

Road map to community resilience

Operationalizing the Framework for Community Resilience



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Road map to community resilience

Operationalizing the Framework for Community Resilience

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest volunteer-based humanitarian network. With our 190 member National Red Cross and Red Crescent Societies worldwide, we are in every community reaching 160.7 million people annually through long-term services and development programmes, as well as 110 million people through disaster response and early recovery programmes. We act before, during and after disasters and health emergencies to meet the needs and improve the lives of vulnerable people. We do so with impartiality as to nationality, race, gender, religious beliefs, class and political opinions.

Guided by *Strategy 2020* – our collective plan of action to tackle the major humanitarian and development challenges of this decade – we are committed to saving lives and changing minds.

Our strength lies in our volunteer network, our community-based expertise and our independence and neutrality. We work to improve humanitarian standards, as partners in development, and in response to disasters. We persuade decision-makers to act at all times in the interests of vulnerable people. The result: we enable healthy and safe communities, reduce vulnerabilities, strengthen resilience and foster a culture of peace around the world.



Table of contents

Foreword	5
.....	
Overview	7
Who is this guide for?	7
What is this guide for?	7
How does this guide relate to other documents?	7
What is in this guide?	8
.....	
Orientation: what is different about ‘resilience’?	11
Rethinking our approach	13
Rethinking red cross red crescent services	16
.....	
Stage 1: Engaging and connecting	19
Milestone 1: Engage as a national society	20
Milestone 2: Engage the community	23
Milestone 3: Connect the community to stakeholders	26
.....	
Stage 2: Understanding risk & resilience	29
Milestone 1: Prepare to assess	31
Milestone 2: Measure community resilience	33
.....	
Stage 3: Taking action to strengthen resilience	43
Milestone 1: A community resilience plan of action	43
.....	
Stage 4: Learning	51
Milestone 1: Learn from resilience actions	53
.....	
Annexes: Resilience reference sheets	57
.....	



Inclusion of elderly people is key in the RCRC approach to strengthening community resilience

Foreword

In recent years, humanitarian needs have grown at an alarming rate. The number of people dependent on humanitarian assistance has more than tripled while the cost of responding has increased five-fold.¹ Every source of evidence suggests that human and economic losses, particularly due to climate change, will only continue to grow. If we continue a business-as-usual approach of crisis and crisis-response, we will not be able to manage the increasing scale of the challenges. We need a paradigm shift in the way we work with communities at risk – and to act preventively to reduce exposure, vulnerability and impact at local level.

For Red Cross Red Crescent National Societies, fostering community resilience is the answer. It empowers communities to shape their lives and create a safe, healthy and prosperous future. Resilience is not something that can be brought to or built for communities. Strengthening resilience at every level is a participatory journey led by its beneficiaries: it requires a new mind-set that focuses more sharply on accompanying, enabling and connecting communities as they grapple with complex challenges. In these respects, strengthening resilience differs dramatically from the conventional model of humanitarian assistance.

For the IFRC, the concept of community resilience encapsulates all we aim to achieve. Numerous National Societies have sought to strengthen community resilience for many decades, even if their efforts have not been described in those terms.

The Global Community Resilience Forum (Cali, November 2014) and World Conference on Disaster Risk Reduction (Sendai, March 2015) marked important milestones in our journey towards a resilient world. In Cali, National Societies launched the One Billion Coalition for Resilience (1BC).

The IFRC has developed this Road Map to Community Resilience to provide National Societies with step-by-step guidance on how to support communities on their journey. It will help communities to take specific steps to strengthen their resilience and advance the goal of 1BC, which is to build, scale up and implement resilience partnerships led at community level.

The call to address the world's escalating humanitarian concerns is both timely and pertinent. The goal of 1BC is to build a truly global coalition of individuals, communities, businesses, international organizations and governments. It seeks to mobilize our collective networks, and our ability to work at scale and coordinate our shared resources. Local communities and National Societies are the central agents of change in this process and it is our hope that the Road Map to Community Resilience will support their leadership on this path.

Garry Conille

Under Secretary General, Programme and Operations
International Federation of Red Cross and Red Crescent Societies

¹ OCHA, *World Humanitarian Data and Trends 2015*.
At: http://reliefweb.int/sites/reliefweb.int/files/resources/WHDT2015_2Dec.pdf



Communities sowing the seeds
of their own resilience

Overview

Who is this guide for?

The Road Map to Community Resilience (Road Map) is for National Society staff and volunteers, and IFRC and its operational partners, who want to help communities become safer and stronger.

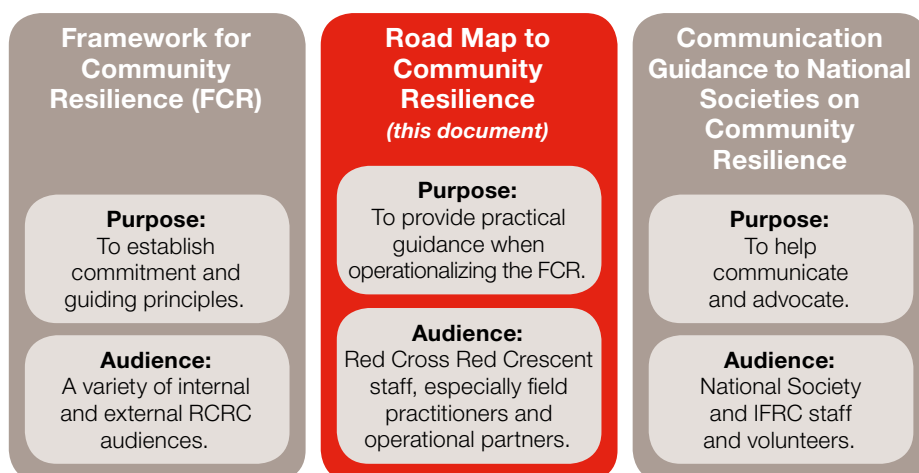
What is this guide for?

The Road Map provides step-by-step guidance on **how to operationalize the International Federation of Red Cross and Red Crescent Societies' Framework for Community Resilience (FCR)**. It will help you coordinate programme teams in your National Society or branch and work alongside other stakeholders to enable communities to become more resilient in the face of threats.

How does this guide relate to other documents?

The Road Map to Community Resilience is one of three IFRC documents on resilience that serve broader sets of users (Figure 1).

Figure 1. Key documents on resilience



The Road Map to Community Resilience contributes to the One Billion Coalition for Resilience (1BC)² by explaining the steps that communities can take to strengthen their resilience.

² At: <http://ifrc-media.org/interactive/one-billion-coalition/one-billion-coalition-learn-more-about-the-one-billion-coalition/>

What is in this guide?

The Road Map consists of an introduction and four sections that describe the main stages on your journey to build community resilience (Figure 2).

- **Orientation** explains what is different about resilience and why resilience is relevant to communities in all contexts, as well as to National Society and IFRC staff and volunteers.
- **Stage 1: Engaging and connecting** explains how to involve all sectors of your National Society in resilience-building, how to involve communities, and how to link communities to other actors. It also provides advice on which communities to work with, and how to help them define and establish internal roles and responsibilities during the stages that follow.
- **Stage 2: Understanding risk** explains how to guide communities when they assess their risks and measure their resilience.
- **Stage 3: Taking action for resilience** explains how to guide communities when they develop and implement a resilience-building action plan.
- **Stage 4: Learning** explains how to guide communities as they learn how to track their progress, learn from mistakes, and adapt their action plans accordingly.
- **Reference Sheets** provide more detail. They are designed to assist readers less familiar with resilience-building. Reference Sheet A provides a reading list.

Each **Stage** includes

- Milestones to aim for and to gauge progress.
- Steps that should be taken to reach the milestones.

You will also find Landmarks to guide your approach. These are described in the next section on Orientation.

As you use the Road Map, remember that every community is unique: in each case, you will need to adapt the path you take and the journey you follow. You will need to contextualize this guidance document in its setting (developed or less developed contexts, urban, peri-urban or rural settlements, settled or migrant communities, etc.), taking into account socio-political and economic factors that affect how people think and behave. Each journey will be different, reflecting a community's identity, when you work with it, where it is located, and the people who are its members.

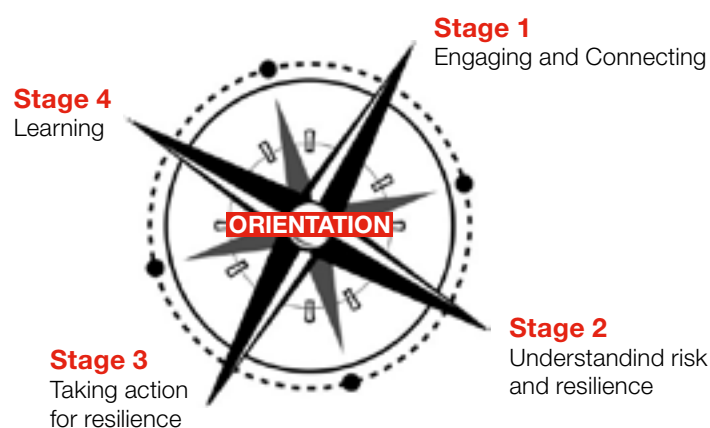
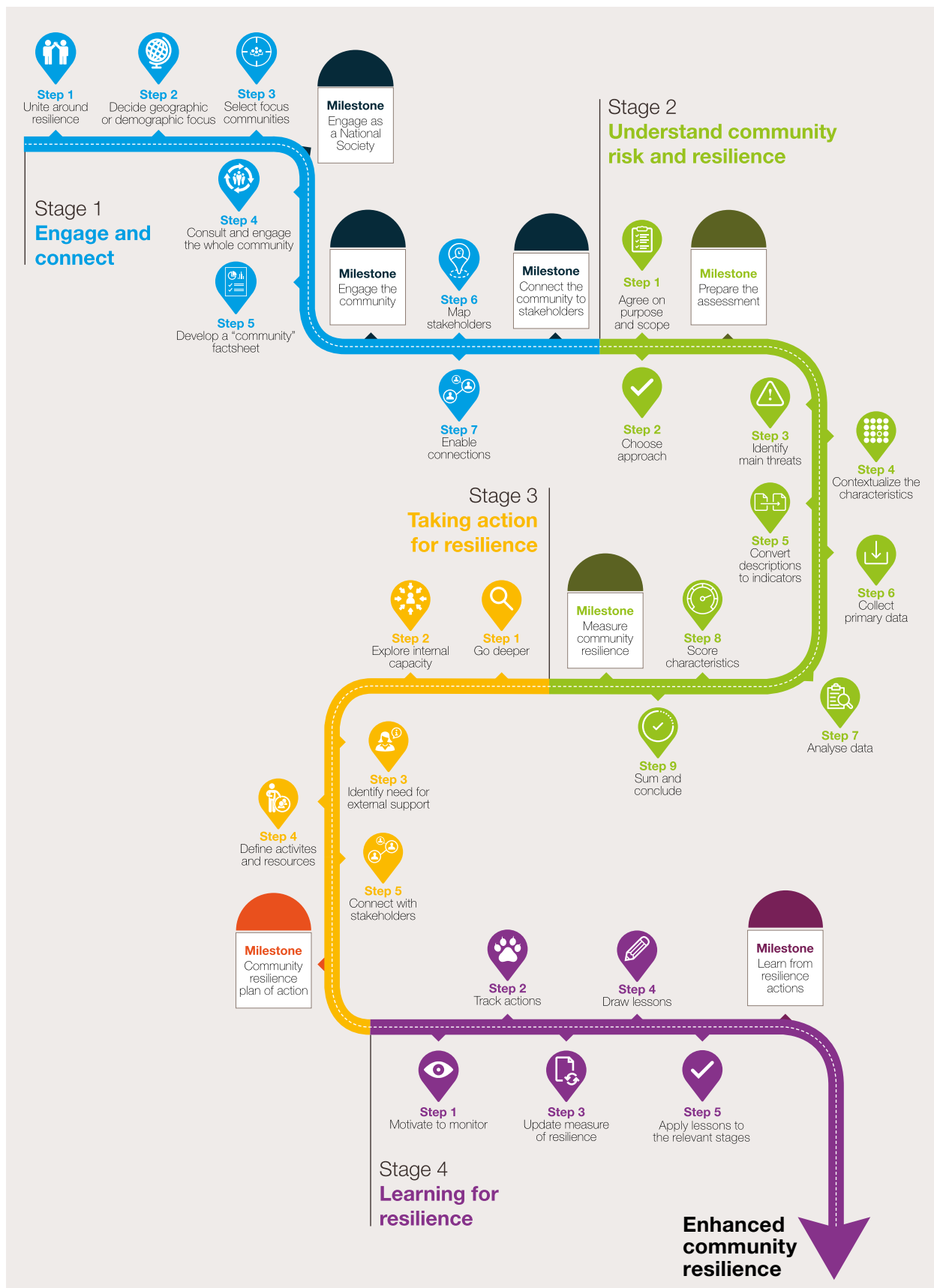


Figure 2. Stages on the Road Map to Community Resilience.





Orientation: what is different about 'resilience'?

Resilience has become a top priority for many organizations that work in humanitarian action and development, including the IFRC. This section explains the IFRC's approach to resilience, including what your National Society will need to do differently.



The IFRC focuses on community resilience, see definition.

Definition. Community resilience

The ability of communities (and their members) exposed to disasters, crises and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with and recover from the effects of shocks and stresses without compromising their long-term prospects.

Resilience is readily aligned with the Movement's Fundamental Principles. (See Reference Sheet B).

Research carried out by the IFRC in the Asia Pacific,³ Latin America and the Caribbean has shown that resilient communities have six specific characteristics (see Figure 3).⁴ For the purpose of assessment and analysis, the first ('...Is knowledgeable, healthy and can meet its basic needs') can be broken down into several sub-characteristics (for example: '...can meet its basic food needs', '...can meet its basic shelter needs', '...can meet its water and sanitation needs', etc.).

³ At: <https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/disaster-risk-reduction/resilience/>
The web reference provided is accessible from the extranet of the IFRC (Fednet).

⁴ In the IFRC, notably in the Framework for Community Resilience, we speak of the 'characteristics' of resilient communities. These align readily with the human, social, physical, natural, financial and political 'capitals' to which the resilience frameworks of many like-minded organisations refer.

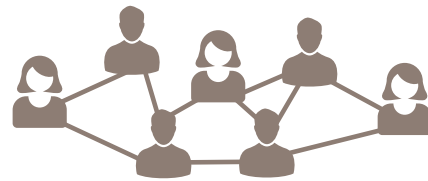
Figure 3. The six characteristics identified in the Framework for Community Resilience

A resilient community...

... is knowledgeable, healthy and can meet its basic needs



... is socially cohesive



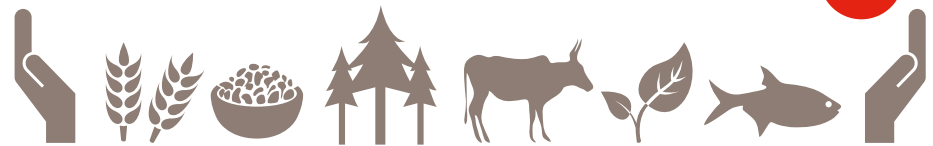
... has economic opportunities



... has well-maintained and accessible infrastructures and services



... can manage its natural assets



... is connected



Rethinking our approach

To enable communities to strengthen or gain the characteristics of resilience, we need to work in a different, smarter way, led by the following landmarks.

Landmark 1: Risk-informed



Resilience requires a broad understanding of risk and its consequences. Communities face many types of threat, some of which can influence other threats. For example, conflict may affect markets, causing the price of staple foods to rise. Communities then have to deal simultaneously with violence and food insecurity, and eventually with poor health due to an inadequate diet.

Instead of looking at threats in isolation (as we and the aid community have tended to do until now), we need to identify and analyse the range and trends of hazardous events that communities face. We need to capture information on all pertinent threats as well as their underlying contexts and causes: health threats, hazards, conflict, violence, climate change, environmental degradation, etc. Only then can we and, more important, communities, set priorities and decide how best to address them.

Landmark 2: Holistic (systems-oriented)



As the characteristics show, **communities are multi-dimensional systems within wider systems.** For example, a community's water sources draw on a larger hydrological system, and its marketplace is connected to a wider economic system of supply and demand. (See Reference Sheet D: What is a System?)

The interdependence of different aspects of wellbeing, safety and prosperity is a critical element. For instance, good health depends among other factors on food security, which in turn depends on social stability, natural resource management, and so on. This means that efforts in just one area will have a limited impact on overall resilience. **Coordinated action across key sectors** can achieve more significant and lasting change. National Society staff and volunteers can offer to communities a range of expertise (in food security, shelter, disaster preparedness, health, etc.), as well as access to other sources (see example).

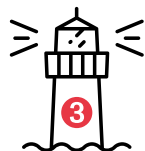
Example. Integrating programmes to build resilience

The Ethiopia Red Crescent Society runs an integrated community programme that merges three distinct sectors (WASH, Livelihoods and DRR) based on an integrated vulnerability and capacity assessment (VCA), and directly links the community to public officials. In a spin-off of this effort, it is drafting a resilience framework. A programme of the Bangladesh Red Crescent Society also focuses strongly on resilience in the same three sectors.

We also need to think and **operate across levels.** While National Society branches work mainly at community level, we recognize that a resilient society requires efforts and commitment at other levels, by individuals, local and national authorities, and internationally. By linking communities with other levels,

we empower them and help to strengthen the system as a whole. Communities should be recognized as active participants in relevant legal frameworks (such as those that address holistic risk management) and be empowered to engage at local level. 1BC provides opportunities for communities to build on individual resilience.⁵

Landmark 3: Demand-driven



National Society resilience support should **respond to the community's own understanding of its risks**. While studying secondary data and lessons learned elsewhere is important, National Societies must address what the community identifies as its problems. The community needs to create the plan of action, not us.

Landmark 4: People-centred



A people-centred approach is central to the IFRC's Strategy 2020, and our work on resilience is no exception. This means **listening to and understanding what people think** at all times, rather than imposing ideas or projects on them. Ask people in your community what they think are their most vital challenges and solutions. Describe the actions in this Road Map and ask how they think those actions should be adapted to their realities. The IFRC's commitment to the Core Humanitarian Standard also affirms this approach.

Landmark 5: Inclusive



IFRC is mandated to prevent and alleviate human suffering **without discrimination**. This commitment, rooted in the principle of impartiality and a people-centred approach, means that all Red Cross Red Crescent community resilience work should be **inclusive**. It should analyse and address the needs and interests of all groups in the community, being sure to consider gender and diversity.

Members of a community often share the same natural resources and culture; they are often exposed to the same threats. This said, communities are not homogenous entities, and their members do not have the same access to assets and services, opportunities and interests. The extent to which a community possesses characteristics of resilience depends on **all** its members. You will find that the groups featured in Table 1 are often (though not always) among the most vulnerable. When a threat materializes, they are likely to require additional assistance to cope and recover. If unattended, their needs can destabilize or negatively affect others. At the same time, if their special skills are nurtured, minority groups can support others during a crisis (see the second column of Table 1). For these reasons, minority groups should be a shared focus for all, and their needs and skills should be monitored throughout the process.

Our inclusive programming approach extends across both humanitarian and development work. In our humanitarian action, we are primarily concerned to ensure equitable access to services based on an approach that is sensitive to gender and diversity. Where our longer-term programmes focus on social inclusion, they aim to establish and maintain equal status for excluded people, giving them the same access to resources, opportunities and rights as other members of society.

⁵ At: <http://www.ifrc.org/Global/rw/one-billion/resources/IFRC-OneBillionCoalition-external-A4-EN-02.pdf>

Table 1. Achieving inclusive resilience.

Vulnerability	What groups may offer to community resilience
<p>Women and girls. Many societies limit the access of women and girls to education and information, perpetuating their economic dependence. This affects their ability to anticipate and recover from threats.</p>	<p>Women have many perspectives on risk given their productive, reproductive, social, political, and other roles. They are often key networkers, and household managers, and have a good understanding of community dynamics. They are also predominantly carers, and are able to reach people who may be more at risk. Draw on these perspectives to make a holistic assessment and develop appropriate resilience-building actions. Ensure that women are actively represented in risk governance.</p>
<p>Low-income households are particularly vulnerable to threats (such as ill health) that require resources to address them, because they cannot afford the extra expense. The financial systems in many societies prevent such households from accessing credit.</p>	<p>Those with few resources are often, of necessity, resourceful. These skills need to be nurtured and brought into community learning.</p>
<p>Minority/marginalized groups may be unable to access information and services they require to manage risk, because they face language, cultural or political barriers.</p>	<p>Their perspectives need to be included in any 'whole community' risk assessment; an important objective of resilience action is to remove barriers to inclusion.</p>
<p>People living with disabilities. Many societies do not ensure that all their members have physical access to services and information. For example, early warning systems may not be coordinated with resources for early action, such as assistance to evacuate.</p>	<p>Every person has important skills to offer and is entitled to be taken into account in community resilience plans. Having a specific physical impairment does not prevent a person from developing skills that reduce risk. Those who do develop such skills may also be particularly aware of others' vulnerability and capacities, increasing the value of their contribution to risk assessment.</p>
<p>Migrants. Often cut off from their social networks and traditional safety nets, migrants can be vulnerable to many threats, from ill health to lack of safe shelter. If they do not know the local language, they may be unable to read information signs or understand radio messages.</p>	<p>Migrants have experience outside the community and have seen what works and does not work in other societies. If shared, this knowledge can enhance preparedness and response options.</p>
<p>Older people, youth and children may be overlooked in public policies, excluded from decision-making, and lack information they need. Their dependence on others may also expose them to violence during a crisis.</p>	<p>The life experience of the elderly and the fresh perspectives and energy of young people are valuable assets that should be included in discussions and activities to build resilience.</p>

Plans to strengthen resilience should capitalize on the diverse experience, skills and knowledge of the entire community.

Landmark 6: Prevention of suffering



Action to strengthen resilience focuses on understanding, pre-empting and reducing **risk** – not on responding to threats after they become disasters. When risk is reduced, crises can be prevented. A National Society may not be able to eradicate diseases or stop water from rising, but proactive preventive efforts can reduce the risk that disease or floods will cause a major shock to lives and livelihoods.

Rethinking Red Cross Red Crescent services

Our approach to resilience seeks to create a transformational change that will strengthen communities and build bridges across entire systems. To achieve this, we need to adapt our working methods and consider new Red Cross Red Crescent services, drawing on the concepts of **accompanying**, **enabling** and **connecting**. (See Reference Sheet C for information on National Society organizational development and how you can shape messages for your volunteers.)

Key Red Cross Red Crescent service: to accompany communities



To 'accompany' is to join in action and influence. To foster resilience, National Societies join rather than lead; actions are owned by the community. Accompanying is not a passive role, however. It involves actively stepping aside and bringing communities into the centre, enabling them to take control of their futures. When we 'accompany' we also nurture, empower, encourage, support, catalyse, orientate, provide role models, and accommodate.

No external actor (and no National Society) can build resilience for a community. Members of a community must want to change their situation and progressively take responsibility for managing their change process. As National Societies, our efforts should promote leadership capacity in communities so that, over time, they depend less on our support. We need to be prepared to accompany communities for several years until they are in a position to find their own long-term solutions.

Key Red Cross Red Crescent service: to enable communities



'Enabling' implies providing the means (human and other resources) to act. Our approach is to enable communities to apply their knowledge, experience, and capacities to solve problems. When we enable, we also train, teach, instruct and facilitate. National Societies should continuously seek opportunities that enhance the understanding and skills of a community (see example).

Example. Enabling through committee membership

The Bangladeshi Cyclone Preparedness Programme enabled communities by placing a Red Cross volunteer (for instance, a first aider or member of an early warning or early action initiative) on village committees. The Red Cross Red Crescent needs to establish long term links with communities; for this reason, when possible, volunteers should come from the communities in which they work.

Key Red Cross Red Crescent service: to connect communities



When National Societies strengthen resilience, one of their key roles is to connect communities to the outside. We must introduce them to, or reinforce their knowledge of, principles, processes, systems and structures that can help them to build resilience. To achieve resilience, many stakeholders from different levels, sectors and disciplines must work together. While National Societies can and do play a role in building social capital in a community, in

this sub-section we focus on connecting better with the outside. When we connect we also convene, bridge, unite, introduce and link.

Connecting can be achieved partly through convening. Convening means bringing selected people or groups of people together for a purpose. You can convene one-off events, such as a meeting or an activity, or longer-term processes, such as community development planning. **Convening** facilitates and **generates connections** between actors, sectors, levels of governance and other forms of social organization. It builds **bridges** to entities with which communities have not traditionally interacted.

We should also enable communities to interact with government. In both international and domestic law, National Societies are recognized as humanitarian auxiliaries of public authorities. This unique status enables National Societies to dialogue with government while maintaining independence and participating in civil society fora. When used effectively, the status can enable communities to access public resources, obtain training and other types of expertise, participate in policy and legislative change, and contribute to decisions that will affect them. The Red Cross Red Crescent's role as auxiliary to government calls us to support, complement and facilitate a government's mandate to protect its citizens and communities and ensure that community voices are taken into account and acted upon. It provides a platform for ensuring that communities are engaged actively in decisions on risk management. (See Reference Sheet E on the Auxiliary Role and Advocacy.)

National Societies are well-placed to be connectors, as described in Stage 1.

Journey log: orientation

Before moving to the next stage of the journey, make sure you can pack and unpack the concepts below to take forward with you.

- Six characteristics of a resilient community.
- Three key services that National Societies offer: to accompany, enable, and connect.
- Six landmarks to guide you on the road to community resilience.
- Our approach is: risk-informed, holistic, demand-driven, people-centred, inclusive, and prevents suffering.

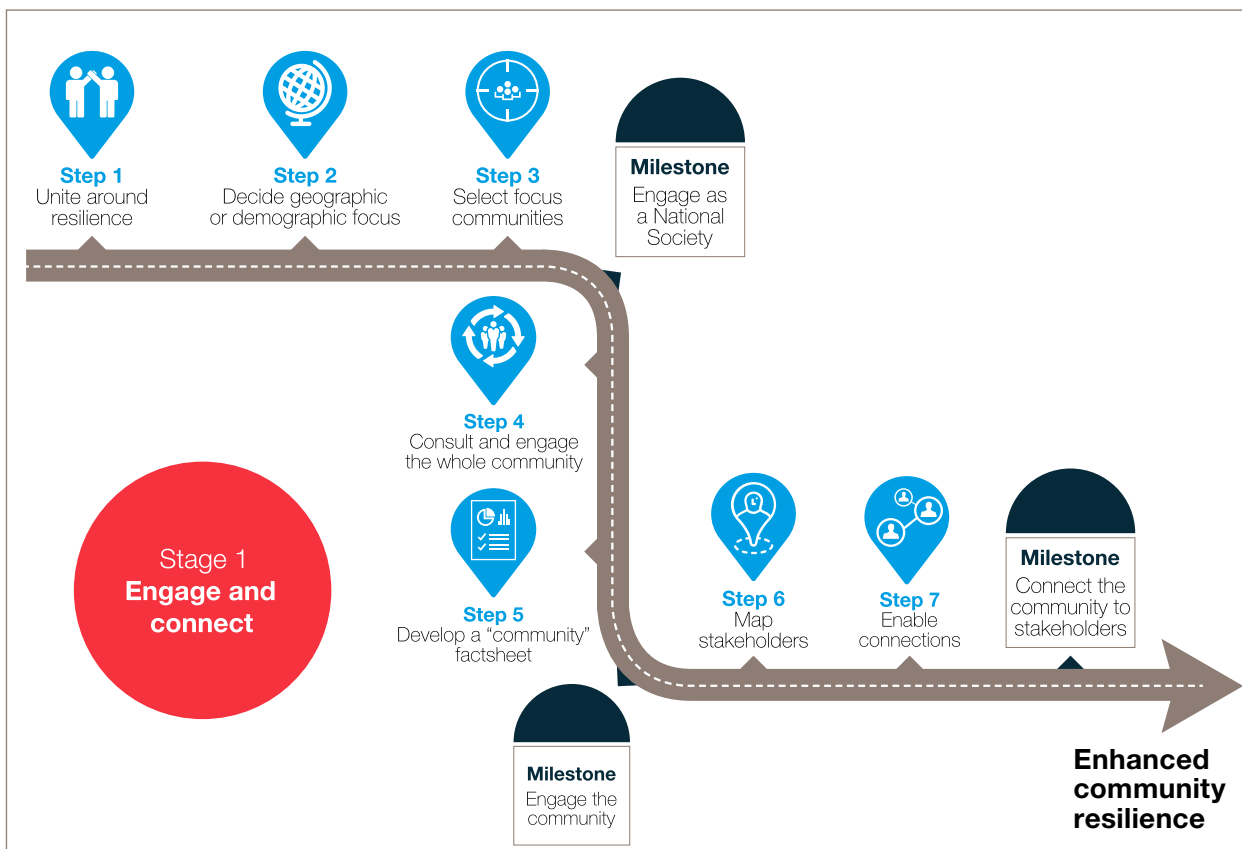


One of the RCRC key roles is to accompany the community, join in action, influence and connect them to other stakeholders

Stage 1: Engaging and connecting

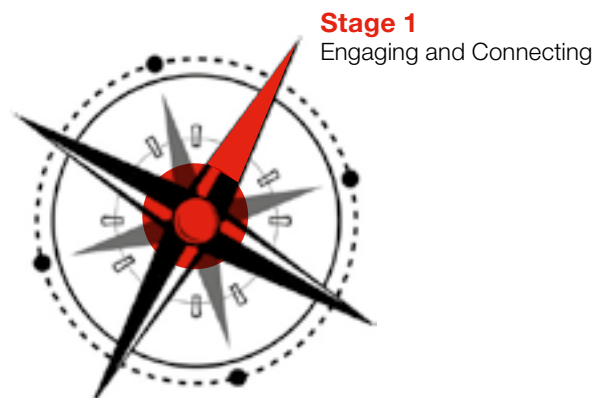
Stage 1 introduces the steps in Figure 4.

Figure 4. Stage 1: Engage and connect



Milestone 1: Engage as a national society

Our Framework for Community Resilience makes it clear that strengthening resilience is an integrating, multi-sectoral, multi-level process. If your National Society wants to contribute to community resilience, every staff member, volunteer, branch, department, partner, and level needs to understand that resilience is everybody's business. It cannot be the domain of the disaster management section, or the health department, or any sector-specific team. Instead, just as threats affect all aspects of life, building resilience requires a holistic vision and complementary, coordinated actions from all parts of your National Society.



Step 1: Unite around “resilience”

- Approach the leaders of your National Society to express your interest in resilience. Offer to start a discussion in your National Society. If they agree:
- **Create a small group** of ‘resilience champions’ made up of colleagues who are interested in resilience in your National Society. Together, prepare a presentation. The presentation should explain:
 - What being resilient means.
 - The status and evolution of the Red Cross Red Crescent’s commitment to resilience.
 - How strengthening community resilience reflects our mission and mandate.
 - The basics of our approach: three services and six landmarks.
 - The six characteristics of resilient communities.
 - How the IFRC is already contributing to building resilience.
 - What we need to do differently to enable all the communities we work with to strengthen their resilience.
 - The implications for funding, existing programming, current priorities, and organisational development (see Reference Sheet C).
- Hold a **briefing with team leaders** and as many staff and volunteers as possible. Give the presentation and then generate a discussion of the factors that affect community resilience and how the National Society’s knowledge and skill sets can help communities.
- **Give a copy or summary of this guidance** to every participant and organize follow-up sessions, so that staff and volunteers feel they have time to reflect

on what they have heard and read, and to discuss what it means for them. It may take time for some to:

- Believe communities should and can lead processes to strengthen their resilience.
- Accept that a National Society's role in resilience-building is to accompany, enable and connect, rather than lead.
- Understand that, to strengthen community resilience, they need to work together throughout the programme cycle, each contributing their skills and knowledge to a joint plan of action.
- Be committed to seeking and allocating resources for community resilience, not just for their own sector or area.
- Work out how to adapt existing programming.
- Want to engage and connect with other stakeholders in community resilience.

Discuss and decide how to **contextualize this guidance document** to your specific country, cultural and community contexts.

Step 2: Determine geographic or demographic focus

Example. Risk-informed community selection in the Caribbean

Confronted by limited resources and high demand for their services, the **Jamaican Red Cross Society** and other **Caribbean National Societies** developed and piloted a strategic targeting methodology. This uses secondary data collected from many stakeholders at a national workshop to select the most hazard-prone and vulnerable areas in the country. The same process is then repeated at lower levels, identifying the most vulnerable communities. This consistent, transparent and documented process ensures that National Societies make **risk-informed choices** and helps them explain those choices to communities and other stakeholders.

As 'resilience champions', you now need to gather reports, statistics and other studies on risk, vulnerability and threats to people's lives, health and well-being across your country. Explore the secondary data to identify the geographical areas or population groups at highest risk. Consider the capacity of your National Society and branches when you decide in how many areas or with how many population groups you will foster resilience (see example).

Step 3: Select a focus community or communities

- **Identify the distinct communities** that live in the areas/populations selected. See the definition.

Definition: community

For the Red Cross Red Crescent, a community is 'a group of people who may or may not live within the same area, village or neighbourhood, and share a similar culture, habits and resources'. Communities are 'groups of people exposed to the same threats and risks such as disease, political and economic issues and natural disasters'.

- **Prioritize the list of communities** using the criteria in Figure 5 (below). Although resilience is relevant to all communities that face high levels of risk, your National Society or branch needs to prioritize. Accompanying a community through the process of becoming more resilient can take several years and your National Society or branch needs to be sure that it has sufficient capacity to provide support for as long as support is needed.

Figure 5. Criteria for community selection

1. Level of risk	The principle of impartiality instructs us to be guided solely by needs and prioritize the most urgent cases. Knowledge of needs may come from previous programs or studies. Establish level of need.
2. Access	If conflict or other issues prevent NS staff and volunteers etc. from reaching the community, humanitarian assistance may be more urgent than resilience building. Confirm access and seasonal limitations.
3. Interest	It is crucial for community members to want to invest their own time and efforts in improving their situation. Resilience is not a quick fix, nor can it be 'done by the RCRC'. Confirm action and commitment from the community itself.
4. Funding	You may already have funding for certain types of communities or programs. Confirm that the community meets criteria 1-3 above and that the donor is open to using the program as a holistic entry point for broader work on resilience.
5. Current programming	Always build on ongoing work. If your NS is already implementing, for example, a health programme, you can build on this by addressing other types of vulnerability. Fostering resilience is easier when the community knows and trusts us.
6. Complementary	Strengthening resilience requires actions in many sectors, working with others is key to success, as long as there is no duplication, and other very vulnerable communities nearby are not left unattended.

- **Talk to both formal and informal leaders** of the prioritized communities, without raising expectations, and discuss potential collaboration. Because each community will need to learn to lead the processes in which it is involved, it must actively participate in final decisions.⁶ Tell community leaders that your National Society wants to help communities such as theirs to become stronger and more able to cope with adversity.

Explain that the National Society's role is to support and accompany the community, not lead the process. Use the discussion to **gauge the level of commitment** of both community leaders and the wider community.

- **Document the process** and **share the information** with staff, volunteers, interested communities and other stakeholders. Continue to gather ideas on how the Road Map should be contextualized in your communities.

⁶ For further guidance, see IFRC, *Framework for Community Resilience and Strategic Targeting Methodology* (2014). At: http://www.preventionweb.net/files/48260_stmguidelinescorrected2.pdf

Milestone 2: Engage the community

Once you have selected one or several communities to work with, it is time to fully engage them.

The members of a community are people of different ages, gender and ethnicity, and *every person in a given community has an equal right to participate in decisions that affect his or her safety, wellbeing and future*. For resilience to be authentic and sustainable, every member of the community – and particularly the most vulnerable – needs to have the opportunity to engage in the process. National disaster risk management laws should affirm this entitlement. Your National Society has an important role to play in making sure that community members can participate and engage in a sustainable manner. (See Reference Sheet F on Sustainability.)

In addition to engaging the broader community, it is likely that a smaller group of people will be needed to lead the community towards resilience. A community can move forward more efficiently when it empowers some of its members to take decisions and act on everyone's behalf for the community's overall benefit. It is very important, therefore, that the members who are chosen to lead and manage resilience processes represent the interests of all members of the community and are committed to a participatory approach and an accountable relationship with the community as a whole.

The Movement recently published a guidance and training package on **Community Engagement and Accountability** (CEA), to strengthen communication with and accountability to people and communities, and promote community engagement in the design and delivery of programmes and operations. (See also IFRC, Beneficiary Communications.⁷) Guidance associated with the IFRC's Better Programming Initiative – Do no harm (<https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/better-programming-initiative-bpi-/>) will also help you to understand how action to support community resilience may affect power relationships in a community, and how to maximise the positive and minimize the negative consequences of such effects.

Follow the steps below to help a community engage its members and organize to build resilience.

Step 4: Consult and engage the whole community

Work with the community to increase its understanding of risk and resilience. This is an important starting point for the whole journey to resilience.

Explain to community leaders that building a resilient community requires broad community engagement and a dedicated group to take the community's plans forward. This group may be a group or committee that the community had already formed for another reason.

Suggest calling a community meeting or another event to inform everyone of the proposal to promote resilience and get organized. Ask the leaders to **actively involve people** from all sectors of the community, including young people, the elderly and minorities. (See Tip 1 on Inclusive representation and CEA Guidance.)

⁷ At: <http://www.ifrc.org/en/what-we-do/beneficiary-communications/>

Tip 1. Inclusive representation

Unless they are very small, communities will probably need to select a group of individuals to lead their plans to strengthen resilience. Small groups may be selected in a variety of ways, including by vote, from volunteers, by invitation (of minorities, for example), or by a mix of these. Whichever method is used, the community must consider it to be fair and open. This ensures legitimacy, reflects the social cohesion characteristic of a resilient community, and acknowledges that communities are systems composed of many sub-systems. Resilience requires a systems approach.

Assist the leaders to **explain to the wider community** the concept of resilience, the support your National Society can offer, and (if the community agrees) the potential value of selecting a small group representing all members of the community to take the process forward. Be clear that your National Society has limited resources and is not likely to have competences in all areas of the plan the community will develop. Say that you will be able to provide accompaniment and guidance, connect the community to other stakeholders, and, depending on their priorities, may be able to offer some but not all of the services or resources they seek.

Step 5: Develop a simple 'community factsheet'

Once the community has selected a representative group to drive forward the resilience plan, encourage them to **collect basic facts** about the community. Readily available information should be collected, for instance on:

- Demographics.
- Health and morbidity.
- The local economy (principal occupations, levels of income, economic activities, industry, etc.).
- Basic services and their coverage (electricity, water, sanitation, health).
- Basic infrastructure.
- School attendance and literacy levels.
- Land tenure.
- Hazards and recent disasters.
- Political structures and affiliations.
- Intra-community and inter-community organisation.
- Social trends.
- Patterns and causes of conflict and violence.

Encourage members of the community to pool their knowledge and consult secondary data (see Reference Sheet G on secondary literature and data). Explain the importance of disaggregating data by gender where possible. As it gathers this 'baseline' information, the community will start to construct the foundation of its resilience action plan, while the group responsible for leading the process will start to work as a team.

- Remind the community of the **characteristics of a resilient community** and encourage them to organize and document the information they find using the characteristics listed in Tip 2.

Tip 2. Sample community factsheet using the characteristics of a resilient community

Table 2. Basic facts (sample community) by characteristic.
(Repeat the process for characteristics 4-6.)

Characteristics of a resilient community	Facts and source
General	<p>678 inhabitants (351 females and 327 males). 405 are under the age of 18. 35 are over the age of 65. (<i>Government census 2016.</i>)</p> <p>621 are mestizo (<i>mixed Hispanic/indigenous</i>); 57 identify as indigenous 'Wilu'. (<i>Government census 2016.</i>)</p>
<p>1. (a) Is knowledgeable about threats. (b) Is healthy. (c) Can meet its basic needs.</p>	<p>Cholera and dengue outbreaks occur annually during each rainy season. (<i>Municipal health records.</i>)</p> <p>The river floods approximately 10 per cent of homes each year. Larger floods affect up to one third of homes every 5-10 years. (<i>Local knowledge.</i>)</p> <p>Plagues of rats occur every 5-10 years. (<i>Local knowledge.</i>)</p> <p>Homicides have risen (from 3 in 2015 to 4 in 2016), attributed to gangs in the capital city. (<i>Local knowledge.</i>)</p> <p>Most families boil water from the well before drinking it, but diarrhoea is common among children. In dry months, water is scarce and sometimes disappears. (<i>Local knowledge.</i>)</p> <p>Last year, 321 cases of diarrhoea were reported, 225 of 'flu', 133 of gastric illness, 189 of skin disease, and 35 of sexually transmitted diseases (plus 77 'other'). (<i>Municipal health records.</i>)</p> <p>12 per cent of children under 5 are malnourished; 5 per cent of children under 16 are malnourished. (Ministry of Family Welfare records.)</p> <p>About 80 per cent of houses are constructed from wood and corrugated metal roofs. Over 50 per cent require repairs. No-one in the community is homeless. (<i>Local knowledge.</i>)</p> <p>Over 90% homes have and use a latrine.</p>
2. Is socially cohesive.	<p>Rival gangs from the capital are starting to recruit young mestizo males, reducing the general feeling of safety. (<i>Police post.</i>)</p> <p>There are no known land disputes. (<i>Local knowledge.</i>)</p> <p>There are no racial, ethnic or religious tensions. (<i>Local knowledge.</i>)</p>
3. Has economic opportunities.	<p>50-60 men are employed by Big Star mining company (<i>Local knowledge.</i>)</p> <p>The company Jug o' Juice buys the citrus fruit harvest. (<i>Local knowledge.</i>)</p> <p>Farming households sell corn, melons and avocados in the municipal market, which can be reached in 1-2 hours by road. (<i>Local knowledge.</i>)</p>

Milestone 3: Connect the community to stakeholders

Resilience depends on the connections between people and the social networks, organisations, institutions and businesses around them.

Your National Society should accompany the community and help it to connect with local stakeholders. For most communities, key stakeholders (who have an interest in and can contribute to strengthening resilience) include government authorities, community-based and non-governmental organizations, private companies, and religious institutions. See Tip 3 for a sample list, by resilience characteristic.

Because of its mandate and auxiliary role, National Societies are in a good position to obtain and hold the attention of governments (see Reference Sheet E).

Tip 3. Identifying resilience stakeholders

Table 3. Stakeholders by characteristic

Characteristics of a resilient community	Resilience stakeholders (examples)
<p>1. (a) Is knowledgeable about threats. (b) Is healthy. (c) Can meet its basic needs.</p>	<p>Schoolteachers; health outreach workers; municipal officials; members of the indigenous community council.</p> <p>Health centre staff; school lunch programme staff; members of the mothers' union; mining company staff (for water).</p> <p>School lunch programme staff; mothers and grandmothers; government childcare programme staff; church leaders; local traders and shopkeepers.</p> <p>Municipal officials; large landowners whose plantations consume water; women and girls who buy and transport water; water sellers.</p> <p>Managers and staff of timber yards and logging companies; carpenters. (almost all men); hardware stores in town; energy suppliers.</p>
<p>2. Is socially cohesive.</p>	<p>Members of the farming co-operative; members of the women's savings group, the mothers' union, parent-teacher groups, the football club.</p> <p>People associated with gangs in the capital city; members of youth groups; members of the community council; the priest; members of the neighbourhood watch group; NGO staff working on gender issues.</p>
<p>3. Has economic opportunities.</p>	<p>Managers and staff of the mining company; members of the farming co-operative; members of the women's savings group.</p>
<p>4. Has well-maintained and accessible infrastructure and services.</p>	<p>Developers; road maintenance officials; managers and staff of the mining company (affects water); municipal officials; managers and staff of the electricity company.</p>
<p>5. Can manage its natural assets.</p>	<p>Managers and staff of the mining company (affects water); landowners; officials of the Ministry of Environment.</p>
<p>6. Is connected.</p>	<p>Officials of the municipal roads authority; local political leaders; staff of the internet café; staff of the cell phone company.</p>

Step 6: Map stakeholders

Assist the community to **map stakeholders** using the IFRC VCA Toolbox and reference sheet, 2007 (see Research Reference Sheet (RRS) 12-14, p. 121-134) or similar tools.⁸ Remind them that the goal is to answer the question: Who can contribute to the community's resilience? Help to organize the results in terms of the six resilience characteristics.

Step 7: Enable connections

Assist the community to **arrange meetings** with the organisations you have identified during the stakeholder mapping. At these meetings, the community should explain its desire to become more resilient and explore potential collaboration.

Before each meeting, coach the community members who will take lead roles in basic presentation, negotiation, and advocacy skills. Accompany them to meetings if they wish, but do not take over the leadership role. After each meeting, help those who participated to **record the results**. Take note of the level of interest displayed or any commitments made, for example, since such information can contribute to the action plan (see Stage 2).

Journey log: Engaging and connecting

Before moving to the next stage of the journey, make sure you can pack and unpack the following concepts to take forward with you:

- To build community resilience: Engage as one National Society. Be willing to work holistically across sectors and departments, in the neediest area(s) of the country.
- Engage with communities. Select communities that meet certain criteria, including inclusive leadership and organization.
- Connect communities with other stakeholders to strengthen their resilience-building.



⁸ See IFRC, VCA toolbox and reference sheet, 2007. At: <http://www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf>



Understanding risk, making use of participatory methodologies, is a key step in the resilience building process

Stage 2: Understanding risk & resilience

This stage helps communities to better understand their risks and resilience. The assessment process measures community resilience and generates a holistic understanding of the risks a community faces, and what solutions are appropriate to reduce them.



Stage 2
Understanding risk
and resilience

To understand their resilience, community members need to recognize the difference between the two main components of risk (threats; and vulnerability/capacity). Risk assessment is a process for exploring and measuring those components. For definitions of key terms (such as 'risk') and the principles of **integrated risk management** that underpin this stage of the journey, see Reference Sheet I. For more information on **knowledge management** in general, see Reference Sheet J.

Too often, assessment is purely extractive. An outsider goes into a community to ask questions and takes the answers out for independent analysis. In our approach to resilience, the **on-site process** and **ownership** of an assessment **are as important as the data collected**.

When you begin the steps below, assist the community to reach its own conclusions. Compare their findings with secondary data but do not allow their conclusions to be biased by the opinions of outside actors or donor funding. **Train volunteers from the community**. One of the National Society's key roles is to develop capacities that strengthen resilience (see Tip 4).

Tip 4. What is different about building capacity for resilience?

The capacity to build resilience is different from technical sector-specific capacity and skills. Problem solving is far more important for resilience than technical mastery of any single tool or sector. Train and nurture volunteers and members of the community to be strong ‘problem-solvers’. Also, nurture a willingness to innovate. Learning and improving are accomplished by innovation, asking questions, and trial and error. Those leading the community’s resilience efforts should:

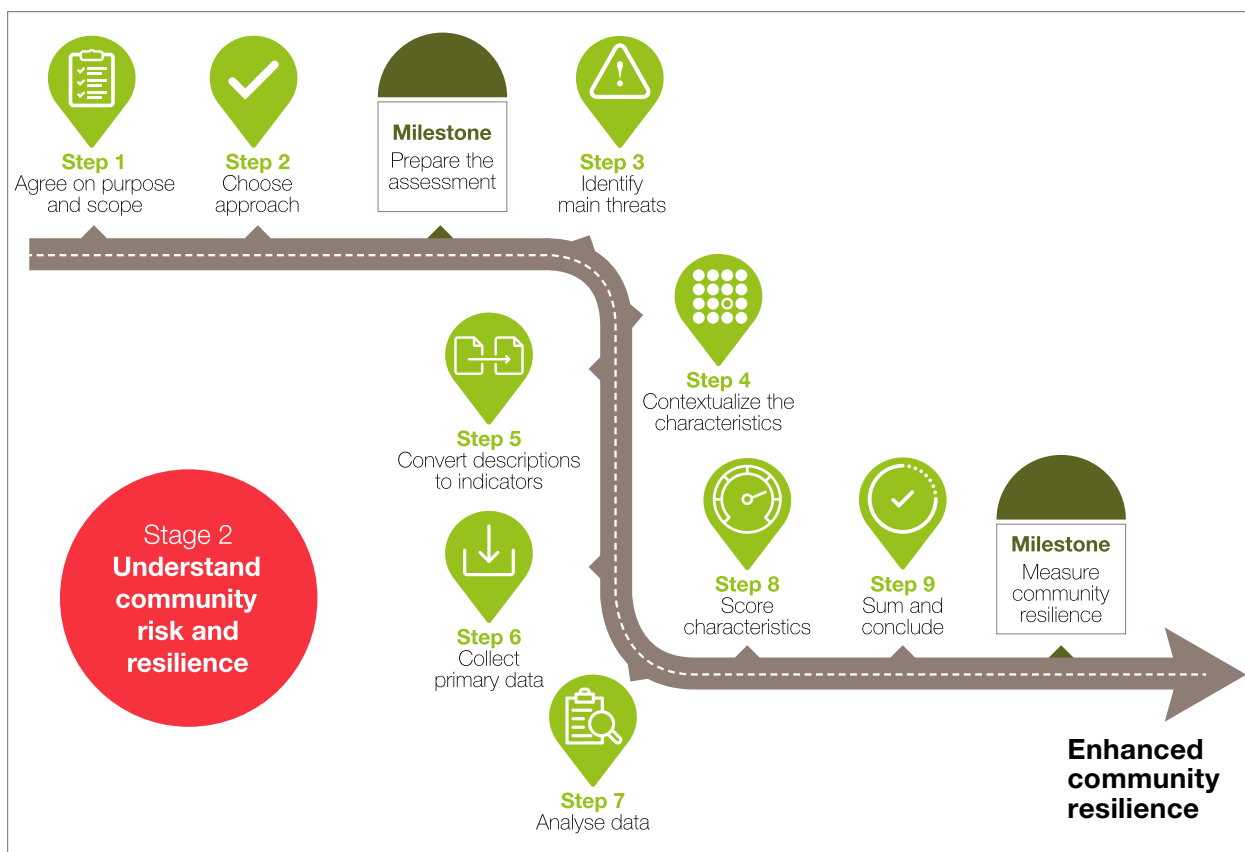
- Focus on the solution, not the problem.
- Keep an open mind.
- Innovate; embrace novel approaches.
- Challenge and change assumptions.
- Think laterally, across traditional boundaries.
- Keep things simple.

Remember that the community may prioritize elements of risk that fall outside the typical basket of services your National Society provides. This should not feel threatening but should encourage you to focus on accompanying, enabling and connecting – services that are equally important.

The IFRC believes that the process of strengthening resilience must start by asking the community **to define the concept in its own words, judging itself how resilient it is**. This places the term firmly in context and catalyses the community’s leadership of the process. Once community members describe ways to recognize how they or their neighbours have what is needed to bounce back from a threat, they will use those characteristics as ‘indicators’ to build and measure resilience.

Follow the steps in Figure 6 to enable the community to understand its risks and resilience.

Figure 6. Stage 2: Understanding community risk and resilience



Milestone 1: Prepare to assess

Step 1: Agree on purpose and scope

- **Share the generic purpose** (see definition) with members of the community, and encourage them to express the purpose in their own words.
- Facilitate a community **dialogue on local resilience, making use of the three perspectives below:**

1. Across time. Accompany the community as it discusses how the six characteristics of resilience change from season to season. Help them to look backwards (to examine trends) and forwards (to assess expectations, aspirations and the likely impact of climate change on local vulnerability). Doing this enables a community to capture perceptions linked to the past, the present and the future. This is an essential condition for becoming risk-informed and preventing suffering. [Vulnerability and capacity assessments (VCAs) include many tools and methods to help consider time and changes in risk. See seasonal calendars and historical profiles, including special guidance on climate-sensitive VCAs.] Please refer to the VCA toolbox and the Integrating Climate Change and Urban Risk at: <https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/vulnerability-and-capacity-assessment/>

Definition. The purpose of an integrated risk assessment

In its most basic form, a risk assessment aims to enable the community to: understand and rank the threats and vulnerabilities that trouble it most; and identify and agree on appropriate, long-lasting and inclusive actions that will make the community and its most vulnerable members more resilient.

2. Across social groups. Encourage members of the community to discuss how to capture the opinions of all community members. Accompany them as they do so. For each characteristic, discuss why some individuals have access and power that others do not. Doing this enables the community to **collect data** as inclusively as possible (taking account of the interests of youth, the elderly, etc.), and seek data in the right places (see Reference Sheet M on sampling). To be successful, resilience-building processes must be people-centred and inclusive. [VCAs and other Red Cross Red Crescent approaches provide many tools and methods for considering social groups, including institutional and social network analysis, and conflict-sensitive context analysis from the Better Programming Initiative – Do no harm, etc.⁹]

Example. Coming to terms with diversity in Colombia.

On the Pacific coast of Colombia, Afro-Colombian, indigenous and 'mestizo' groups live in the same communities. When the Colombian Red Cross implemented a resilience-building programme, it was told the different groups had very different needs and interests and carried out separate assessments of every group to ensure that their specific situation and context were considered. When the assessments were compared, however, it became clear that the differences were much smaller than expected. With the groups' permission, the Colombian Red Cross facilitated joint meetings to develop community-wide plans that took account of shared interests as well as each group's specific needs. As a result of this people-centred and inclusive approach, all the groups now attend community activities.

⁹ At: <https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/better-programming-initiative-bpi/>

3. Across space and levels. Finally, accompany members of the community as they discuss how characteristics of resilience differ across geographies. Encourage them to consider where certain characteristics have the most influence. Doing this enables the community to understand why some physical areas are perceived to be more valuable or more risk-prone, and **to capture data from both types of place.** It is useful in this context to consider risk and resilience factors associated with neighbouring communities (for example, up-stream and down-stream societies on the local river), land management, deforestation, or urbanization, or erosion linked to farming or road construction, etc. [VCAs and other approaches provide many tools and methods for exploring local spatial relationships. See transect walks, risk mapping, etc.] Asking questions about risk and resilience factors outside the community will add an invaluable systems perspective to the community's resilience analysis and will assist the National Society when it acts as a connector.

Help the community to understand that these three perspectives define the scope of its assessment.

Step 2. Choose your approach

In the last 20 years, the Red Cross Red Crescent network has developed more than a dozen assessment approaches for studying communities (see Figure 7 and Reference Sheet K on Red Cross Red Crescent approaches to community assessment). One of these, the **Vulnerability and Capacity Assessment (VCA)**¹⁰ was designed specifically to assess risk. The VCA's original holistic vision, endorsed by the General Assembly in 1999, described it as "a self-reflection process ... highlighting the unfulfilled needs of new vulnerable groups" and "an opportunity for National Societies ... to ensure programmes are kept relevant to ever changing needs of the vulnerable". Grounded in the values of the Red Cross Red Crescent Movement, it was the first and only assessment method to be recognized at this level and was ahead of its time in acknowledging that risks and vulnerabilities – and vulnerable groups – evolve (Detail information on how to conduct a VCA process can be found at: <https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/vulnerability-and-capacity-assessment/>). The VCA inspired many of the other assessment approaches that the Red Cross Red Crescent uses today.

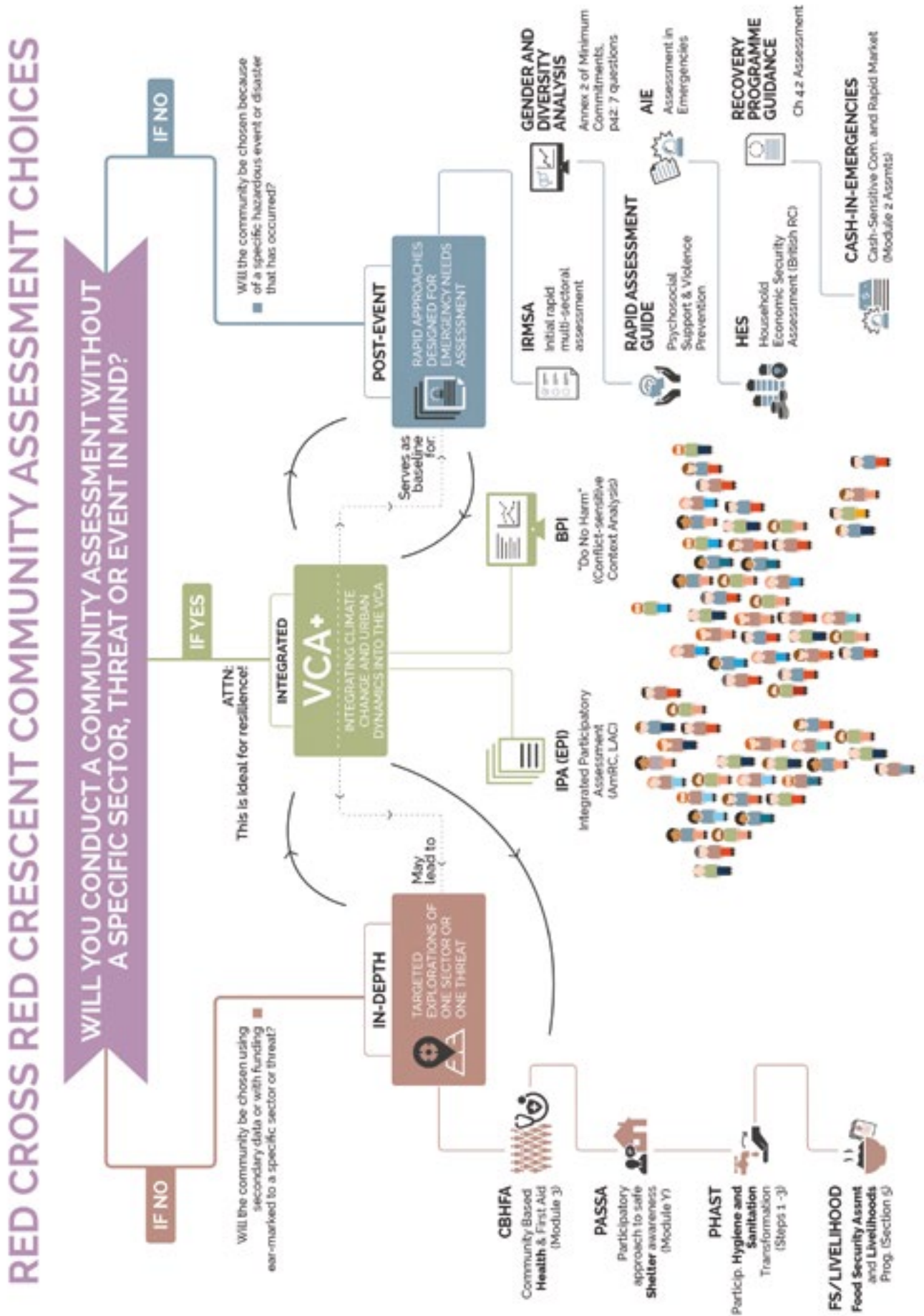
- **Study the options.** The flow chart in Figure 7 starts by asking: Will you conduct a community assessment without a specific sector, threat or event in mind? Having answered that question, follow the chart to choose an assessment approach to use in the community. The three groups of approaches in Figure 7 are fully complementary and links between them are strong and growing:
 - Once an integrated risk assessment has been applied (see green group in centre), decide if it makes sense to conduct an in-depth assessment (purple group on left).
 - While the assessment approaches in blue (right) are designed for use after a disaster or crisis, many of them can be adapted to strengthen an integrated risk assessment.
 - Whenever possible, start by using the VCA as a holistic process to capture community voices.¹¹

Review the materials provided for the chosen approach (see Reference Sheet K for links). Each approach contains many tools and methods. Whichever one you chose, you may need to combine tools and methods. **Gather ideas on how to adapt tools and identify the right methods** to your context. No method or tool is ready-to-use without carefully adapting it to the local context. The right combination is one that works locally, leads to better understanding, and generates appropriate actions.

¹⁰ In 2015, the IFRC decided to refocus the VCA on its original values and launched a VCA enhancement process. It is guided by an advisory board of 25 members of the Red Cross Red Crescent, many from National Societies. At the time of writing, three work streams were proposed: on social marketing and promotion; on quality enhancement; and on technology. The work will be rolled out between 2016 and 2020.

¹¹ The IFRC's VCA Enhancement Advisory Group is developing and will test the reporting template. to help standardize the process and provide quality assurance.

Figure 7. Red Cross and Red Crescent community assessment choices (Source: IRMA, LLC.)



Milestone 2: Measure community resilience

The following steps assume you start with a VCA, or holistic assessment approach. Some of the next steps are highly interconnected with the VCA process and its outcomes, please use the gathered and analyzed information through the process.

In Stage 1, you already used (or adapted) some of the VCA tools when you helped the community map stakeholders in order to build partnerships. Steps 3, 6 and 7 below also draw on the VCA process, using some of its methods and tools.

The Road Map adds four new steps to assess community resilience: Steps 4, 5, 8 and 9 are also described below. Although Step 4 builds directly on the vulnerabilities and capacities that you are used to collecting in a VCA, it employs the six characteristics of resilience to help you decide what data to collect and how to analyse them.

If you do not start with a VCA approach, you will need to decide how much of the data below have been collected using another approach, and what else needs to be done to fill gaps and complete the unique steps associated with this process.

If you have not used an accompanying, enabling and connecting approach in your assessment, you should introduce one deliberately and gradually, because it is an essential element of fostering resilience.

Step 3: Identify main threats

- **Brainstorm threats the community perceives.** In this assessment, a threat can be expressed as “we get sick more and more often”, “it has become dangerous to cross the roads”, “we don’t feel safe”, or “earthquake”. Welcome all ideas and produce a thorough list of possible and perceived threats. Make sure threats listed by neglected groups are included.
- **Employ VCA tools and methods to explore local threats** across space (mapping), across time (seasonal and climate-adapted calendars), and across social groups (repeating the tools in different social settings to take account of age, gender, etc).
- **Rank the threats** so that the most serious problems can be addressed first. Ranking can be done in many different ways and must be considered fair and inclusive. Encourage members of the community to think carefully about different prioritization methods and choose the best one for them. (See also Reference Sheet N on prioritization.) They may prefer a sophisticated technology-based (SMS) voting system or to raise hands in a community meeting. If the poorest people in a community do not have access to phones or do not know how to use them, an SMS-voting system will not be inclusive. On the other hand, communities divided by conflicts or communities with extreme power imbalances may need to adopt an anonymous voting system. Encourage the community to prioritize approximately five main threats.

Step 4: Contextualize resilience characteristics

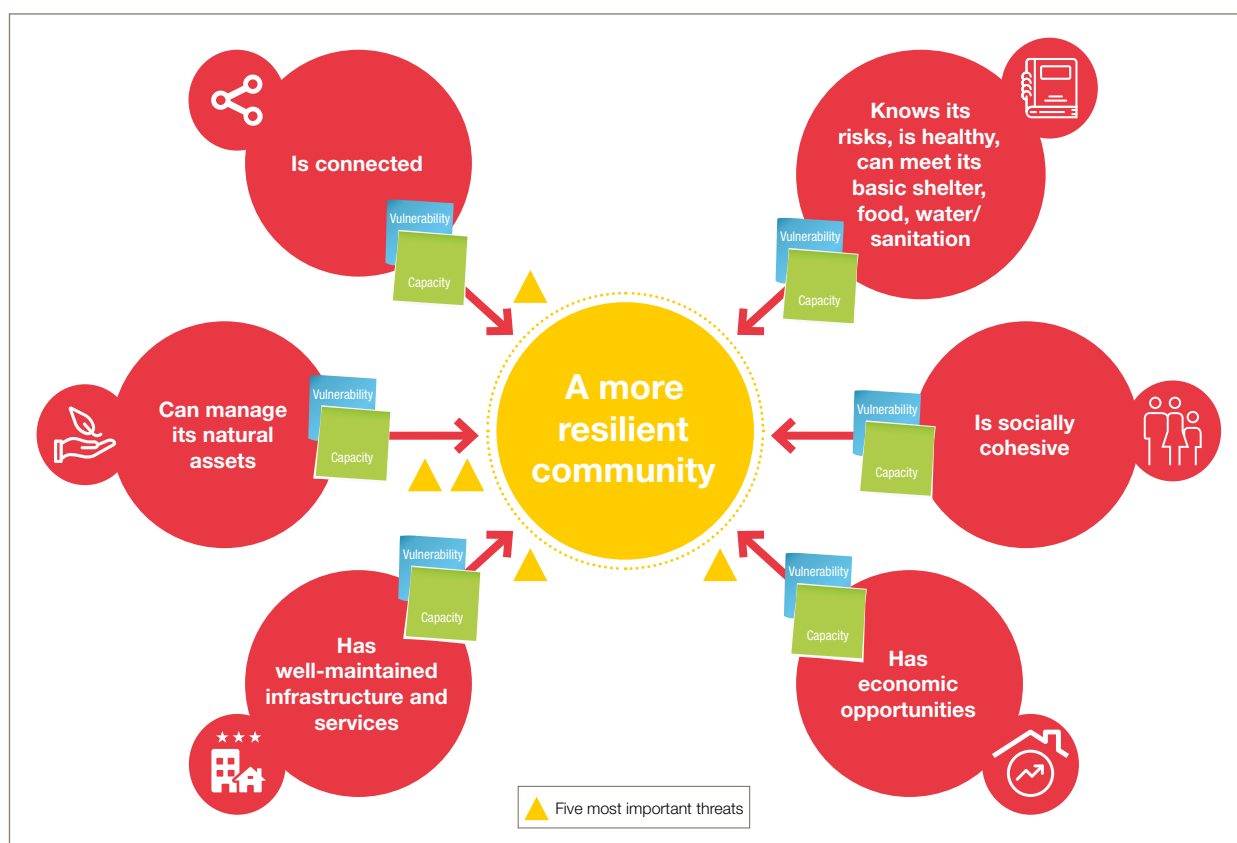
With the ranked threats in mind, encourage members of the community to describe the characteristics of resilience in their own words. ‘Contextualizing’ means making ideas real for the community.

- Explain that this step **establishes how the community perceives its vulnerabilities and capacities**. Have the Framework for Community Resilience and the characteristics of a resilient community handy.

Display the six characteristics in a table or star formation in the local language (see the example in Figure 8 and the tables below). Choose any format that will be easily understood or that engages the participants. Make available a visible list of the prioritized threats from Step 3 above. (See also Reference Sheet O: VCA Resilience Star.)

- **Contextualize the characteristics**. Ask members of the community to **explain each characteristic in their own words**. Starting with the first characteristic (underlined below) and the first threat on the list (from Step 3), ask the participants: “How can you tell if a person or family in this community knows about X?”

Figure 8. Example of a resilience star



Repeat the question, replacing ‘X’ (in the question above) sequentially with each threat on the ranked list. Some characteristics cannot be analysed easily in terms of a specific threat, so adapt your questions to make them relevant (see examples in Table 4).

Table 4. Contextualizing the characteristics

A. Characteristics of a resilient community	B. Formulations of the question: How can you tell if a household in this community...?	C. Community contextuali- zation
1. (a) Is knowledgeable about threats. (b) Is healthy. (c) Can meet its basic needs.	... is knowledgeable about **cholera, road accidents, floods, changing risks** ? ... can regain or maintain health after a **road accident, illness, flood** ? ... can find or restore shelter during/after **violence, earthquake, mudslide, flood** ? ... can keep feeding its children during a **strike** , in spite of **price hikes** ? ... can find clean water to drink during or after a **cholera epidemic, flood, drought** ?	Record community descriptions here, or on cards placed on the star.
2. Is socially cohesive	... has neighbours or family nearby on whom it can rely during **a storm, flood, conflict** ? ... does not feel at risk of violence from someone in the community or neighbourhood?	
3. Has economic opportunities.	... can find or hold on to a job during or after the **conflict, earthquake, drought** ?	
4. Has well-maintained and accessible infrastructure and services.	... can draw benefit from **the market, school, clinic** despite the **strike, flood, conflict** ?	
5. Can manage its natural assets.	...takes care to respect the **nearest water source, forest, soils** ?	
6. Is connected	...makes regular visits outside the community? Is aware of relevant policies and laws and how they both affect the community and can support the community as it acquires resilience?	

**** Prioritized threats.**

- Apply the list of threats, one by one, to each of the six characteristics. **Take careful note** of the descriptions by writing them on cards, on a visible flip chart, or on a laptop with a shared screen. If the literacy level of the community is low, find contextually-appropriate ways to aid recall (for example, use drawings, repeat descriptions several times, make a video of the activity, etc.).

Welcome illuminating descriptions even if they are not measurable. A participant might say: “We can tell they know more because they think more about the future”. This response may be challenging to measure, but it is just as insightful as a comment that refers to the quality of shoes or rooftop materials.

When participants find it difficult to come up with a description, give them a few examples of comments made by other communities, or propose comments on the list in Table 4 or Reference Sheet Q. Remind them to include descriptions that relate to how people react and respond when a threat has materialized.

Determine if the **secondary data** identified during Stage 1 sheds light on any of the community’s descriptions. (See Reference Sheet G on secondary data.)

Step 5: Convert descriptions to indicators

In this step, you enable the community to transform descriptions (Step 4) into measurable indicators. To do so, follow these instructions in order.

- Review the full list of descriptions to **find commonalities**. Group those that are very similar or identical, since there is no need to measure them twice. **Rephrase** if needed to make sure that all participants understand them.
- One by one, **convert each description into a measure** – something that can be counted by the community. Record proposed indicators (on cards, a chart, or by the other methods mentioned above). Repeat for each characteristic (see Table 5) and complete the table. You should end up with at least one measure per characteristic, but more than one is common. Reference Sheet Q (Indicator Catalogue) suggests some possible indicators, but only propose these if the community struggles to come up with its own.

To ensure active and inclusive participation during this step, see Reference Sheet P on developing indicators that are SPICED (subjective, participatory, interpreted, communicable, empowering and disaggregated).

Table 5. From contextualization to indicators

A. Characteristics of a resilient community*	C. Community contextualization	D. Indicator (Level, time frame, and actual measure)
1a. Is knowledgeable about risk.	... the flood early warning system (EWS) is functional. ... people expect next flood may be worse than previous floods. ... schools teach about deforestation.	# months that the EWS was active in 2015. % people that are not optimistic. # hours/months that ecosystem disaster risk reduction is taught in schools.
b. Is healthy.	... the household has and uses a latrine. ... the household has attended a first aid (FA) training.	# households that have access to a latrine in their home (measure annually). # households that successfully passed FA training in 2015.
c. Can meet its basic shelter needs.	... the household has a roof made out of X material.	# households with roof of X material (measure annually).
d. Can meet its basic food needs.	... frequency with which products are unavailable in local shops.	# days'/months' supply not available.
e. Can meet its basic water needs.	<i>Community to add examples.</i>	<i>Etc.</i>
2. Is socially cohesive.	<i>Community to add examples.</i>	<i>Etc.</i>
3. Has economic opportunities.	<i>Community to add examples.</i>	<i>Etc.</i>
4. Has well-maintained and accessible infrastructure and services.	<i>Community to add examples.</i>	<i>Etc.</i>
5. Can manage its natural assets.	<i>Community to add examples.</i>	<i>Etc.</i>
6. Is connected.	<i>Community to add examples.</i>	<i>Etc.</i>

* Column B ('Formulations of the question: How can you tell if a household in this community...?') has been removed to gain space.

- Next, ask who or what is the best or ‘most useful’ source of information on each indicator. This decision provides the **level at which data will be counted**. For example, to collect data on roofing material, is it best to look at the community’s school or its houses? Depending on the indicator, a wide range of sources/levels may be appropriate: neighbourhoods, schools, clinics, organized community groups (like youth clubs), unorganized groups of people with something in common (like female farmers), or specific professions (teachers, vendors, leaders), or the community as a whole. Note the sources/levels of each indicator.
- **Group** the indicators in separate lists. Develop one list for each of the levels selected. For example, group all information to be collected at household level; group all the indicators that will be assessed through interview with specific persons, etc.

Step 6. Collect baseline data

In this stage, you enable the community to **collect or compile primary data** for each of the indicators identified (see Tip 8). If relevant, you can refer to the primary data collected during the assessment.

- Determine the **collection method** that will be used to gather information for each of the organized lists above (Step 4). One of four methods may be used: (1) observation, (2) focus group discussions, (3) key informant interviews, or (4) surveys. (See Reference Sheet J for more information about these methods.)
- Develop a **sheet of questions** (an ‘instrument’) to guide data collection for each method chosen. To record data, use whatever is appropriate in your context (for example, printed questionnaires, a hard-bound register, an audio recording device, a computerized tablet, or an App on a smartphone).

Tip 5. Data collection for resilience

Don’t be in a hurry. A community assessment process should always count more than its product. Data collection alone can last from three hours (in rare cases) to three months.

Innovate and capitalize on local resources whatever they are. If urban stakeholders decide that a rapid high-tech SMS-based risk assessment (inspired by prediction markets) is useful and appropriate, that could form the basis of your assessment method. Be ready to explain how the assessment helps the community to understand risk, so that they can feel they own the actions that follow from it.

- Identify **sub-groups of people** in the community who may face specific risks and resilience concerns. This information may be obtained from the ‘scope’ discussion in Step 1. Design the collection instruments in a manner that ensures you can identify data provided by vulnerable sub-groups. When you compare women to men, for example, you need to collect data on both and record the sex of respondents on the collection instrument. (See Table 6 for other examples.)

If the community is very large or dispersed, you will not be able to discuss with all households or even all neighbourhoods. In such cases, consider choosing a subset of groups that you believe are generally similar to, or representative of the full community. This is especially relevant to individual or household indicators. (See Reference Sheet M on sampling.)

- **Identify the appropriate time frame** for each indicator. Should information be collected at a particular time, for example, because community members, or a particular sub-group are available then?
- **Collect the data.** You can engage the community in simple data collection in several ways. Volunteers can conduct household surveys (checking also for differences in them). Schoolchildren may go house to house to record observations. For neighbourhood or community level data, a community member may be assigned to make regular trips (weekly, monthly) to obtain information. For instance, she might regularly interview a key informant (a nurse, a teacher) or record prices of goods in the market, etc. (see example).

Example. Ensuring that risk and resilience measurement in Belize is inclusive and people-centred.

When carrying out a VCA with an indigenous Mayan community, the Belize Red Cross Society adapted its normal procedure for establishing a baseline score of the community's resilience. Instead of numerical values, it asked community members to use five images of facial expressions to rate their vulnerability. This inclusive, people-centred innovation proved very effective. Faces were more accessible across linguistic and cultural boundaries, participation was high, and community members, particularly women, were very satisfied.

Step 7: Analyse the data

Once a full set of data has been collected, assist the community to analyse it.

- **Organize and clean** the data collected, checking to see that all the collection instruments are completed with legible answers in the right place. Offer the community technical assistance, as well as maths and knowledge management skills.
- **Summarize the data.** Do this with respect to all the methods used and across time, social groups and location. The result for each indicator may be expressed in terms of mathematical averages per sub-group or a qualitative description in words.
- **Triangulate.** For each resilience characteristic, compare what has been learned from all sources and perspectives. For example, if family health status indicators were collected at a health centre and by a survey, compare both data sets. (See Reference Sheets R on triangulation and S on processing and analysing risk data.) Repeat for each characteristic.
- **Disaggregate the data.** Having identified key sub-groups before data collection, use a table (like Table 6) to compare their responses. Summarize differences qualitatively (by anecdote, quotation, etc.) or quantitatively (by calculating averages, for instance).

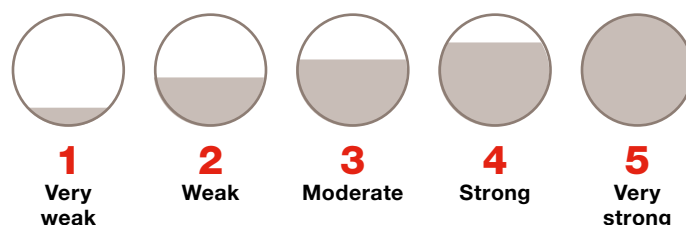
Table 6. Disaggregated ‘inclusive’ analysis

Comparison groups	Main differences
Women vs. men	<ul style="list-style-type: none"> • Women prioritize health risks; men prioritize weather-related risks. • Etc.
Disabled vs. non-disabled	<ul style="list-style-type: none"> • 52 per cent of those with disabilities but only 7 per cent of the general population are unaware of evacuation routes.
Livelihood differences: fishermen vs. farmers	<ul style="list-style-type: none"> • Most fishermen have roofs of natural materials; most farmers have steel roofs. • Etc.
Youth vs. elderly	Etc.
Lowland vs. highland dwellers	Etc.
Other comparisons...	Etc.

Step 8: Score the characteristics

In this step, assist the community to use all the identified indicators to arrive at a single score for each characteristic of resilience.

- Look at the indicators of one characteristic at a time. Discuss as a group and decide together whether the indicators contribute to the overall resilience of the community. In Figure 9, the scores are scaled from 1 to 5, where 5 shows that an indicator makes a very strong contribution and 1 that its contribution is very weak or negligible.
- To record the overall score given by the community to each characteristic, sum the indicator scores on a **community score card**. Calculate one simple number per characteristic (not per indicator). Record comments made.
- Repeat for each resilience characteristic.

Figure 9. An example of scale

You can score your collected data using simple maths on by means of a facilitated debate. The score represents the resilience ‘status’ of one resilience characteristic at that moment, as judged by the community. Adapt a scoring method that makes sense in the community’s context.

- Support each characteristic's score with a **statement** summarizing how the community understands the characteristic. (See Reference Sheet T on data reduction for more details.)

Step 9: Sum scores and conclude

In this step, you enable the community to combine the scores of all six characteristics to obtain an overall measure of resilience.

- Sum the scores of each characteristic from Step 8. If scores of '5' were awarded to 10 characteristics (allowing for sub-categories of the six main resilience characteristics), the community would obtain an overall score of 50 – a very rare level of resilience.
- Discuss with the community what its score means. The community's goal should be to get closer to 50 each time that measurements are taken.

At this point the community is ready to explore what actions it can or should take to strengthen its resilience. While it will be useful to compare the community's overall score over time (and to compare its scores to the scores of other communities engaged in the same process), communities use the scores of each resilience characteristic primarily to decide what actions they will take to improve their resilience (Stage 3).

Journey log: Understanding risk

Before moving to the next stage of the journey, make sure you can pack and unpack the following concepts to take forward with you.

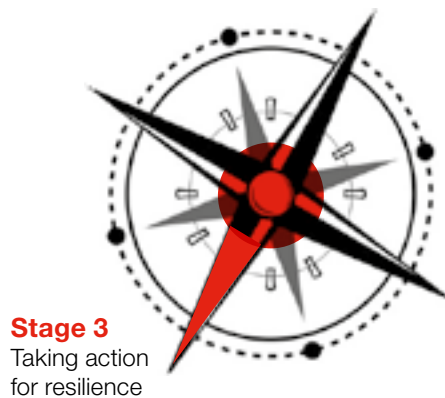
- Eight simplified steps enable a community to assess its own resilience.
- Communities must own the process and the product.
- Assessments for resilience cannot be 'pre-packaged'. The time invested and methods used must be adapted and contextualized for each community.
- Results: main threats; baseline measures; a score per characteristic; an aggregate measure of resilience that is comparable over time and with other communities.
- The VCA process and its report is key outcome for the next steps of the resilience journey.



Communities take action to strengthen their resilience based on their own capacities and external support

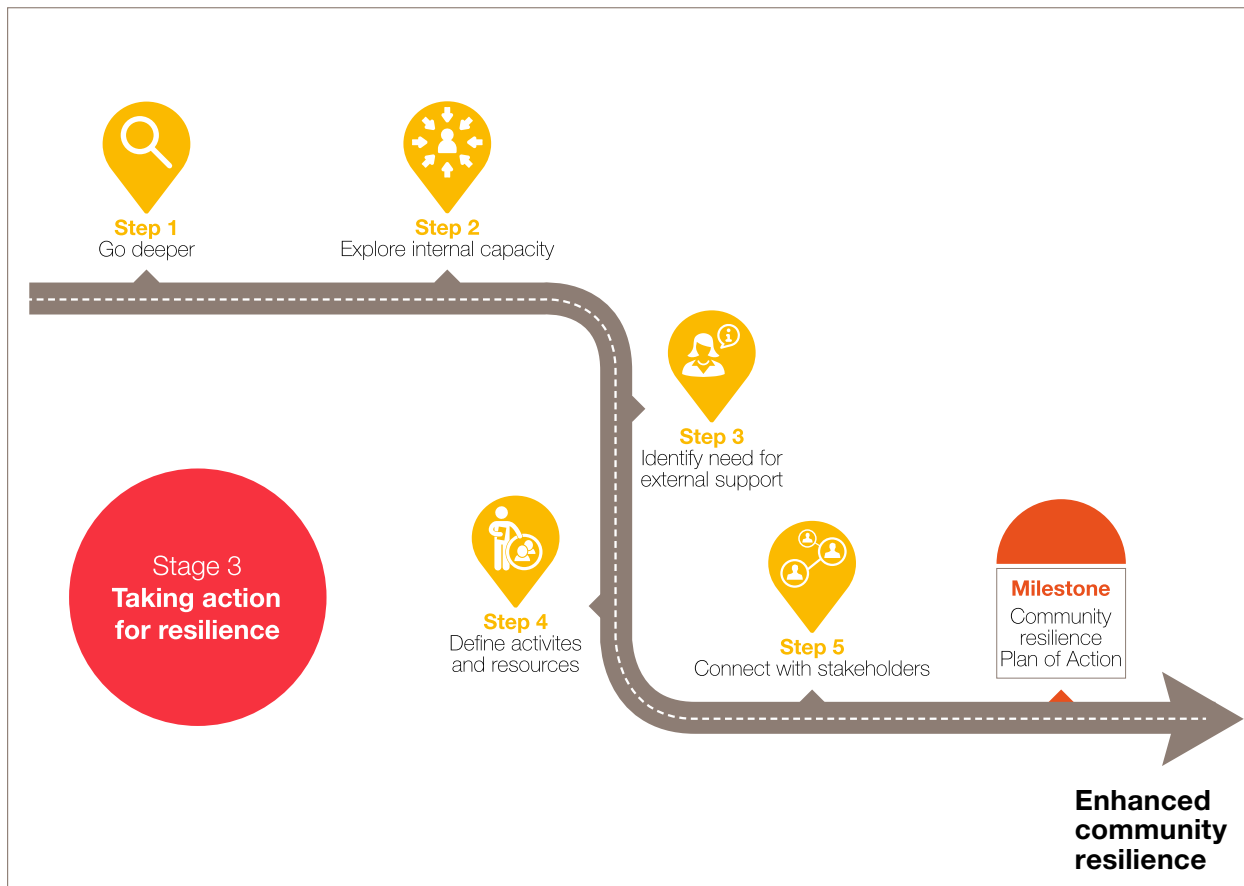
Stage 3: Taking action to strengthen resilience

This stage helps communities use the evidence they have gathered to take action. Your role as a National Society is to facilitate that process, connect communities with relevant stakeholders, and accompany communities as they make progress.



Milestone 1: A community resilience plan of action

The risk assessment baseline made by the community produced a scorecard of resilience characteristics. When a characteristic scores below '4', the community decides whether it wants to address its risks and vulnerabilities in that area and, if so, how. It may also decide to gather more information before taking a decision. For example, if the 'is healthy' characteristic scores low, it may decide to find out why people are falling sick and how best to prevent that sickness. If the community decides it needs more information, follow Step 1 onwards. If it decides it is ready to take action, go straight to Step 2. See Figure 10.

Figure 10. Map for Stage 3

Step 1: Go deeper

- **Explain** what expertise in in-depth assessments your National Society can provide the community (for links, see Reference Sheet K on assessment approaches). If the community would like to make a deeper analysis, connect them to the relevant sectoral team in your National Society to make arrangements.

If your National Society does not have expertise in the community's weakest areas, encourage community members to review their stakeholder map (Stage 1) to see whether other government, non-government, or commercial entities might help. Connect them to potential partners and accompany them through the process.

If your National Society cannot provide support or identify other local actors, use your auxiliary role to connect the community to other levels, such as regional or national governments. This may involve assisting the community with advocacy (see Stage 4) to gain official attention or resources.

- Remind the community that, even if one threat dominates, a multi-threat approach should be maintained throughout the assessment process.

When additional in-depth assessments have been completed and the results are known and understood by the community, go to Step 2.

Step 2: Explore internal capacity

Start by exploring the community's own capacity to address its risk and vulnerabilities.

- **Compare weak resilience characteristics with the community's own capacity and resources.** Write (or draw or symbolize, as appropriate) on separate cards the five characteristics with the weakest scores. Place the cards on one side of a common space (table or wall). Then ask: "What resources or capacities do we have in this community that can help us strengthen characteristic Y?" Make available empty cards of another colour for participants to record capacities and resources (using words or drawings).

Structure the discussion. Examine each characteristic one by one, or hold a brainstorm to put many capacities and resources on cards before returning to the weak characteristics. Mention the role of local authorities if members of the community do not. Using string, chalk or other 'connectors', ask participants to draw lines between characteristics and capacities/resources; allow any number of lines to originate or terminate at the same card.

- **Repeat the exercise with other groups of people** who could not attend the meeting, or who did not feel comfortable enough to contribute. These people may include women with young children, people with a disability, or people from a minority group. The findings from all sources must be compiled into one full set, on the basis of which the community can identify its priorities.
- **Summarise the results** of the exercise by articulating the community's plans in the form of objectives. For example, say: "To enable our homes to withstand storms, we will replace worn roofing materials".

Repeat the exercise until all objectives that can be met using internal capacities have been articulated as **objectives**.

Step 3: Identify the need for external support

Now turn the community's attention to those characteristics it **cannot** address with its own resources.

- **Ask for ideas** about how to address each characteristic, and note them on cards or a public board. Again, repeat the exercise in smaller focus groups with people who could not attend the meeting or who did not feel comfortable enough to contribute.
- Next, use a participatory method (such as voting) to **reach consensus** on the community's preferred option(s). (See Reference Sheet N on prioritization.)
- Finally, as in Step 2, summarise the results of the exercise by articulating the agreed plans in the form of **objectives**.

Step 4: Define activities and resources

Consider all the activities that need to be done to achieve the objectives formulated in Steps 2 and 3.

- When you address the first objective you discuss, mark **activities** on cards and ask the community to place them in sequence. For example, if the community's objective is to reduce disease by clearing blocked drainage canals, they might decide (in order) to:
 - Inventory the canal system and mark areas that are blocked.
 - Set a period of time to clean and follow up.
 - Call a community meeting to form volunteer work groups.
 - Rent or gather shovels and disposal equipment.
 - Etc.
- **Estimate the additional resources** needed, in terms of labour, money, materials, technical assistance and services, and any other resources. (See Reference Sheet U on participatory resource planning.)
- Repeat the exercise for each objective until the community has created a complete **community resilience plan**.
- Finally, consider how (known and potential) threats might adversely affect the resilience plan, and what can be done to minimise such damage. The community might decide to avoid certain activities during monsoon season, for example, or seek advice on farming practices to cope with increasingly erratic rainfall, or store tools and other resources above the most extreme flood levels, or reassign responsibilities when key people are sick or absent. Adjust the plan accordingly.
- If the community is interested and has capacity, consider introducing project management tools such as the logical framework or other approaches that are described in the Project and Programme Planning guide. See examples.

Example. Enabling community-owned planning in Lebanon.

The Lebanese Red Cross has applied community risk assessments to produce written community-based action plans. A documented plan and budget recently helped one community to obtain external support to repair a damaged school. This motivated it to develop and drive forward its plans to increase resilience.

Example. Adopting a holistic, demand-driven approach in Myanmar.

The Myanmar Red Cross Society has worked for over a decade on disaster risk reduction in Mavis Bank, a township in the foothills of the Blue Mountains. After a risk assessment based on resilience characteristics, the community identified a range of challenges, including mental health, environmental mismanagement, poor road networks and unemployment. Its holistic, demand-driven resilience plan included objectives to improve livelihoods, water, sanitation and youth participation.

Step 5: Connect with stakeholders

The community's resilience plan is likely to need inputs from many actors (see Step 3 above). In addition to any material, financial and technical support it can provide, your National Society can contribute to the plan's success by connecting the community to other relevant actors, processes and resources. In this respect, links to stakeholders with responsibility for local development (usually local government) are critical. Any actions the community wants to take to strengthen its resilience must take into account, and whenever possible be aligned with, ongoing development activities. The community may also be able to tap into government funding to achieve parts of its plan.

Carry out the tasks below to help generate resources and partnerships.

- Assist the community to **prepare a presentation** of what it wants to do and why, starting with the 'My Community Factsheet' (see Stage 1). Collate the findings of the assessment, the objectives the community has chosen, and a summary of prioritized activities. If community members are willing, whenever possible use visual aids (photographs, sketches, PowerPoint). Encourage several members of the community to act as presenters or speakers, making sure that those chosen reflect the diversity of the community.
- Help **set up meetings** with external stakeholders who participated in the assessment, and others who might be able to offer resources. Use your National Society's contacts to obtain meetings if the community is unable to do this itself (see definition on advocacy). Accompany community members to meetings, assist and coach speakers, record any offers of resources, and assist the community to access them. You may need to help members of the community to develop a proposal, arrange future meetings, train in project management skills, or take other follow-up actions (see Tip 6).
- **Discuss the process with your National Society's donors**, including partner National Societies. Explore whether your current funding arrangements might permit you to support the community's resilience action plan. When requesting new funding, try to build flexibility in from the start.

Once community members consider that they have the resources to carry out the initial activities of one or more objectives, encourage them to begin implementing these, even while they continue to reach out to other potential contributors and partners.

The number of objectives that a community can address simultaneously will vary from community to community. If resources are available, talk to community members about how much they can manage. Encourage them to consider options for coping: sequencing; the formation of working groups with different responsibilities that meet periodically to report progress; or renegotiation of timeframes. Use this approach in your National Society too: if various technical teams and groups of volunteers are involved, be prepared to adapt, postpone and coordinate in order to provide your support at an appropriate pace.

Definition. Advocacy

Accompanying communities as they strengthen their resilience may require a range of advocacy initiatives. “Advocacy is about persuading people to make changes, whether in policy, practice, systems or structures. Advocacy can include speaking for, working with and supporting others to speak for themselves. It is a way of taking community voices to a different level of decision-making. Advocacy can bring communities together and encourage them to respond to external threats. It goes hand-in-hand with awareness raising and education. Awareness raising and education can empower communities to change and to have safer, healthier lives, while advocacy can create the conditions in which they are actually able to do so.” (IFRC, *Disaster Risk reduction, a global advocacy guide* (2012), p. 11.)

The community will need to persuade authorities and other stakeholders to support community resilience. Use the Red Cross Red Crescent’s credibility and auxiliary role to connect the community with relevant authorities and other decision-makers.

Your National Society can also assist the community to prepare for these meetings. Share your experience and skills on presenting evidence, requesting action and documenting agreements: this can help the community to take full advantage of opportunities. (See Reference Sheet E on advocacy and the auxiliary role in resilience.) To understand more about the range of tools that can assist you to carry out humanitarian diplomacy, consult IFRC’s Humanitarian Diplomacy Policy.*

Tip 6. Managing partnerships

To manage multi-stakeholder processes such as the Resilience Action Plan, communities need to develop good coordination skills. Help them establish a ‘partnership’, memorandum of understanding or contract with each stakeholder, detailing their respective responsibilities, schedules, communication protocols, and financial arrangements. Your National Society may be able to offer formats for this as well as access to legal advice (if necessary). Suggest holding regular meetings to update all stakeholders on the process and results. *Enable* the community to prepare for meetings by helping them to set an agenda, design a presentation, and co-chair.

* IFRC *Disaster Risk Reduction, a Global Advocacy guide* at: http://www.ifrc.org/Global/Publications/disasters/reducing_risks/DRR-advocacy-guide.pdf <http://www.ifrc.org/en/what-we-do/humanitarian-diplomacy/humanitarian-diplomacy-policy/> and IFRC’s *Protocol Handbook* at: <https://fednet.ifrc.org/es/recursos-y-servicios/diplomacia-humanitaria/representation/international-relations/protocol/>

Journey log: taking action

Before moving to the next stage of the journey, make sure you can pack and unpack the following concepts to take forward with you.

- Connect communities with relevant stakeholders for the purpose of doing in-depth assessments, when communities request.
- Match the weakest scored resilience characteristics to community capacity.
- Rank unmatched actions, make a resilience plan of action, and seek external support where required.
- Be prepared!
- Use advocacy and nurture partnerships.



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Learning from experience is done
by including different social
groups from the communities



Stage 4: Learning



This stage helps communities learn from the results of their resilience-building actions. It helps your National Society to enable communities to:

- Acknowledge achievements and identify what makes them successful.
- Recognize failures and understand why they happen.
- Adjust plans and make new ones based on this knowledge.
- Involve all community members and other stakeholders in the learning process.
- Use the process to motivate existing stakeholders and others to provide additional support.

Stage 4
Learning



It also helps your National Society to:

- Identify results they can report to donors.
- Analyse the quality of your services, including how community members perceive them.
- Develop an evidence base for mobilizing additional funds to support communities.

The guidance for this stage takes into account all the landmarks of our approach and the services we provide. See Table 7.



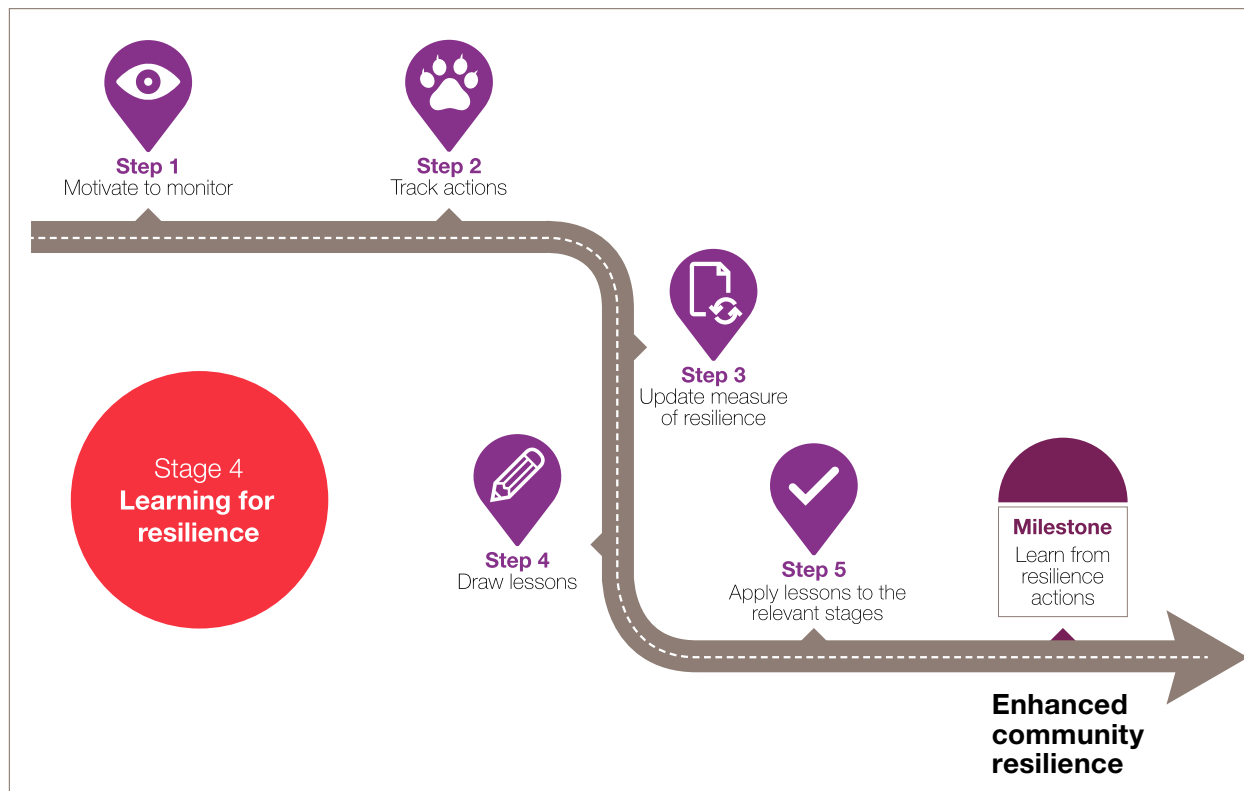
Table 7. Learning across landmarks and services

Community resilience: our approach to monitoring and learning is:	How
Risk-informed	we base the process on an initial risk assessment carried out by the community. We encourage the community to consider new risks or information needs that emerge after the assessment.
Holistic	we use the characteristics of community resilience. We encourage the community to consider changes in and outside the community that may have contributed to successes or failures.
Demand-driven	we enable the community to understand the purpose of monitoring and ensure resilience actions are driven solely by the community's needs.
People-centred	we ensure that community members' perspectives and monitoring (not external actors or data sources) drive and inform the process.
Inclusive	we encourage and facilitate the participation of all sectors of the community, supporting social inclusion in the longer term.
Prevents suffering	we introduce and support monitoring as a routine, and apply lessons and appropriate solutions before a crisis develops.
Accompanying	we introduce the idea, and offer encouragement.
Enabling	we facilitate, passing on experience.
Connecting	we encourage stakeholders to participate. We disseminate the results. We build support.

Milestone 1: Learn from resilience actions

Follow the steps below to monitor the current status of the community resilience plan and learn from actions that have been implemented. See Figure 11.

Figure 11. Road Map Stage 4



Step 1: Motivate to monitor

- **Explain to the community the reasons for monitoring.** Reassure them that it is normal to want to know how things are going, especially when we are investing time, energy and other resources in a new activity. Use examples:
 - We check to see whether seeds germinate and crops grow as expected.
 - We count and compare the day's takings after selling food at market.
 - We ask our children to show their school reports.
 - We agree to a medical check during pregnancy.
- Point out that normally we **compare the results** of one activity with others, to see what, if anything, has changed. For example, farmers compare one season's crop with another, and health workers compare a woman's weight gain during pregnancy with the average weight gain of women at the same stage.
- Use the same examples to **illustrate why all stakeholders should contribute to monitoring.** Give the following reasons in your explanation:
 - They might notice a change that others do not.
 - Their observations may agree with the observations of others, building confidence in the result.

- They are entitled to know the results of actions in which they invested.
 - Their cooperation and collaboration may be necessary to adjust or complete plans successfully.
- **Agree how to involve all stakeholders in monitoring.** As in Stage 2, you may need to hold separate meetings with those who do not wish to participate in a large community gathering. To involve external stakeholders, options include: interview them separately; invite them to participate in a community meeting; request them to provide documented evidence (for example, government plans to fund a health post, or photos of a reinforced river bank, etc.). However you choose to engage them, make sure the views they express are fed into the main monitoring and evaluation process.

Step 2: Track actions

Check that activities are on track is key to success.

- Encourage the community to ask the following questions at sensible intervals:
 - Have we done what we expected to do by this stage? If not, why not?
 - How can obstacles to progress be removed?
 - What needs to be done to get back on track?
- When a community chooses its monitoring method, draw on the guidance in the Monitoring and Evaluation chapter of the Project/Programme Planning Manual. Explain that some changes or signs of progress are best identified by interviewing relevant people, while others are observable. Sometimes you need to take specific actions to obtain people's views on how to resolve a problem.
- If planned activities need to be changed significantly, encourage the community to take those decisions together, with maximum participation (see example).

Example. Preventing suffering by inclusive monitoring in Africa.

Red Cross and Red Crescent societies in Africa are scaling up the use of mobile technologies to collect data. They have found that mobile phones can be used inexpensively and rapidly to record the results of health surveys that involve all the members of target communities. The Kenya Red Cross Society conducted its first rapid mobile phone-based survey (RAMP) in 2011 to assess malaria in at-risk communities. It has successfully used the same methodology for monitoring and learning purposes.

Step 3: Update the measure of resilience

- **Assist the community to repeat the assessment process** (conducted in Stage 2). Whenever possible, use the same indicators that the community selected for its last assessment.

Encourage the community to **consider new threats** that may have emerged. If they identify any, they may wish to add new indicators to measure them, complementing the baseline.

- Assist the community to **record the results** of the repeat measurement process. This is very important because changes over time can only be detected if good records are kept.

Step 4: Draw lessons

- After calculating a new score for each characteristic, encourage the community and external stakeholders to **answer the question 'Why have the changes happened?'** Help community members to list the factors visibly, reach consensus on the most important, and document them.

If the score has fallen, encourage the community to **check whether the process has produced valid results** by answering the questions in Tip 7.

- Keep note of these factors to enable your National Society to **'measure attribution'**, that is, assess its own contribution to the community's achievements and failures. Discuss the factors in your National Society and use them to report to donors that fund your work with the community.
- Describe and assess your National Society's performance. How well did you accompany, enable and connect the community? What does the community attribute to you and your work? Through this exercise, you can measure **'the contribution'** that Red Cross Red Crescent Societies make to community resilience.

Tip 7. Managing a downward trend

If the monitoring process shows a downward trend (in other words, the community has become less resilient), encourage the community to ask the following questions:

- Do the main (five) threats genuinely capture the perceptions of the most vulnerable members of the community?
- Do the indicators developed by the community throw an accurate light on the characteristics?
- Were the data collected and analysed correctly?
- Do the actions that were implemented address the identified threats and address the right people and places in the community?
- Was the action implemented as planned?
- Has anything major happened between the two measurements?

The most important learning happens after failure. Use trends and changes to really understand and improve.

Step 5: Apply lessons

- Ask the community and other stakeholders how, if at all, they think their community resilience plan should change. Change might involve continuing, scaling up, adapting, innovating or stopping certain activities (see Reference Sheet V on adaptive management). Accompany them as they **repeat the action planning process** described in Stage 3, and help connect the community with other actors if necessary.
- Encourage the community to **share learning** with other communities, either by exchanging directly or via the Red Cross Red Crescent Movement. Provide connections and resources to enable other community representatives to visit and learn from the community, and ask its permission to share the community's experience with other organisations in publications and other learning fora.

Journey log: learning

Before moving to the next stage of the journey, make sure you can pack and unpack the following concepts to take forward with you.

- Use day-to-day examples to explain to the community why monitoring is useful.
- Track (monitor) the progress of ongoing resilience actions and adjust plans as required.
- Repeat the assessment, this time to *enable* the community to identify changes.
- Accompany the community as it identifies and analyses factors that have changed the community's risks or resilience.
- Use community-level analysis to assess your National Society's contribution to change.
- Encourage adaptive planning and management based on monitoring results.
- Use the community's experience to facilitate wider learning.



Annexes

Resilience reference sheets

Reference sheet A	Reading for the journey
Reference sheet B	Resilience across the fundamental principles
Reference sheet C	Organizational development, a resilient national society
Reference sheet D	What are systems and systems thinking?
Reference sheet E	The auxiliary role and advocacy
Reference sheet F	Sustainability in resilience building
Reference sheet G	Secondary literature and data
Reference sheet H	Why connecting and convening are key red cross red crescent services
Reference sheet I	Risk and integrated risk management
Reference sheet J	Knowledge management
Reference sheet K	Red cross red crescent community assessment approaches
Reference sheet L	Threat-specific assessment
Reference sheet M	Sampling
Reference sheet N	Prioritization (ranking)
Reference sheet O	Vca resilience star
Reference sheet P	Spiced indicators
Reference sheet Q	Indicator catalogue
Reference sheet R	Triangulation
Reference sheet S	Processing and analysing risk data
Reference sheet T	Data reduction (to produce concluding statements)
Reference sheet U	Participatory resource planning
Reference sheet V	Adaptive management

Reference sheet A: Reading for the journey

Where/when to apply resilience

Although not all of the resources below use the term 'resilience' explicitly, most describe well-thought-out actions that contribute to resilience.

By type of community:

Resilience and urban settings

- IFRC, *Gender and diversity in urban settings* (2015).
http://www.ifrc.org/Global/Publications/Gender%20and%20Diversity/Urban%20DRR_Final.pdf
- Kresge Foundation, *Bounce Forward: Urban Resilience in the Era of Climate Change* (2015, with Island Press).
<http://kresge.org/sites/default/files/Bounce-Forward-Urban-Resilience-in-Era-of-Climate-Change-2015.pdf>
- Arup, *Water resilience for cities* (2014).
http://www.arup.com/~media/Files/PDF/Publications/Research_and_white-papers/ArupUrbanLife_WaterResilienceForCities.ashx

Resilience and migration

- IFRC, *Smart practices that enhance the resilience of migrants* (2016).
http://www.ifrc.org/Global/Publications/migration/Smart-practices-summary-report_EN.pdf

Community resilience

- IFRC, *Understanding Community resilience* (2012).
http://www.ifrc.org/PageFiles/96984/Final_Synthesis_Characteristics_Lessons_Tsunami.pdf

By risk management phase:

Resilience, DRR and preparedness

- IFRC (with Arup International Development), *Key determinants of a successful CBDRR programme. Community Based Disaster Risk Reduction Study* (2012).
http://www.ifrc.org/docs/Evaluations/Evaluations%202012/Global/GlobalKeyDeterminants_12.pdf
- IFRC, *Community Based Disaster Risk Reduction Study: Lessons Learned from the Tsunami Operation CBDRR Programmes* (2012).
<http://preparecenter.org/resources/ifrc-community-based-disaster-risk-reduction-study-lessons-learned-tsunami-operation-cbdr>
- IFRC, *Disaster Risk Reduction Annual Mapping and Disaster Risk Reduction Database*.
<https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/drr-db/?p=8>

Resilience and Climate Change Adaptation

- IFRC, *Guide to Mainstreaming disaster risk reduction and climate change adaptation* (2013).
http://www.ifrc.org/PageFiles/40786/DRR%20and%20CCA%20Mainstreaming%20Guide_final_26%20Mar_low%20res.pdf
Red Cross Red Crescent Climate Centre, *Minimum standards for local climate-smart disaster risk reduction* (2013).
<http://www.climatecentre.org/resources-games/minimum-standards>

Red Cross Red Crescent Climate Centre, *Climate Guide* (2007).
<http://www.climatecentre.org/publications/the-climate-guide>

Resilience and response

- Caroline Hargreaves et al, 'Resilience' – *An Objective in Humanitarian Aid?* (2012).
[http://www.academia.edu/4107337/Resilience - An Objective in Humanitarian Aid](http://www.academia.edu/4107337/Resilience_-_An_Objective_in_Humanitarian_Aid)
- OCHA, *Position Paper on Resilience*.
<https://docs.unocha.org/sites/dms/CERF/OCHA%20Position%20Paper%20Resilience%20FINAL.pdf>

Resilience and recovery

- IFRC, *IFRC Recovery programming guidance 2012* (2012).
<http://www.ifrc.org/PageFiles/41104/IFRC%20Recovery%20programming%20guidance%202012%20-%20201232900.pdf>
- GFDRR, *Resilient Recovery, an Imperative for Sustainable Development* (2015, the World Bank).
<https://www.gfdrr.org/sites/gfdrr/files/publication/Resilient-Recovery-An-Imperative-for-Sustainable-Development.pdf>

Resilience and reconstruction

- GFDRR, *Building Resilience: Integrating Climate and Disaster Risk into Development – The World Bank Group Experience* (2013, the World Bank), p. 4.
<http://documents.worldbank.org/curated/en/762871468148506173/pdf/826480WPOv10Bu0130Box379862000UO090.pdf>

Relief and development

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Reference sheet B: Resilience across the fundamental principles

Resilience across the fundamental principles

Principle	Examples of good practices in resilience strengthening that reinforce the Principles
<p>Humanity. The International RCRC Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.</p>	<p>Resilience thinking promotes humanity by strengthening social cohesion, protecting the most vulnerable individuals in communities and connecting the neediest communities to partners that can help meet the needs they prioritize. Respect for humanity also implies that the Red Cross Red Crescent will not insist on providing only one type of support when communities adopt different priorities.</p>
<p>Impartiality. It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.</p>	<p>National Societies identify the communities with which they work by comparing their needs with those of other communities (using secondary evidence or VCA). Communities are not selected on the basis of a single sector, or individuals, or funding. Individuals from the community are engaged inclusively and impartially.</p>
<p>Neutrality. In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.</p>	<p>Maintaining neutrality while promoting resilience requires the completion of a thorough, integrated context analysis that clarifies power relationships. Decisions to support a community must take care to avoid favouring the priorities of any particular group in that community.</p>
<p>Independence. The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.</p>	<p>While connecting communities with partners (especially with the Red Cross Red Crescent's privileged partner, government) is a key service in promoting resilience, a systems-approach must always maintain autonomy, and ensure that communities are at the heart of action.</p>
<p>Voluntary service. It is a voluntary relief movement not prompted in any manner by desire for gain.</p>	<p>Volunteers must be well trained. They should be valued above all for their accompanying and problem-solving skills, rather than technical skills. Ideally, they should be from the communities served.</p>
<p>Unity. There can be only one RCRC Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.</p>	<p>A unified National Society that demonstrates good internal coordination will be able to address the range of needs that communities prioritize.</p>
<p>Universality. The International RCRC Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.</p>	<p>While many National Societies are very advanced in their thinking about resilience, they should all have an equal opportunity to share pertinent experiences and strengthen future versions of this guidance.</p>

Reference sheet C: National society development and community resilience

Successful implementation of this Road Map to Community Resilience depends on a National Society's capacity. Organization development (OD) measures may be required to revise staff and volunteer terms of reference, integrate the concepts, and provide the services foreseen in the Road Map. Before committing itself to community resilience programming, each National Society should therefore review the capacity of its staff and volunteers to take on additional challenges.

The IFRC has developed many policies, guidelines and tools for National Society development that are relevant to National Societies that decide to promote resilience. They include the Guidance for National Society;¹² the National Society Development Framework (2013); the Characteristics of a well-functioning National Society;¹³ National Society Governance Guidelines (2003);¹⁴ Strategic Planning Guidelines for National Societies: developing and implementing a strategic plan in a National Society;¹⁵ the Volunteering Implementation Guide;¹⁶ the Youth Policy and Youth Engagement Strategy;¹⁷ leadership development training tools;¹⁸ the Participatory Community Development Manual,¹⁹ etc. These resources will provide a strong foundation for the new ways of thinking and operating that adoption of the *Road Map to Community Resilience* requires.

To provide National Society development practitioners with easy access to National Society development-related texts, the IFRC hosts a National Society Knowledge Centre on FedNet (the IFRC extranet, at: <https://fednet.ifrc.org/en/resources/ns-development/national-society-development/nsd-virtual-knowledge-center/>). The centre has arranged National Society development resources and tools in the following order:

- Leadership development.
- Legal base.
- National Society planning and evaluation.
- Volunteering development.
- Youth development.
- Branch and community development.
- Relationship management.
- Resource mobilization.
- Information communication technology.

National Societies can assess their organizational capacity with the help of the Organizational Capacity Assessment and Certification (OCAC) process (at: <https://fednet.ifrc.org/en/resources/ns-development/national-society-development/organisational-capacity-assessment-certification1/>).

OCAC's objectives are to: (a) enable National Societies to assess their own organizational capacity, performance and national relevance and thereby determine opportunities for self-development; and (b) ensure that all National Societies commit to and comply with a comprehensive set of organizational minimum standards and thereby protect and improve the overall performance of the Federation network.

The Netherlands Red Cross has developed and is piloting a branch organizational capacity assessment (BOCA) tool to take this process to a new level.

- 12 At: <https://fednet.ifrc.org/resources/HD/advocacy/post-2015-development-agenda/national-society-guidance/>
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Available at the IFRC internal e-learning platform: www.ifrc.org/learning-platform
- 19 At: <https://fednet.ifrc.org/es/recursos-y-servicios/desarrollo-de-las-sociedades-nacionales/organizational-development/nsd-virtual-knowledge-center/branches--community-development/>

Reference sheet D: What are systems and systems thinking?

A system is a set of interacting or interdependent parts that form a whole. Every system has a **purpose, components** and **interconnections**. Its behaviours give each system a certain structure even if this changes regularly, and rules (many unwritten or even unspoken) that govern its behaviours.

Every community is a system, and a system within other systems. Your target community may have an unspoken purpose (for example, to promote 'welfare', 'happiness' or 'prosperity'). It is composed of many sub-systems, which include individuals, households, leadership structures and may include development committees, a central market or school, or a river. These components interact at many levels inside and beyond the community with various effects. Every element is capable of adapting and, when it does so, may change the entire system – including even its purpose.

Academic institutions have traditionally studied the individual components of complex systems (for example, health, water, infrastructure). International development and humanitarian aid followed their lead. It is now recognized that interdisciplinary approaches offer huge advantages because, by studying the interactions in a system, they can find more complete solutions to modern challenges such as inequality and climate change.

Systems thinking is the deliberate examination of whole systems, rather than their separate parts. It offers communities a way to promote sustainable and transformative change, and calls you to examine interconnections across levels (thereby promoting vertical integration when appropriate), across sectors/geographies (horizontal integration) and across time. You will need to explore how a community is (or should be) linked to local, provincial and national authorities – and even to global dimensions of knowledge (such as technological advances in vaccination, up-to-date understanding of climate change, or changes in the pattern of natural hazards). You will also study access to services and relationships of power, and look carefully at the **interactions** between sectors or between one sector and others. For instance, you might need to examine how changes in the health status of a community are affected by climate, infrastructure, global market prices, migration, or the evolution of livelihoods and employment.

When we study systems we often encounter the terms '**chaos**' and '**complexity**'. Chaos theory maps the causal links between small changes in one location and the occurrence of much larger events at a distance.²⁰ Accordingly, a minor change in the initial state of a small community may have a striking ripple effect across that system and more widely. Complexity theory breaks apart the components of complex systems to study and explain the effects of their interaction, inter-dependence, adaptation and self-organization.

Advantages of a systems approach

Applying a systems approach to resilience strengthening brings many more advantages than disadvantages. In fact, the only disadvantage may be the additional time it requires – to analyse before taking action (to look before you leap) and radically review traditional approaches to programming to see how they can be run more effectively. The main advantages of a systems approach are highlighted below:

²⁰ Chaos theory is famously illustrated by the proposal that a butterfly, flapping its wings in one continent, might be the original cause of a tropical storm in another.

- **Context analysis.** Systems thinking starts with a thorough and holistic context analysis that is not confined to one sector, programme or agenda. This enables a community to better understand both its complexity and its relationships with other parts of the system.
- **Wider reach.** No National Society can support all the priorities that communities identify during a context analysis or vulnerability and capacity assessment (VCA). A systems approach will help to identify partners that the National Society should connect the community to in order to obtain additional support.
- **More sustainable reach.** Applying a systems approach helps communities to understand their environment, including the wider system in which they are embedded. As a result, they are better equipped to identify and nurture new relationships sustainably, for example with local authorities.
- **Redundancy.** To strength the overall system, including the interconnections that define it, it is necessary to build in redundancy. Redundancy exists in a system when, if a critical component fails, another can assume its functions. For instance, if a community's relationship with local authorities breaks down following elections, its ties with other communities may still provide for its needs.
- **Expand/contract.** All communities are different: one advantage of a systems approach is that it can deal with differences in complexity and scale. It enables us to understand the diverse interconnections in a large urban community as well as the close relationships in a small hamlet.

Taking the example of first aid services (a core activity for almost all National Societies), let us imagine how they might connect with other 'systems'. Table 8 shows how work with first aid **in isolation** cannot, on its own, make a community resilient to health shocks. Treating first aid separately could be counterproductive and even harmful to the community. If your National Society is involved in the First Aid in Every Home initiative, your activities already contribute to household resilience. Impact can be improved, however, by using first aid as an entry point for strengthening other services it depends on.

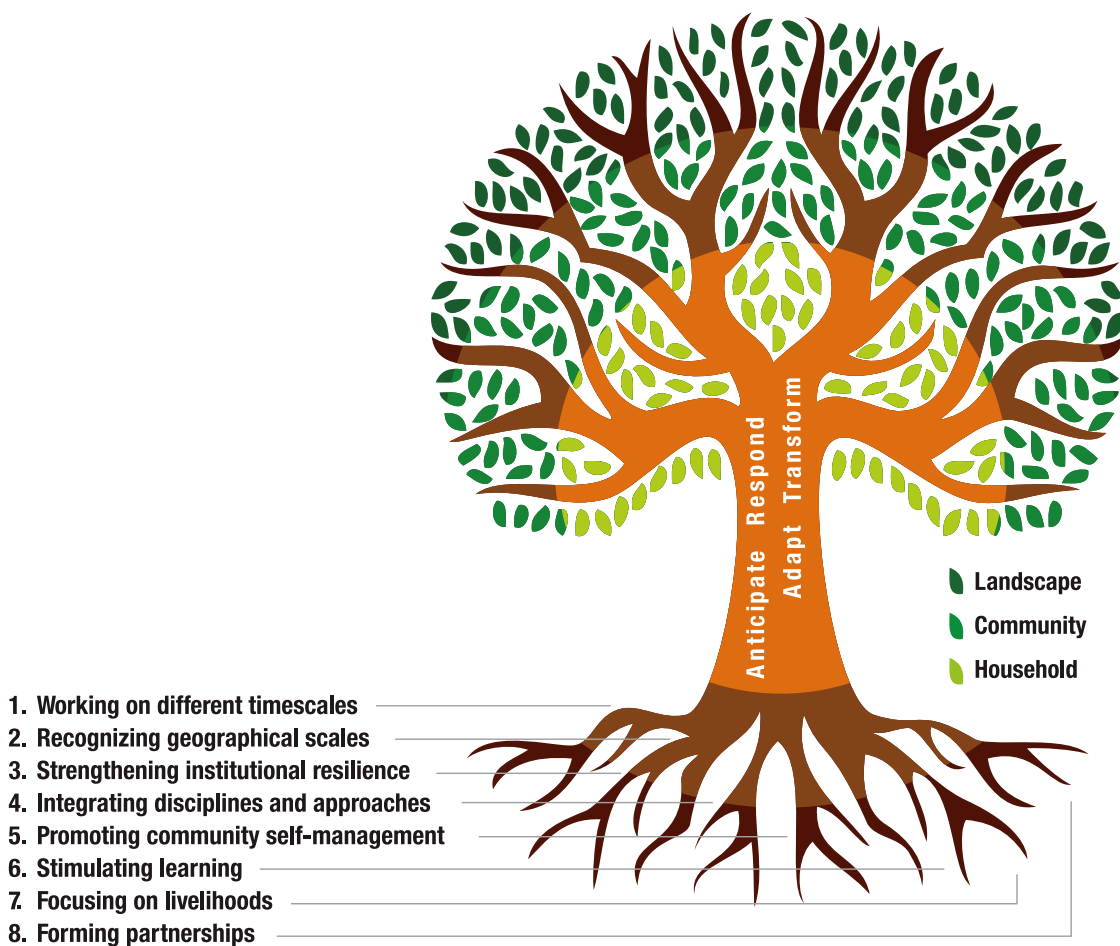
Table 8. Looking at first aid programmes holistically

Teaching first aid in isolation is not enough to foster resilience. (Note: the examples below are illustrative.)	To build resilience, other strategies and actions may also be necessary
Appropriate water and sanitizing products are unavailable to assure hand hygiene.	Improve access to water of sufficient quantity and quality. Ensure access to sanitation facilities. Increase incomes so that families can purchase hygiene items.
Communication networks (which relay needs to emergency medical services, for example) and cold chain technology become entirely dysfunctional during storms.	Make contingency plans with health actors to ensure the continuity of vital services when threats occur.
No primary health care provider operates nearby and the only vehicle that can transport injured and sick people to a facility is out of order.	Lobby to persuade municipal authorities to establish more primary health care facilities and emergency vehicles in the area.
Cultural norms (with respect to caste, gender, etc.) prohibit the five volunteers who are trained in first aid from physically touching certain people. First aid providers also face ethical decisions with respect to triage and allocation of limited resources.	Improve the selection of candidates for first aid training. Ensure that selection is inclusive and diverse.

While *holistic systems thinking* is only one of the landmarks of resilience strengthening, it presupposes and promotes the fundamental shift in thinking that is required **before other landmarks can take form**.

Many entities that work with National Societies are applying a holistic approach to their operational activities. For example, the Partners for Resilience (PfR) Vision Tree²¹ (Figure 12) focuses on core phases (anticipate, respond, adapt and transform) set in a layered system that runs from households to communities and into larger landscapes. Its eight principles draw on systems thinking to promote resilience and its method stretches beyond the traditional community to include the full ecosystem. Since 2011, National Societies in nine countries have cooperated with Partners for Resilience. Disaster risk reduction initiatives that link communities upstream and downstream in flood early-warning systems also apply systems thinking.

Figure 12. Partners for Resilience: Tree of Vision



²¹ Partners for Resilience, *A New Vision for Community Resilience: A Case for Change* (2012, Netherlands Red Cross, Cordaid, Wetlands).
<http://www.climatecentre.org/downloads/File/PFR/PfR%20Resilience%20vision.pdf>

Reference sheet E: Auxiliary role and advocacy

Their status as auxiliary of government gives National Societies an important opportunity to act as a bridge between government and communities. National Societies can leverage their relationship with and proximity to government to help community members to become more informed, involved and influential. In some cases, this may mean communicating official decisions and regulations to communities to ensure they are informed of their rights and responsibilities. In other cases, it may mean facilitating access by communities to local government and other decision-making fora, and ensuring they are adequately represented in national and local disaster risk management structures. For example, a National Society might lobby for community members to be represented on local government committees, or arrange meetings at which communities can raise and discuss their concerns with local government officials.

Target audiences of advocacy

Advocacy in support of resilience may take a variety of forms. Communities should determine what form their advocacy takes and how they take it forward. “Advocacy needs to be carried out both to and for communities. Crucially, though, it must also be carried out alongside them. It is not for the National Society to decide what priority issues a community needs to advocate” (IFRC, Disaster Risk Reduction: A Global Advocacy Guide (2012), p. 18). National Societies may also need to coach and provide advocacy support, sharing tools and skills to equip communities to dialogue with government and other actors. The advocacy approaches listed below can promote resilience:

- **Advocacy in communities.** National Societies may need to encourage selected community members to advocate behaviour changes in their community, for example in order to promote healthier, safer lifestyles.
- **Advocacy to government.** National Societies may need to leverage their auxiliary role, as set out above, to advocate in favour of certain decisions, projects or changes in law or policy, for example to foster safer, risk-informed and healthier conditions or more connected and enabled communities. Advocacy may also be necessary to ensure that community representatives have opportunities to contribute their views on decisions or plans that affect them.
- **Advocacy to private actors and others.** Consultation with the community may reveal that advocacy is needed to address or change behaviour or activities, by private companies or other actors, that negatively impact community resilience.

Forms of advocacy

“The art of advocacy lies in persuasion, not confrontation. There are many alternatives to ‘lecturing’ that can be used to persuade people, whether communication is private or public, direct and indirect. Advocacy may take the form of major public campaigns, cornering the media, espousing key messages on prime-time television or popular radio programmes. It is also much broader and includes complementary activities at many levels. A private conversation or meeting with authorities is often the most effective way of persuading somebody to change their mind, their behaviour, or a policy. Wherever possible, it

is always worth trying a direct, private approach before going public. For example, your local mayor will be far more likely to listen to concerns about slums creeping into a flood plain if you first express them in private. A calm, open discussion can then take place, and action assessed without the mayor feeling threatened. If your private efforts get you nowhere, you can always take your case to the media or through other channels later. Your method will then be indirect – attempting to influence public opinion that, in turn, may influence the mayor. Public advocacy can also be used alongside private approaches. For example, you can hold seminars, public meetings, interviews or media briefings, publish opinion pieces or letters to the editors of newspapers or journals. Or you can invest time, money and people in an advocacy campaign.” (IFRC, *Disaster risk reduction, a global advocacy guide* (2012), p. 12 at http://www.ifrc.org/Global/Publications/disasters/reducing_risks/DRR-advocacy-guide.pdf).



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Reference sheet F: Sustainability in resilience building

Sustainable outcomes – the long term, continuing benefits of National Society interventions – should not be considered only at the end of projects, programmes or plans. The IFRC’s Framework for Community Resilience considers sustainability to be a quality that ought to be generated throughout the life of resilience-strengthening processes.

The three Red Cross Red Crescent services and landmarks that promote sustainability from different angles should now be familiar to you. If it has followed the steps in this guide, your National Society should have catalysed and supported sustainability from the very start of its engagement with the community. To be sure, check on the actions described in Table 9 below.

Table 9. Check sustainability

Key services of the FCR	Actions that increase the sustainability of community resilience
A risk-informed, holistic approach	<ul style="list-style-type: none"> • Make sure the risk assessment process is fully participatory. This empowers communities and encourages them to periodically assess risk. • Assess risk holistically, so that the underlying causes of vulnerability are identified and addressed, not just the symptoms. • Involve many stakeholders from the earliest possible stage. This creates momentum and critical mass, helping to sustain effort.
A demand-driven, people-centred and inclusive approach	<ul style="list-style-type: none"> • Use participatory risk prioritization and objective-setting processes to generate community ownership of its choices. • Help communities to mobilize their members. This generates leadership capacity and builds social capital. • Actively involve and include all sections of the community in monitoring progress on resilience, to generate buy-in and interest.
An approach that connects communities to prevent and reduce human suffering	<ul style="list-style-type: none"> • Instead of taking a leading role, accompany the community and its committee(s), enabling them to build their capacity in the long term. • Support communities in their advocacy: to engage with public authorities; access public budgets; and influence policies and laws that strengthen or weaken their resilience. • Connect communities with other external actors, to increase networks of support and learning. • Create partnerships between the community and authorities. • Use your experience as well as evidence to communicate to donors the need for long-term funding and flexible unearmarked budgets that enable innovation and learning for resilience.

Solutions that serve multiple purposes tend to foster sustainability. Communities are more likely to invest energy in sustaining activities that feel useful most of the time. For instance, construct a storm shelter only if it will also meet other daily needs in the community (for example, by acting as a meeting place, school or church).

Resilience-building activities are more likely to be sustainable if they are **linked to activities that raise income** or promote income-generating activity. For example, if community members who train in first aid can obtain care work, they are more likely to remember and apply the skills they have learned.

Reference sheet G: Secondary literature and data

Secondary data is data that already exists, usually in the form of written documents or reports, or statistics. Secondary data can be compared to, and can support, data you collect directly from the community (primary data). Compiling and using secondary data can help a community to build an evidence base for its efforts to strengthen resilience.

Role of secondary literature and data

Secondary data are used to:

- Develop an overview of the community's situation in relation to the main areas on which resilience depends: risk knowledge; health; meeting basic needs; economic opportunities; social cohesion, management of natural assets; maintenance of infrastructure; and connectedness.
- Highlight trends and issues that might be difficult to characterize using primary data.
- Cross-check primary data.
- Identify other actors that have knowledge of and interest in the community or the area and who might potentially contribute to community resilience plans.

Sources of secondary literature and data

As resilience spans many sectors and issues, numerous secondary data sources can be relevant to community resilience efforts. They include reports and documents produced by local and sub-regional government authorities, by specialized institutions, and by other organizations working with or near the communities in which you are interested, as well as documents on community programming generated by your National Society and other Red Crescent actors.

When you assist the community to look for relevant secondary data, explain that data may be available in different types of media, from local newspapers to websites and official publications, and that local, sub-national and national sources are all likely to be useful.

Given the range of sectors and factors that contribute to resilience, the community may find the volume of secondary sources overwhelming. The following criteria will help them select and compile the most appropriate documents:

Prefer recent publications. The more recent, the better. Trends in urbanization and climate change make it important to understand communities' current realities.

Seek out credible sources/authors. Seek out objective authorities on the topics of interest. Possible biases that could affect the accuracy or objectivity of the source should be discussed and taken into account.

Balance qualitative and quantitative. Informative statistics complement qualitative descriptions. Numbers help explain the 'what' and text the 'why'.

Cover all relevant areas. Many themes are relevant to resilience: once several informative documents on a topic have been identified, move to other areas.

Keep focused on the local level. Most secondary data sources are likely to focus on municipal, sub-national and national levels, so it is important to help the community to obtain documents that focus on the local and community levels. While certain issues and trends are generic and affect many communities in similar ways, others are quite specific. For example, livelihoods can depend on very local resources, such as a water source.

Pay attention to inclusiveness and gender and diversity. Secondary data sources may be gender-blind (may fail to consider that issues affect men and women differently) or may neglect issues affecting minorities. Explain to the community why they should prioritize documents that are inclusive and note gaps.

Reference sheet H: Why connecting is a key service

For several reasons, the Red Cross Red Crescent is uniquely well placed to *connect* communities.

Reputation. The Red Cross Red Crescent is known and respected as an impartial humanitarian actor. We have a solid reputation both locally and globally, and National Societies have established strong connections with many entities at many levels. This reputation can be leveraged to attract others to common interest platforms and potential partnerships. In many cases, community leaders and even local government authorities are not in a position to start resilience processes on their own, or may lack the experience or resources to do so. As a staff member of a National Society, you need to move out of your comfort zone to take on new responsibilities to *accompany, engage and connect* communities.

Proximity. National Societies and their branches develop close and long-standing relationships with the communities they serve. In addition, many Red Cross Red Crescent volunteers live in vulnerable communities: making use of their services should be encouraged because they know their community's vulnerabilities and potential, can help communicate these issues to other actors, and can contribute to developing locally-driven solutions.

Longstanding engagement. Unlike NGOs, National Societies have a permanent presence in their countries. This enables them to make long-term commitments (an essential factor in the coordination of multi-stakeholder processes), gradually build communities' competences, and empower them to convene stakeholders themselves.

Connecting may also contribute to **advocacy**. The laws, policies or practices of a powerful actor (such as a government authority or a private company) may cause harm to others. By presenting their perspective, indicating that many people want bad practices to end, and suggesting how the party responsible could also benefit from reform, communities may not only protect their interest but acquire confidence and new skills. This is called advocacy because it involves 'voicing' objectives desired by a group of people, not just one individual. See example.

Example. Connecting communities to leverage government programmes.

After carrying out a participatory risk and resilience assessment in San Blas, the Costa Rican Red Cross supported a community's initiative to establish a Development Association. More than 200 participants from a community of 124 households attended the inaugural meeting, and 60 subsequently participated in a leadership course facilitated by the Red Cross. Later, the community organized a cultural week to raise funds to clean the community hall, paint the health centre, and fix the church.

In Costa Rica, Community Development Associations (CDA) are able to draw on municipal funds. After negotiations between the community's leaders and municipal authorities, San Blas agreed to rebuild the community school, establish a recycling centre and support local artisans.

Following a Red Cross orientation on relevant government programmes, the community was able to access the Manos a la Obra programme to obtain seasonal employment for low-income women in projects such as community clean-ups. Highly appreciated by the community's members because it brings in income, the programme relies on CDAs to identify the most vulnerable.

Reference sheet I: Risk and integrated risk assessment

Risk is the likelihood that an event will occur and have a negative impact. The degree of impact depends on how vulnerable a community is beforehand, as well as on the capacity of its members to anticipate, adapt to, cope with, and recover (even improve their position) afterwards.

Figure 13. Risk: where threats (likelihood, magnitude) and vulnerability / capacity collide



A resilient community is one that has built up its capacities and thereby reduced its vulnerability in relation to the threats it faces. As resilience increases, risk falls.

Both elements (threat and vulnerability/capacity) are required to provide a complete picture of risks and identify sound proactive solutions (see Figure 13). For example, early warning systems (EWS) were originally designed specifically to track hazards. It has become clear, however, that EWS only provide actionable information when they also track the condition of people in the path of a threat – their presence, profiles, and ability to withstand its impact. This holds for early warning of any threat, whether from epidemics, conflicts, or road accidents.

Integrated risk assessment. Assessment is a well-known component of programme cycles. It provides a way to collect and compile information, and use the resulting 'evidence' to draw conclusions that (a) reflect the needs and priorities of affected communities and (b) deliver appropriate and sustainable solutions. Risk assessment or risk measurement means studying both components of risk – the threat, and a community's vulnerability and capacity (see Tip 8). When you adopt a holistic approach, as suggested in this Road Map, and examine all the threats a community perceives and how they interact, you are doing an integrated risk assessment.

UNISDR is currently reviewing its glossary of terms for this sector. An update will be issued in 2016/17. Small changes may subsequently be made in the way that terms are used and combined.

Tip 8. Threats have many names

... Adverse event, shock, stressor, hazard, hazardous event, accident, disturbance. They may be of any kind and may occur in any sector.

Reference sheet J: Knowledge management

Knowledge management 1, Data collection methods, Knowledge management 2

Knowledge management 1

When you assist a community to collect information, it is useful to understand knowledge management concepts. The data you collect directly – primary data – become secondary data for the next person who uses or quotes your information. To make this distinction simple, we often refer to primary data collection and secondary data compilation. (For the importance of secondary data, see Reference Sheet F.) When organisations select communities for partnership or resilience initiatives, they often rely on secondary data. Those organizing integrated risk assessments are strongly recommended to combine secondary and primary data.

Assessment data are *qualitative or quantitative*. A simple way to distinguish these concepts is to ask how the material you want to collect is most naturally described. If it is most naturally expressed in numbers, it is quantitative (cost, weight, temperature, distance, time). If it is most naturally expressed in words, it is qualitative (colour, emotions, events, relationships). For an assessment, you may collect qualitative data (community perceptions) that you later quantify to generate a deeper analysis of trends, levels of consensus, etc.

Data collection methods can also be qualitative or quantitative. If the purpose is to gather facts and numbers of things or people, the collection method is considered quantitative; if the purpose is above all to explore or understand, it is usually considered qualitative. The best assessments – *mixed-method assessments* – usually combine the strengths of both.

Data collection methods

There are **four main methods of primary data collection**: interviews, group discussions, surveys, and observation. Table 10 below summarizes the four data collection methods²² and their goals, units of focus, common instruments, and approach.

Most assessments select **key informants** (KI), chosen because they represent a particular perspective in or on the community. Interviews with them are called *key informant interviews* (KII). KIIs typically adopt a semi-structured interview model, which includes at least two or three elements that can be compared across all the KIs relating to one community. Combining all KIIs provides an overview of the larger community. Interviews usually provide both quantitative and qualitative evidence (some facts and some reflections).

KIIs differ from **survey interviews**. Surveys are usually more formal. The interview sample (of individuals or households) is more strictly defined, and interviews typically use a questionnaire (the instrument) – a list of carefully constructed questions to each of which there is logically one answer (closed-end questions). Surveys are used to provide quantitative data. They can therefore increase the statistical rigour of an assessment. Not all surveys need to be lengthy, however, or adopt a scientifically rigorous framework (random sampling, etc.). A well-designed 10-minute survey of an appropriate sample can provide very useful hard data even if respondents complete it themselves by hand or on-line.

²² You can find good suggestions and instructions on how to conduct focus groups, semi-structured interviews (KII) and surveys at: www.oxfam.org.uk/policyandpractice

The best-known group-based collection method is commonly called a **focus group discussion** (FGD).²³ FGDs gather together a group of individuals who share at least one interest or characteristic in common (the ‘focus’). For instance, they might be farmers, or female farmers, or single-parent female farmers. The group is invited to discuss a topic, guided by a few open-ended questions. This method creates purely qualitative data; it is not used to generate quantitative data or consensus. FGDs are not primarily interested in collecting individual opinions; their aim is rather to capture general attitudes or convergences/divergences of attitude within (subsets of) a community. FGDs are also good for brainstorming and generating ideas. Some people like to conduct FGDs to help them design survey questionnaires; others use them to understand survey results. Both are appropriate. While the FGD is a method, the topical outline of questions is your instrument. You might choose to do a ranking exercise (for example) during a FGD session, depending on your purpose or the product you need.

Direct observation is a critically important but often forgotten method.²⁴ Conducted separately from, or simultaneously with, the other three methods, observation validates what you hear with what you see. Structured matrices are often used to tabulate a wide variety of observations, from body language to numbers of livestock in a market or the quality of roofing materials. When they are collected systematically and independently by many volunteers at different places and times, observations provide additional quantifiable information. The instruments best suited for observation are multiple choice checklists.

²³ See information on FGD in the Research Reference Sheet (RRS) 4 of the IFRC VCA toolbox and reference sheets, 2007, p. 66-70. At: www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

²⁴ See information on Direct observation in the RRS 5 of the IFRC VCA Toolbox and reference sheets, 2007, p. 71-74. www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

Table 10. Four main data collection methods

Methods	Key informant interviews (KII) ²⁵	Surveys (S)	Focus group discussions (FGD)	Observation (O)
Goal	Overview from many perspectives.	Facts, data.	Exploration or in-depth understanding.	Verification and triangulation.
Unit of focus	Individuals who know the community (inside or outside).	Individual or household.	Group who share one or more characteristics (not individuals).	Site or community (assessment team perspectives).
Common instruments	Semi-structured interview guide.	Questionnaire.	Topical outline.	Checklist.
Approach	Qualitative and quantitative; extractive.	Quantitative; extractive.	Qualitative; participatory.	Qualitative but easy to quantify.
Those providing data are called	Informants.	Respondents (e.g. household heads).	Participants.	(Volunteers or Red Cross Red Crescent staff collect.)

²⁵ In this instance, key Informant Interviews are synonymous with semi-structured interviews. See information on semi-structured interviews in RRS 3 of the IFRC VCA Toolbox and reference sheets, 2007, p. 60-65. At: www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf.

Knowledge management 2

Data processing is an exciting part of risk assessment because it is during this stage that data become information, from which knowledge is produced. *Data* are most easily understood as small isolated facts (words or numbers). *Information* can be described as organized or ordered data. If data are like the pieces of a puzzle, information is what you get when you assemble or fit them together (see Figure 14). *Knowledge* is produced when you compare information from several perspectives and draw conclusions based on the (divergent or convergent) insights they generate. The term *triangulation* is commonly used to describe this effort to align perspectives (see Reference Sheet N). Table 11 provides examples of the three main elements of knowledge management.

Figure 14. Comparing data to information

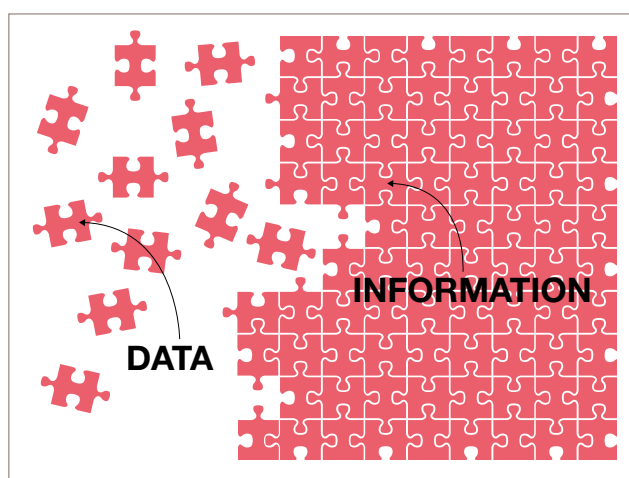


Table 11. Elements of knowledge management

Data	Information	Knowledge
Rainfall (in mm. per month): 12, 55, 102, 43, 0.	Rainfall is lower than normal.	Low rainfall in the Spring is strongly linked to poor crop production.
Health (number of cases of Ebola per community): 5, 21, 109, ...	Community X has the highest incidence, twice as high as last month.	Community health centre staff are not trained in Ebola prevention, are ill-equipped to treat cases, and are unable to halt an epidemic.
Roofing material in a village (per household): grass, metal, cement, timber...	The most common roofing material is steel.	Metal is the costliest and valued roofing material used: disaster risk reduction practice is to place heavy objects on roofs during tropical storms.

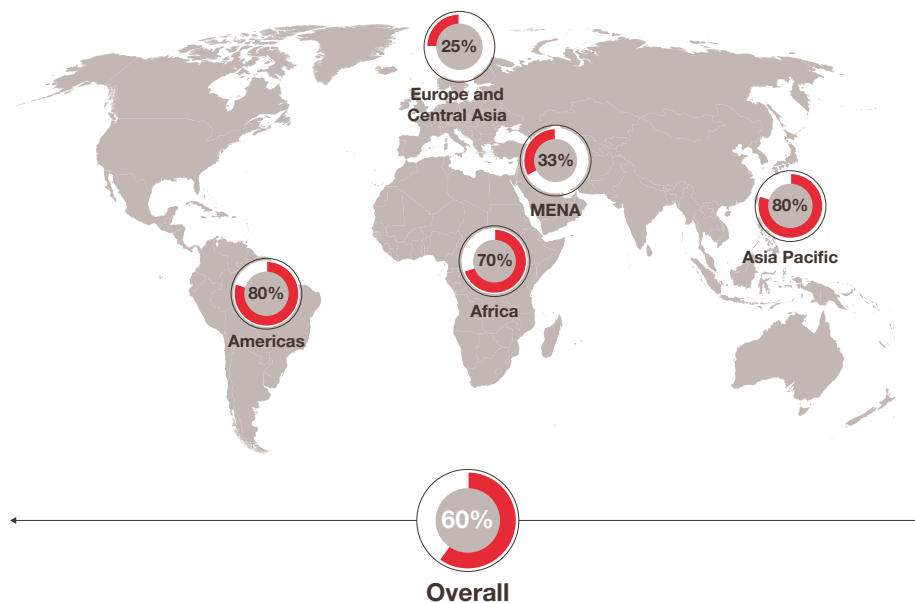
Reference sheet K: Red Cross Red Crescent community assessment approaches

In the last 30 years the Red Cross Red Crescent network has developed dozens of carefully crafted assessment approaches for studying communities. The Red Cross and Red Crescent has originated or formally 'owns' at least 13 different community-level assessment approaches.^{26,27} Three of these are considered to be 'integrated' or intentionally **un**linked to any one sector (VCA, IPA and BPI). Four more were conceived for use in particular sectors (CBHFA, PASSA, PHAST, FS/Livelihood), and at least six others were designed for needs assessment after an emergency or disaster (IRMSA, AiE, gender/diversity, psychosocial, economic security, recovery, and cash/markets). Nearly all have been inspired by or build on **vulnerability and capacity assessment (VCA)**, the grandmother of Red Cross Red Crescent assessment models (see Stage 2 of the Road Map).

Vulnerability and capacity assessment

The General Assembly endorsed the original holistic vision of the VCA in 1999, describing it as "a self-reflection process ... highlighting the unfulfilled needs of new vulnerable groups" and "an opportunity for National Societies... to ensure

Figure 15. VCA



²⁶ Many other assessment approaches used by the IFRC are not designed for community level use, but assess for example conditions at country, National Society, branch or volunteer level. Although these approaches assess elements that will make National Societies more resilient, they do not directly address community resilience and are therefore not featured in this guide. The approaches inventoried include Organisational Capacity Assessment and Certification (OCAC), Branch Organizational Capacity Assessment (BOCA), Well-Prepared National Societies (WPNS) Self-Assessment, Preliminary Urban Assessment, the Safer Access Framework, Rapid assessment for markets (ICRC), and Disaster Emergency Needs Assessment.

²⁷ Hundreds of community-level risk or needs assessment approaches have been developed outside the Movement. These are not featured here for many reasons. First, it is assumed that the most relevant approaches for core Movement programming are available already in key institutional documents. Second, the Movement has invested significant resources in these approaches and it is more important to use them than to create new ones. If we have omitted an approach developed and implemented by your National Society, please let the IFRC know.

programs are kept relevant to ever-changing needs of the vulnerable”. Grounded in the values of the Movement, it is the first and only assessment method to have been recognized at this level and was ahead of its time in acknowledging that risks and vulnerabilities – and vulnerable groups – evolve. Also crucial is the Red Cross Red Crescent principle of impartiality, on the basis of which it is recognized that needs are the *only* factor that should drive National Society programming. It is not enough to say that “every community needs health programming” or “every community needs to reduce disaster risk” – though of course they may. You need to ask where those needs should be ranked, relative to other needs that you may not have identified but that communities consider vital. The original idea behind the VCA is to listen to communities.

The VCA²⁸ is the approach most commonly used across the network to capture the needs that communities identify and challenges that make it hard to meet them (see Figure 15). Many other assessment approaches, developed in parallel to the VCA, aim to improve on it or go deeper into the needs of a specific sector.

How to choose an approach?

It is critical to remember that an integrated risk assessment that a National Society conducts *for* the community will be of little use. If the community is not ready to lead its own integrated risk assessment (perhaps *enabled* or coached by the National Society), this is a sign that it is premature to try to build resilience in that community. The National Society would do better to *accompany* the community for a bit longer before initiating an assessment.

If you select a community based on secondary data analysis of one sector (for example, malaria prevalence), the National Society **should still assess risk holistically** (using multi-dimensional teams of volunteers and stakeholders), enable the community to identify *its own* priorities, and help it to explore solutions. This is so even if communities do not put floods or malaria at the top of *their* priorities. If a donor grant earmarked for disaster risk reduction causes you to work with a particular community, and you dismiss (or downplay) priorities that community members set (such as education, water or livelihoods), you are not respecting the principle of impartiality. When it addresses resilience, your National Society team needs to bring appropriate skills: an open mind, problem-solving expertise, and readiness to invest in systems thinking, bridging and partnership. These are new resilience services for National Societies.

Remember that the three types of approaches featured in Figure 7 (Stage 2) are interlinked and complementary. When you adopt an integrated approach, you may subsequently find it necessary to explore one sector more deeply (see Table 12 for links to in-depth sectoral assessment). Once you have completed an integrated or holistic in-depth assessment, later initiatives can draw on it for baseline data and for comparison.

28 See footnote 10

Table 12. In-depth community assessments.

Characteristics of a resilient community	In-depth assessments and related programmes available in the Red Cross Red Crescent
1. Knowledgeable about risk	VCA. Start here: http://www.ifrc.org/vca .
Healthy	Community Based Health and First Aid (CBHFA: Module 3): http://www.ifrc.org/en/what-we-do/health/cbhfa/toolkit/
Can meet its basic shelter needs	Participatory approach to safe shelter awareness (PASSA, Module Y). http://www.ifrc.org/PageFiles/95526/publications/305400-PASSA%20manual-EN-LR.pdf
Can meet its basic food needs	Food Security Assessment. http://www.ifrc.org/Global/Publications/disasters/food_security/fs-assessment.pdf
Can meet its basic water needs	Participatory hygiene and sanitation transformation (PHAST, Steps 1-3). http://www.ifrc.org/Global/Publications/Health/water-and-sanitation/WatSan-Software_Tools.pdf WatSan Assessment Tools. http://watsanmissionassistant.wikispaces.com/Assessment+Tools
2. Is socially cohesive	'Do No Harm' context analysis (political economy). http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools/better-programming-initiative/
3. Has economic opportunities	Livelihoods programme assessment (Section 5). https://fednet.ifrc.org/PageFiles/97001/IFRC%20Livelihoods%20Guidelines%20GB%20FINAL.pdf
4. Has well-maintained and accessible infrastructure and services	Rapid market assessment (Module 2). http://rcmcash.org/ Cash-transfer programming (Module 3 on assessment). http://www.ifrc.org/global/publications/disasters/finance/cash-guidelines-en.pdf Post-disaster community infrastructure rehabilitation and reconstruction guidelines (Section 2.2 on assessment). http://www.ifrc.org/PageFiles/71111/PostDisaster_Infrastructure-Guidelines.pdf
5. Can manage its natural assets	Ecosystems and disaster risk reduction (Eco-DRR). Consider: https://iversity.org/en/courses/disasters-and-ecosystems-resilience-in-a-changing-climate American Red Cross, 2010: Green recovery and reconstruction Toolkit. http://reliefweb.int/sites/reliefweb.int/files/resources/GRRT_-_Toolkit_Guide_0.pdf OCHA, Humanitarian action and the environment. http://www.ifrc.org/PageFiles/95755/B.f.01.%20Humanitarian%20action%20and%20the%20environment_OCHA.pdf
6. Is connected	Red Cross Red Crescent internal policies. http://www.ifrc.org/en/who-we-are/governance/policies/ ODI, Measuring influence of policy. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6453.pdf IFRC disaster law database. https://www.google.com/maps/d/viewer?mid=1xr9uo9VsTpKmbbANVlsU29vHxrE

Reference sheet L: Threat-specific assessment

The IFRC is developing and piloting several specific threat measurement tools. One of these is a flood resilience measurement framework prepared by an interdisciplinary alliance of five organizations: Zurich Insurance Group, the IFRC, Practical Action, the International Institute of Applied Systems Analysis (IIASA), and the Wharton Risk Management and Decision Process Center. Drawing on skills and expertise from the public, private, and humanitarian sectors, the Alliance aims to advance knowledge, develop expertise, and design strategies that will improve communities' ability to deal with floods.

Looking at the origins of resilience and considering the many models already developed to assess resilience, the Alliance partners chose to combine them in what they call a '5C-4R community-based flood resilience measurement framework'. The '5Cs' are the five forms of capital (human, social, physical, natural and financial) set out in the sustainable livelihoods framework of the UK Department for International Development (DFID). They are complementary resources or assets that sustain and improve community wellbeing. The '4Rs' are drawn from a model developed by the Multidisciplinary Center for Earthquake Engineering Research (MCEER) at the University of Buffalo (United States). This model states that four properties determine the resilience of a system: robustness, redundancy, resourcefulness, and rapidity. For instance, a physical asset such as a community centre that can be used as a temporary classroom during floods adds redundancy to a system and can be considered a source of resilience. The flood resilience framework developed by the Alliance defined 'sources of resilience' for each form of capital.

To measure resilience, the Alliance partners adapted a tool used by Zurich Insurance to assess risk. The technical risk grading standard (TRGS) facilitates data analysis and assessment of a community's resilience to flooding. The tool combines quantitative and qualitative data based on sources of resilience. When these have been scored, actions to enhance resilience can be identified with assistance from trained resilience assessors. The flood resilience measurement tool is currently being tested in Haiti, Indonesia, Mexico, Nepal, Peru, and Afghanistan. (For more information about the tool, visit: <https://www.zurich.com/en/corporate-responsibility/flood-resilience/measuring-flood-resilience>)

You are warned not to focus prematurely on one hazard. An experience from Nepal shows why. In 2014, a community there was in the middle of rolling out the Zurich flood risk tool pilot when it was struck by the very destructive earthquake of that year. Resilience efforts should consider all forms of risk, as this guide has underlined, on the basis of a multi-hazard, multi-threat assessment led by community members themselves. Subsequent assessments and actions may focus on specific hazards, but the community must always identify and plan to address all sources of risk.

Reference sheet M: Sampling in integrated risk assessment

As you engage and connect (Stage 1) and start your assessment (Stage 2), you will discover some important differences in the community. As you do so, you will need to help the community to capture its different voices in a way that permits comparison. One way you can do this is through your choice of sampling. A sample is a subset of a whole population, information from which can enable accurate conclusions to be drawn about the whole population. Sampling (the process of selecting a sample) is necessary whether data employ random (probability) samples for quantitative methods (such as a survey) or purposeful (non-random) samples for qualitative methods (such as interviews or focus groups). Sampling is a technique that makes it possible to identify a representative subset of a population when you cannot communicate with all its members.

Purposive sampling occurs when you knowingly determine and select groups from whom you need data. Purposive sampling involves participants who are selected with a specific purpose in mind, not randomly. One purpose that aligns perfectly with Red Cross Red Crescent values is **diversity sampling**. This technique aims to capture the widest relevant diversity in a given community, thereby ensuring that all voices are heard. The first step is to establish what diversity exists in the community. To do this, identify groups that are less visible and more marginalized early in the data collection process. These might include women, immigrants, youth, the elderly, people with disabilities, or ostracized groups (such as castes).

If you are conducting a more formal quantitative survey, you may use **stratified sampling** to select participants at random from each of the strata or sub-groups you wish to survey.

You can also break your data collection into groups by applying the same method or tool with identified sub-groups separately. A seasonal calendar, for example, will look quite different if you first ask fishermen to describe their year and then ask women farmers. While it is not always necessary to repeat each session completely with every different group, it is important to capture an appropriate range of voices, giving particular attention to those who are most vulnerable.

Sampling may sound demanding, but it is at least as important for qualitative as for quantitative methods. You need to develop a thoughtful sampling strategy (method and tool) for every data collection session you conduct. You will also need to be able to convince others that those who provide your primary data accurately represent the groups or perspectives you are interested in.

For more technical support see IFRC, *Project/Programmer Monitoring and Evaluation Guide* (2011), pp. 36-38, Annex 2 of which lists other useful resources.²⁹ IFRC's Rapid Mobile Phone-based (RAMP) survey (2012) provides valuable guidance, both on using mobile phones to collect data and on practical sampling and surveys.³⁰

²⁹ At: <http://www.ifrc.org/Global/Publications/monitoring/IFRC-ME-Guide-8-2011.pdf>

³⁰ At: <http://www.ifrc.org/ramp>

Reference sheet N: Prioritization

31 At: www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

32 Many resources can help you conduct problem analyses. They include the VCA Toolbox, MRS4 (Problem tree analysis at: www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf), PASSA Activity 3 (Frequency and impact of hazards at: <http://www.ifrc.org/PageFiles/95526/publications/305400-PASSA%20manual-EN-LR.pdf>), and the Project/ Programme Guidance Manual <http://www.ifrc.org/Global/Publications/monitoring/PPP-Guidance-Manual-English.pdf>.

33 At: https://www.google.com/url?q=http://www.ifrc.org/Global/Publications/disasters/guidelines/guidelines-for-emergency-en.pdf&sa=U&ved=0ahUKewiK2pbwkb_RAhVeF8AKHXkfA5cQFggEMAA&client=internal-uds-cse&usq=AFQjCN GUzcZvm8N2DLAq0T2yBUeqCDYwfA

Prioritization can be done in a number of different ways, most of which include ranking. (For more information on ranking, see the Method Reference Sheet (MRS) 2, of the IFRC VCA Toolbox and reference sheets, 2007, p. 138-142.³¹).

- **The threat component.** Put each threat that community members propose on a card and ask a group to work together to separate threats that are symptoms from threats that are root causes of a problem.³² This exercise can also serve to validate data that had been collected earlier, by triangulation or in focus group discussions.
- **The capacity/resource (vulnerability) component.** Ask members of the community to list capacities and resources, then sort them by dividing them into categories (positive and negative, urgent and important, etc.) or adopting any system that is appropriate. It may be useful to pair rank statements (see more information on pair-wise ranking in the IFRC Guidelines for assessment in emergencies, 2008, chapter 7.1.5, p 57³³). Independent scoring that can be merged later or averaged can also be useful.

You are recommended to organize threats and capacities in terms of resilience characteristics and then to determine, in relation to each characteristic, whether each proposal or statement is positive (a strength) or negative (a gap or threat).

At the end of the prioritization analysis, the community should have named (and prioritized) up to five distinct and very important threats as well as an unlimited number of resources (assets) or resources that are lacking (vulnerabilities).

Reduce your data to a set of statements that you can trace directly back to your evidence (via the Triangulation Star or Matrix). Prioritize those statements to produce five main threats and a list of possible resources which the community can draw on.

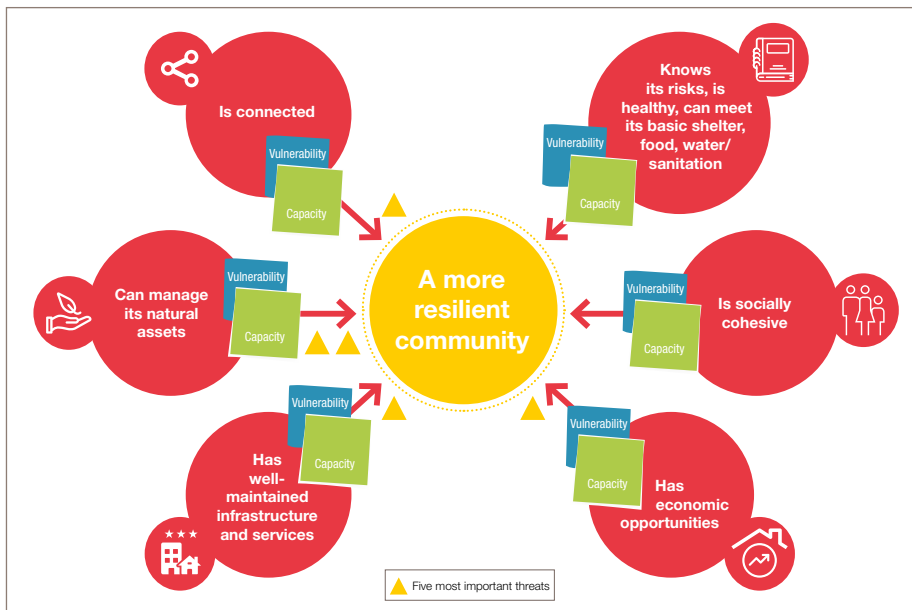
Reference sheet O: VCA resilience star

What is the Resilience Star? The Resilience Star is a participatory tool that is used to produce and organize data about vulnerabilities, capacities and risk, and present that data visually in a manner that promotes community ownership and planning. It is designed to advance the VCA Enhancement Action Plan and operationalize the Framework for Community Resilience.

What does the Resilience Star mean? The circle in the middle represents a resilient community. The points of the star represent the six characteristics of community resilience. The notion of security has been added to **social-cohesion** and the notion of policy to **connectedness**. (Neither value was included in the original FCR.) The other symbols on the star show capacities, vulnerabilities and threats that the community identifies and prioritizes: green cards (that communities complete) indicate resilience capacities; yellow cards indicate vulnerabilities; and black triangles (placed where they have the most direct impact) indicate principal threats.

How to use the Resilience Star in a participatory assessment process (see Figure 8). The Resilience Star may be used in many ways; you can develop your own method. For example, you can conduct a holistic enhanced VCA and use the Resilience Star as a **tool of analysis** to organize your data and draw conclusions. Or (as described in Stage 2 of the Road Map), the star can act as a starting point: used as an **indicator development and scoring tool**, it can help a community to describe its resilience and develop indicators for each characteristic.

Figure 8. Example of a resilience star



In both cases, the star shape, placed on a wall or the ground and painted or drawn on several pieces of paper, introduces participants to the concept of resilience. If the community prefers, the star can also be presented as a simple table. Participants write on black triangles the most important threats that they have identified in previous steps, and place them around the star. They then consider those that are (or are likely to be) exacerbated by climate change or other factors, and highlight them with an exclamation mark.

Using the Resilience Star as a tool of analysis. The participants review their vulnerability to the most important threats. They summarize these in a few words or symbols on yellow cards (one card for each), and place them on the relevant point of the resilience star (not in the centre circle). Participants then repeat the process for capacities, using green cards (one for each capacity), and place these closer to the centre. Then they separately brainstorm each of the capacities that help them build resilience, in relation to each characteristic.

Collectively, participants then consider each point, deciding how to evaluate their current situation with respect to their resilience. If they have many vulnerabilities and few capacities, they make a blue mark somewhere towards the outside of the star. If they have significant capacities, they make a mark nearer the centre of the star.

Jointly, then, participants consider what needs to be done to get the blue mark to move closer to the centre of the star. They may decide to acquire additional capacities or to reduce their vulnerabilities. Ideas are drawn from the problem and solution trees and are written on a card of any colour (other than blue or yellow). When all lines have been considered, the first stage of the action plan (actions) is ready. It can then be assessed in terms of priorities, opportunities, responsibilities, funding, etc.

When done for the first time, this exercise creates an image of the community's resilience baseline. Monitoring and evaluation processes will create new markers to show how much progress has been achieved and what remains to be done. Monitoring may also identify emerging vulnerabilities and threats, or new capacities. These should also be taken into account when planning further actions.

Reference sheet P: Smart and spiced indicators

In the past, it was common to speak about ‘SMART’ indicators. When **strengthening resilience, it is also important to develop ‘SPICED’ indicators.**

The acronym ‘SMART’ denotes the international standard for traditional, typically quantitative indicators. This states that indicators should be:

- **Specific** about what is being done, and for whom.
- **Measurable** in terms of progress made and achievements.
- **Achievable** – attainable and action-oriented, taking into account the community’s capacities and potential support from outside stakeholders.
- **Relevant** – responding to priorities identified by the community.
- **Time-bound** in terms of stating when they are to be achieved³⁴.

To promote resilience, seek SPICED indicators as you work through the list of descriptions, organized by characteristic. (See Tip 9)

Tip 9. What’s different about indicators for resilience?

While there are no set rules for selecting indicators, National Societies can refer to several guidelines when they assist and enable communities to identify their own indicators.

The **SPICED** approach encourages communities to select indicators based on qualities that closely match the characteristics associated with resilience. ‘SPICED’ stands for:

- **Subjective** – contextualized, will lead to owned indicators and processes.
- **Participatory** – inclusive.
- **Interpreted** by the community.
- **Communicable** to stakeholders.
- **Empowering** of the most vulnerable.
- **Disaggregated** – see analysis below.

Source: http://betterevaluation.org/en/toolkits/equal_access_participatory_monitoring

Reference sheet Q: Indicator catalogue

Table 13 below lists standard indicators by characteristic of resilience that may be useful when the community converts its contextualized image of local resilience to measurable concepts. It is strongly suggested that you do not start Stage 2 with this list, but allow the community to describe what it knows and how it identifies risks before mentioning it. The indicators in the table are not in any way exhaustive; they are derived from a variety of sources. In particular:

- The Humanitarian Response Indicator Registry. (In normal text; response-only indicators are not included.) Exact calculations can be found at: <https://www.humanitarianresponse.info/en/applications/ir>.
- Zurich Flood Resilience Indicators. Underlined when not duplicated by the Humanitarian Response Indicator registry. Most have been reformulated to apply generally to all threats.
- Others (for example, the IFRC Shelter Safety handbook). (In italics.)

³⁴ At: http://betterevaluation.org/sites/default/files/EA_PM%26E_toolkit_module_2_objectives%26indicators_for_publication.pdf

Table 13. Catalogue of indicators

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
<p>1. Community is knowledgeable about risk</p>	<ul style="list-style-type: none"> • The number of individuals in the community who are trained in first aid and have sound knowledge. • The number of individuals with a sound understanding of appropriate options for reducing threats, their limitations, longer term impacts, and the feasibility of actions in response. • The number of individuals with a sound understanding of what drives exposure to threats, their increase, and management options. • The number of individuals who have an accurate perception of the location of hazard sites. • The level of awareness and accurate knowledge about evacuation and safety in the context of rapid-onset threats. • The level of accurate knowledge about appropriate options to minimize threat-related damage to housing and livelihood assets. • The level of perception of trends in risk drivers (land use, building types, environmental degradation and regeneration, climate change...) and an accurate understanding of how those drivers affect risk. • The number of individuals who understand the long-term impacts of using various coping strategies, and who would like to use non-erosive strategies. • The level of understanding of the impacts of waste management on health (including outside the community), particularly during floods. • The existence and degree of community engagement with external services that run early warning systems (including credible seasonal forecasts) and the reliability of those relationships. • The number of threat-related simulations conducted in coordination with relevant external services in the last 5 years. • The number of campaigns to raise awareness of threats organized in the last 24 months. • The percentage of community members who report that they accessed understandable, timely and actionable information on flooding in the last 24 months. • The level of influence, and knowledge of risk, of community leaders. • The percentage of educational personnel trained in disaster risk reduction, psycho-social support, emergency life skills, etc. • The percentage of children (3-18 years) who access education programmes that feature disaster risk reduction, emergency life skills, health, hygiene and nutrition, psycho-social care, peacebuilding and conflict resolution, etc. • The presence/number of CBO leaders trained in disaster risk reduction and planning. • The scale and capacity of local government-led response plans, and their ability to meet the needs of the whole community in its diversity. • The visible efforts of local government across sectors to use knowledge, innovation and education to build a culture of preparedness, safety and resilience. • The percentage of surveyed community members who are able to articulate strategies to prevent physical violence and other harmful practices. • The percentage of surveyed community members who are aware of the dangers and consequences of the worst forms of child labour. • The percentage of community members who can describe at least one action to prevent or report on child recruitment.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
Community is healthy	<ul style="list-style-type: none"> • The number of community health workers. • The number of functional health facilities providing selected relevant services. • The number of non-functional health facilities. • The number of outpatient consultations per person per year (attendance rate or consultation rate). • The number of consultations per clinician per day. • The coverage of measles vaccination (%). • The coverage of DTP3 in < 1-year-old (%). • The percentage of births assisted by a skilled attendant. • The percentage of deliveries by caesarean section. • The incidence of selected diseases relevant in the local context, including malnutrition (GAM/SAM). • The case fatality ratio (CFR) for most common diseases, including malnutrition. • The percentage of households possessing one or more effective insecticide-treated mosquito nets. • The percentage of pregnant women, children under five and other vulnerable people sleeping under effective insecticide-treated mosquito nets.
Community can meet its basic shelter needs	<ul style="list-style-type: none"> • <i>The number of inhabitants per square metre of dwelling.</i> • <i>The existence and enforcement of appropriate land use and urban planning legislation (flood zoning, urban proximity and density, location of settlements away from coastal areas where tidal surges occur, etc.).</i> • <i>The existence and enforcement of building codes. (Are buildings designed to enable a rapid exit from all rooms, are doorways strongly built, etc.)</i> • <i>The existence of appropriate communal evacuation shelters, which are accessible and adequately stocked with supplies.</i> • <i>The percentage of households who are aware that they need to reinforce the walls of houses in earthquake zones, and have the capacity to do so.</i> • <i>The availability of sandbags at household level to protect houses from flooding (due to cyclones, etc.).</i> • <i>The presence of trained fire fighters, a fire alarm warning system at community level, strategic water points, and firefighting equipment.</i> • <i>The frequency of evacuation exercises in settlements, apartments and public buildings.</i> • <i>The percentage of households who know how to remove or secure loose materials that may be carried away by strong winds and cause damage.</i> • <i>The percentage of households who know how to respond to storm warnings, and are familiar with evacuation procedures.</i>

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
Community can meet its basic food needs	<ul style="list-style-type: none"> • The community continues to have access to food after disasters: neither its supply or quality (nourishment, calorie intake) are diminished. • Food consumption patterns: meals per day, diet diversity, intra-household food distribution. • The availability of key commodities in markets. • The extent of staple food reserves (the number of days that stocks will be sufficient to feed the population). • Production compared to the previous year's harvest, by commodity. • The ability to plant for next season (seeds, tools, etc.). • Herd sizes. • The incidence of animal disease outbreaks. • The availability of a sufficient suitable daily water supply and fodder for livestock. • The capacity to prepare food safely. • Food sources. • Key food and non-food commodity prices. • Coping strategies. • The main sources of income. • Expenditure patterns. • Ownership of productive assets. • Access to functioning markets. • The number of people trained in (for example) best nutrition practices, land conservation, etc.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
Can meet its basic water needs	<ul style="list-style-type: none"> • The percentage of the community that is aware of actions that should be taken during disasters to ensure that drinking water is clean. • The presence of a functioning community waste management plan. • The community has access to water, sanitation and waste disposal facilities from several reliable sources; during disasters water is potable and facilities are not damaged or contaminated. • The quantity of water consumed per person per day for drinking, cooking, hygiene and laundry. • The percentage of households in which only safe water is used for drinking and cooking. • The average time required (in minutes) to make one water collection journey, including travel in each direction and queuing. • The percentage of households with access to a source of safe drinking-water. • The availability (daily) of sufficient suitable water and fodder for livestock. • Access to an appropriate amount of safe water. • The percentage of schools/learning spaces which have adequate safe water for drinking and personal hygiene. • The percentage of schools/learning spaces that possess adequate hand washing and functioning solid waste management facilities. • The percentage of schools/learning spaces that have adequate male and female WASH facilities. • The presence of faecal-oral diseases. • The extent of acute malnutrition and food insecurity. • The density of settlement (m² of total site area per person). • The percentage of households possessing soap. • The percentage of households that store, prepare and consume food safely. • The percentage of households that possess at least one clean and appropriate water container for drinking water. • The percentage of households that have appropriate water treatment supplies and equipment. • The percentage of men, women, boys and girls (disaggregated) who used a toilet when they last defecated (or whose faeces were disposed of safely). • The percentage of men, women, boys and girls (disaggregated) who wash their hands with water and soap after contact with faeces. • The likelihood of a critical drop in the quantity of water available per day within the next month. • Access to appropriate bathing and laundry facilities. • The presence of human faeces or solid waste on the ground. • The average number of users per functioning toilet; the percentage of households with access to a functioning toilet. • The percentage of toilets that are clean.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
Can meet other household needs (education, electricity, gas, phone...)	<ul style="list-style-type: none"> • The percentage of households that value both girls' and boys' education highly. • The percentage of households whose members attend or have completed primary school. • The community has access to energy from several reliable sources, which are portable, are not damaged, and remain free from contamination during disasters. • The number and proportion of school-age children attending school. • The number of functional schools/learning spaces. • The number of teachers, and facilitators, volunteers or peer educators. • The number of children receiving an education in schools considered safe for boys and girls of different ages. • The percentage of schools/learning spaces that meet minimum safe construction standards. • The percentage of schools/learning spaces accessible to children who have physical or learning disabilities. • The percentage of schools/learning spaces with active recreational and sports education programmes for boys and girls. • The average cost of shelter-related energy/fuel. • The number and percentage of affected households able to cover their energy needs. • The number of persons/households/communities who have received training in energy/fuel use. • The number of households with access to basic community infrastructure not covered by other sectors or clusters: police stations, town halls, administrative buildings, schools (if not in education), playgrounds, parks, etc.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
2. Is socially cohesive	<ul style="list-style-type: none"> • The percentage of community members who report being part of an informal or formal social network that organizes mutual assistance. • The existence of formal or informal networks/channels through which community members autonomously exchange information on a regular basis. • The percentage of community members who feel extremely safe in the community at all times. • The percentage of community members who report willingness to volunteer for activities related to threat management. • The percentage of community members who feel personally responsible for preparing, responding, and recovering from threats. • The percentage of community members who report they belong to a structure relevant to threat management; or the number of formal or informal community structures in which community members participate in threat-related activities. • The number of community members who regularly participate actively in threat-related initiatives or who have volunteered in the last 24 months through formal or informal structures; or the percentage of community members who volunteer or are willing to do so. • The percentage of community members who have confidence in external services responsible for disaster response and recovery. • The percentage of community members who collect information during emergencies. • The percentage of community members who feel safe when they are at home, walk alone in the street, or take public transport after dark. • The percentage of community members who report that they feel most people can be trusted. • The percentage of community members who have confidence in the police force. • The percentage of community members who think lost assets would be returned to them if found by someone else. • The existence of a representative community structure dedicated to risk management and decision-making. • The number of meetings hosted by a representative risk management body in the last 12 months. • The percentage of community members who report they are satisfied with the set-up and operation of their risk management body. • The percentage of community members from vulnerable or marginal groups who sit on, or participate in, risk management or decision-making bodies. • The percentage of community members who lack personal identity or other civil documents. • Observed or reported changes in women's and/or girls' mobility patterns. • The percentage of households headed by women. • The percentage of children who live alone, separated from their caregivers; the percentage of households headed by children. • The percentage of households that report they live in hazardous areas, or close to hazardous items.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
2. Is socially cohesive	<ul style="list-style-type: none"> • The percentage of persons with a physical or mental disability. • The percentage of households that indicate they are deliberately excluded from access to certain services because they belong to a specific minority. • The number of persons who are reported missing, abducted, arbitrarily detained, or forcibly recruited into armed groups or other forces. • The percentage of households that report they are subject to or at risk of violence, gender-based violence, torture, or cruel and degrading treatment or punishment. • The percentage of communities that have functioning safe spaces for children; and/or for youth. • The percentage of surveyed communities that indicate that children are involved in the worst forms of child labour. • The number and percentage of surveyed persons or communities that report the occurrence of forced evictions.
3. Has economic opportunities	<ul style="list-style-type: none"> • The percentage of households who possess a financial buffer that is expressly for recovery and is adequate to cover expected losses. • The percentage of households that are able to cover their health, education and nutrition needs on a daily basis. • The existence of local (or regional etc.) flood emergency funds, with known distribution channels and a disbursement record that is considered equitable. • The percentage of local businesses that have access to credit or can fully maintain their operations without laying off employees or cutting production. • The percentage of households or businesses that have access to risk insurance. • The percentage of households that have one or more strategies that enable them to maintain their livelihood or income stream. • The existence of statutory and budgeted social safety nets that households can access efficiently, that are solvent, and that have a dedicated source of funding (such as payroll taxes, etc.). • The existence of statutory and budgeted mitigation project, conservation or infrastructure funds that households can access efficiently. • The availability of funding or investment vehicles for economic development projects that the community can access with minimal bureaucracy. • The number of households that have access to formal or informal financial services. • The number of households that include owners of micro-enterprises who have received skills training. • The number of households without livelihood assets. • The percentage of the economically active workforce that is employed on (a) a short term or temporary basis and (b) a long term and permanent basis.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
<p>4. Has well-maintained and accessible infrastructure and services</p>	<ul style="list-style-type: none"> • Healthcare, education, etc. facilities are built robustly, located away from flood zones, and can be accessed safely in protected ways even during floods, etc. • The existence of appropriate infrastructure (including emergency equipment) that is designed to protect lives during emergencies and is open to all groups. • The existence of a responsive, timely, credible, accessible early warning system, with a comprehensive management plan, that provides clear instructions linked to an enabling environment (good forecasting by the hydro-meteorological services). • The existence of formal, local emergency services; the number of threat-relevant trainings delivered to personnel in the last 24 months. • The percentage of local emergency services personnel trained in flood response in the last 24 months. • The existence of response and recovery mechanisms coordinated with external response services (for example by written agreements). • The degree to which threat-related external services consult and involve the community. • The existence of an (appropriate) feedback and complaints mechanism in relation to external disaster services. • The existence of appropriate local early warning systems and adequate links to national early warning systems. • The percentage of community members who report that they have confidence in (threat-related) information provided by local authorities. • The existence of local, up to date, certified or peer-reviewed standard operating procedures for threat-related interventions and contingency plans. • The percentage of community members who report that they have confidence in the local health, education, food, water, waste and energy systems. • The percentage of community members who report that the local health, education, food, water, waste, and energy systems are equitable. • The existence of structural or non-structural measures to protect against flood: levees, river bank stabilization, adequate vegetation, populations location, physical protection of most community physical structures and the communal infrastructure, etc.

Characteristics of a resilient community	Indicators that may line up with the community's description of local risks and its own resilience
5. Can manage its natural assets	<ul style="list-style-type: none"> • The percentage of community members who can accurately describe the relationship between environmental resource use and threats such as flooding in their community (upstream and downstream). • The existence of an up-to-date, certified or peer-reviewed village or district flood management plan. • The percentage of community groups who report that they are involved in and satisfied by the design of the plan. • The existence of a certified or peer-reviewed watershed/basin management plan. • The existence of risk-informed national environment legislation. • The level of awareness among local authority officials of threat-relevant environmental regulations. • The degree to which community members are aware of and accept threat-relevant environmental regulations. • The existence of a community-driven, certified or peer-reviewed plan for the sustainable management of local natural resources; the degree to which it takes account of threats. • Integrated flood-risk management (IFRM) is in place and fully functional at basin scale. • Natural forests, vegetation and wetlands (habitats) are protected and maintained as a recognized component of the landscape. • Natural habitats are well represented from the top to the bottom of the river basin and ecosystem services operate across the entire basin. • Local critical natural habitats in the community are actively managed and preserved. • Production practices that depend on natural resources (farming, livestock, forestry, fisheries, aquaculture, gravel extraction) respect natural resource carrying capacities and demonstrate best practice. • A biodiversity action plan or strategy recognizes the contribution of natural habitats.
6. Is connected	<ul style="list-style-type: none"> • The percentage of community members who fully understand their rights and responsibilities, and those of government and other institutions, in relation to risk management. • The percentage of communities represented in established watershed/basin flood structures. • The number of flood-relevant, multi-sectoral partnerships at the level of the water basin. • The existence of a national policy and plan to develop and enhance the production of relevant climate information. • The number of national policies that explicitly refer to the risk management of floods or other specific threats. • The existence of threat-specific legislation. • The percentage of community leaders who are aware of the existence of threat-specific legislation. • The presence of housing developments in high-risk areas. • The percentage of community members who report that corruption is a barrier to equitable and effective local enforcement of threat-related regulation. • The community has communication tools that continue to operate in disaster conditions. • Legislation requires and resultant practice ensures that all forms of habitat conversion for the purpose of promoting livelihoods or development trigger compensatory (offsetting) activities of comparable scale in the watershed.

Reference sheet R: Triangulation

Triangulation is an important technique for processing collected data. It checks the validity of your findings and starts to build a knowledge base. Good risk managers constantly triangulate new data. Just as a triangle has three sides, you typically need at least three sources that converge on roughly the same finding before you conclude that information is strong, meriting the status of 'knowledge'. Weight of evidence suggests that, if we examine a given issue from different points of view and independently reach the same finding in each case, it is reasonable to conclude that the information is more than likely to be 'valid'. Triangulation was first used to identify a fixed point using the laws of trigonometry. Widely used in ancient Greece and Egypt, it became the basis of maritime navigation and later for Global Positioning Systems (GPS), now a common component of internet and cell phone technology. In the late 1970s, triangulation re-surfaced in sociology as a way of comparing qualitative data from different sources. Now an industry standard in mixed methods research, it should be a fundamental part of your risk assessment.

The four types of triangulation you may want to consider are described in Table 14. The most common are data triangulation (comparing responses across key informants or respondents) and method triangulation (comparing findings across collection methods). No matter the type, triangulation is a structured way to compare findings and identify divergences, convergences and gaps.

Table 14. Triangulation

Type	Example
Data triangulation - across sources of data. Environmental triangulation (a related version) alters a set of environmental factors to see whether findings remain the same.	Compare answers from three different key informants, or four survey respondents, or compare the responses of two comparable focus groups of men and women. Compare an assessment in summer with an identical one in winter.
Method triangulation - across multiple methods.	Compare the findings of a focus group with the findings of a survey.
Investigator triangulation - across assessors.	Compare the conclusions of two independent researcher teams who asked the same scientific question and used the same methods.
Theory triangulation - across theories (often from different disciplines).	Compare the conclusions of independent researchers who ask the same scientific question but use <u>different</u> methods.

If findings diverge (for example, when measured by different methods), you will need to follow up, to be certain you understand why and to correct your results if they prove false. By contrast, if findings converge (and different methods repeat them), it strengthens confidence in the results.

The Triangulation Matrix in Figure 16 combines perspectives and characteristics and compares them across collection methods to record a community's story of risk and resilience. In this story, each characteristic of resilience is a chapter, and each method an actor with a compelling perspective. In each cell of the table, you record full sentences of rich detail that tell the story. In the survey and observation columns, you insert summary statistics (the quantitative dimension of the story).

Figure 16. Triangulation matrix

Source/method		KII-1	KII-2	FGD	O	S	Other methods	Secondary data
Characteristics								
Knows their risks	General							
	Temporal trends							
	Geographic trends							
	Socio-economic trends							
	Systems thinking							
Is healthy	General							
	Temporal trends							
	Geographic trends							
	Socio-economic trends					here		Gaps or misunderstandings
	Systems thinking							
....	General							
	Temporal trends							
	Geographic trends							
	Socio-economic trends							
	Systems thinking							

Reference sheet S: Processing and analysing risk data

This sheet provides guidance on how to process evidence the community has collected.

Comparing what you see with what you hear. Every person involved in an assessment needs to individually nurture and continually employ his or her **observation skills**. These help the participants to process what they hear, and capture discrepancies and areas of convergence. During focus group discussions and surveys, for example, one team member should always be asked to observe and take guided notes on what he or she sees: body language, interactions, relative positions, expressions of power and social mores, etc. These observations are qualitative evidence that provide context and contribute to the processing of assessment results.

Processing data at the end of each group session

You have brought people together in a focus group, for example, to explore vulnerability, threats or a given characteristic of their resilience. If you have prepared well, you know exactly what the aims were, and whether or not you met them. (And, if aims were not met, you should have a solution or back-up plan ready to hand.)

Rather than summarize the results yourself, however, give participants the opportunity to **draw their own conclusions**. The last question you ask should be open-ended: invite them to say what they remembered or learned from the session. Ask, for example: “If you tell your spouse or friend about this meeting, what will you tell him or her?” Even if they do not mention content (and some will), you will receive strong feedback on how participants perceived the process. Every group session needs to end by giving the participants a chance to express their own conclusions. This is a critical part of data processing in the community.

Example. Community level processing

To learn about the community, we often conduct a VCA and often run simultaneous sessions with two separate groups to map threats and adverse events and vulnerability and capacity. At the end, we ask a member of each group to present its map to the other group: the threat group presents its map to the vulnerability/capacity group and vice versa. After the presentations, members of one group can ask questions or point out things that may have been forgotten; this type of exchange is ideal and improves the results. At the end, there is a golden opportunity to ask the full or combined group to imagine the two maps overlaid, one on the other. Ask: “What does this overlay point suggest to us...? Where is the greatest risk?” You can then ask: “Why is the risk highest here, or here...?” (This question also serves to confirm their understanding of the two factors of risk.)

Community-level processing also occurs when group sessions use ranking, tabulating or comparisons. As the session draws to an end, it is always useful to invite different participants to help tally, sum or articulate the comparisons that emerged during the discussion and are portrayed on the flip charts or other instruments used. (‘X is the largest of the set’, or ‘Y was more common before 1995’, for example.) A good facilitator will then always ask: “Why is that so?” or: “Why does that make sense to you?” A good note-taker on the assessment team should carefully record what the participants say. This is valuable new evidence on community perceptions of risk.

- Before you process and analyse your data, **take stock of the findings**. See where they converge or diverge before drawing any conclusions about trends. Fill in gaps that have been noted.
- Allow ample time to process your data. Rushing through processing will always cause you to miss many important connections.
- To properly process the data, designate one team member from the community to manage the evidence base. S/he will need to know where pieces of evidence are, and the format they are in, etc., and should obtain key pieces from team members once they have been discussed, to archive them carefully.
- It is never too late to process more. Feel able to return to the data to test an idea that occurs to you later or query a conclusion. Do this even if data collection and processing have taken place and actions have started. The most important thing is to learn from our errors, mistakes or wrong impressions. Admit when you go astray and take matters forward from there. Both quantitative and qualitative data require analysis. It is more challenging to analyse qualitative than quantitative information because it contains more words, which have multiple meanings and obey fewer rules.
- Data disaggregation may not be feasible unless you have planned your collection process in a way that enables you to capture the different aspects of risk stories that you want to disaggregate. Where it is possible, go back and collect additional data if you lack evidence of the right sort. Disaggregation is a critical dimension of analysis, because it gives a voice to key groups that otherwise may be marginalized.
- **Reduce data to key findings**. This is one of the hardest and most important steps of assessment. The challenge is similar to writing a one-page summary of a hundred page report. Don't underestimate the time required. Finding a structure (like the structure of a Triangulation Matrix) is critical to successful summarizing.
- Make concluding statements and keep notes, notably of the original ideas that participants expressed in their own words, because then the community can recognize themselves and their own thinking in the final result. Add interpretive qualifications (perhaps in italics) so that those reading these can see that they have not yet been reviewed by the community. What the community does not own or identify with should be discarded (or set aside for later work).

Organizing the data

It may be easier to organize and process some data at your branch office. If you do so, members of the community and volunteers should continue to participate fully.

- After an intensive data collection process, **organize and process your data**. You will have handwritten notes of every session recorded by your assessment team. You will have the flip charts as well: these should be typed up in a format that reminds you of everything that was said and felt during the session. You may have survey and observation forms that need to be keyed into a computer. You may also have data that have already been entered or saved in cameras, audio recorders, tablets or telephones. At regular intervals, the team should also have completed a triangulation matrix for each community. Each of these pieces of evidence should be inventoried and their originals kept in a safe place.

- **Data-enter your quantitative data** (if it is not automatically captured by a tablet, SMS phone or other technology). Number your completed survey or observation sheets and create a data entry mask (for example, in MS Excel) in which to key them in. When this has been done, clean all the data (error check by looking for logic errors, outliers or empty cells, etc.). Check the numbered surveys or sheets if you see that an error was introduced during data entry or data-capture. When you are comfortable with the quality of your numerical data, you can develop some initial summary statistics. Use a spreadsheet programme to calculate the **sums, frequencies and averages of your quantitative data**, as appropriate.³⁵
- If you have not been able to carry these summary statistics into your triangulation matrix, do so now. This step will offer you a chance to compare the new facts with the qualitative findings, generating deeper insights. Present the numbers in full sentences to add quantitative findings to the Triangulation Matrix.
- **Qualitative data.** When you triangulated (as described above), you processed mainly qualitative data. When you deliberately noted where it converged or diverged, you applied a technique known in qualitative research as *coding*. **Coding** is a process of grouping words or phrases (and assigning them a name or code) in a manner that allows their meaning to be counted and compared. When you noted that three out of four key informants or two out of three applied methods produced the same conclusion, you coded them 'green' to show convergence. You may also have concluded, for example, that "5 out of 6 sources reported that [adversity X] was the most problematic for this community". In coding, any piece of qualitative evidence you collected can be counted, that is, converted to a quantitative form for logical analysis.
- In the VCA, Methods Reference Sheet-3 (The Wall Method) offers further ideas on processing qualitative data using triangulation.
- If you have time to process (and eventually analyse) more deeply, type up (or 'transcribe') taped interviews or focus group discussions in a document file. Such files can be coded electronically by qualitative data software. They use the same type of coding as the Triangulation Matrix, though it is more sophisticated and sometimes easier to quantify. You can also code with colours or symbols on flip charts or coloured post-its on a wall. The best processing technique is the one that works for you, in your context.

³⁵ MS Excel is proposed because it has easy-to-learn formulas and is globally the most accessible programme. More sophisticated statistical software packages (SPSS, SAS, STATA or even EPI-INFO) are able to go way beyond summary and descriptive statistics. Numerous sophisticated data analysis techniques using statistics exist, but are not the topic of this guidance. The following links provide guidance on how to use MS Excel to derive simple statistics:

http://www.nuffieldfoundation.org/sites/default/files/excel_descriptive_stats.pdf

<http://www.reading.ac.uk/ssc/resources/UsingExcelForStatistics.pdf>

<http://web.stanford.edu/group/ssds/cgi-bin/drupal/files/Guides/Using%20Excel.pdf>

<http://www.cbgs.k12.va.us/cbgs-document/research/Statistical%20Tests%20in%20Excel.pdf>

http://documents.routledge-interactive.s3.amazonaws.com/9780415628129/Chapter%2013%20-%20Using%20Excel%20for%20Quantitative%20Data%20Analysis%20final_edited.pdf

Reference sheet T: Data reduction → concluding statements

After completing a disaggregated analysis, state the main conclusions that emerge from the community's answers. List:

- The main threats or adverse events that face the community.
- The resources the community possesses to confront those threats (assets, capacities, relationships, and also vulnerabilities that weaken its resources, etc.).

Go back to the community results and make sure the details are carefully transcribed into the triangulation star or matrix, and that they also reflect the disaggregated summary of results. Review similarly the exercises you organized that inventoried local resources and relationships (in and beyond the community). Every important quantitative and qualitative finding, from each of the methods and instruments used, needs to be visible in the right place on some type of a triangulation star or matrix.³⁶

Analyse or examine your triangulation matrix to decide which trends (of those you coded green) are the most important, for inclusion in the conclusions.

Data reduce. As much as you may want to, you cannot import all the richness of your findings into the conclusions. Identify the most valid trends and the most important knowledge. This is called 'data reduction'.³⁷ Reduce your data to a few main actionable statements. Having invested so much effort in collecting and recording details, it is sometimes excruciating to replace rich detail by ten simple statements. Consider this is a moment when you really make a difference in the community, because this step will prioritize the kind of support (if any) that your National Society offers the community: an in-depth assessment, conventional programming, or the equally important role of engaging and connecting.

As the assessment team examines the Triangulation Star or Matrix, start by looking for areas in which findings converge. Make a list of all these findings, organized in terms of resilience characteristics. For each characteristic, make sure that you develop at least one conclusion that represents a threat or adverse event and one that represents a capacity (or vulnerability). See Tip 10.

³⁶ The term 'triangulation matrix' refers to any compilation of all relevant assessment findings in a central place (in an MS Excel file, on a wall, etc.), allowing a careful comparison across all methods and sources. The Resilience Star is a good tool that assists triangulation across all the FCR's characteristics of resilience.

³⁷ In the VCA (Methods Reference Sheet-3), the 'Wall method' also refers to data reduction and funnelling. www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

Tip 10. Concluding statements – characteristic 1

Characteristic: Is healthy

Threat

- Water born disease is on the rise.
- A large proportion of local crops has been destroyed in the last few seasons by excess rainfall, causing a higher incidence of malnutrition.
- Etc.

Capacity/resources (vulnerability)

- Livelihoods have not yet benefitted from crop diversification and still depend on rain-fed subsistence agriculture.
- Social cohesion is low; no visible system of sharing with neighbours exists.
- A health centre is being constructed in the community.
- Etc.

Interpret. It is important to pull out the original ideas but also to interpret them. At this point, findings can be reformulated as definitive statements (without

reference to their source, the method used, their exact expression, or minor details). What you are doing is reducing dense and colourful evidence to clear summary statements that you can readily trace back to your evidence.

When you consider **threats** and **capacity**, remember to prioritize those the community cites. Whenever possible, systematically **rephrase statements in positive terms**. Instead of saying “No community member has a relationship with the meteorology authority in the nearest town”, say “A meteorology station, currently with no direct contact to the community, is situated at a distance of X km”. Doing this will help you to link problems to resources later in the process.

Even if some statements could have been deduced before secondary data or other sources were assessed, **only add statements to the list if the evidence base confirms convergence**, on the basis of the views of community members (a minimum of three sources). The list must highlight the priorities and perceptions of the community, not those of the assessment team or National Society.

When the assessment team is convinced that nothing in the triangulation star or matrix has been missed, data reduction has been completed. Once strong concluding statements have been drafted and agreed, their prioritization is a simple and participatory task (see Reference Sheet L).

Reference sheet U: Participatory resource planning

Participatory resource planning is a process that enables various stakeholders to decide what resources are needed to implement a plan, and where they will come from. Stage 3, Step 4 of this guide explains how to generate a list of the activities that are needed to achieve an objective. The example used here addresses the objective: ‘Clear the community’s drainage canals to minimise flooding’.

Estimate the resources needed, in terms of people (manual labour), money, materials, technical assistance, services, and anything else. Creating a chart (see the example in Table 15) helps community members and other stakeholders to visualize the resources they require. The chart in Table 16 enables the community to document offers of resources and visualize the involvement of key stakeholders.

Table 15. Resources needed

Objective 1: Clear drainage canals	Labour	Money	Materials	Services	Other
Inventory canal system and mark blocked areas	10 people.	–	Maps, pens, computer,	GIS/mapping service.	
Obtain equipment	Shovels, wheelbarrows, gloves.

Table 16. Resources obtained

Objective 1	Community	Local government	Private sector	NGO / CBO	Red Cross National Society/ Branch
Inventory canal system and mark blocked areas		Mayor’s office: 2 engineers for 3 days.			
Obtain equipment			BuildFast: loan of 50 shovels.		
Involve media					Local TV reporter to attend first session.

Reference sheet V: Adaptive management

Adaptive management, adaptive co-management³⁸ and **adaptive governance** are techniques for promoting positive change. Communities and National Societies can master them. They have become key tools for resilience programming. Each relies heavily on changing behaviour by iterative learning (repeated learning, reinforced by each repetition).

Adaptive co-management emphasizes knowledge sharing by different actors, including communities and policy-makers. Adaptive governance focuses on boosting learning by sharing knowledge across levels in order to connect communities to relevant external institutions. Shared learning between actors and across levels is important for the development of new social norms and cooperation. The extent to which participation stimulates learning among different groups in society is increasingly recognized. Highly collaborative processes highlight different values about systems that are key to finding sustainable solutions.³⁹

Adaptive management is based on **learning by doing**.⁴⁰ It allows the community to experiment whenever possible. Experimental actions chosen by the community can be based on the data they have collected. Their efforts can and should be adjusted during a planned action, based on learning that arises from monitoring. Since rigid project designs do not lend themselves to changes in management, the adoption of adaptive management approaches will require donors and project managers alike to change their behaviour and expectations. As this guidance has stressed from the beginning, the most appropriate way to promote resilience is to confirm or devolve responsibility to community structures, and help them to operate more organically as they work towards their desired goals. Just as communities live in dynamic environments, so their internal management must regularly adapt too. Any work you organize with a community should set an example, create greater community ownership and build long term capacity.

³⁸ Stockholm Resilience Centre, *Applying resilience thinking: Seven principles for building resilience in social-ecological systems* (2015), Principle 5: Encourage learning at: <http://stockholmresilience.org/download/18.10119fc11455d3c557d6928/1459560241272/SRC+Applying+Resilience+final.pdf>

³⁹ *Ibid.*

⁴⁰ Ibrahim, M. and Midgley, T., *Participatory learning approaches for resilience: Bringing conflict sensitivity, disaster risk reduction and climate change adaptation together* (2013, World Vision UK) at: <http://www.alnap.org/resource/11467>

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.

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