

Integrating climate change and urban risks into the VCA

Ensure effective participatory analysis and enhanced community action

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The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest volunteer-based humanitarian network, reaching 150 million people each year through our 189 member National Societies. Together, 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.

Acknowledgements

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Foreword

Extreme climate variability and rapid, unplanned urbanization are magnifying risks to the most vulnerable people. These changing risk patterns, compounded by poverty, epidemics and demographic shifts, can exacerbate the vulnerability of communities. The convergence of these trends and the corresponding exposure to risk have affected communities' preparedness, coping strategies and resilience. Similarly, the short and medium term risk factors from climate change require different risk reduction approaches, especially in urban environments where the density of risks, stakeholders and communities are unprecedented.

The International Federation of Red Cross and Red Crescent Societies (IFRC) has been at the forefront in working with communities to increase their resilience to hazards. Our vulnerability and capacity assessment (VCA) is a process of participatory investigation designed to assess, analyse and address major risks affecting communities in a timely manner. It aims to determine the level of people's vulnerability to those risks, and their capacity to cope and recover from them. VCA has been one of the prominent methodologies used by the IFRC and its member National Societies since the 1990s.

Recognizing shifting risk patterns and taking into account the increased institutional use of the assessment tools, a review was undertaken in 2011 to re-examine the VCA methodology to capture two key risk drivers – climate change and urbanization.

Arising from a comprehensive consultation process, this booklet includes new knowledge and guidance on how to adjust the VCA to better address climate change, and how it can support the reduction of vulnerability in towns and cities. In addition,

these guidelines take into account the other main findings of the VCA review, and provide clear suggestions on how to ensure an effective VCA is carried out. This booklet supplements the four main VCA books (What is VCA, How to do a VCA, VCA training module and the VCA toolbox) that were published between 2006 and 2008.

As the world's largest humanitarian network, reaching more than 150 million people in need every year, the IFRC needs to adapt quickly to trends if it is to continue to fulfil its mission. These complementary information to the VCA process will help National Societies and their secretariat to contribute to the safety and resilience of communities all over the world, saving and improving the lives of the vulnerable people we all serve.

Bekele Geleta Secretary General

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Introduction

Used by National Red Cross and Red Crescent Societies since the early 1990s, the vulnerability and capacity assessment (VCA) methodology is composed of a set of participatory tools and approaches that enable Red Cross Red Crescent staff and volunteers to work together with communities and identify their vulnerabilities, risks, capacities and priorities.

The VCA methodology provides an entry point for planning community-based interventions and it promotes an understanding of people's needs and perceptions, of resources that can be used to address their needs and minimize risks and of how a National Society can support them in strengthening resilience. In other words, the VCA provides a framework to turn communities' assessments of their own vulnerabilities and capacities for minimising risk into community-led action.

But just how effective is VCA implementation within the Red Cross Red Crescent? In 2011, after almost two decades from its introduction, it was felt necessary to assess the current state of VCA within the Red Cross Red Crescent and, in particular, whether: i) the VCA had maintained its relevance in relation to Red Cross Red Crescent activities and programming, especially taking into consideration changing risk patterns; and ii) the VCA framework and the way it was being used in practice was still appropriate or whether modifications were required. To answer these and other questions, a review of the VCA methodology was undertaken by the IFRC.¹

The review looked at the VCA in light of growing institutional VCA experience and changing risk patterns, in particular to assess its relevance in addressing issues linked to climate change and to conducting a VCA in an urban area. The assessment included

¹ The complete review report can be found at: https://fednet.ifrc.org/PageFiles/97204/ VCA%20Review%20report_CC%20and%20Urban%20Risk%20Issues_Final%202011.pdf

both a review of relevant literature and interviews² that focused on understanding how VCA is being used, what constraints there might be on improving its impacts and of whether the VCA methodology requires revision to incorporate issues of vulnerability and capacity in relation to climate change and urban risks.

The review highlighted many different issues including how the VCA is perceived, training and practitioners' capacity, communities' expectations and the fact that VCA standards (of preparation, design, outcomes and evaluation) vary considerably across the Red Cross Red Crescent; at times, the VCA process was not used to effectively contribute to informed planning of activities. Based on the review findings, IFRC identified the need to develop this additional Guidelines document with a focus on using VCA in the context of climate change and urban risk and the aim to complement the existing four VCA booklets.

1.1 Key findings of the VCA review

In the coming years, it will be necessary to address some of the recommendations from the VCA review (listed below) to ensure that the VCA continues to inform and strengthen the Red Cross Red Crescent programmatic approach at community level.

The VCA is one of the most comprehensive methodology for reduction of any kind of risk, not only for disaster

² This include interviews conducted by Institute of Development Studies (IDS) with 50 people who had been or were involved in using and/or promoting the use of VCA in the field and included both IFRC Secretariat and National Red Cross and Red Crescent Societies.

risk-reduction activities. It continues to be perceived sometimes in this way and therefore the VCA in itself is a 'neutral' participatory process that allows a better understanding of people's vulnerability which empowers communities to identify their own needs and priorities and what they can do to address them. This means that, as a methodology, the VCA is ideal for supporting National Societies in their planning and risk-reduction activities in all programmatic interventions including food security and nutrition, health, water and sanitation, and shelter.

- What is important is **HOW** the VCA process is facilitated; therefore, it is crucial that:
 - VCA facilitators remain neutral and do not influence the process with predetermined ideas of vulnerabilities, risks and what the outcomes ought to be (community members should own the process and be empowered to identify needs, capacities and actions that are relevant to them);
 - ii) VCAs should be carried out by a multi-sectoral team, including when analysing the VCA results.
- VCA should result in actions that community members can undertake and lead themselves a common misconception about the VCA process is that it should result in large projects or activities that require significant external funding. However, if community expectations are well managed from the onset, the VCA results will be prioritized according to existing capacities and resources of the community, the National Society and other actors. National Societies can support communities' efforts by advocating to relevant authorities or by involving such authorities or organizations in the VCA process itself.
- ☑ Improve training for VCA facilitators in particular: i) build more understanding of the importance of the VCA as a

process rather than a checklist of different tools; ii) stress the importance of the facilitator(s) ensuring the inclusion of an empowerment element throughout the VCA process; iii) improve understanding of what constitutes a 'good' VCA process; iv) improve the capacity of facilitators to select, tailor if needed (i.e., with regard to the ability to integrate climate change or other issues), and make appropriate use of the VCA tools. To achieve the above, greater investment is needed in training and selecting VCA facilitators with appropriate skills (i.e., negotiation, facilitation, etc.) and in ensuring follow-up training in the field. Experienced practitioners should support newly trained staff until they are comfortable with the process.

- Strengthen capacity to analyse data a key challenge for many facilitators is the translation of information collected through the VCA (i.e., from participatory surveys) in strategic and informed planning. This is a key aspect of the VCA process that can inform not only National Societies' planning but also policy discussions at local, regional and national levels with government, different organizations and donors. Further resources need to be allocated to: i) strengthening the analytical skills of VCA practitioners; ii) improving recruitment policies to ensure staff members have the necessary capacities to analyse data gathered through VCA tools (i.e., employment of social scientists); iii) developing additional guidance for the VCA toolbox, specifically on how to analyse data and tailor tools to local contexts.
- Need to standardize the monitoring and quality assurance for VCAs – while some National Societies and regions have developed tools³ to assess the way VCAs are implemented and their impact on National Societies' programming, there is not a

³ Gathering information from the VCA – America Zone – Resilience Centre of Reference – CREC.

1. Introduction

Red Cross Red Crescent-wide, standardized method. Based on existing experiences, we need to enable standardized reporting and evaluation of results on a global scale. This would provide an unprecedented evidence base for programme development and allow for monitoring VCA outcomes including changing risk and vulnerability patterns. Additionally, it could help with quality assurance of VCA implementation.

- VCA facilitators can support post-disaster planning while it is not appropriate to carry out a full VCA in a disaster response situation, previous VCA experience, knowledge and reports can be very useful and should be taken into consideration whenever available. In addition, when a Needs Assessment is carried out, some participatory tools and methods common to the VCA are normally used (i.e., focus groups, Better Programme Initiative (BPI)). What is key, therefore, is to ensure that information collected during the Needs Assessment is used: i) to inform response activities so that actual, rather than presumed, needs can be met; and ii) as a basis to develop a complete VCA later on, thus allowing the linkage between response and recovery.
- Climate change issues need to be reinforced in the VCA to ensure that additional risks (present and future) caused by a changing climate will be included in longer-term risk and vulnerability-reduction strategies. By engaging with people's own priorities and working with them to reduce risk, a well-managed VCA will detect gradual changes that are already occurring and having an impact on people's livelihoods, access to water, shelter, food security and health. At the same time, the VCA can support the identification of measures to build resilience to climate change. The review highlighted the need for additional guidance to understand climate change issues and interpret and analyse information gathered through the VCA.

Working in urban areas requires adapting the tools but not changing the methodology – there are several experiences from National Red Cross and Red Crescent Societies that have applied the VCA in urban areas which show that the VCA can also be valuable when applied in urban areas. However, respondents felt that further guidance needs to be developed since the VCA was initially designed for use in rural areas and there are considerable differences between urban and rural communities that will need to be taken into account to tailor the VCA process and tools.

1.2 Purpose of these IFRC Guidelines

These Guidelines have been developed to specifically address two key recommendations that have emerged from the VCA review; these are to provide further guidance to National Red Cross and Red Crescent Societies on how to:

- i) integrate into the existing VCA process and tools, information on the additional risks and vulnerabilities linked to climate change when carrying out a VCA
- ii) ensure that relevant information is included on what needs to be done differently when conducting a VCA in an urban context and on using the existing VCA tools. In addition, these Guidelines take into account the other main findings of the VCA review, with clear suggestions on what needs to be done to ensure that an effective VCA is carried out.

1. Introduction

The development of these Guidelines has followed a highly participatory process⁴ and their contents are based on lessons learnt and practical applications from the field. These Guidelines, therefore, bring together IFRC knowledge and practical experience while combining the latest thinking on the application of participatory approaches taking into account the specific challenges linked to climate change and working in urban areas.

1.3 How to use these Guidelines

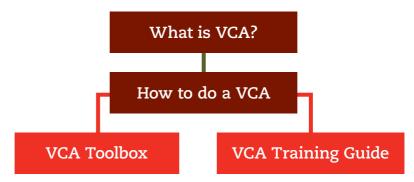
These Guidelines have been developed to complement and strengthen the current VCA process. It is important to note that this document does not intend to replace any previous guidance on VCA⁵; rather, the information provided in these Guidelines should be used together with the existing VCA booklets that are illustrated in Fig. 1, below.

It is strongly recommended that, prior to initiating a VCA, National Society staff members familiarize themselves with all four of the VCA publications. In addition, it may be helpful to consult some of the VCA literature produced in your region. What these

Over 30 people were interviewed; both National Red Cross and Red Crescent Societies and IFRC Secretariat staff, and their knowledge and experience complemented an initial literature review. In addition, the different drafts of these Guidelines have also been shared and reviewed by staff at all levels of the IFRC.

⁵ The four main VCA books were published in 2006, 2007 and 2008 and 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/

Guidelines aim to do is to complement the (detailed) information that is already contained in the previous four publications:



Each of the four VCA publications serves a specific purpose:

- What is VCA? provides an explanation of VCA, aimed at National Society staff and volunteers, International Federation delegations, donors and partners
- 2. How to do a VCA constitutes a step-by-step guide on how to undertake a VCA
- 3. VCA toolbox instructs practitioners in the use of a variety of information-gathering techniques
- 4. VCA training guide offers instructions for training Red Cross Red Crescent staff and volunteers in implementing a VCA, through classroom training and, more directly, through 'learning by doing'.

Introduction

This fifth publication complement the series: Integrating climate change and urban risks into the VCA; the document is organized into five sections as follows:

Section 1.

Includes information about the development of the Guidelines and a summary of the key VCA review findings.

Section 2.

Highlights key principles that always underline a VCA process in its different phases (planning, preparation, implementation, etc.) to ensure its success.

Section 3.

Focuses on key climate change impacts and how the additional risk brought about by climate change can be addressed within the VCA process.

Section 4.

Focuses on issues that need to be taken into account when implementing a VCA in an urban context.

Section 5.

Provides guidance on what needs to be taken into account when using the different VCA tools to ensure that issues linked to climate change are assessed and when applying the VCA tools to an urban context.



If used properly, the VCA supports practitioners to work with people to identify existing and potential risks, vulnerabilities and possible solutions. However, what has emerged from the VCA review is that there remain some issues that are **not properly addressed** when carrying out a VCA.

First of all, it is important that, whenever undertaking a VCA, practitioners first keep in mind that they must understand the principles outlined below and the philosophy behind the VCA. This is explained in detail in the booklet 'How to do a VCA'. At its core, a key role of the VCA is that of supporting Red Cross Red Crescent integrated programming by tapping into community knowledge to identify and address needs, vulnerabilities and risks. Another important aspect of the VCA is that local people and communities become the focus – not only as beneficiaries but as active participants in the identification of risks and vulnerability and in the design of programmes and actions.

Integrated programming

A number of National Societies have found ways to respond to the challenge of connecting local concerns with actual disaster preparedness by using VCA as an entry point to:

- diagnose community needs in all areas of risk and vulnerability
- integrate existing programmes in order to work with local people in a more effective way
- identify areas in which partnerships with other organizations can be developed to fill the gaps where the Red Cross Red Crescent cannot work
- advocate for other stakeholders, including government, to fulfill or initiate activities to remedy other risks and vulnerabilities.

Source: What is VCA?

Keeping the above in mind, we need to ensure that the following principles are taken into account when planning and implementing a VCA:

- **1. Be ready to invest in the VCA team and VCA process** this means both investing in human resources and in time that might be needed to plan for, prepare and conduct the VCA and analyse the results. To do so, it will be important to:
- select an experienced and diverse VCA team each team member must be selected according to their experience in different programmatic areas (i.e., food security, water and sanitation, health, disaster risk reduction, etc.), their interpersonal skills and their ability to communicate effectively. It would be particularly important to have team members who have backgrounds in the social sciences and who are well able to address gender issues.
- build capacity on facilitation a key element of a successful VCA lies in the facilitation and conflict-resolution skills of the VCA team. We can identify four main areas that need particular attention: i) members of the VCA team should have followed a training programme on the VCA; ii) there should always be at least one experienced facilitator in a VCA team; iii) in addition to specific training on facilitation skills, coaching is also an important part of capacity building for VCA practitioners. Conducting a VCA should not translate into carrying out different activities mechanically – it means being able to effectively build a sense of trust and cooperation with the communities and engage them in a transformative process. These are skills that not all people possess and they need to be built and strengthened in advance; iv) a variety of challenges can emerge during the process and effective conflict management skills are needed.

2. Core principles of a successful VCA process

VCA facilitators need to be gender sensitive and gender trained so that they maximize the existing gender and diversity perspective already included in the VCA Toolbox.

Prerequisites of gender analysis:

- Ensure equal access and participation of women and men and those from diverse backgrounds in internal/in-house trainings.
- Train IFRC staff and volunteers on gender and cultural diversity and gender-sensitive programming (gender mainstreaming).
- Collect, analyze and disaggregate data by sex, age and other grounds of diversity to identify which groups are being marginalized and for what reason and design appropriate programs.

IFRC Strategic Framework on Gender and Diversity Issues (2013-20), VCA toolbox.

- strengthen the analytical capacities of the VCA team in interpreting data gathered from the VCA. Enough time needs to be allocated to the assessment phase (i.e., triangulate information, identify contradictions, common finds, information gaps and need for collecting additional information) and staff members need to have the right skills to understand and use these data to inform programming. For specific issues, such as, for instance, climate change, additional training might be needed for the VCA team to understand and analyse data in light of future changes and needed interventions.
- VCA team is asked to look at issues with which they are not familiar including climate change and urban risk, in particular to understand how to use and tailor the VCA tools as well as how future changing risks can be built into interventions. Facilitators should then be coached in the field to strengthen their learning. It is important to remember that capacity building is a continuous process (i.e., skills of facilitators should be regularly updated in needed areas).

- have a long-term commitment to work with communities the VCA team needs to be able to allocate enough time to the VCA process to ensure that community members understand the process and are fully engaged in the analysis of the five vulnerability elements (livelihood and its resilience, wellbeing, self-protection, social protection and governance). In addition, there needs to be commitment towards putting the VCA outcomes into action and to monitoring progress.
- **2. Be ready to understand the local context** as this is essential to the success of the VCA. The VCA team needs to:
- y gather enough secondary information about the community in advance, if necessary by contacting authorities, friends, school directors, church leaders.

Participation: the key ingredient

Participation can mean a great many things – from people simply 'attending' an activity, to being the principal actors and decision-makers in a complex process. In order to better understand what we mean by participation and how participation can be used to strengthen or weaken the VCA process, let us look at one simple way of defining it, using a 'ladder' of participation, where each rung represents a different level of community involvement.

- have a preliminary understanding of the values and belief systems of a community, and the most common challenges that they may encounter working with them (e.g., gang violence, conflict between agriculturalists and nomadic pastoralists, conflicts over access to scarce resources, etc.)
- if necessary, think ahead about what they could do to build confidence and trust and to manage community expectations.
- understand and tailor language to both the local context and their audience. For instance, when dealing with issues

2. Core principles of a successful VCA process

such as climate change, it is important to communicate this information in a simplified manner, avoiding scientific terms and giving practical examples.

3. Be ready for community ownership – once a VCA is started, the facilitators should turn as much authority and decision-making control as reasonable to community members, so that they 'own' the process. It is important that communities identify and discuss issues that are relevant to them and that facilitators do not influence this process. It might be that, in the end, the community's risks and priorities are not what the VCA team might have expected them to be, but these should be understood and respected by the team. No VCA team should start undertaking a VCA with preconceived ideas about the needed outcomes; it is important to remain neutral and support community participants' points of view.

"Before, we used to do things for people. Now we do things with people – they are fully engaged in the investigation and are full participants in creating the solutions. This has changed the branches and the National Society."

Member of a National Society after carrying out a VCA

4. Be ready to understand community needs – the VCA process needs to be structured around participants' time availability and day-to-day activities. The VCA process might be lengthy and require a considerable input of time from participants and the VCA team; often those who are most vulnerable might not be able to participate regularly or there might be times that make participation difficult (e.g., sowing or harvesting periods in the countryside, occasional labour in cities or rural areas, etc.). Community members should determine what time of year, of the week or of the day is best and attention needs to be paid to ensure that the process is socially inclusive and that all the different

groups of a community are represented in meetings. If this is not always possible, it might be necessary to schedule different meetings with different stakeholders and to be flexible to their needs and time constraints.

5. Be ready for an inclusive process – an important role of the VCA team is that of promoting social inclusion in places experiencing marginalization. It is important to ensure that it is done in an appropriate manner, using the most relevant tools, and that actions during and following the VCA should involve community members even when the population is transitory and/or may include a wide range of livelihoods and different legal statuses (e.g., in urban informal settlement). Formal and informal hierarchy within the community also needs to be understood to ensure that elected traditional leaders respect and support each other, but also to ensure that all members of a community are given an opportunity equally to participate/contribute to the VCA process. The inclusion of other stakeholders such as local authorities and humanitarian and development organizations in some of the VCA activities and discussions can increase their understanding of the issues that different parts of the community are dealing with and win their support in the implementation of activities.

The VCA team must be prepared for any eventual outcome that the community highlights as a priority, whether it is disaster risk reduction, health or income generation. Many of these cannot be foreseen or controlled. This is a key requirement and is stressed in all the VCA publications.

It is natural – and should not be perceived as negative – that communities will identify priority issues that fall outside the VCA team's mandate or capacity. This can be a source of difficulty if the team is not properly prepared. At the very least, different departments must agree to work together before a VCA can be undertaken effectively (e.g., health, youth, disaster management) and the VCA team should also be representative of the different programmes of the National Society.

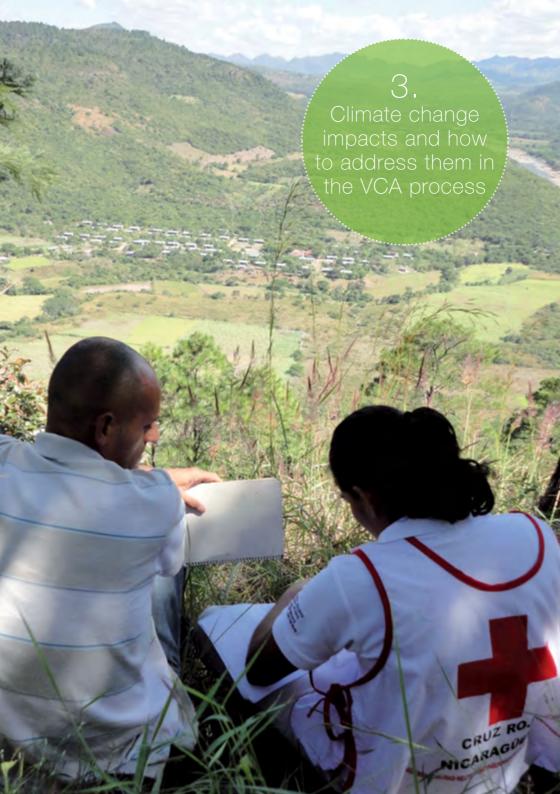
Member of a National Society after carrying out a VCA

- 6. Be ready for partnerships the National Society should expand partnerships and liaise with experts who can support the VCA team by bringing in specific knowledge and expertise. For instance, greater collaboration with research centres can support VCA facilitators and Red Cross Red Crescent practitioners in analysing climate change information. During the planning stages, it is important to think about what expertise is needed to complement the existing skills of the VCA team during the different stages of the VCA process. Stakeholders' involvement could also result in greater coordination and strengthening of complementary activities.
- 7. Be ready to influence decision-making it is essential to encourage local authorities' involvement from planning to implementation of the VCA. Improved communication with civil society is critical because political involvement and will is often key for implementing VCA outcomes. If necessary, National Societies should have further training in advocacy. Engagement with the private sector should be sought whenever relevant.

"It is important to reduce women's dependency at the grassroots level and to work on self- help initiatives such as livelihood programmes.

Concessions should be given to women on Nepal Red Cross Society memberships and their income generation skills should be improved."

Narbadha Sharma Chairwoman, Banke Branch, Nepal RC



3. Climate change impacts and how to address them in the VCA process

Climate change, one of the most serious challenges of our time, will increase a range of livelihood threats and vulnerabilities and therefore affect the work of the Red Cross Red Crescent. While there is still considerable uncertainty over what exactly the impacts of climate change will be and how they will affect our lives and livelihoods, what we do know is that climate change will act as a stress multiplier, interacting with other global pressures to exacerbate existing vulnerabilities.

Climate change impacts will vary from region to region and will be closely related to existing vulnerability and risk exposure. Those most vulnerable will be affected disproportionately, especially the poor who have limited resources to cope with, or recover from, economic and environmental shocks.

Poor, rural people in developing countries will be the hardest hit as their livelihoods are usually directly dependent on the natural resource base (e.g., rain-fed agriculture, livestock and forest products, fishing). Their livelihoods are therefore highly vulnerable: smallholder farmers rely on rainfall, and pastoralists have herds that need good pasture and water. In many parts of the world, the effects of climate change on these livelihoods are already being felt and the speed and intensity of change is outpacing people's ability to adapt and slowly eroding their coping capacities. While developing countries are most vulnerable to the impacts of climate change because they lack sufficient capacity to adapt, developed countries will also be faced with its impacts including increased risk of flooding, drought, hot and cold waves, effects on agriculture (including new pests and crop diseases) and the emergence of new diseases as the geographical spread of vectors will change with higher temperatures.

⁶ Such as environmental degradation, population growth, unsustainable development patterns and rapid urbanization.

Why is the climate changing?

The very rapid rise in the Earth's average temperature by more than 0.7°C in the past hundred years has happened because of human use of 'fossil fuels' (coal, oil, natural gas). When these are burned, they release 'greenhouse gases' (GHGs) into the atmosphere. GHGs are gases in the earth's atmosphere that help keep the planet warm by trapping radiation from the sun. Without them, it would be too cold to live on Earth. This heat-trapping function is what is known as the 'greenhouse effect' and is what keeps the Earth's surface in a suitable temperature range to sustain life as we know it. After water vapour, the most important 'greenhouse gases' (GHGs) are carbon dioxide, methane and ozone.

Since 1750, the growth in the use of fossil fuels (transport, energy production) has greatly increased the atmospheric concentrations of GHGs. Because more heat is trapped within our atmosphere, average earth temperatures have started to increase.

The rise in average temperatures is what leads to changes in climate thus causing changes in the patterns of rainfall, temperatures and seasons, and increased weather variability.

These changes have already started to take place and will become more significant in the coming decades because of the levels of GHGs that have already been, and continue to be, released into the atmosphere. It is highly likely that by 2050 there will be an increase of 2° C in global average temperature.



Source: Global greenhouse warming

For the past ten years, the need to address and limit the humanitarian consequences of climate change has been an important part of Red Cross Red Crescent work. Local communities are reporting increased weather variability, shifting of seasons, increasing duration of heat and cold waves, higher temperatures and numbers of days experiencing higher temperatures, and the emergence of new hazards (e.g., some areas might be experiencing flooding or drought as a new hazard). As the climate changes, it is likely that these problems will worsen.

Impacts of climate change affect all areas of Red Cross Red Crescent work and National Societies will need to increase their preparedness work and invest more resources in understanding and assessing future risks and measures that are needed to strengthen community resilience in light of those additional and specific impacts.

3.1 What are the expected impacts of climate change?

Changing climate trends, increased variability – one of the most significant impacts of climate change will be increased variability as well as changes in average conditions (of temperature, rainfall, humidity, seasonality). Seasons seem to be shifting, rainy periods are less predictable based on historical patterns (bringing planting problems, floods and water shortages) and crops are less able to tolerate higher temperatures. As these changes happen, people all over the world are spontaneously adapting to their changing environments – as farmers and others have done for thousands of years under natural environmental variability. However, the speed at which this will happen will make it increasingly difficult for both human and natural systems to continue to adapt.

Increased number and intensity of hazards – as a result of global warming, climate-related natural hazards like floods, droughts, heat waves and storms are expected to become more frequent and, in some cases, more intense (e.g., tropical cyclones and hurricanes may include more rainfall and stronger winds, and cover more territory). In addition, some climate-related hazards such as tropical cyclones, storms, floods, droughts, and heat and cold waves might affect places that have not experienced them before.7 For instance, there is some evidence that typhoons affecting the Philippines and Vietnam are moving southwards, affecting new areas. Hurricanes struck Brazil in 2004 and 2010 in the south Atlantic, where they have not been known to happen before. An increase in intense rainfall in hills and mountain areas may also result in more landslides8, particularly in areas that have been degraded or deforested. Climate change is also expected to increase the incidence of both short (seasonal) and long-term droughts (build-up of dry years that leads to a serious disaster), and to affect areas that have not had much experience of drought.

During the floods that affected Fiji in 2012, communities living in the highlands witnessed for the first time severe landslides and, at the same time, the drying up of rivers, leading to the drastic disappearance of river mussels on which their livelihoods depended heavily.

Sea-level rise (SLR), which is caused by the warmer water in the oceans expanding, plus the melting of land ice from ice caps and glaciers, will have a significant impact on the lives and livelihoods of coastal people by increasing salinization of water sources. It will also increase coastal erosion and loss of land,

⁷ Tropical cyclone is the general term for what are known as hurricanes, typhoons or cyclones in different parts of the world.

⁸ Reported rain-related landslides killed more than 32,000 people in the period 2004–10.

3. Climate change impacts and how to address them in the VCA process

and coastal flooding from storms and high tides. Glacier melting will also affect the flow of rivers, water supply, sedimentation and flooding. A serious threat in high mountain ranges, especially affecting Nepal and central Asia, is glacier lake outbursts (GLOBs). As the ice on the mountains melt, landslides occur in narrow valleys, causing lakes to build up behind these 'natural dams'. When the glacier melt-water eventually breaks through these barriers, serious flash floods can happen.

Small, low-lying island countries, for example in the Pacific and Maldives, are already exposed to risks of coastal inundation and erosion. Sealevel rise will exacerbate these risks and the crops of communities living along coastlines may be inundated by sea water more often.

- Impacts on livelihoods, food security and health in combination with the above impacts, climate change will act as an intensifier of existing problems and vulnerabilities. Amongst the others, this will bring about:
 - increased food insecurity as a result of crop failure because of the increase in the number of hot days and higher temperatures and/or increase in natural hazards (droughts, cold or hot waves, wild fires, etc.), emergence of new pests and diseases, and water scarcity. Biodiversity loss and acidification of the oceans will also have severe implications (i.e., reduced water resources, changes in the primary productivity of crops and rangeland) for rural communities whose livelihoods are often dependent on biodiversity and ecosystems and for coastal fishing communities. Livestock might be increasingly affected by diseases that may spread because of higher temperatures; for instance, parts of Western Europe are now affected by two insect-borne diseases (Bluetongue and Schmallenberg viruses) that are thought to have spread since average temperatures have risen. As with crop diseases that reduce harvests and nutrition, any harm to livestock is going to

damage people's livelihoods. Increased pressures on fragile rural infrastructures, such as roads, irrigation systems and storage facilities, will impact the production, distribution and storage of food unless investments are made to strengthen such infrastructure.

Climate change can be thought of as a 'magnifier' or 'intensifier' of many existing problems such as:

- environmental degradation
- desertification
- species extinction and biodiversity loss
- health risks
- water scarcity
- acidification of oceans
- conflict over scarce resources.
 - Health risks are likely to be made worse by climate change. In recent years, both rich and poor countries have been badly affected by heat waves that have killed thousands of people,⁹ devastated crops and livestock and reduced livelihoods through damage to infrastructure (including from wild fires). Heat waves and drying out of the land associated with poor rains increase the risk of wildfires, such as those that affected Russia in the 2010 heat wave (which is estimated to have led to 11,000 deaths in Moscow alone). Older people and babies are especially vulnerable to both hot and cold waves.¹⁰ In Mongolia and China, a

⁹ In Europe in 2003, an estimated 35,000 people died prematurely in a prolonged heat wave, many of them elderly.

Global warming may also bring more cold waves because of the disruption of the normal climate patterns in the north, bringing cold weather further south.

sequence of cold waves in recent years has killed millions of livestock, and brought snow and ice as far as the semitropical south of the country. Higher risk of flooding will also potentially result in an increase in contamination of water sources and exposure to water-borne diseases, while some locations will see an increase in drought that could also result in consumption of unsafe water. Higher temperatures may lead to a change in the geographical range of vector-borne diseases (e.g., malaria and dengue) or to the emergence of new diseases such as the virus that damaged the coffee crops of smallholders in parts of east Uganda in 2011.

3.2 Is the VCA suited to address climate change impacts?

As the climate changes, it is likely that existing vulnerabilities will worsen as a result of more-frequent and severe weather extremes that will disrupt livelihoods, infrastructure, food security and so on. Not only will the effects of climate change (including changing temperatures and rainfall, patterns of disease and hazards) be felt in poor countries, it will be important for all National Societies to be better prepared. VCA is a proven approach that will be useful for assessing current and future risks, understanding the vulnerabilities of people to climate change, and where their capacities can be strengthened in order to adapt to future changes. In addition, because of its integrated approach, VCA will enable these additional risks and vulnerabilities to be considered in the context of other issues that occur in the community and not as stand-alone issues.

"The climate is what you expect; the weather is what you get"

CLIMATE represents the average weather that can be expected in a climate zone over the longer term – it is usually understood as involving a 30-year period.

The **WEATHER** is what is actually experienced on any particular day or week and is within the range that is expected for that climate zone (for temperature, rainfall, wind, humidity).

The weather can vary considerably around the average for the given climate but within an expected range. A weather forecast can tell you the likely conditions for the next week or so, and a seasonal forecast can give you an idea of likely conditions even a few months in advance.

The Earth has a climate system that is relatively structured and stable so we have known what the climate was at any given location and season. However, as a result of global warming, the climate is changing. In the future, the expected pattern of climate at any time and location will differ significantly – with a change in the average conditions and the likelihood of more extreme events outside the averages.

The VCA process can also support climate-change adaptation efforts significantly by helping people to understand the risks and enabling them to make informed decisions to reduce their vulnerability to new as well as existing risks.

Adaptation can be understood as taking the necessary action to deal with current and future effects of climate change. This can occur at many levels and scales; for instance, it is important to:

- prepare for stronger or emerging hazards
- change crop varieties to deal with higher average temperatures, or plant at a different time because of changes in rainfall patterns (for farmers)
- adjust and diversify livelihood activities to be less dependent on those that rely entirely on the weather (household level)
- cooperate to conserve water resources to deal with drought (village level)

- implement measures to address changes in water supply, new health risks, flooding and, perhaps, extremes in temperatures and their impact on the elderly, homeless and very young (at city and local administration level)
- carry out existing activities in the context of greater risk of disaster, new or worse health problems and changes to the type of activities which need to be carried out (all organizations, including National Societies).

The above highlights some of the activities that need to be implemented to make communities more resilient in light of a changing climate impacts.

Knowing that climate change may bring a more uncertain future may help communities to understand the climate change impacts and make decisions about their priorities and actions in the future.

Box 1. Some examples of the impacts of climate change and how to address them in VCA

Possible climate change impacts	General impacts	Impacts on people	Dealing with impacts in VCA and community action plans
Climate hazards	Increase in frequency and/or severity of cyclones, storms, floods, droughts, hot and cold waves; landslides Examples: heavy rains; severe cyclones (e.g., Aila and Sidr in Bangladesh, Nargis in Burma) may be indicative of change; hot waves affecting Western Europe (2003), Russia (2010); cold waves affecting Asia several times, Europe (2011, 2012), USA several times.	 More deaths, injuries, ill-health Displacement Lost assets and damaged livelihoods Health problems related to disrupted or damaged water supply and disease vectors from standing water 	 Prepare for magnified or more-frequent hazards Need for greater awareness-raising Communicate complex issues in simple ways to the communities Increase preparedness measures to avoid loss of land and other livelihoods assets Set up community-based warning systems
	Changes in geographical and/or seasonal extent of some unprecedented hurricanes which hit Brazil in 2004 and 2010; typhoons may be moving south in the Philippines and Vietnam	 Increase in landslides from tropical cyclones, drought, flood zones shifting to new locations Heavy rain 	- Be aware that, if communities have not experienced some types of hazards, tools like historical time lines and hazard assessments will not capture the right information

3. Climate change impacts and how to address them in the VCA process

Possible climate change impacts	General impacts	Impacts on people	Dealing with impacts in VCA and community action plans
Climate trends: changes in average conditions	 Changes in rainfall and temperature patterns Changes to rainy seasons may be emerging in some regions (e.g., the Mediterranean, East Africa), with higher peaks, longer dry seasons Observed changes to seasons in many parts of the world – early onset of Spring, fewer frost days, more days at high temperatures Average weather conditions may become more extreme, leading to exceptional events 	 Damage to agriculture, forests, pastures, fisheries Reduced livelihoods and food security from rising temperature and changing rainfall patterns Pests, diseases of crops and livestock may change and increase Water shortages and droughts More landslides Health impacts of poor water availability New diseases 	 Assess the sensitivity of different livelihoods to the potential changes in weather patterns Create awareness of the need to be ready for a possible wide range of impacts, and likely lack of clear predictions for localities
		Heat wavesIncreased fire risksCold wavesIncrease in normal rain brings floods	 Focus on increasing people's awareness of hazards of which they are not aware and support their abilities to identify new solutions

Possible climate change impacts	General impacts	Impacts on people	Dealing with impacts in VCA and community action plans
Uncertainty and increased variability	Less-predictable weather conditions Changes in strength and extent of expected weather, e.g., of monsoons Changes in seasons or variability in arrival of different seasons	 Reduced ability to plan for farming as traditional patterns are no longer reliable Less certainty of crop yields 	Identify traditional and past adaptation strategies and people's capacities (and possibilities) for innovation and identifying new solutions
	New types of extreme events possibly linked to shifts in jet streams and patterns of pressure systems	 Heat waves and cold waves which are more frequent, longer lasting and exceptional, some affecting areas that are not accustomed to them e.g. heat waves: Russia 2010, Europe 2003 Cold waves: Central and East Asia 2010 	With the community members and other key stakeholders, identify ways to build resilience
Oceans	 Thermal expansion of sea water producing sea-level Rise Changes to temperature and acidity of the oceans affecting corals, sea life and food chains 	 Intrusion of saline water into water supplies Impact of saline water on crops Damage to fisheries: die-off of corals, impact on plankton and food webs up the food chain; changes in location of species, disruption of migratory routes of pelagic fish 	Assess vulnerability of livelihoods to the impacts of climate change and develop longterm community adaptation strategies

3. Climate change impacts and how to address them in the VCA process

Possible climate change impacts	General impacts	Impacts on people	Dealing with impacts in VCA and community action plans
Oceans (continued)	– Possible changes to the pattern of El Niño/La Niña (ENSO)	- If climate change alters El Niño/ La Niña, this would affect farming, fishing and hazards in many regions. Drinking and irrigation water being affected, making situation worse especially in delta regions like Bangladesh, Nile, Mekong - In the longer term, this can link to displacement of people as a result of loss of land, storm damage to fields, loss of drinking water	- Increase preparedness for longer and shorter-term changes and cycles like El Niño/La Niña in relevant geographical areas
Ice caps, glaciers, sea ice, permafrost (frozen land in Arctic circle)	Faster rate of melting of ice caps and glaciers	 More rapid rise in sea level – difficult to predict Disrupted water flows to key rivers fed by glaciers Delta regions especially need to have longer-term plans for this Areas reliant on glaciers need preparedness 	Less relevant for VCA, but need for National Society awareness for longer-term planning and advocacy (e.g., on migration), using results from VCA to indicate vulnerability and exposure

3.3 What issues need to be taken into account to address climate change when planning a VCA?

A particular climate hazard, such as a drought, does not affect all people within a country, a region, a community – or even the same household – equally because some people have greater copying capacities than others to deal with the crisis. It is important to remember that the inequitable distribution of rights, resources, access to information and power – as well as repressive cultural rules and norms – constrains many people's ability to cope with and recover from different shocks.

Because of climate change impacts are expected to exacerbate existing vulnerabilities of people such as marginalized populations (i.e., indigenous people and nomadic pastoralists) people with disabilities, the very young and the elderly, and informal settlement dwellers are likely to be the most affected. Additionally in many countries, because of their lower adaptive capacity, women could be more affected by climate change. More attention will need to be given to identifying the social, economic and political determinants of vulnerability, in light of present and future risks brought about by climate change, and to developing specific interventions with the participation of vulnerable groups, men and women, to support adaptations that meet the specific needs of vulnerable people. 12

¹¹ Section 4 will examine, in more detail, the issue of climate change in urban areas.

Explanatory Note to IFRC Strategic Framework on Gender and Diversity Issues (p. 11): All assessments need to adapt gender inclusive strategies and approaches to ensure the different needs of women, girls, boys and men. This enables collecting data on a desegregate basis to identify marginalized groups.

3. Climate change impacts and how to address them in the VCA process

Studies from gender and disaster research, such as during and after the cyclones in Bangladesh and Hurricane Katrina in Louisiana, have shown that gender and poverty can intersect to make poor women the most vulnerable. Mainly due to differential power relations and access to resources between men and women that lead to differences in vulnerability and adaptive capacity. In general, women have fewer rights to land, credit and capital that would, for instance, promote greater resilience in the face of external shocks.

CARE International Climate Change Brief: Adaptation, gender and women's empowerment www.careclimatechange.org/adaptation

Another important aspect is **how information about climate change is conveyed to people** and the importance of **engaging people** themselves in looking at and analysing climate-related changes. More specifically:

- What do people need to know about climate change to be able to make informed decisions and avoid alarmism?
- What is the language that should be used and in what ways could complex issues be translated so that they are easily understood?
- → How to ensure that climate change is not dealt with as a stand-alone issue but, rather, within the context of existing risks and vulnerabilities?¹³

In most cases, it will require using simple language, avoiding abstract discussions about greenhouse gases, mitigation and adaptation, and so on. In some communities, introducing such information could cause confusion. Facilitators can draw on relevant changes identified together with the community to explain the issues and provide examples of what is happening to the climate. Practical solutions for adaptation should be discussed with community members to avoid creating fear or fatalism. It will be crucial that within the VCA team there are one or more

¹³ Many of which will be made worse by climate change.

people who have a good grasp of the key issues related to climate change and that are able to communicate them clearly.

In addition, it will be important that the VCA team understands well what supporting communities in adapting to climate change will involve. More specifically this refers to:

- ensuring that existing community priorities (e.g., water, health, food security, shelter, security) are addressed in relation to the additional impacts of a changing climate by building on existing practices¹⁴
- supporting people in addressing and preparing for more-specific impacts of climate change (i.e., rising temperatures, changing rainfall patterns, extreme events, changing patterns of disease).

Since climate change has several different impacts (e.g. over different time scales and geographical extent), it will be necessary to ensure that potential adaptation measures that are identified for one type of climate impact do not counteract those carried out for a different impact.

Using climate information to reduce risk – In many communities around the world, people often have their own knowledge about their weather and climate. Sometimes this includes forecasting methods built up over hundreds of years as a form of 'indigenous knowledge'. Because of unusual changes in weather patterns, local knowledge is becoming increasingly less reliable in predicting the weather and needs to be complemented with an understanding of current processes. However, traditional knowledge remains an important source of information that can inform practitioners on what changes have been observed and can provide an important input in the development of adaptation strategies as it shows

¹⁴ For instance, where changes in the distribution or seasonality of malaria are expected, awareness campaigns will be needed, along with distributing bed nets and other appropriate measures.

what type of adaptive and coping strategies were adopted in the past to adapt after, and recover from, climate-related shocks.

While there exists information on the potential impacts at country level, there are limits to the accuracy of climate change predictions and, possibly, a lack of reliable forecasts on the local scale. In most cases, when looking at potential risk reduction and adaptation strategies, people will need to deal with uncertainty and possible unforeseen impacts and changes. In addition, the effects of climate change will alter over time; what is a suitable adaptation for the next five years may not be relevant for the following ten years. This means that adaptation strategies will need to be implemented without anyone necessarily having a clear understanding of what the changes will be. Local communities will often require support to develop resilience to a possible wider range of negative impacts of climate change so they can withstand the effects on crops, livestock, food supply and health.

It is likely that existing seasonal forecasts (which are already reasonably good for some parts of the world) will become better. While these may help with what to plant for the coming season, they will not help decide whether a longer-term change of crops is going to be necessary, or whether a particular disease (of crops or livestock) will arrive, or when agriculture in a place may become completely unviable. Because of this, an integrated approach to building the resilience of local communities through strengthening different livelihood activities will best equip them to deal with uncertainties and the range of possible outcomes. In particular, the following should be taken into account:

- Which aspects of community knowledge can be relevant for the future?
- What did people do before when they had to deal with extremes or unexpected weather?

- Can this be linked with an understanding of the general trends in climate that may affect them (including changing rainfall, temperature and seasonal patterns)?
- What are the adaptation measures that are likely to be relevant to a fairly wide range of immediate and longer-term conditions?

All these questions can be approached through the VCA process at community level. It may be possible also for some communities to benefit from knowledge from other places that are already experiencing the type of conditions predicted for them. This again could be organized through sharing of experiences between communities that carry out VCAs.

Clearly, it will be important for Red Cross Red Crescent activities to make full use of available climate information from national (e.g., the meteorology office) and international sources. New partnerships for sharing information and dealing with changing risks across scales will become vital.

At the same time, the VCAs will enable National Societies to collect community-level information on existing trends and changes that have been recorded. This will be an important contribution to regional and national-level planning and will provide a link between local knowledge and national-level climate science. Both external climate information and information gathered during the VCA will also be helpful in strengthening and scaling up community-based, early-warning systems, that have risk knowledge as one of the main components.¹⁵

¹⁵ Community Early Warning system: Guiding principles available at: www.ifrc.org/PageFiles/103323/1227800-IFRC-CEWS-Guiding-Principles-EN.pdf (see page 15 and guiding principles 4 and 9 (among others)). Public awareness and education for DRR key messages: www.ifrc.org/PageFiles/103320/Key-messages-for-Public-awareness-guide-EN.pdf

3.4 Bringing climate change into the VCA process

When planning to do VCAs, a National Society will need to understand the need for additional actions (at different stages of the VCA process) to ensure that climate change issues are addressed. The below figure illustrates the 12 steps of the VCA process – while climate change needs to be considered throughout, the arrows show the steps whereby the VCA team will need to think or do things slightly differently to ensure that the added risks brought by climate change are properly addressed.

The VCA process: Moving from investigation to action in 12 steps

Level one: National Society support

- 1. Understanding why VCA is being proposed.
- 2. Sensitizing (of National Society leadership, branches, partners).
- 3. Setting up a management structure for the VCA.
- 4. Setting the VCA objectives.

Level two: From assessment to planning

- 5. Planning the VCA.
- 6. Preparation phase.
- 7. Using the investigation tools with the community. <
- 8. Systematizing, analysing and interpreting data.
- Returning information to the community and deciding priorities and actions for transformation.

Level three: From planning to action

- 10. Turn vulnerabilities into capacities through actions. <
- 11. Recommendations and report-writing for local authorities, donors and partners.
- 12. Programme implementation: risk reduction projects with the community.

Every context has its own specificities; thus, the VCA team will need to work in advance to gather information to analyse the specific context in which the VCA will be carried out and understand how to correctly introduce issues linked to climate change during the VCA process and what the main entry points are for doing so.

For example, when setting the objectives (Step 4), it is important that the National Society leadership, branches and volunteers are aware of how climate change is likely to affect the country and its different regions.

It will be vital to ensure that relevant expertise is built into the process, and that partnerships are set up to access relevant secondary data and to design interventions for building community capacity for climate change (Step 6 Preparation phase).

During the planning stages, it will be important that:

- adequate resources are made available to build the capacity of Red Cross Red Crescent staff and volunteers (as well as of the local people)
- the VCA team is able to understand and to take climate change impacts into account throughout the VCA process.

Particular attention will need to be given during **Step 7** as it is important not only to use the revised tools (see Section 5) but also to consider the order in which the tools are used. Begin by recording people's observations and understanding whether they have noticed any change. Then, identify the best tool that will help the VCA team to present the topic of climate change while avoiding introducing it too early as this could influence people's opinions.

3. Climate change impacts and how to address them in the VCA process

Practical solutions (Step 10) for dealing with the risks that people identify should be based on the community's own awareness of its needs and its capacities to act, and must take climate change into account for all types of risk. The interventions supported by the National Society may focus on building greater resilience to current and future climate risks that the community may not be aware of. Because accurate predictions on the local scale are not likely to be available, the community will need support to 'prepare for the unknown'. As with VCA generally, the National Society may need to advocate to government and other organizations for support in areas where it lacks expertise or resources.



4. Vulnerability and capacity assessment in urban areas

Traditionally, disasters have impacted rural areas in greater measure both in terms of life and livelihoods losses. However, the rapid process of urbanization that has characterized the last few decades is slowly being reflected in a greater urbanization of risk and disasters. Rapid, unplanned urbanization has taken place mostly in developing countries and the trend is set to continue this century.

Urbanization refers to the process by which towns and cities acquire people both through their own natural population increase and through migration (temporary or permanent) and the arrival of displaced people (because of conflicts or disasters).

It also describes other processes around the concentration and density of goods, services, infrastructure, population and utilities present in urban areas. Urban populations are heavily dependent on markets for their daily goods and access to services provided by authorities.

By the year 2050, about 80 per cent of the world's population will live in urban areas. ¹⁶ Together with rapid urbanization, processes such as population growth and expansion in unsafe areas, environmental degradation, unsustainable development patterns and climate change are contributing to changing risk exposure and livelihoods choices, with many people choosing to move towards urban centres to improve their livelihoods.

However, some cities today are far from being 'safe havens'; rather, they are increasingly places where vulnerability and risk are growing as well. The trend is set to continue and it is expected that, in coming decades, the major driver of risk will be 'the growth of people and assets in harm's way' (WB 2013) and particularly so in urban areas. With more than half of the world's population living now in urban areas, it has become increasingly important for the

^{16 (}United Nations 2009).

Red Cross Red Crescent to consider how to reduce vulnerability and risk in urban centres – while **continuing** to do so in **rural areas** and paying particular attention to the **interactions between rural** and **semi-urban** areas.

Key facts about urbanization

- In 1900, there were 16 cities around the world with populations of one million or more people, almost entirely in developed countries. By 2000, there were 400 cities with populations of more than one million around the world, three-quarters of which were in developing countries (UNDESA 2010).
- By 2030, the global population will stand at nine billion, and the global urban population will account for up to 60 per cent of this figure (ibid.). Almost all population growth in the next 30 years will take place in urban settings. To put this shift into perspective, there will be almost twice as many people living in cities in 2030 as there were people living on the planet in 1970.
- □ In 2010, for the first time in history, the urban population outnumbers the rural population (IFRC WDR 2010) and this trend continues. World Bank global urban population figures for 2012 show that 53% or 3,763,000,000 people living in urban areas whereas the global rural population is 47% or 3,337,000,00.
- Most of this urban growth will be in small and medium-sized cities rather than in mega-cities, with about half of the world's urban population residing in cities of 500,000 people or fewer (UN-Habitat 2009). These urban areas will account for up to 90 per cent of all global economic activity (UNDESA 2010).
- In terms of sheer numbers, Asia will continue to house the largest number of people in its towns and cities. Africa, although the least urbanized continent today, will become home to 1.2 billion urban dwellers by 2050, with a significant majority of youth (ibid.)

(Source: ALNAP 2012)

4.1 What is driving the urbanization of risk?

- Urban concentration higher numbers of people in most countries living in urban places provide conditions for the magnification of risk and eventual disaster or crisis, including the potential for the rapid spread of health-related epidemics. Population density means also that, when a disaster occurs, more people are likely to be killed and injured within a small space, and the level of needs may overwhelm the ability of the humanitarian system to provide support. The density of construction means that there will also be more damaged infrastructure that will need to be managed, such as buildings, roads, business areas and sewers (ALNAP 2012), or whose ruins will make access more difficult for relief workers.
- Climate change will add a layer of additional risk and uncertainty. The extent to which cities will be affected by changes in climate is influenced by different factors. Location is one of them and, for example, cities have historically developed along coastlines and flood plains that supported economic development. Today more than 360 million people live in coastal urban areas and they, amongst others, will be directly affected by rising sea levels and coastal erosion (exacerbating the risk of flooding), salinization of agricultural land and water intrusion, and increased storm surges.
- Napid and unplanned urbanization has generally taken place on marginal lands and in hazardous areas since, particularly in developing countries, people who move to cities seek shelter in marginal, high-risk areas such as hillside slopes, flood plains or subsiding land because they are more affordable. In extreme cases, vulnerable populations living

in informal settlements trade off environmental safety and protection from disasters for living in proximity to the economic opportunities urban environments offer.

These informal settlements are often characterized by lack of safe water and sewage services, poor sanitation, lack of garbage collection services and other health issues (including contagious and vector-borne diseases).

The vulnerability of urban populations to external shocks is greatly increased by poor urban infrastructures. During rapid urbanization, compliance and enforcement of building codes and safety requirements might be ignored. As a result infrastructures might be more vulnerable to the impacts of more intense and frequent hazards resulting from Climate Change.

BOX 2

Change in climate	Possible impact on urban areas		
Changes in means			
Temperature	Increased energy demands for heating or coolingWorsening of air qualityExtremes that are exaggerated by urban heat islands		
Sea-level rise	Coastal floodingReduced income from agriculture and tourismSalinization of water sources		
Precipitation	 Increased risk of flooding Increased risk of landslides Distress migration from rural areas as a result of crop failures Interruption of food supply networks 		
Changes in extremes			
Extreme rainfall/ tropical cyclones	 More intense flooding Higher risk of landslides Disruption to livelihoods and city economies Damage to homes and businesses 		

4. Vulnerability and capacity assessment in urban areas

Changes in extremes		
Drought	Water shortagesHigher food pricesDisruption of hydroelectricityDistress migration from rural areas	
Heat or cold waves	 Short-term increase in energy demands for heating or cooling 	
Abrupt climate change	 Possible significant impacts from rapid and extreme sea- level rise 	
Changes in exposure		
Population movements	- Movements from stressed rural habitats	
Biological changes	Extended vector habitats	

Urban Risk, World Disaster Report 2010, IFRC

Urbanization of poverty – informal settlements are usually located far from urban centres and necessary services and their inhabitants need to spend a considerable amount of time and money in travel to job places, schools, hospitals, etc. Inhabitants of informal settlements also spend more money on the informal provision of electricity or clean water, for example, than do other urban residents who can benefit from these services and, compared to rural poor, have limited access to 'wild' foods.

While more people are moving to urban centres to find economic employment or to escape conflict, they do not always find what they are seeking. Many towns and cities, especially in developing countries, lack adequate economic opportunities and have highly unequal distributions of wealth; these result in economic, social and political exclusion of new residents. Many newcomers have to resort to informal means for their livelihoods or illegal employment with low wages that cannot be challenged.

In addition, traditional coping mechanisms and social support systems are usually lacking in the poorer, informal settlements. Influx of people from different parts of the country (or from other countries), with at times differences in language, religion and culture, results in a lack of a sense of community. Lack of coordination, a sense of place and a feeling of exclusion can also lead to high levels of violence and the inability of residents of informal settlements to come together and discuss improvements, prepare for risk or invest in the upgrading of their settlements.

Poor governance – the inadequate allocation of urban services to certain insecure and hazardous areas in towns and cities leads to the 'institutionalization' of urban risk. This often occurs because governments refuse to acknowledge or actively discourage the creation or growth of informal settlements. Dominant power systems make participation and empowerment of at-risk, urban social groups extremely difficult and territorial and social discrimination in the assignment of urban services and infrastructure is a common feature of today's fast-growing cities. Good governance is complicated by the complexity of urban systems, the lack of resources in many cities, the presence of many different economic and social interests, and a lack of security.

Rapidly growing, peri-urban, small, and middle-sized cities are particularly at risk. They often lack not only financial resources, infrastructure and services but also the institutional capacity to manage the increase in urban population even as their exposure to risk is increasing. Data from the Global Assessment Report on Disaster Risk Reduction 2011 suggest that the most significant increases in risks and disasters happen in towns and cities with populations in the range of 20,000 to 50,000 people, with the majority of disaster events happening in urban places with populations of up to 100,000 people.

4.2 Is the VCA suited for use in urban areas?

While many of these problems would likely be tackled through the VCA process in rural areas, it is less clear how to use the VCA model and make it suitable for use in the urban context, where some National Societies are less confident about using it.

VCA had its origins in a time when rural development problems were more dominant in thinking about poverty and risk, and linked to working in a participatory way with people in a community.

This meant that the target locations were thought of as separate rural communities, and VCA tools were largely derived from existing participatory methods (such as PRA – Participatory Rural Appraisal) used by NGOs and researchers. More recently however, as a result of an increase of risk in urban areas, several National Societies have carried out "urban VCAs".

But is the VCA well suited for use in urban areas? The majority of National Societies consider the VCA to be a valuable methodology that can be used in urban areas; however, it does need to be adapted to overcome some key differences between rural and urban contexts and its use should be based on a case-by-case assessment as there might be cases whereby other methodologies would be better suited. In particular, it will be important to look at how to adapt both the VCA process and the different VCA tools that might need to be tailored for use in an urban context.

 $^{^{17}}$ Exemplified by key interventions such as Robert Chambers' book Putting the Last First (1983).

4.3 What issues need to be taken into account when planning a VCA in urban areas?

There are fundamental social and physical differences between rural and urban locations, and this means that there are different sociocultural contexts, challenges and opportunities that need to be taken into account when working with urban communities in a participatory manner.

- The approach used will depend on the urban location; more specifically, the following issues will be important:
 - Urban settlements can vary in size from a few thousand to many millions of people. A small town is likely to retain many links with people in the surrounding countryside and may be rather 'rural' in outlook, with some of its people engaged in economic activities that connect them with agriculture.
 - The definition of 'urban' is usually based on administrative boundaries so it is possible that a place defined as 'urban' includes people in the countryside that falls within its boundary, while, in larger towns or cities, the economy is predominantly urban.
 - Urban density can make VCA work difficult as a result of the concentration and complexity of the settlements (e.g., it might be difficult to know what is meant to be a path or a drain channel).
 - The type, nature and extent of the urban centre will determine how VCA tools and overall process will need to be tailored to fit that specific context.

- The VCA process in urban areas also needs to take into account the fact that there may be a lack of a clear-cut community¹⁸ urban communities may encompass more than one language, have less historical knowledge of the location, may be transient and unable to devote time to participation, or have less incentive to invest in planning and preparedness activities because their status is uncertain and their dwellings are illegal and could be demolished by government at any moment.
- Social, economic and political conditions may be more complex, involving different types of actors (including those considered to be 'uncivil' and negative in relation to other people, e.g., those linked to gangs and crime), and the threat of violence itself may make interventions by National Societies difficult. This challenges the Red Cross Red Crescent on how to work with the most vulnerable people when it may lead to risks for staff and volunteers. It is also often necessary to bring other partners (e.g., government agencies or research institutions) into the process as change cannot often be achieved by working only with communities, but rather by influencing also the local institutions and key actors such as urban planners, architects, providers of services, social services and other organizations that are working in the same specific areas such as youth and crime, conflict resolution, adult education, etc. Some thought needs to be given to how to adapt the VCA approach to overcome the differences in social relations in urban versus rural settings.

¹⁸ In rural areas, this is assumed to be a village.

Lessons from Haiti - 'Safe Spaces'

Intervening in Haiti in the aftermath of the 2010 earthquake, the IFRC was faced with a series of challenges. Dialogue with people proved difficult; because they were living in a context characterized by high levels of violence and police brutality, people would not openly discuss their most urgent needs and issues linked to their safety. Confidentiality, therefore, (rather than group discussions) became imperative and sensitivity was needed to discuss determinate issues in particular with women and young people. Other challenges included finding suitable places where it would be possible for people to meet safely.

To answer these challenges, the Safe Space approach was developed by the IFRC and piloted in four communities. The approach is based on a community-led protection methodology that asks community members about violence while guaranteeing anonymity. This enabled holding meetings with young men, some of whom had links to gangs, to give them space to talk and reflect in safety. Findings showed that violence was mostly against women and girls and predominantly of a sexual nature. But violence was also found in homes, camps, schools, streets, transport stations, etc. Results contrasted starkly with information from a 'traditional' VCA conducted previously where information on violence was minimal.

Within a VCA, we need to tailor both the process and the tools to reflect a determinate context and, if that is deemed to be not possible, the use of different approaches should be carefully evaluated.

There may be different languages, ethnic groups and religious beliefs and some groups may not want to cooperate with others. Even something as simple as finding a place for meetings may be very difficult; for example, it may be hard to avoid the gathering being controlled by one group or being in a territory that is not welcoming to people from outside. The challenges for facilitators are likely to be far greater and the methodologies less straightforward. For instance, some people may not want to give names and addresses, for fear that they may be accused of passing on information (e.g., about where gangs operate). This makes it very difficult to have follow-up meetings and organize local activities.

- 4. Vulnerability and capacity assessment in urban areas
- Participation may be restricted or interrupted for instance, it could be that, because of different social and political factors, men may not be able to join in the VCA during the day and women represent the majority of participants; when participation at certain times (e.g., during the day) is an issue, it may take longer to complete a VCA in urban settings because multiple meetings/teams may be needed to complete the VCA process in each community to ensure that all sections of a community have been represented and have participated in the VCA process.

The Integrated Neighbourhood Approach after the Haiti earthquake

In the aftermath of the Haiti earthquake, both those who survived near their original homes and those who moved into shelters and camps were not easily identifiable as 'communities'. People were in fragmented groups or households, with many dead, missing or injured. Social relations were disrupted, broken or replaced with new types of linkages. In this context, it was difficult to look at collective action for the medium or longer term (a key aspect of a VCA process) as people were wary of making investments because they were concerned about the existing conditions of uncertainty, conflict and rivalry.

An innovative approach to deal with these issues is the Integrated Neighbourhood Approach (INA). Key to this approach is the idea that, although you do not have a functioning community, interventions still need to be developed in a participatory manner and integrated with activities of other service providers in particular when they focus on livelihoods, shelter, water and sanitation, risk reduction and protection from violence. By working with newly established and re-established communities, the INA supports the transition from the post-earthquake disorganized and dislocated 'civil society groups' into renewed communities, wherever they happen to be. Working together with other key stakeholders in the provision of services also resulted in supporting a much broader range of interventions focused at promoting greater local development.

It is important to understand urban violence – while problems of violence do not affect only urban areas, ¹⁹ there are particular types and concentrations of violence-related issues in urban areas that need to be solved before other problems can be addressed. Urban violence includes both issues linked to gangs, drugs, ethnic conflict and other, less obvious, forms of interpersonal and self-directed violence, often arising from poverty, discrimination and isolation, stress and mental health problems (including addiction). ²⁰ Often, domestic violence has a direct impact on the violence that happens on public streets; they are connected. In addition, identity loss (at times, this encourages the joining of urban gangs) and the availability of unregulated small arms, alcohol or drugs in urban areas can fuel violent behaviour.

"Advancing the Red Cross Red Crescent Fundamental Principles and humanitarian values we commit to work with people vulnerable to violence with a particular focus on children and youth; to prevent mitigate and respond to violence – locally and globally – through advocacy and promoting change in knowledge mind-sets attitudes and behaviours in order to foster environments that respect human dignity and diversity and are caring safe and peaceful".

IFRC Global strategy on violence prevention mitigation and response (2010–2020).

Urban violence, and the Red Cross Red Crescent efforts to change this, brings with it the issue of safety for Red Cross Red Crescent staff and volunteers. Indeed, many of those who commit violence are themselves 'victims' of direct violence and of the poverty and

¹⁹ Within 'communities', there are often divisions and conflicts: they include groups with different interests and communities that are not inherently unified and cooperative. This can lead to violence. This problem is well examined in the Better Programming Initiative (IFRC, Aid: supporting or undermining recovery? Lessons from the BPI, 2003).

²⁰ IFRC Global Strategy on Violence Prevention, Mitigation and Response 2010–2020. Also see the Predictable, preventable: Best practices for addressing interpersonal and self-directed violence during and after disasters from the Canadian Red Cross/IFRC written in 2012.

stress that affected them when they were growing up. Important lessons can be drawn from Red Cross Red Crescent experience in working with young people in violence-prevention projects which contribute to breaking the cycle of violence.

4.4 Planning the VCA in urban areas: steps and approach

When planning a VCA in an urban context, it might be important to consider whether the timing is appropriate or not. As is the case in rural areas, if this is the first intervention of a National Society in a specific area, and especially if there are complex issues to be solved, the VCA might not be an appropriate entry point. The decision could therefore be that of postponing the VCA to when a level of trust and respect has been achieved after for example the carrying out of more straightforward service delivery/specific programmes such as more traditional vaccination campaigns, relief and reconstruction work carried out after a disaster.

When looking at the 12 steps of the VCA process, there are some key entry points when additional attention to the urban context will need to be given by the National Society and the VCA team. From the very onset of the VCA process, and as highlighted by the section above, it will be important to clearly define why a VCA is being proposed (Step 1 of the VCA process). The list below has been developed to help this reflection and each point will need to be interpreted with care and in light of the specific context. For instance, how the VCA is designed and the community identified may be very different depending on the size of the town or city.

The VCA process: Moving from investigation to action in 12 steps

Level one: National Society support

- 1. Understanding why VCA is being proposed.
- 2. Sensitizing (of National Society leadership, branches, partners).
- 3. Setting up a management structure for the VCA.
- 4. Setting the VCA objectives.

Level two: From assessment to planning

- 5. Planning the VCA.
- 6. Preparation phase.
- 7. Using the investigation tools with the community.
- 8. Systematizing, analysing and interpreting data.
- Returning information to the community and deciding priorities and actions for transformation.

Level three: From planning to action

- 10. Turn vulnerabilities into capacities through actions.
- 11. Recommendations and report-writing for local authorities, donors and partners.
- 12. Programme implementation: risk reduction projects with the community.

It will also be very different depending on how well established the neighbourhood is and whether it has coherence as a community. Factors to take into account include the following:

- How long has the 'community' been there? Is it a longestablished settlement that can be acknowledged as part of the urban fabric, with an identity that is recognized by its inhabitants and others? If not, how can participatory approaches be used that take account of the limitations?
- Does the Red Cross Red Crescent already operate in that area, for instance in health or other sector activities?
- Has the National Society built up trust with the people (all of them or only some?) that will allow it to carry out a VCA and have a deeper relationship with people? Or would it be better

- to delay doing a VCA until greater trust and understanding has been established through the provision of services?
- Is it recognized as a settlement by the authorities? Governments are often reluctant to recognize poor people's settlements because 'legal' status enables the inhabitants to claim services and official support. Many vulnerable people may live in informal settlements that are not recognized by the government. It may be difficult to work in illegal settlements where there may be little or no government.
- How stable is the population of the location? Is there a significant proportion that changes frequently (i.e., circulating between city/town and rural 'home', or to other parts of the city)? How is this going to impact on people's participation and engagement in projects?
- Do the work patterns of the inhabitants make it possible for participation and for activities to be carried out as a result of a VCA?
- Are there any existing organizations through which the Red Cross Red Crescent could work? These might include NGOs and community base organizations. In many cities, there are organizations operating in informal settlements, and some of these are part of a global federation that is very active and a potential partner for the IFRC.
- Which other organizations can be partners? For instance, specific technical capabilities may be needed that the Red Cross Red Crescent does not have in order to implement certain projects that are identified by the VCA.
- Is the local government engaged in the process as a willing participant or partner? What about other key actors such as urban planners and service providers (also private sector)? A VCA is not likely to be successful if all relevant actors are not involved.
- Are there security and safety problems that would affect the ability of Red Cross Red Crescent staff and volunteers to carry out the VCA?

Is there a problem of violence between groups that makes it difficult for a VCA to occur (e.g., people might be scared to participate)? Can the VCA incorporate prevention of violence as a part of the interventions that are carried out with the people?

The above points also help in determining what type of 'community' will be involved:

- Is it a neighbourhood and, if so, how does it define itself as such?
- Is it a particular group that has identified itself by living in a particular location?
- ☑ Is it a section of an illegal settlement chosen because of the particular risks that it faces?

It is important to be clear about who is going to be involved and why they are chosen, so that possible interventions are relevant and supported by people.

During the planning stage (Step 5 of the VCA process), adequate attention needs to be given to the following aspects to ensure successful implementation and results of the VCA:

- Allocation of sufficient resources (time and money) especially adequate time over a period long enough to deal with potential constraints on people's participation. Urban VCAs could take more time than would rural ones.
- Allow enough time for planning and for gathering and analysing secondary information during the preparatory stages (Step 6 of the VCA process).
- Identify what skills are needed (e.g., expertise in domestic and youth violence) and invest time in developing partnerships and ensuring that different actors and experts are fully on board.
- Develop good working relationships with local government and relevant departments and key actors – be aware of their

weaknesses and lack of information and identify the ways in which a VCA can also support their work as this will make it more relevant to them. At the same time, be aware of whether there is mistrust towards local government and/or local police and ask community members whether the information they are sharing can also be shared with third parties such as local government.

Ensure that enough precautions are taken to guarantee the safety of both the people with whom you will be working and Red Cross Red Crescent staff and volunteers (in particular, women). Staff and volunteers need to spend enough time preparing for dealing with potential violence in the community. This is important throughout the 12 steps of the process, including Step 12.

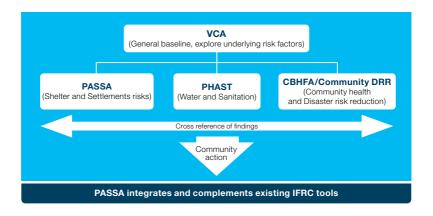
4.5 VCA and other IFRC participatory approaches

If at any stage it is felt that it might be too early to engage an urban community in a VCA process, as it is quite demanding and it does need to have strong community engagement and support, it may be that participatory work targeted at specific sectors (e.g., health, sanitation or nutrition) would be more successful.

In this case, rather than selecting communities on the basis of geographical boundaries and residential areas, entry points such as schools, workplaces or other organizations could define the target population. Work could include participatory methods like those used in VCA, but using a different process that would focus on specific groups and risks (e.g., earthquake risk in schools, fire safety) as entry points. In Latin America, the Protected Schools programme and other approaches have used participatory

methods as a way to engage the children and parents.²¹ This can support building connections to people in related neighbourhoods.

To do this, there are other tools that have been developed by the IFRC to understand vulnerabilities and these may be particularly suitable since their focus is on enabling specific services to be delivered in and with the communities through people's involvement. An excellent example is the PASSA (Participatory Approach to Safer Shelter Awareness) approach which focuses specifically on the construction of safe housing and other buildings and which is being used also in recovery and reconstruction. With its linked Shelter Safety Handbook, it is aimed at preparedness for different types of hazards, and at creating awareness of the construction methods needed to reduce and prepare for different risks.



²¹ http://www.scribd.com/doc/154793942/Catalogue-of-Products-Reference-Centres-Americas-Zone-2013

4. Vulnerability and capacity assessment in urban areas

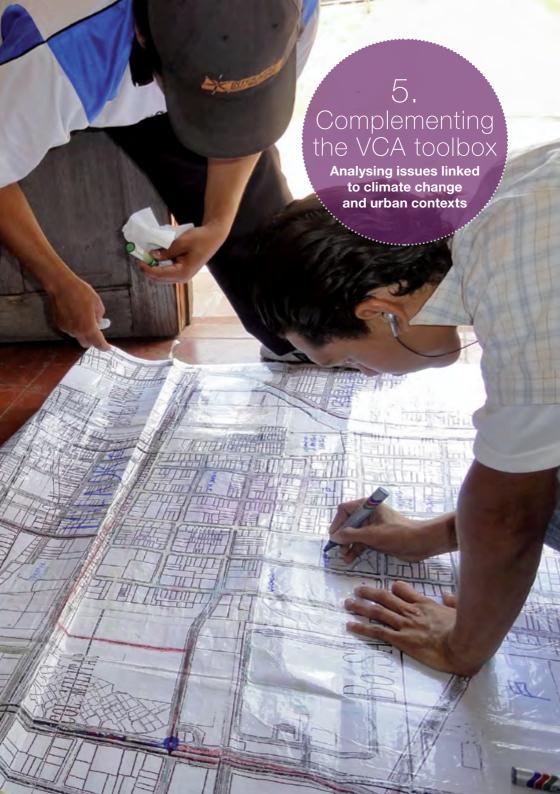
The PASSA, PHAST (Participatory Hygiene and Sanitation Transformation) and CBHFA (Community Based Health and First Aid) make use of the participatory tools that are in the VCA toolbox so as to ensure that the shelter, sanitation and health projects are embedded in the community. Because these programmes are sector-specific, it is possible that they are easier to implement in an urban context.

However, as the diagram shows,²² the sector specific participatory activities are designed to be implemented after the VCA, during which community member determine what the risks are. Having diagnosed what it is that concerns people, then the different tools provide the means to follow up with people in relation to their specific needs. More information on the different tools can be found on the IFRC website: www.ifrc.org

Another useful document when planning activities after conducting a VCA is the Urban Programs Checklist developed by the America Zone.²³

²² Extracted from PASSA handbook.

²³ Urban Risk documents – IFRC America Zone http://www.educacionvirtual.ws/ desaprender/



5. Complementing the VCA toolbox

The tools that we consider in the sections below are from the booklet: "The VCA Toolbox" and the below information needs to be used together with the other VCA booklets as it is meant to complement their content, not replace it.

It will also be important to refer closely to the information that is contained in the **Methods Reference Sheets** because using the correct method²⁴ is as important as is using the correct tool. The decision of which method is best will have an impact on the successful use of the selected tools.²⁵

In the end, the VCA is not just about tools – what is important is **how the tools are applied** and adapted to fit specific contexts.

Some thought should be given also to the **sequence** in which the VCA tools will be used. Choosing which tools to use requires careful consideration: **which ones are best** to collect the information that is needed, to verify findings and to identify gaps, challenges and opportunities. Keep in mind the following questions to determine which are the right tools to use:

- → What information do you want to obtain?
- → How much will it cost and do you have the necessary resources (financial and human)?
- Does the VCA team possess the capacities to implement the tool correctly and to collect accurate information, analyse it and interpret it?

²⁴ For example, if you are looking at having a community meeting in an urban environment, most likely this will need to be organized and run very differently from the way it would be run in a rural context. You might need to take into account different working hours, the issue of safety of women at night if the meetings cannot be held in the day, and very mixed cultural and educational levels of participants, etc.

²⁵ Please refer to the Methods Reference Sheet, pg. 133 of the VCA Toolbox. You can find it at: http://www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

- Are there others (VCA resource people, external experts, partners) who can help?
- □ Can the VCA team be trained and what kind of training is needed?
- Does the VCA team have the capacity to analyse the information generated by the tool?
- □ Does the selected VCA tool help you build stronger relationships with the community?
- Does the selected VCA tool encourage participation of community and neighbourhood representatives in light of a specific context and related challenges?

Depending on each situation, the VCA team will decide whether all VCA tools are needed or whether only a combination of different tools is needed to meet the objectives of the VCA.

To cover issues related to climate change impacts or VCA use in an urban environment, some VCA tools can be applied as they are while others might need to be slightly adjusted (e.g., to include additional questions) to cover the additional challenges that climate change or an urban environment brings to the VCA process. Box 3 below indicates which tools can be used as they are and which ones need additional guidance.

BOX 3

Tools	Research Reference Sheets	What it is	Changes needed
Review of secondary sources (quantitative and qualitative)	RRS 1	A review of secondary sources means collecting information that already exists, usually in the form of written reports or documents. It provides an overall picture of the community in which the VCA is going to be carried out. This review should be carried out prior to any fieldwork being started, as the findings may influence the types of tools you choose to use in a given community.	YES – for both climate change and urban context
Community baseline data	RRS 2	A list of questions designed to obtain information needed for the creation of baseline data. The questioning should be completed early in the process because it enables the comparison of the situation before and the situation after risk reduction projects have been implemented.	NO – however, at times, it may be necessary to adapt some of its content to an urban context, e.g., when looking at construction materials or emergency response resources as they are bound to be different in urban areas
Semi- structured interview	RRS 3	A form of guided interview in which only a few questions are decided upon ahead of time. The questions are open-ended, with the aim of stimulating an informal discussion on a given topic. It can be used both to give information (i.e., raising awareness) and to receive information.	YES – specific questions need to be used to gain a better understanding of climate change and urban issues

Tools	Research Reference Sheets	What it is	Changes needed
Focus group discussion (qualitative)	RRS 4	An organized dialogue between a selected group of knowledgeable individuals in a community on a given topic. Focus groups provide insight into people's shared understanding of everyday life and the ways in which individuals are influenced by others in a group situation. The facilitator needs good group leadership and interpersonal skills to moderate such a group.	YES – for both climate change issues and when using VCA in urban contexts
Direct observation (qualitative)	RRS 5	Direct observation helps the VCA team to understand the context in which the information is being gathered. All members of the VCA team should be constantly taking notes on what they are observing. It is essential to provide as much detail as possible and to describe the circumstances and the context.	YES – for both climate change and urban issues
Mapping (qualitative)	RRS 6	Maps can be made by a community to indicate risks and hazards. They can also show what resources a community has and where they are located. Maps are useful for stimulating discussion among community members about key community issues and for helping to analyse potential problems and solutions.	NO – however, with regard to climate change and urban risk, the discussion should include current processes of change observed by people and causal factors

Tools	Research Reference Sheets	What it is	Changes needed
Transect walk (qualitative)	RRS 7	A transect walk involves walking through a community to observe the surroundings, people, land use and resources. The route taken can be determined by drawing a line on a map of the locality that goes through or 'transects' all zones in order to gain a representative view of the community. It is usually carried out early in the research process as it gives an overall view of the community and helps team members to observe things that may require further investigation later on during interviews or group meetings. It is more effective when undertaken with community members.	NO – please use all the different steps that are already indicated in the VCA toolbox for the transect walk as this is covered extensively (pages 86 – 92 of the VCA toolbox)
Seasonal calendar (qualitative)	RRS 8	For a seasonal calendar, a chart is created with the months of the year along the horizontal axis and the events and activities significant to the community listed on the vertical axis. Completion of the chart by the community helps the VCA team to see the hazards and risks in terms of when they occur. The analysis can help a community to rethink its living habits according to its vulnerability to hazards.	YES – additional issues need to be considered when applying the tool for both climate change and its use in an urban context

Tools	Research Reference Sheets	What it is	Changes needed
Historical profile and historical visualization (qualitative)	RRS 9	With a historical profile, a community can build up a picture of past events, track changes in the environment and in behaviours and understand causal links. In turn, this can influence decisions that community members take when planning projects. With historical visualization, the community members create a chart showing how key aspects of their lives have changed over time. It can show up changes in housing, trees, river levels, livestock and hazards, and helps people to think about how their susceptibility to certain risks may continue to change in the future.	YES – additional issues need to be considered when applying the tool for both climate change and its use in an urban context; however, changes are minimal and most steps will remain the same

Tools	Research Reference Sheets	What it is	Changes needed
Household and neighbourhood vulnerability assessment (qualitative)	RRS 10	This tool is useful for helping households – and, by extension, neighbourhoods – to assess their levels of vulnerability in relation to likely hazards and risks so that action can be taken to reduce them. It takes into account key factors such as housing, location, evacuation routes, electricity and drainage.	NO CHANGES – but additional information needs to be taken into account to consider climate change issues. In particular to: i) understand household and neighbourhood vulnerability to predicted climate change impacts in that area; ii) assess risks that are going to be magnified; and iii) assess potential new risks. For example: if the review of secondary sources has shown that it is likely that rainfall and flooding will increase, you can use this tool to understand people's vulnerability to these changes and the interventions needed.*

^{*} Think about how the assessment links to the information gained from secondary sources. The possibility of greater intensity in rainfall, storm and cyclone risks (and related landslides) would link up to issues such as whether there are adequate housing structures, infrastructures (e.g., rural roads, passageways in slum areas, etc.), early-warning systems, escape routes, food and livestock storage areas, etc. This would point to where interventions need to be made to reduce people's vulnerability.

Tools	Research Reference Sheets	What it is	Changes needed
Livelihoods analysis (qualitative) Coping strategies analysis (qualitative)	RRS 11	Livelihoods analysis and coping strategies analysis look at two separate but closely related issues (can be implemented separately or together). Livelihoods analysis creates an inventory of a household's assets and how they are applied as a 'bundle' to its income earning. It helps identify a household's vulnerability and what capacities and resources it can draw upon. Coping strategies analysis focuses on what people do when they are affected by a hazard (e.g., drought). Coping strategies are what families (and communities) rely on to maintain their livelihoods during and after a disaster.	YES – only for the urban risk context
Institutional and social network analysis (qualitative)	RRS 12	This tool helps to gauge people's perceptions of the role and significance of various organizations within the community. It can stimulate discussion leading to identification of the role each organization can play not only in times of disaster but also in relation to disaster preparedness and mitigation activities.	YES - Minimal changes are needed

Tools	Research Reference Sheets	What it is	Changes needed
Assessing the capacity of people's organizations (qualitative)	RRS 13	Listing the key organizations in the community, such as religious bodies, schools, financial committees, hospitals, coordinating bodies and local government, can help to identify the various types of support available to the community in times of crisis. This can be used to gradually build up a picture of local capacities. It is closely linked to capacity mapping.	NO CHANGES
Venn diagram (qualitative)	RRS 14	Venn diagrams are designed to collect social data by using circles to show the links or relationships between different parts of a community or institution. Because they reveal similarities and differences between institutions, partners, people and issues within a community, they can be useful in identifying problems and possible solutions. Venn diagrams are especially relevant for institutional analysis as they can help to identify specific organizations that could be involved in implementing a community action plan.	NO CHANGES

In addition (see Sections 3 and 4), issues related to gender need to be taken into account when using the different VCA tools as they can influence the way information is collected, analysed and used to decide on priorities and activities. In some contexts, women's participation in the VCA process will need to be handled sensitively and every effort made to collect information on the different levels of risk experienced by men and women²⁶ and to ensure that priorities and follow-up activities are tailored in such a way as to reduce risk for all people. The process of information collection and using the tools involves being aware of the differences between men and women.

The section below follows the same order as that in the VCA Toolbox booklet, and gives only the additions and changes – it should be read alongside the VCA Toolbox book, which is available at: www.ifrc.org/Global/Publications/disasters/vca/vca-toolbox-en.pdf

5.1 What needs to be done differently in the different VCA tools?

As already highlighted by **Box 3** on page 69, not all VCA tools will need to be revised to address climate change impacts or when implementing a VCA in urban areas. The section below therefore will look **only** at those tools that need revision and provide information on what needs to be taken into account in addition to what is already described in the VCA toolbox.

²⁶ For instance, you may need to schedule sessions for some tools so that women are able to attend at different times of the day from men and you may need to deal with opposition to the idea of holding separate sessions for women.

5.1.1 RRS 1 - Review of secondary sources

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to understand:	 what climate change impacts might be in a certain area and how they may affect communities whether the community members have already been exposed to climate change-related information whether there is a mismatch between what the community has identified, and the longer-term changing trends and hazards Identify who are those most vulnerable to climate change impacts who can support the selection of locations for VCAs what initiatives are already under way (and whether there are any lessons learnt) and who are potential partners and experts the concrete climate change issues that may affect a particular area based on available information. 	 how urban processes affect the community and different types of risk who are those most vulnerable to climate change impacts and who can support the selection of locations for VCAs (e.g., neighbourhoods in a city, etc.) what initiatives are already under way in a specific area (and whether there are any lessons learnt) and who are potential partners and experts key issues that are affecting a specific area or neighbourhood.
Step 1 (pg. 49): Determine what information you want to collect	Check what information you already have about the community and local area and about climate change. If necessary, seek more information on: - climate change impacts expected in your country and region in the coming decades - past changes – observed changes in the last few decades – as locally relevant as possible	Check what information you already have about the community or local area, and about urban risk and vulnerability. If necessary, seek more information on: – gender issues – patterns of employment and other economic and livelihood activities (in urban centres, duties of women and wage-earning opportunities may be different)

Including climate To consider when change <u>issues</u> carrying out a VCA in the VCA tools in an urban context Step 1 legal status of the settlement (continued) (as it may be very precarious and people might not want to invest or authorities might not - Gender roles and potential want to be involved) impacts of climate change on land-use plans to understand possible future development in that area composition of the community (cultural make-up, educational level, languages spoken, any existing conflict or crime) levels of contamination of water and sanitation sources that are close to, or used by, a neighbourhood or community areas used for waste management and their location in relation to the neighbourhood and community areas where there is poor development and /land use planning and/or excessive growth; identify also which and to what extent safety codes are being used - main social and natural physical hazards, and organizations working to address them in the identified area(s).

²⁷ If your National Society has been part of the Preparedness for Climate Change programme, then the Society should have produced a climate change report specific to your country and National Society.

Including climate change issues in the VCA tools

To consider when carrying out a VCA in an urban context

Step 2 (pg. 50): Make a list of potential sources of information Find out if someone in your National Society is in contact with the national meteorological office and/or local environmental department. If not, it is good to contact them as these offices will be able to provide an overview of historical changes (e.g., rainfall patterns for a given town) that are already occurring, plus projected climate for the coming decades.

In addition to the organizations already listed in the VCA toolbox (page 50), other information could be obtained from:

- climate change focal points at the IFRC Zone office and IFRC Secretariat in Geneva (website)
- ministries such as Environment, Agriculture, Planning, Development that are working on climate change issues
- Red Cross Red Crescent Climate Centre
- IFRC Climate Helpdesk
- UN agencies working on climate change such as UNEP, UNDP, FAO and WFP.

Find out what the existing relationship is between the community and the authorities (e.g., lack of trust or existing conflict) and who the key actors are who are working in a specific community and what they do.

In addition to the organizations already listed in the VCA toolbox (page 50), other information could be obtained from:

- local authority (of a specific district, area within the city), local police and hospitals
- urban planning office
- public service providers (e.g., waste, water, electricity)
- informal services providers (e.g., informal distribution of water)
- population information office (census)
- local churches
- local community committees and groups
- IFRC Shelter and Settlement, Community Preparedness and Risk Reduction, Health, Principles and Values
 Departments
- UN Habitat, FAO (urban gardening projects) and main donors supporting work in that area (DANIDA, SIDA, CIDA, ECHO, World Bank, among others).

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 2 (continued)	 Another source of information is the IPCC;²⁸ check IPCC most-recent climate change reports (2007) with regional assessment of climate change impacts: www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg2_report_impacts_adaptation_and_vulnerability.htm Special Report on Managing the Risks of Extreme Events and Disasters: Summary and full report: http://ipcc-wg2.gov/SREX/ 	
Step 3 (pg. 51): Collect the information	Additional information that might be needed is: - existing knowledge within the country of changes in climate in recent decades, including temperature and rainfall changes, changes in hazard trends and extreme events - general projections for the country which can provide useful information for the local level (e.g., there is high confidence that temperatures, sea levels, ocean acidification, etc. will continue to rise); this information alone can be useful if working with coastal communities because it might help prioritize actions - information relating to scenarios and forecasts	Additional information that needs to be collected in urban areas: - knowledge of what sociopolitical changes have been experienced in the selected area in the past 20 years - key features of the current political system and who is in charge of what at municipal and district levels - information on crime related to a specific area (both domestic and non-domestic) and incidence of sex-related crime and HIV/AIDS rates

²⁸ Inter-governmental Panel on Climate Change (IPCC).

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 3 (continued)	- climate change activities carried out by other organizations (which may enable partnerships and sharing).	 information on 'hidden' disasters (e.g., fires in informal settlements due to lack of electricity and use of oil, candles and gas stoves, deaths from cold weather or high temperatures (heat waves), diseases related to poor sanitation and unclean water existence of recreational activities and spaces access to school and safety-related issues (if any) literacy levels of the different members of the community information on drug and alcohol-related abuse rates of migration into the area and past or present tensions between newcomers and more-established residents. Often this information is found in local newspapers (old, digital records are usually found in public libraries).
Step 4 (pg. 52): Analyse the information	If needed, work in partnership with other organizations to understand complex information. In addition to what is already described by the VCA toolbox, the analysis needs to look at how climate change is likely to affect existing processes and vulnerabilities and focus on: 1) main expected changes; 2) impacts on local economies and livelihoods; and 3) main potential risks.	Check page 53 of the VCA toolbox and follow the questions proposed. ²⁹ In particular: - What processes and policies are affecting the community? - What is affecting or could affect their vulnerabilities or coping capacities? - What is affecting or could affect the risk profile of the community?

 $^{^{\}rm 29}$ When looking at the information collected, don't forget to take into account the expected, additional impacts of climate change.

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 4 (continued)	More specifically: - What are the expected impacts on livelihoods, poverty trends, vulnerability to hazards, health, water, food security, shelter? - What will be the potential impacts on income opportunities (e.g., livestock rearing, fisheries, agricultural work)? - How will livelihoods be affected if rainfall and temperature change? Will there be any specific impacts on crop production and availability of water? - Which types of communities, or which parts of the country, are likely to be most affected?	 What key information is still missing and where could you find it? Is information on some group or people in the community less available than it is on others? Why? This needs to be discussed within the VCA team to identify a targeted approach to collecting missing information. Are there interesting initiatives that other organizations are undertaking in the community and neighbourhoods? Would they be good partners for the National Society?

5.1.2 RRS 3 - Semi-structured interview

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to:	 understand better what changes are happening and the preparedness level of a community in relation to climate-related shocks. 	 how to understand better the urban context.
Steps 1 & 2 (pg. 62): Semi- structured interviews, interviewees	NO CHANGE	NO CHANGE

Step 3 (pg. 63):

Topic and guide

questions

Including climate change issues in the VCA tools

in the VCA to

support greater understanding of changes in a community that may be linked to climate change (as one of the causal factors) and the community

- better understand the use of climate information:
 - From where do communities receive their early warnings³⁰ and from whom? Who receives the warnings?
 - Is it only warnings of immediate dangers (one to five days) or also long-term seasonal forecasts?
 - Is anyone in the community responsible for announcing early warnings? What happens if the person isn't there?
 - Is weather information used? Are the forecasts understood?
 - Are there organizations that could be conduits for information, e.g., schools, religious institutions, health services?
 - Could the system be improved?
 - Does the community use weather warnings to know when to harvest crops? If not, why not?

To consider when carrying out a VCA in an urban context

Find below some potential questions that you might want to use to understand more about the urban context and to better understand the level of preparedness of the community:

- Do you receive information on hazards (e.g., heavy rainfall, epidemics of polio, dengue, heat waves or cold waves)? Who receives the warnings?
- How is the warning communicated? What media are used and are accessible to the community?
- Is it only warnings of immediate dangers (one to five days) or also long-term seasonal forecasts?
- Do people know which offices are responsible for announcing early warnings?
- Do people know where to seek information or where to go if something happens? Do they have access to some of the existing structures and services?
- Is access to safe structures and support and information equal for women and men? Disabled and elderly people?

³⁰ To have comprehensive information on community-based early-warning systems and key actors, please refer to: Community Early Warning Systems: Guiding Principles (IFRC, 2013).

Including climate change issues in the VCA tools

Step 3 (continued)

- How do people normally communicate with each other and what is their favourite technology (e.g., cell phones, internet, social media, gatherings).
- better understand the use of traditional knowledge:
 - What traditional signs warn of bad weather or a change of season? Who holds this knowledge?
 - By which seasons does the community typically plant crops? Has this changed?
 - Is traditional knowledge about crops still used and is it still correct?
 - Is traditional knowledge still being used to predict hazards? Is it useful? Have changes in those hazards been noticed?
 - Have there been changes in temperature or rainfall patterns?

Changes in livelihoods:

- Are any changes occurring that are resulting in positive or negative outcomes for the community?
- Have people noticed differences in wildlife and fish stocks or differences in the times of year of the catch?
- What are people's main coping strategies? Have they changed? Are they still valid?

To consider when carrying out a VCA in an urban context

- How do people usually communicate with each other and what are the most common technologies used (i.e. cellphones, internet, tablets, social media, etc.)
- Could these also be used to communicate risk-related issues?

Find below some potential questions that you might want to use to better understand process/changes in the community:

- What are the main changes that have happened and are happening in your community?
- What do you think of them?
- Are more people moving in? Is this causing any tension? What are the main difficulties that you need to deal with on a daily basis?
- Where do you and other community members receive support with different issues? Can this be improved?
- What is the local authority doing in your neighbourhood to address existing issues? What works and what doesn't work? And why?
- If you and your neighbours have issues or have to deal with an emergency, where do you go to? Who do you talk to? Is this enough?

Including climate change issues in the VCA tools

To consider when carrying out a VCA in an urban context

Step 3 (continued)

Health

- Are there diseases that are more common during certain times of the year?
- Have some diseases been increasing or decreasing in the last five to 15 years?
- Are there diseases that are more common when it rains or when there is a drought?
- If 'yes' to any of the above:
- Which ones?
- Why do people think that is?
- Who is most affected?
- What actions are people taking to reduce the risk of these diseases?
- What could be done differently?
- From whom do people receive information about health problems?

Natural resources:

- What are the main environmental issues in the area? (e.g., soil erosion, water pollution, desertification, silting of riverbeds, invasive species, soil contamination, overexploitation of natural resources, etc.)
- What are the main causes?
- Whose livelihoods and which livelihoods are most affected by current environmental issues?
- Have these issues been the same through the years?
- What has been and is being done to address them?

 Are you renting or is it your house? Do you have a rental contract? Did you build it yourself? Did you have permission to build from the municipality?

Health:

- What are the main health issues? What are the causes?
- Are there diseases that are more common during certain times of the year?
- If you know when certain diseases are more common, what is being done to prevent them?
- Do you have access to health services? How close are they to your home? Are they free?
- Are there vaccination programmes?
- Who is most affected by health issues and why?
- Do you receive information on health issues? From whom?
- Do you have tap water? If not, where do you get water from?
- How do you dispose of your garbage?

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 3 (continued)		Safety: Do you feel safe in your neighbourhood? What, in your opinion, are the main safety issues in your neighbourhood and nearby areas? Who is less safe than others in the neighbourhood and nearby areas? If you need support, to whom do you go? Are there any organizations working on safety and violence prevention in your neighbourhood? What do you do to protect yourself? What do other community members do? Is there a community-based protection system in place? Does it work? What else could be done? Environmental issues: What are the main environmental issues in the area? (e.g., soil erosion, water and soil contamination, burning of garbage leading to air pollution, unsafe disposal of garbage, air and noise pollution, etc.) What are the main causes?
		Whose livelihoods and which livelihoods are most affected?What has been and is being done to address them?

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 4 (pg. 63): Conduct the interview	 Ask indirect questions to stimulate discussion and understand what is affecting a community. For example, rather than asking a community whether they know if the "climate is changing" ask about agricultural practices and how the present situation and patterns compare to those of the past. 	 Ask indirect questions to better understand what issues are affecting a specific urban community and identify key informants (e.g., police, health workers). To understand issues that might be related to violence and safety (domestic or not), use questions that elicit people's awareness of, and willingness to deal with, the issues. Make sure sensitive information is treated confidentially.
Step 5	NO CHANGE	NO CHANGE
Step 6 (pg. 64): Analyse information	 How do weather and climate extremes affect the community? Are they increasing? Are they becoming more severe? Are there changes such as flowering or harvesting times that are affecting the community? Are some groups in the community more vulnerable than are others to climate change and extreme weather events? In what ways? What capacity does the community have to address problems they face? How can these be used to work on the problems identified? 	 When looking at information on safety, are there differences in perceptions between men and women? If 'yes' for the previous question, why? Are there differences in perceptions according to other demographics (e.g., children, youth, elderly, people with disabilities, newer versus long-term residents)?
Step 7 (pg. 64): Discuss the results	NO CHANGE	NO CHANGE

5.1.3 RRS 4 - Focus group discussion

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to:	 create community awareness of climate change; gain their views on its relevance to their lives and livelihoods and to generate discussion about how to address climate-change-related problems. 	 How to create community awareness and possible actions to address urban risks, and what could be done to address them.
Step 1 (pg. 67): Determine the purpose of the focus group discussion	Do NOT create a specific focus group to discuss climate change. Choose the key issues and language carefully and pay attention to how some terms might be understood in local languages (e.g., 'climate change', 'global warming'). DO NOT prompt the group to talk about climate change, or even mention it to begin with, rather talk about changes and coping strategies generally, which can be linked to climate change as appropriate. Changes observed by the community may include: i) average rainfall; ii) temperatures; iii) seasons (e.g., timing of rainy seasons); iv) extreme weather events; and v) location and timing of plants and animals.	The facilitator needs to be fully aware of the particular issues involved in relation to safety, strategies for dealing with conflict, and issues of violence and intimidation. It's important to ensure that measures are taken to create a 'safe' environment where people feel encouraged and safe to discuss their concerns, priorities and key risks in their neighbourhoods and areas. ³¹ In addition, the VCA team needs to ensure that the focus group is representative of a certain community or neighbourhood and should include, for example, parents, young people, elderly people, businesses, teachers, etc. The focus of the discussion will be determined by the outcomes of the secondary data analysis and semi-structured interviews.

 $^{^{\}rm 31}$ Toolkit for Violence Prevention Assessments in Emergencies and Recovery – Canadian Red Cross.

Including climate change issues in the VCA tools

To consider when carrying out a VCA in an urban context

Step 1 (continued)

When discussing issues that you know are linked to climate, record any changes people have noticed. You may consider introducing climate change then. This is to ensure that the community is not biased toward seeking out signs of climate change where they may or may not exist.³²

Where appropriate, the facilitator can encourage the group to think about and discuss:

- their experiences of climate, and how these link to changes the community has observed in their environment, and impacts on their lives and livelihoods
- information from the review of secondary sources and how climate change impacts might potentially affect the community
- capacities and strategies for dealing with climate and environmental change and risk, and how the community can mobilize for this.

Please remember that this tool might not be suitable for all relevant issues; for example, it might not be good to discuss issues linked to crime in a certain area with a large group as people might be too intimidated to discuss key issues freely.

Many National Societies have produced materials to use to communicate on the subject of climate change and, at the appropriate time, you could use similar publications in focus groups. Find examples at: http://www.climatecentre.org/downloads/File/programs/Samples%20of%20communication%20materials%20 final pdf

The Red Cross Red Crescent Climate Centre has created a module about climate change communications in its Climate Training Kit. It can be found at: www.climatecentre.org/training

When a relationship has been established with people in the community and climate change is opened up as a topic for discussion, there are participatory methods that can be used such as participatory videos and games. Information on these is available at: http://www.worldresourcesreport.org/responses/puttingvulnerable-people-center-communication-adaptation-case-knowledge-sharingthrough-p

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 2 (pg. 68): Decide who to include	In leading the discussion, you should not assume that climate change has affected the community – questions should be open. Important people to include, depending on what you will be discussing, might be: Local agricultural officers Local health officers Local authority and district officers Local education authority and teachers A wide representation of the community including elderly people, women, minorities, disabled, youths, etc. Local meteorological officers or climate information providers Environmental officers and planners (district and local levels).	The participants should be chosen depending on the key topic to be discussed, but would usually include: Local residents (ensure wide representation) Local authority (planning, service provision, education, health, safety, civil protection, fire services, etc.) Representatives of local churches (when appropriate) Local business and service providers Meteorological services Geological services Social services and organizations working in the area supporting vulnerable people (e.g., elderly, victims of violence, etc.).
Step 3 (pg. 68): Determine the questions you will ask	Do not ask direct questions on climate change – assess what is relevant from people's responses to indirect questions such as: Are there changes in the behaviour, numbers or condition of pests, insects, other animals, plants, trees? Have there been changes in crop yield and quality? Have storage conditions for harvests changed, for example, humidity, infestations? Is water in wells changing in level or quality?	When asking questions, keep in mind that, in some urban areas, people may have moved in recently and/or may be there temporarily. Please refer to STEP 4 of RRS 3 – semistructured interviews (above). Possible questions may include: What agencies are working in the area? Are they working on specific problems affecting the community? What is the legal and institutional status of the community, and who are the powerful actors that influence a person's access to land and services.

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 3 (continued)	 Have flood levels changed (where relevant to the area)? Are there more-frequent strong winds or other weather events? Are there problems with diseases or pests affecting vegetation, fish or wildlife? Are they common or new? What do people do when their crops fail or are damaged by pests? Does this happen often? More than in the past? If so, what do they think is the reason? Are there traditional signs that warn of bad weather or a bad season? Are they still useful to people? How do weather and climate extremes affect the community? Are they the same as they were in the past? Have temperature and rainfall patterns changed? How have the rains been recently and in the past? Have illnesses been increasing or decreasing in recent years? Are there new climate-related problems affecting the community? How do they impact people's livelihoods? Do people receive weather forecasts or climate information from outside the community? If so, from whom? Is the information useful? 	 Have any illnesses been increasing or decreasing in recent years? What climate-related problems does the community experience? How would the community be affected if these problems worsen over time? Has this neighbourhood experienced disasters in the past? What types of disaster? How did people living in the affected area respond? How did the authorities respond? Were there other organizations involved in response efforts? How was the recovery process? Is the community prepared to deal with future shocks? Which are the most common communication media? Is there a community TV or radio channel? Do people living in this area have access to social or recreational activities? Where are they located and who uses them most often? What are common income activities in the area (e.g., small business or companies)?
Step 4 to Step 6 (pgs. 69 – 70):	NO CHANGE	NO CHANGE

5.1.4 RRS 5 - Direct observation

Including climate To consider when change issues in the VCA tools carrying out a VCA in an urban context Useful to: - observe the situation directly to help facilitators and local people understand how changes may be affecting their community Climate change issues should This is a key tool to use in an urban environment because it allows a full understanding of the processes. No assumption complexity and the dynamics of should be made that changes urban environments. Enough time are caused by climate change. should be allocated to carry out How people are dealing with all this exercise. types of change can give insights into how people react and what capacities they rely upon. Step 1 You might want to look for Add to the existing list: (pgs. 72-73): pollution **Decide what** which have been or are likely to garbage be affected by climate change areas you flooded areas in the are going to neighbourhood focus your - the health and nutritional status observations on soil erosion of the children - location (and usage) of the health of the animals. buildings (including lighting) in unsafe areas materials used for construction - flooded areas that could (i.e., laminated roofs can increase temperatures during heat waves) and status suitability of community of buildings (new or old, construction materials used) buildings taking into account • are house construction common hazards materials suited to possible proximity to main roads proximity to water courses rainfall, or stronger winds? (likely to flood, contaminated water because of waste or pollution from factories) including possible floods?

air pollution

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 1 (continued)	If floods become more frequent or a new problem, what may happen to houses, livestock, other assets, roads? Where did the past maximum flood levels reach and what might be the impact of changes? obvious, visible destruction caused by landslides very dry environment/very wet? bad smell? effluents? chemicals/smoke? existence of health facilities close by? nearby schools, research centres and universities (environment, agriculture) nearby businesses nearby markets existence of safe havens or refuges existence of food-storage facilities.	 existence of evacuation routes land-use planning for this area. It will be important to crosscheck with secondary data information to identify planned interventions in the use of land (i.e., road construction, commercial developments, redevelopments of the area or parts of it).
Step 2 to Step 4 (pgs. 73-74):	NO CHANGE	NO CHANGE

5.1.5 RRS 8 - Seasonal calendars

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to:	 discover whether this tool can help to discern any change in seasonal cycles and farming practices. Do NOT assume that seasons are changing. People should record seasonal changes neutrally, without prior assumptions that changes are linked to climate change. Assessments on potential climate changes should be done LATER. Even if a community has not noticed any change in seasonality, this exercise can help in understanding how a community might be affected by climate change: for example, if the community experiences heat-induced health problems (for both human and livestock) at a certain time of year, it may be more vulnerable to future increases in temperature. 	Seasonal calendars can help understand urban issues as well. Some livelihoods have seasonal patterns (people may go to towns and cities to work when there are seasonal income shortages in the countryside). The rainy season may affect health (infections, insect-borne illnesses such as malaria, dengue) and waterlogging may increase water-borne diseases. The hot season can produce illness or affect income for those who find it difficult to work in the heat. As climate changes, the seasonal calendar will be important in urban locations to assess changing patterns of urban risk (e.g., effects of increased temperatures on elderly and young children).
Key questions to be added to existing ones	 In which period does the community typically plant and harvest crops? For how long has it been this way? Has this changed and, if so, how? 	 How are work tasks divided between men and women during the year? Are any changes linked to the different seasons? Are any changes happening that affect the work distribution between men and women?

³³ There are indications from some community assessments that people unconsciously alter their data to fit a climate change discussion, even when the actual data (e.g., from a weather station) does not record what they are saying. This is not because the people are deliberately misleading you. It is a common problem in surveys that people say things to please the interviewers: that is why it is important not to lead people into thinking that the assessment is about climate change.

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Key questions (continued)	 Are there problems related to farming that occur at particular times of the year (e.g., flooding or food shortages, pests, crop disease)? Has this changed over time? If so, explain what time period – is it since a few years ago or over a longer term? How are work tasks divided between men and women in the seasonal cycle? Are any changes happening that affect the work distribution between men and women? What about the role of children in the seasonal cycles – have their roles changed? What traditional methods are used in the community to predict 'good' or 'bad' seasons, harvest yields, health risks or other factors linked to seasonality? Are these methods still effective? 	 What about the role of children in the seasonal cycles – have they changed? Are children/youths able to go to school in all seasons and weathers? How does the seasonal cycle affect the lives of other vulnerable groups (e.g., elderly, people with disabilities)?
Step 1 to Step 3 (pg. 94)	NO CHANGES	NO CHANGES
Step 4 (pg. 95): Determine values	The seasonal calendar can also be used to show changes in annual cycles. An extra line can be added to the calendar to show how things were in the past (please see the graphic below). If the community has noticed changes, this situation can be used as an opportunity to think about why these changes have taken place and what can be done about them now and in the future. Encourage the community to think about contributing factors.	NO CHANGES

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 4 (continued)	Other questions might include: Have measures been taken to cope with or adapt to changes? What are the different measures taken at different points of the year? Are these strategies identified individually or jointly by the community?	
What does the calendar tell us?	If certain activities or problems have changed, this can be used as a basis to think about: - Why has this occurred? - How have people dealt with changes in the past? Based on that, what they could do about this now and in the future? - Are people's existing experiences and knowledge adequate for dealing with new changes? Think about opportunities as well: for example, the potential to plant new crops. At this point, the issue of climate change could be introduced as a possible explanation for seasonal changes that have been observed and as a new piece of information brought into the community.	NO CHANGES

Example of a seasonal calendar

Security	J	F	М	Α	М	J	J	Α	s	0	N	D	1
Low income				Ψ			Ψ	Ψ	Ψ				
High income	↑	↑	↑								↑	↑	
Immigration and migration	↑	↑	↑	↑	↑	↑					↑	↑	Extra line added here to allow for changes noticed
Burglaries				Ψ					↑				in annual cycle – e.g., changes to
Crop season						↑	↑	↑					planting, rainfall
Drug trafficking		↑	↑	↑					↑	↑		↑	
Vehicle accidents				↑					↑				
Domestic violence	↑	Ψ	Ψ	↑	↑	↑	↑	↑	↑	Ψ	Ψ	Ψ	
Harvest time	↑	↑										↑	
Rainfall period						↑	↑	↑	↑				l
Health	J	F	М	Α	М	J	J	Α	S	0	N	D	l
Flu, coughs, colds	↑										1	↑	
Stomach illness (vomiting, diarrhoea)	↑					↑	↑	↑				↑	
Conjunctivitis			↑	↑	1								Extra line added here to allow for
Water-borne disease (fungi, sores)						↑	↑	↑	↑				changes noticed in annual cycle
Head lice	↑												
Hazards	J	F	М	A	М	J	J	Α	S	0	N	D	l
Hurricane						↑	↑	1	↑	1	1		
Forest fire	↑	↑	↑	↑	↑								Extra line added here to allow for
Agricultural fire						↑	1	↑					changes noticed in annual cycle
Floods							↑	↑	↑				iii aiiiidai oyole
Fire												↑	
Temperature (high-low)	↑	↑	↑	↑						Ψ	Ψ	Ψ	
\uparrow = high ψ = low													

5.1.6 RRS 9 – Historical profile and historical visualization

0.1.0 11110 0 111		
	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to:	 bring into the discussion known and new risks (and potential action for coping with them). This may be less helpful when climate change is likely to bring new hazards for which people have no historical experience (e.g., floods or cyclones affecting new locations).³⁴ Any information gained here should be cross-checked with secondary climate information. Where there is a match, it is a good starting point to discuss people's local understanding and context with reference to recorded climate trends and predictions. Memory tends to be biased with regard to severe events. But climate change impacts might also result in a succession of small-scale, localized shocks – keep this in mind to see whether this may be the case in a specific area. 	In the urban context, many people lack a long personal or inherited awareness of the past, especially if they have recently arrived. Even more-established groups might not have the same perception of the past as is the case in rural areas. On the other hand, some poor people's settlements, in slums and squatter areas, have long histories even if the people circulate and change. So there may be an acquired 'history', even a pride and sense of purpose about the neighbourhood or community.
Historical profile Step 1 to Step 4	NO CHANGE	NO CHANGE
Historical visualization Step 1 to Step 6	NO CHANGE	NO CHANGE

 $^{^{\}rm 34}$ In this case, secondary information about expected new risks should be included in the discussion.

5.1.7 RRS 11 - Livelihoods and coping strategies analysis

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Useful to:	 assess existing challenges to livelihoods and evaluate the likely additional impacts that climate change would have on these or new challenges that will arise.³⁵ 	 understand and identify the main livelihoods activities in urban areas and how, potentially, they could be affected by risks faced by people living in a specific area.
Step 1 (pg. 114): Identify livelihood activities	NO CHANGE but keep in mind how these livelihoods activities could be affected by a changing climate.	When applying this tool in urban areas, it is necessary to keep in mind that: - in urban areas, there will be more employment in the formal sector, with some people receiving wages or salaries - fewer livelihoods are based on natural resources: with little or no access to land, many people will have irregular and fluctuating income activities in the 'informal sector'. This covers multiple activities such as provision of services or small businesses. - some of the informal activities might have negative connotations (e.g., begging, street vendors, garbage collecting and sorting, sex work, dealing in drugs). In these cases, it may be difficult to gather information on some of the informal activities as some people might choose to withhold information (e.g., if dealing with drugs, prostitution, etc.).

³⁵ Climate change will affect outputs of food and other crops (through changing trends in the climate, pests and diseases of crops and livestock). It may lead to increased illness, and therefore have a negative effect on livelihoods in various ways: from paying for medical care and diverting household labour to being a carer.

	Including climate change issues in the VCA tools	To consider when carrying out a VCA in an urban context
Step 1 (continued)		it will be crucial for the VCA team to build trust with people so that they feel comfortable discussing their different livelihoods activities and how they are or can be affected by risks.
Step 2 (pg. 115)	NO CHANGES	NO CHANGES
Step 3 (pg. 116): Identify the hazards that threaten the assets.	NO CHANGES	NO CHANGES

5.1.8 RRS 12 - Institutional and social network analysis

Including climate To consider when change issues in the VCA tools carrying out a VCA in an urban context Useful to: To prepare: before engaging To prepare: before engaging people living in a certain area familiar with organizations or neighbourhood, become working on climate change familiar with organizations issues (including national and working on issues linked to local government, university urban risk in that area (health, departments, agriculture water and sanitation, housing, colleges or farmers' groups). planning, etc.). Understand also what role the media plays and When engaging with community how issues linked to risk are members, make sure you do being reported. not mention what you already Do not mention information on the different organizations when organizations working on weather/climate in their country engaging with people living in the and it is important to find out area as it is key to find out what what people know about them, people know about the different how they are perceived and organizations and how they are whether they are considered perceived. to understand and identify the different ways in which people living in the area or neighbourhood have organized themselves and whether there are any organizational structures within the neighbourhood or area. If these have been established for some time, it would be good to understand when and for what reasons they were set up (i.e., before or after a crisis or disaster or to respond to some need, etc.).



Red Cross/Red Crescent References

Year	Title
IFRC VC	A booklets
2006	What is a VCA?
2007	How to do a VCA
2007	VCA toolbox with reference sheets
2008	VCA training guide: Classroom training and learning by doing

www.ifrc.org and https://fednet.ifrc.org/

https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/vulnerability-and-capacity-assessment/

http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools1/

IFRC VCA Videos

2008	ABC of VCA
2008	The art and science of VCA

www.youtube.com www.youtube.com/watch?v=wS719VN-HfU www.youtube.com/watch?v=Fv5vE2vxYwY

VCA Reviews

1999	Vulnerability and capacity assessment: Training review
2006	Vulnerability and capacity assessment: Lessons learned and recommendations
2010	Review of the implementation of the vulnerability and capacity assessment methodology in the Caribbean region
2010	Review of ten vulnerability and capacity assessments – Central America and Mexico
2011	Review of Vulnerability and Capacity Assessment (VCA) use in relation to climate change and urban risk issues

https://fednet.ifrc.org/

https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/community-and-national-society-preparedness/community-preparedness/vulnerability-and-capacity-assessment/

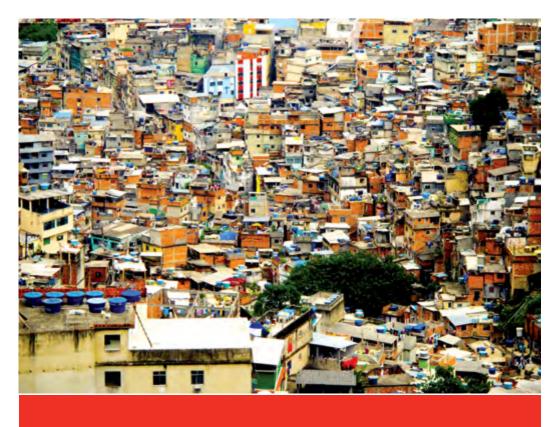
Year	Title					
2012	Red Cross Red Crescent Climate Centre – How can climate change be considered in VCA http://www.climatecentre.org/downloads/File/VCA%20guidance/VCA-CC-for%20					
	practitioners-JUN2012.pdf					
2007	RCRC climate guide					
	https://fednet.ifrc.org/PageFiles/96930/140%20RCRC_climateguide.pdf					
2008	Integrating climate change and disaster risk reduction https://fednet.ifrc.org/PageFiles/96970/109%20Integrating%20climate%20 change%20and%20DRR%202008%20EN16.pdf					
2009	Climate informed reduction of disaster risk					
	https://fednet.ifrc.org/PageFiles/96970/151%20NLRC%20Climate-informed%20DRR.pdf					
2013	IFRC plan of action on climate change https://fednet.ifrc.org/PageFiles/96970/151%20NLRC%20Climate-					
	informed%20DRR.pdf					
2013	How to engage with National Adaptation Plans – Guidance					
	https://fednet.ifrc.org/FedNet/Resources%20and%20Services/CPRR/1254901_ NationalAdaptionPlans_layout_EN.pdf					
2013	Accessing climate finance – Overview					
	https://fednet.ifrc.org/FedNet/Resources%20and%20Services/CPRR/1255801_ ClimateFinance_layout_EN.pdf					
2013	A guide to mainstreaming DRR and CCA					
	https://fednet.ifrc.org/FedNet/Resources%20and%20Services/CPRR/MainstreamingDRR_CCA.pdf					
Urban E	PRR/DM					
https://fe	ednet.ifrc.org/urbandrr					
2007	Urbanisation: Study into cases, trends and consequences of the rapid growth of cities and the impact on Red Cross and Red Crescent work					
0000	https://fednet.ifrc.org/PageFiles/130683/Urbanisation%20paper.pdf					
2008	Colombian Red Cross - Netherlands Red Cross VCA in Large Cities https://fednet.ifrc.org/PageFiles/97204/65%20AVC%20in%20Large%20Cities.pdf					
2010	IFRC World Disasters Report 2010: Focus on urban risk					
	www.ifrc.org/Global/Publications/disasters/WDR/WDR2010-full.pdf					

Year	Title				
2011	IFRC PASSA: Participatory Approach for Safe Shelter Awareness www.ifrc.org/PageFiles/95526/publications/305400-PASSA%20manual-EN-LR.pdf				
2011	IFRC Shelter Safety Handbook: Some important information on how to build safer www.ifrc.org/PageFiles/95526/publications/305400-Shelter%20safety%20 handbook-EN-LR.pdf				
2011	IFRC, No Time for Doubt: Tackling Urban Risk – a glance at urban interventions by Red Cross in Latin America and the Caribbean https://fednet.ifrc.org/en/resources/community-preparedness-and-risk-reduction/disaster-risk-reduction/urban-risk-reduction/				
2012	IFRC Urban Conceptual framework, Strategic Guidance for urban DRR Check list for urban programming, Methodological approach http://www.educacionvirtual.ws/desaprender/				
2012	Case studies from Guatemala, Honduras, Costa – Panama transborder experience http://www.educacionvirtual.ws/desaprender/				
2012	IFRC Sustainable Reconstruction for Urban Areas, Skat – Swiss Resource Centre and Consultancies for Development with IFRC www.ifrc.org/PageFiles/95526/publications/Urban%20reconstruction%20 Handbook%20IFRC-SKAT.pdf				
2012	IFRC Programmatic Directions for the Red Cross and Red Crescent in Building Urban Community Resilience in the Asia Pacific Region https://fednet.ifrc.org/PageFiles/96936/AP%20-%20EMI%20Urban%20Study%20FINAL%20VERSION%20April%2030%202012.pdf				
2012	British Red Cross Learning from the city https://fednet.ifrc.org/PageFiles/130683/Learning%20from%20the%20City%20 (2012).pdf				

Year	Title				
Violence	Violence Prevention				
1999	Better Programming initiative				
2012	Canadian Red Cross/IFRC, Predictable, Preventable: Best practices for addressing interpersonal and self-directed violence during and after disasters				
2011– 2020	IFRC Strategy on Violence Prevention, Mitigation and Response Strategic directions to address interpersonal and self-directed				
www.ifr.org and https://fednet.ifrc.org/ www.ifrc.org/PageFiles/94522/ViolenceInDisasters-English-1up.pdf www.ifrc.org/PageFiles/53475/IFRC%20SoV%20REPORT%202011%20EN.pdf					
Gender	and Diversity				
2013	Explanatory note to the IFRC Strategic Framework on Gender and Diversity Issues				
2013 -2020	IFRC Strategic Framework on Gender and Diversity Issues				
2010	IFRC Gender Sensitive Guide to Disaster Management				
https://fednet.ifrc.or https://fednet.ifrc.org/en/resources/principles-and-valuesglobal/gender-issues/					

Non-RCRC References

Year	Title
2009	IUCN Training Manual on Gender and Climate Change (in Spanish and French) www.wedo.org/themes/sustainable-development-themes/climatechange/gender- and-climate-change-training-manual-now-in-spanish-and-french
2011	BRIDGE - Cutting Edge Pack on Gender and Climate Change - Gender and Climate Change Cutting Edge Pack - Overview Report - Gender and Climate Change: Supporting Resources - Gender and Development in Brief Gender and Climate Change - edition 22 www.bridge.ids.ac.uk/vfile/upload/4/document/1211/Gender_and_CC_for_web.pdf www.bridge.ids.ac.uk/vfile/upload/4/document/1111/Climate_changeSRC1.pdf www.bridge.ids.ac.uk/vfile/upload/4/document/1201/InBrief22-ClimateChange-ForWeb.pdf
2011	Feinstein International Centre Developing a Profiling Methodology for Displaced People in Urban Areas http://intersos.org/sites/default/files/images/developing-a-profiling-methodology-yemen_0_0.pdf
2011	Inter-Agency Standing Committee, Reference Group on Meeting Humanitarian Challenges in Urban Areas: - Report on Reference Group for Meeting Humanitarian Challenges in Urban Areas - Activities in - IASC Summary Matrix of Assessment of Tools - Publication Case Studies - IASC Strategy, Meeting Humanitarian Challenges in Urban Areas www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-subsidicommon-default&sb=74
2012	ALNAP, Meeting the Urban Challenge: Adapting Humanitarian Efforts to an Urban World www.alnap.org/pool/files/meeting-paper-2012.pdf



Integrating climate change and urban risks into the VCA

Ensure effective participatory analysis and enhanced community action

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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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