

Use it to...

- **Assess vulnerabilities** by analysing the cause and effect of a hazard or problem
- Identify the various **impacts** of a hazard or problems and additional potential long-term effects
- Understand the **root causes** that need to be addressed to reduce vulnerability.
- It can also be used in the planning phase to create a solution tree to help find the solutions to the problems identified through the problem tree

When to use it

Since this tool dives deeper into root causes of the issues in the community it is advisable to use it at a later stage of the assessment after some of the main problems have been identified using other tools. In conjunction with the solution tree it can be used during the planning phase to identify solutions to reduce vulnerabilities.

Skills needed

The **facilitator** needs to be able to accurately capture and synthesize the information provided. He or she should have good analytical skills in sorting and grouping similar issues and helping to identify connections and linkages between issues. Most importantly he/she needs to be good in asking probing questions such as 'So what' and 'Why'?



The facilitator should have an understanding of the role and relationships of men and women and marginalized groups in the community to help participants identify differently impacts and root causes that might relate to unequal existing social structures.

How to do it

Step 1. Assign a problem or hazard to the group

- From the problem prioritized from the problem ranking tool (see step 5.3 in the EVCA), take each problem separately for a detailed analysis. From the information gathered through the use of other tools and interviews, various concerns and problems will have already been identified. Write down each of the major hazards on a separate piece of paper and then tape these on the wall (people can draw problems if they do not know how to read and write).
- Divide participants into groups and assign one hazard per group. If you have divided groups already by gender or other grouping, you might ask each group to focus on one specific problem that they would like to prioritize first or ask each group to work on all top hazards at the same time. Another option is to ask groups to rotate (world café style), so they can add onto what the previous group already wrote down and each group gets the opportunity to work on all problems .

Step 2. Determine how to divide the groups and participants



- It is critical that all participants get the chance to express the problems they find important. Depending on the context, it is recommended to first prepare separate trees for problems identified by women and men, as well as by different age groups and other groupings deemed important through the process of the EVCA.¹
- For example you could also divide participants into livelihoods groups (industry labourers, traders, farmers, etc.) or other subgroups (poor people, rich, medium) as their problems and vision of the situation may be very different.



- Young people might not feel free to talk when included in groups with adults but it's important to consider their point of view about problems and solutions, as they might have a different outlook on the future.
- At the end the separate trees can then be compared and analysed.



Example of a FGD using a problem tree with women as part of a VCA in Mwenezi by Zimbabwe Red Cross Society

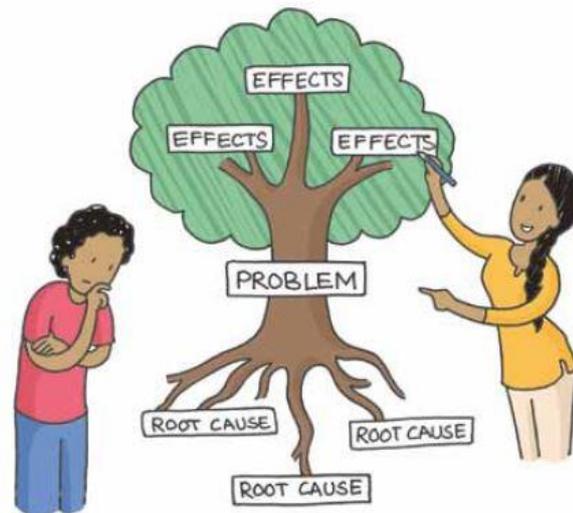
¹ Gender and diversity sensitive VCA, p. 21.

Step 3. Draw a problem tree

Now ask each group to start drawing a “problem tree”:

- The trunk represents a problem (or hazard or threat),
- the branches and leaves are the impacts and effects
- the roots are the causes.

The problem tree can be drawn on a flipchart or with digital tools like MindMap or Mindmeister on a laptop or computer.



Maldivian Red Crescent VCA Toolbox

3.1 Identify impacts

Discuss ‘*How is it affecting us?*’ Each branch can branch out in many further impacts that are resulting from the first impact and even long-term effects. Keep probing: So what? Then what? Are the impacts the same for everyone? Are there specific effects for women, children, and people with disabilities?

3.2 Identify causes

Ask the participants to discuss the possible causes to the problem ‘*Why is it affecting us?*’, what is causing the problem? There could be more than one cause to the main problem and each cause should be listed on a separate tree root. Based on the first level, the participants are to take each of the causes and underlying issues leading to this. This would provide a further level of causes. This process can be done until, a root cause is identified. This is observed when the participants feel that there are no more causes beyond what they mentioned.

These will develop dynamically as participants discuss the issues. As facilitator you should encourage people to probe further.

- When discussing the impact and root causes of the hazard in the community, you can use the [resilience characteristics](#) as guide to explore the different aspects of the problem. For example, what is the impact on people, on health, on their basic needs, on livelihoods and economic opportunities, social structures, infrastructure & services and natural assets. What are the underlying vulnerabilities for example in terms of health, who is more vulnerable, what is their reliance on certain types of livelihoods, is there a lack of quality

of infrastructure and services, degradation of natural resources etc. that are contributing risk factors (see example in table below)?

- If possible, try to cluster the roots (causes) and branches (impacts) by the characteristics of resilience. However, you might also find how they are interlinked, for example a direct impact of a drought might be scarcity of water (basic needs), which might lead to livestock death (economic) leading to a conflict over scarce water resources (social cohesion).

Tip!

Try to reflect on the six characteristics of resilience when considering the different impacts and root causes in relation to the hazards.

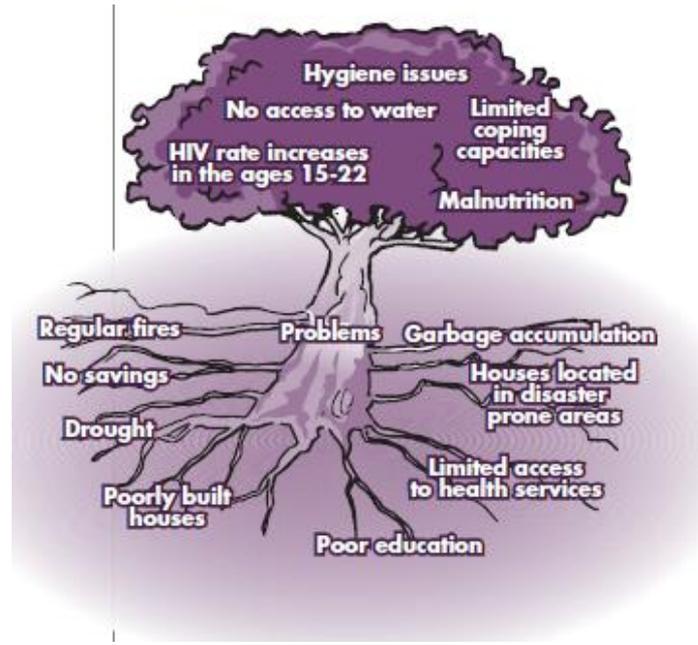
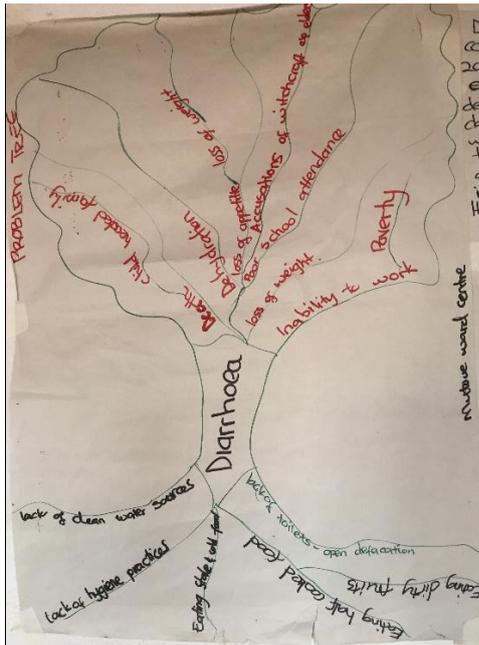


- As mentioned above, be sensitive about facilitating discussion about underlying vulnerabilities and root causes that might relate to social and cultural structures. These are important to identify and might require further dialogue. .



- Beware of not letting the discussion and participants “jump to conclusions” and just blame any hazard on the climate or climate change.² For example, increased flooding might be in part due to more intense rainfall events but there might be many other contributing factors that lead to a flood event. Verify from secondary sources what are the observed climatic changes in the area, but also probe for other contributing factors (e.g. land use changes, environmental degradation, clogged drainage, etc.)

² Suggestions for VCA adaptation – for tools and approaches, 2016.



Example of a problem tree on diarrhoea (Zimbabwe Red Cross Society) Example from Make the Change

Step 4. If different groups were made, bring the groups together to discuss the problem trees

Facilitators could discuss with each separate group the key issues before bringing the community together again.

Then different issues identified in the problem tree must be brought together to discuss the differences and similarities between women, men, disabled and other groups. Highlight commonalities and differences in the impacts identified and the vulnerabilities (root causes). This will create a discussion around different perceptions and priorities which will support the development of solutions in the community.



Next steps: Synthesize vulnerabilities

Once the problem tree has been created, you can check to see whether other sources of information have identified the same problems and root causes and thus verify and triangulate.

Add the issues identified to the [synthesis summary of vulnerabilities](#) in the analysis (see table 6.1.7 in Step 6 of the EVCA guide).

Resilience characteristics	Examples of information collected	Examples of vulnerabilities identified
Knowledgeable about risk	Impact of the hazard/threat on education and trainings	limited education and knowledge about risks and root causes, limited skills (e.g. children in flood areas can't swim)

Health	impacts on health including death, injury, psycho-social health.	Different health impacts depending on age, gender and disability; limited awareness on sanitation and personal health; limited access to health care support
Basic needs- Shelter	impacts on houses and other shelter types	poorly build houses, no adherence to building codes, no emergency shelter, etc.
Basic needs - Food	impact on food security and nutrition	limited awareness on nutrition, no safe storage
Basic needs - Water	impact on quantity and quality of drinking water and sanitation	no protected water sources no filtration,
Social cohesion	Impact of disasters on family and community relations and support networks, different impacts depending on gender, age, disability or ethnic group; stress and violence due to psycho-social impact, conflict over scarce resources,	unequal existing social structures that might be the root causes for different impacts on men and women; limited coping capacities, weak community governance structures, etc.
Economic opportunity	impacts on livelihood such as crops failure or livestock death, impact on business and trade, debt	limited coping capacities, lack of alternative livelihoods, lack of access to savings and loans, lack of livelihood protection and adaptation skills
Infrastructure and services	impact on infrastructure e.g. destroyed bridges or damaged schools, disruption of services,	weak support services, no adherence to building codes for public infrastructure
Natural assets	destruction of natural assets	lack of natural resource management and protection
Connected	loss of mobile connectivity, cut-off from support	remote location, limited support from organizations, limited influence

Constraints and pitfalls



- When discussing the causes in the problem tree, beware of not letting the discussion and participants “jump to conclusions”. Keep probing. Don’t let participants just blame any problem on the climate or topography. Probe for other underlying vulnerabilities that causes people and assets to be affected.
- Be respectful of belief systems. When asked why people think changes are occurring, often they might say ‘because we have done something bad’ or ‘God is punishing us’ or are ‘Acts of God’. This kind of explanation can lead people to believe that things will soon return to normal or even worse, to fatalism or inaction. It is important to consider people’s belief system and discuss other explanations and causes in sensitive ways. Most religion and belief systems do have stories that emphasise the importance of humans using their intelligence to take action³ and have respect for nature.
- It is important to determine whether the different groups of people perceive the problem in the same way, if not, the problem might need to be reformulated. As a facilitator, be conscious though that the views by marginalized groups do not get dismissed by more dominant groups or participants.



³ For example, an Arab Proverb says “Trust in God but tie up your camel”

Variation: Solution tree

What is it?

A solution tree is an activity we can use to help us find the solutions to the problems that we identified through the problem tree; in this way we are able to visualize our desired future situation for our community. Based on the solution tree, the community would be able to develop its action plan (EVCA Step 8).

Use it to...

- help find solutions to identified problems
- identify capacities that can support these solutions
- develop objectives and activities for community led projects
- visualize desired outcomes

How to do it...

Step 1: Brainstorm ideas to solve the problems

Review the problem tree or other tools that identified main problems. Start by picking one of the priority problems and turn it into a positive statement. For example 'lack of drinking water' becomes 'availability of adequate drinking water.'

On pieces of paper ask everyone to write or draw their individual ideas of the different activities and actions that they believe can contribute to solving our problems. Those participants who cannot read and write can present their thoughts through drawings. Stick these pieces of paper on the wall. Identify all those that are similar or are related and we group them together.

Step 2. Construct a new tree of solutions where:

- the solutions are represented in the trunk
- the actions to reach these solutions are in the roots.
- the positive results or consequences we wish for our community are in the leaves.

Step 3: Review and reflect with the participants:

Reflect on the following questions and make changes accordingly or decide how and who will get additional required information:

- Do we believe that the solutions are correct? What additional information or expertise might we need to check and develop them further?



- Have we considered the opinion of women and men, girls and boys? Do the objectives meet the needs of both men and women, and the needs of the most vulnerable? How can women, men, boys, girls, people with disabilities participate in the activities?

- Do no harm: could the proposed activities have negative consequences for other groups or communities? If yes, how could that be mitigated?



- Have we taken into consideration changing and emerging risks? Are the solutions and activities still going to be sufficient in the future (e.g. take into consideration changes in average conditions like sea level or temperatures, or changes in the frequency and severity of the disasters)? Would the proposed activities harm the environment or natural resources?

Next steps:

From the above information you can develop a theory of change, and turn ideas into community action plan or project plan with objectives, outputs and activities.

Resilience characteristics	Coverage of characteristic by tool	Impacts, causes and solutions related to the characteristics	Vulnerabilities identified	Capacities identified
Knowledgeable about risk				
Health				
Basic needs - Shelter				
Basic needs - Food				
Basic needs - Water				
Social cohesion				
Economic opportunity				



Problem tree

Infrastructure and services				
Natural assets				
Connected				