RED CROSS/RED CRESCENT CLIMATE CENTRE

International Federation of Red Cross and Red Crescent Societies

The Netherlands Red Cross

How can climate change be considered in Vulnerability and Capacity Assessments?

- A summary for practitioners – October 2010

Why this document?

The aim of this document is to provide inspiration for practitioners to consider climate change within their work with communities[1]. This document assumes that the practitioner understands and utilises the International Federation's Vulnerability and Capacity Assessment (VCA) toolbox (www.ifrc.org/what/disasters/resources/publications.asp). Please pick and choose which parts from this document are relevant to you and adapt them to use in your local context, including the use of locally appropriate terms.

Start where you feel comfortable

Taking on board all of the ideas and suggestions provided below might be too much to start with so start where you feel comfortable. First, you might want to improve your own understanding of climate change as a facilitator, you might want to ask questions of communities to gather information that can be used to make decisions about dealing with changes that are taking place, and as you grow more confident you might start to bring knowledge of climate change to communities.

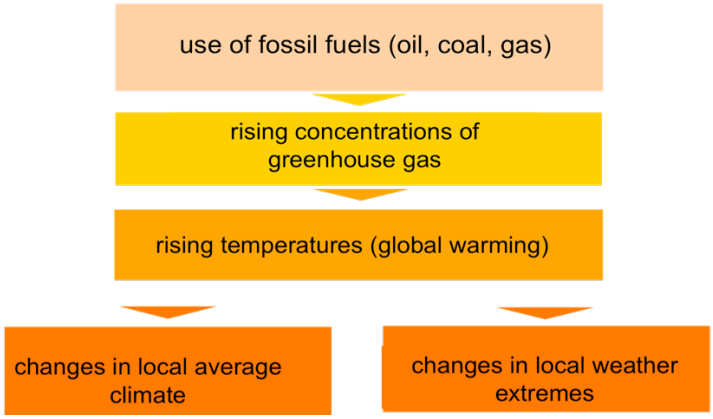
Why does climate change need to be considered in VCAs?

According to climate scientists, weather extremes that already affect communities are likely to occur more often and be more severe in the coming decades. Weather-related disasters doubled in the past 20 years alone. This disrupts community health, livelihoods and education as well as causes obvious damage to infrastructure such as roads and homes. In addition to this, more gradual changes to temperature, rainfall and seasons over time can affect agriculture and water availability. Now we need not only to take action based on our past experiences, but also plan a more severe and uncertain future.

Climate change might already be familiar to communities. Communities in many parts of the world are already noticing changes to climate and weather patterns or 'funny weather' relating to temperature and rainfall (particularly people who depend on climate related sources of income such as agriculture). In many cases it is challenging traditional knowledge. Talking to communities about these changes gives them a chance to come up with strategies to deal with them, and incorporate the ideas into "risk reduction plans" developed with communities through the VCA process.

[1] This document builds upon guidance first provided in the 'Community Risk Reduction' section of the Red Cross Red Crescent Climate Guide available at: http://www.climatecentre.org/site/publications/85.

Origins and effects of global warming



For a summary of the science of climate change please refer to the Red Cross/Red Crescent Climate Guide chapter '*Climate change: the basics'* available at: (http://www.climatecentre.org/site/publications/85).

What steps can be taken?

1. Planning the VCA

First you need to check what is already known about possible changes; so:

- Check if your National Society has worked on a climate change background document as part of the 'Preparedness for Climate Change' programme in the past (53 countries will have completed one by the end of 2010) – this may contain useful information.
- Otherwise, find out if someone in your National Society is in contact with the national meteorological office and/or environment department. If not, you could establish contact with them. These offices will be able to provide the best available information on possible changing weather trends in different parts of your country. This might take the form of 'National Communications[2]' on climate change, or studies on the likely affects of climate change over the coming decades.

Information collected at this stage may provide good guidance on what questions to ask communities. If for example changes in rainfall patterns are evident, then having a discussion with communities on how this might impact their lives now and into the future could assist in developing longer-term strategies to deal with it.

Knowing what is changing and likely to get worse may even be a way of prioritizing where to undertake VCAs. You may even be able to get someone with knowledge of climate change to give you and other VCA facilitators a briefing. You will find a general Red Cross/Red Crescent basic climate change presentation at: http://www.climatecentre.org/site/presentations

(Note: If you need climate information explained in a way that makes it relevant to your work and in less scientific or technical language, or if you have difficulty understanding the information you are given, you can send it to the IFRC climate helpdesk and ask their assistance at: *ifrc@iri.columbia.edu).*

[2] National Communications to the UNFCCC (see: http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php for a list)

2. Consider climate change in VCA tools

You can usually address locally experienced changes in weather without necessarily introducing and using the term or concept of "climate change" which can cause some confusion (see further below).

Some common VCA tools and how they can be used at the community level to consider changes that are taking place	
Common VCA tool	**What we can do differently**
Seasonal Calendar	The seasonal calendar opens up an opportunity for VCA facilitators to discuss whether seasons are changing (see example questions in Annex 1 & Annex 2 diagram). For example, the tool could be reshaped to raise awareness that in light of changes to weather patterns, old seasonal calendars and planning approaches may need to be reassessed. A diagram could be used to indicate how things like flowering, planting and harvest times of crops are changing, new weather and health related hazards might be emerging or old ones might be appearing at times of the year not expected.
Historical Profile/Historical calendar	List major extreme events. Have weather & climate related events such as flood, drought and cyclones changed in number or severity? What about health problems? Have there been new emerging ones?
Institutional and social network analysis	This tool can reveal where the community currently receives its information from, or identify opportunities that are missing yet available e.g. weather forecasts for early warning. Identify local partners that could assist communities, e.g. farmers' technical colleges or government agriculture extension services could help introduce drought/flood resistant seeds and strategies.
Interviews	It is important to interview key informants such as police, health workers, fisherfolk, traders etc. For example they may know if anything 'unusual' is going on in relation to disaster events, agricultural production and health. Think about how women and men might be affected differently, and may have insight into changes in different ways, and consider including people from a diverse range of livelihoods and roles within the community. Consider using special questions to get a picture of what is occurring (see Annex 1 for examples). As in all VCA, it is ususally more effective to ask indirect (open) questions, rather than direct (closed) ones to stimulate discussion and be able to get a picture of what is affecting a community. For example asking a community whether they know if the "climate is changing" might be unfamiliar to them. But asking them about their agricultural practises and traditional knowledge and whether they have noticed changes to these over time might help reveal useful information about changes in seasons. It can also be useful to use other tools in conjunction with interview questions (such as observation and secondary data) to confirm or adjust the assumptions that you are making.
Focus Group Discussion	Consider gathering the elders of the community to have a general discussion about changes over time. You could ask children or youth in the community to interview the elders – that way they learn about it at the same time. Consider having discussions with both male and female elders.
Direct Observation	Think of the information you have gathered in from external sources on changes in climate and also interviews you have had with elders. Are there any obvious signs that changes are taking place? Can the elders or other key informants point out changes that have occurred over time if they aren't obvious? (e.g. land by the sea may have eroded away, new, higher

	flood levels, different crops being eaten or sold, etc.) Prior to meeting with community members, you could gather observations and note questions you might want to ask such as danger zones, places of erosion etc.
Transect Walk	Conduct the transect walk early on in the community visit. Make observations and note questions you might want to ask community such as danger zones, erosion etc. You could also undertake the transect walk again during community discussions.
Risk Map	While developing the map, ask people to describe not only the current situation but also how it has been changing. Ask for specific measurements (i.e. what level hazards such as floods come to and at what time of the year? Have these changed?). Try to ensure that the map includes features of major environmental changes such as deforested zones, flood plains, erosion etc. Based on the information you gathered when planning the VCA (step 1 above), you could use a baseline map to indicate places where changes are likely to take place in the future e.g. higher sea levels. This would indicate which locations are most vulnerable. (See example map from Indonesian Red Cross in Annex 2)
Livelihood analysis	Consider which livelihoods could be most at risk to the hazards associated with climate change in rural and urban areas. For example: small land holder and traditional farming, fishing, small market trading in shanty towns or slum areas. If possible, determine the different livelihood groups in the areas that are most at risk. List what makes them at risk. This could be done with assistance from planning authorities, community group leaders etc You could cross check the information given about livelihoods with the changes and major climate risks – eg. If they are highly agriculturally dependent and rainfall is decreasing over time, or seasons are shifting, this could be an emerging issue.

Children, adolescents and young adults are going to experience the most change out of anyone in the community during their life times. It is important that you gather not only information from them but also ensure that they participate both in discussions about change and the chosen strategies to deal with it.

3. Analyse the information given by a community

You have used all the tools and now you are gathering all of the data and looking at the 'bigger picture' of what is happening to the community. Gather together the information from interviews, historical profiles, mapping, seasonal calendar etc and make an overall judgement – is the climate changing in this community? Is it affecting them? In what ways are they going to be most vulnerable to climate change?

Think about these changes when you are making a summary of risks that the community faces. See Annex 4 for a template that might help when you are making preparations to discuss changes with the community. There are also some questions you could consider asking during this analysis in Annex 1.

4. Using secondary information

You could take a look at the information gathered on climate change in your country during Step 1. Does this information match up with what the community based information is telling you? If they do match up, you could show communities what is happening to other parts of the country so that they are aware that what is happening to them is also happening to others. If they don't match up, perhaps the changes are occurring because of factors other than climate change and this is worth investigating and acting upon also. The community might also not yet be aware of subtle changes taking place.

5. Discuss changes with the community

The summary you have come up with in Step 3 might be useful when you discuss information gathered during the VCA process with a community. It could also be used when the community start to develop solutions to the problems faced. How do they currently cope with the problems? If these problems worsen over time, how is this likely to affect the community? What could be done to stop the problem getting worse? The aim is for communities to understand that the risks are changing and that they can take action to reduce the risks they face.

6. Developing risk reduction plans

When the community is drafting their '*Community Risk Reduction Plan'* (or equivalent), assist in facilitating the process and discuss how the proposed measures in their plan can be geared to handle a more uncertain weather/hazard pattern in the years to come. The plans are the most important outcomes of the VCA process, and proper facilitation should ensure that the plans build not only upon past experiences and historical evidence of disasters, but also consider emerging/changing risks.

7. What next?

Information you have gathered in the VCA on changes that communities are noticing and strategies that they come up with to deal with them in '*Community Risk Reduction Plans'* can be very useful tools for making recommendations to government agencies at different levels (advocacy). As the climate changes, the Red Cross Red Crescent will need to exchange methods for dealing with it at the community level both within and outside the International Red Cross and Red Crescent Movement.

Remember: trying to incorporate climate change concerns into the community-based work is new to everyone, not just the Red Cross Red Crescent. You are at the forefront of this new field of work, which makes it extra important that you document the work and share what works and what doesn't as widely as possible. You may even find forums for practitioners in your country that are sharing their approaches to this. There are also a growing number of international forums for sharing these experiences.

Climate information – a meeting point between community and scientific knowledge

Annex 5 demonstrates that one of the main differences between a usual VCA and a VCA that considers climate change is the intersection of community knowledge with outside knowledge about climate change. As our climate changes, it becomes more important than ever to ensure communities have access to information that they can use for decision making, meaning that outside information about weather and climate doesn't have to just be about the long term future, tomorrow's weather forecast can be just as, if not more, useful.

Communicating climate change

You can facilitate the VCA process as described above – and incorporate concerns for increased weather variability in the programmes – without actually using the term/concept "climate change". But as you gain more confidence in the issue, you may introduce the concept of climate change. Be creative (you could get youth volunteers to put on a drama for example). Through careful training, facilitators must feel confident in explaining the concept of climate change and relating it to the community's context. The important part is to *be*

careful not to over-emphasise climate change, remember that there are many issues that a community faces. It is better to incorporate climate change messages alongside other messages that you are taking to communities (eg. In areas where water availability is an issue, information on the drying trends occurring in the country can help point out why improving water conservation practises is important) and to keep it simple. Consider contacting environmental NGOs or departments who may have experience on discussing climate change with communities.

Talking about climate change with communities can seem daunting, but it doesn't have to involve explaining complicated concepts. The best approach is to begin discussions about climate change based on participant's own experiences – how local weather impacts upon their day to day lives and affects their livelihoods. These can be drawn out during the VCA process. If you find that people notice changes are taking place, and would like to know why, then you could present more information about the causes of climate change.

You might also consider contacting other resource people in-country, who may have experience discussing climate change with communities, so that you don't have to start from scratch.

Integrating climate change

Adapting to climate change is a cross cutting issue – it is not only relevant for disaster management, but also for health and other traditional Red Cross /Red Crescent activities. It reinforces the need for us to work together across our organisation, and seek outside partners to supplement our own capacities.

Belief systems

When asked why people think changes are occurring, often they might say 'because we have done something bad' or 'God is punishing us'. This kind of explanation can lead people to believe that things will soon return to normal or even worse, to fatalism or inaction. It is important to consider people's belief system when trying to understand how a person might choose to take action or not. This form of thinking can be changed through access to new information given in sensitive ways.

A note on networks

Reference has been made to many stakeholders such as Meteorological offices, Environment Departments and NGOs with climate change knowledge. Think of these people as a helping hand. We at Red Cross/Red Crescent can't be experts on everything, but combining knowledge with others can be very fruitful. For a list of climate change related stakeholders and potential questions to ask them, find links on this page: http://www.climatecentre.org/site/getting-started.

Impacts of climate change can be two pronged: changes in average conditions over time, such as rainfall, temperature etc., and changes in the nature (frequency and severity) of disasters. Considering climate change may result in us coming across issues that are difficult to deal with (such as declining agricultural production and unemployment) and this may require us to seek advice from others, or advocate for others to get involved as partners in assisting communities in addressing the wider package of external challenges.

A final word: best of luck!

If you are unsure – ask for assistance from the Red Cross/Red Cresent network. There are a growing number of colleagues working out how best to consider climate change in their community based work. The Climate Centre can be contacted at climatecentre@redcross.nl.

Annex 1. [3] **Climate change related questions to consider in interviews for focus group discussions during a VCA**

Early Warning Early Action

As our climate changes, it becomes more important than ever to ensure communities have access to disaster related early warnings. These questions focus around this:

- Where do communities get their early warnings from?
- Who receives the warnings?
- Is it only short term warnings of immediate dangers (1-5 days), or also more long term seasonal forecasts?
- Is anyone in the community responsible for giving out early warnings? What happens if they aren't there?
- How do they currently use weather information e.g. forecasts broadcast on radio?
- Are the forecasts understood?
- Identify whether any organisations that the community and households have access to are responsible for disseminating early warnings. If not, could they be?
- Are there organisations that could be conduits for information e.g. schools, religious institutions?
- Are there weaknesses in the system that could be addressed?

Traditional/historical knowledge

- What traditional signs warn of bad weather or a bad season? Who holds this knowledge?
- What seasons does the community typically plant crops by? Has this changed?
- Is the knowledge still working?
- When do certain problems occur? Has this changed over time at all?
- Have there been occupations, buildings or services which have been abandoned / moved due to changes in the surrounding environment or climate?
- Has the temperature/rainfall patterns changed?
- Have you noticed any changes in wildlife and fish stocks/ time of year of the catch?
- Has the level of the sea changed?

Livelihoods

- Are any changes occurring that are resulting in positive outcomes for your community? Eg. Crops that can be planted?
- In what ways are the crops you plant dependent on the weather? Do you use weather warnings to know when to harvest crops? If not, why not?
- What changes have occurred over time in your family's way of earning income?
- What if people have livelihoods that are seasonal and the seasons change in length?
- Are people using coping strategies in relation to the hazards identified?
- Are changes in the number and severity of extreme events putting further demand on these coping strategies? Eg. Are men having to move away to find work more often? What impact does this have on the family?

Health

- Are there some diseases that are more common during certain times of the year?
- Have you found that some diseases have been increasing or decreasing in the last few years?
- Are there some diseases that are more common when it rains?
- Are there some diseases that are more common when it is dry?
- *If the answer is 'yes' to any of the above, ask these questions:*
    - Which ones?
    - Why do you think that is?
    - Who is most affected?
    - What actions are people / the community taking?

[3] Including adapted text from Nakalevu,T. (2006) CV&A : a guide to community vulnerability and adaptation assessment and action, SPREP, Apia, Samoa & Daze, & A et al (2009) Climate Vulnerability and Capacity Analysis handbook, CARE International

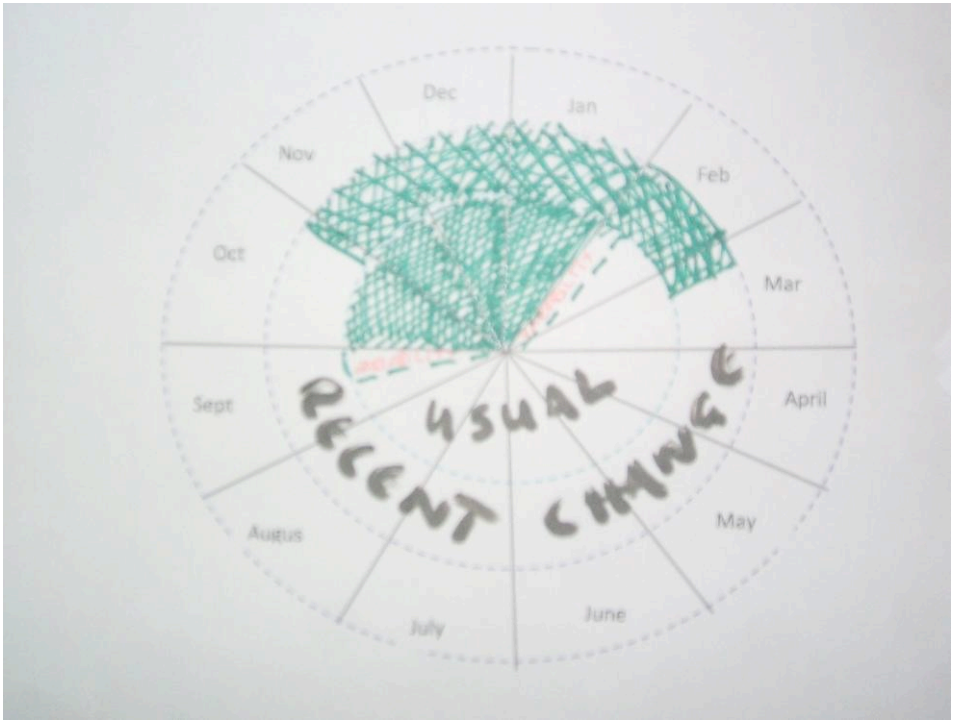
    - If you know that it will rain / be dry / a certain season is approaching when a disease is more common – what do you do?
    - What could you do differently?
- From which source do you receive most of your information about health problems?

Questions that can be used during stage 3. 'Analyse the information given by a community'

- How do weather and climate extremes affect the community? Are numbers of them increasing? Are they becoming more severe?
- Are there longer term, slower changes such as flowering, harvesting times that are affecting the community?
- Are some groups (men, women, children, farmers etc) in the community more vulnerable 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 you have identified?

Annex 2. Seasonal Calendar (variation to incorporate changes in seasons)
Could be used for plant fruiting/production, livelihoods, hazards – Pacific IFRC Office

***In some places communities may not be familiar with the 'Gregorian' calendar (January-December) that is demonstrated here. In that case, please use the local/indigenous format.**



Annex 3. Risk map highlighting changing risk. Indonesian Red Cross, PMI