evaluation efforts.