

May 2011

## QUESTIONS AND ANSWERS ON THE INTEGRATION OF CLIMATE VARIABILITY AND CHANGE INTO THE WORK OF THE RED CROSS/ RED CRESCENT AT COMMUNITY LEVEL



*Ethiopian Red Cross*

This document contains findings of different RCRC programmes like the Netherlands Red Cross Programme Disaster Risk Reduction and Climate Change Adaptation and the RCRC Climate Centre's Preparedness for , Climate Change Programme, both supported by the Netherlands Ministry of Foreign Affairs.

## Introduction

There are a lot of questions around climate change, climate change adaptation, and how to incorporate these concepts into RC/RC work, particularly at the community level. The *Frequently Asked Questions* and *Glossary of Terms* below are designed to frame these issues and address barriers for a variety of users within the RC/RC (the Federation, PNS's, HNS's, NS Climate Focal Points and Program Officers). Please note that this is a draft and work in progress. If you have comments or your questions are not addressed in the document below, please e-mail them to: [climatecentre@redcross.nl](mailto:climatecentre@redcross.nl) (referencing 'FAQ').

## The first thing to understand before reading further

For the RC/RC, climate change adaptation is not just about preparing for climate change projections that tell us what our world is likely to look in the year 2050 or 2100 if no strong greenhouse gas reduction measures are taken. Climate change is already happening and will further accelerate in the coming decades. The RC/RC is going to be responding to disasters all over the world between now and then. That means that the RC/RC is going to be dealing with extreme weather events that happen on timescales of hours to days, as well as the impact of natural climate variability that occurs on timescales of years-decades, combined with the influence of long-term climate change. Because in many parts of the world, our experience of climate change isn't likely to be one straight path towards those projections, the best way for us to prepare is to become increasingly skilled at managing climate and weather related risks we currently face, as well as those anticipated by forecasts on short, medium and long timescales. This is climate change adaptation for the RC/RC. Some might call it climate risk management. Others might call it climate-smart, or climate-informed disaster risk reduction. The idea is that we are aware the climate is changing, we use forecast information across timescales to anticipate where and how it might change, and we become increasingly skilled and efficient at managing the weather and climate risks we currently face, so that we have the capacity, early warning systems, and community awareness necessary to mobilize ourselves effectively as we experience changing and increasing weather and climate-related risks over time.

## FREQUENTLY ASKED QUESTIONS

### A. GENERAL QUESTIONS

#### *1. What is the difference between climate and weather?*

The difference is in the timescale. Weather refers to conditions like rain, temperature and wind over *hours to days*. Climate refers to those average weather conditions over a much longer period of time (30+ years).

#### *2. Is it possible to attribute a single weather event to climate change?*

It is difficult to attribute any single weather event to climate change, since weather fluctuates on short-term timescales and climate change is occurring over a much longer timescale. An increase in the average occurrence of extreme weather events over time however, may be attributed to climate change, especially if other forms of natural climate variability can be ruled out.

#### *3. What is the difference between climate change mitigation and climate change adaptation?*

Climate Change **Mitigation** refers to efforts undertaken to *reduce our emissions* of heat-trapping, ‘greenhouse’ gasses in the atmosphere, which cause climate change. Greenhouse gasses are for example carbon dioxide (related to the use of fossil fuel) and methane. Climate Change **Adaptation** refers to efforts undertaken to *minimize the impacts* of climate change –this is where the RC/RC comes in, with all its expertise and capacity to support the most vulnerable populations in climate-sensitive areas such as disaster management, health, livelihoods, WATSAN, and food security etc.

#### *4. Should activities that have a climate change focus be conducted separately from other RC/RC programs?*

No, RC/RC activities that address changing climate risks on all timescales need to be incorporated into existing strategies and programs, and should not be dealt with as new and separate types of programs. For example, if changes in climate make floods more frequent and severe in your area, you wouldn’t start a separate climate change and floods unit, you would increase capacity to manage floods within your existing disaster management unit.

#### *5. Is previous experience in disaster preparedness and/or reduction required to make our work climate-smart?*

No, you can start from wherever you are now. However, depending on previous experience, you may need to spend some extra effort identifying current and future risks and ways they could be addressed. Although the RC/RC Climate Centre’s Preparedness for Climate Change Programme (PfCC) has ended, the programme’s resources are still available online and can help guide you through the process of becoming familiar with changing climate risks and local resources to address them. You can contact the [climatecentre@redcross.nl](mailto:climatecentre@redcross.nl) if you like to obtain resources or further assistance.

#### *6. Is it sufficient if our climate change adaptation activities mainly focus on awareness raising and advocacy?*

Awareness raising and advocacy are important components of climate change adaptation (CCA) in the RC/RC. However, at the RC/RC CCA needs to be addressed in a comprehensive manner. A comprehensive package of climate activities by RC/RC societies would entail a combination of awareness raising, knowledge sharing, advocacy and local climate-smart DRR and/or preventive health activities, where climate concerns and climate information are being effectively integrated into a wide range of RC/RC plans and programs.

## B. QUESTIONS ON THE USE OF FORECASTS

### *7. Should CCA activities mainly focus on longer-term climate trends, or also incorporate medium-term forecasts and short-term weather alerts?*

Climate change projections are often given for the years 2050, 2080 and 2100. They provide an idea of how warm, wet/dry we currently expect the climate to be by then. However, just because these projections give us an idea of how things are likely to be different in the second half of this century, doesn't mean our experience of climate change will be a direct and gradual progression towards these projections. There are likely to be surprises along the way and natural climate variability still has an influence. For example, if the long-term projection is for drier conditions, but naturally occurring La Niña events tend to bring your country floods, then you'll want to make sure you are preparing for the right risk on the right timescale. Furthermore, a common climate change projection is for increased frequency and severity of things like droughts and floods. Droughts and floods occur on shorter-timescales, so a good CCA strategy would be to closely monitor climate and weather forecasts on medium and short-term timescales in order to anticipate extreme events.

#### **Box 1. What do we mean by long-term, medium-term and short-term forecasts?:**

**Long-term forecasts**, tell us what is likely over decades and centuries.

**Medium-term forecasts**, tell us what is likely over the coming months or season.

**Short-term forecasts**, commonly known as weather forecasts or alerts, tell us what to expect in the coming week, days and hours. (Please see table 1 above for more information)

Finally, much of RC/RC planning and programs happen on shorter-timescales, so using forecast information closer to the timescale on which you work also makes sense. The ability to manage climate and weather-related risks in the short and medium term is an excellent first step at becoming more resilient to changing climate risks in the future. For more information on monitoring forecasts and taking action across timescales, see our Early Warning, Early Action resources at: <http://www.climatecentre.org/site/early-warning-early-action>

### *8. How to understand El Niño and La Niña Events (ENSO)?*

El Niño and La Niña events are a natural part of climate variability, taking place approximately every 2-7 years. These events refer to warm (El Niño) and cold (La Niña) phases in the equatorial Pacific. Sometimes, these events can go unnoticed or even have beneficial impacts in many parts of the world. However these events can also be extremely disruptive. It's hard to imagine, but abnormally warm/cold ocean waters in the Pacific can be part of a mechanism that triggers shifts in rainfall patterns around the globe, particularly in the tropics. As a result, problems can develop when some areas receive too much rainfall and others receive too little. Peak impacts from these events are usually felt during a given location's rainy season, because that is when a disruption of the rains or too much rainfall can have the greatest impact on society (affecting agriculture, livelihoods, food security, health and safety, etc).

### *9. How can we anticipate impacts from El Niño and La Niña?*

Over time, scientists have observed patterns about how rainfall is typically affected by El Niño/La Niña events around the globe. However no two events are exactly the same. Thus, the best way to anticipate if a particular event is likely to bring too much or too little rainfall to your area is to monitor seasonal forecasts, which take influential factors from the current El Niño/La Niña event as well as other elements in the climate system into account. Seasonal forecasts can be found in IRI's Federation Map Room at: <http://iri.columbia.edu/ifrc/forecast/3munusualprecip>

There still isn't a scientific consensus regarding how El Niño and La Niña events will play out on a warmer planet. Some studies suggest these events will become increasingly frequent and severe. Other studies disagree. Some climate models show a tendency towards more El Niño events,

while others show a possibility for more La Niña events. For now the best thing to do is to stay apprised as to whether an El Niño or La Niña is developing, and monitor seasonal forecasts for advanced notice on any likely impacts that can be expected.

*10a. Is there a website where the most relevant information on climate change for my country can be found?*

Yes, we recommend you check the following sources. If you have trouble finding information, don't hesitate to contact the Climate Centre at [climatecentre@redcross.nl](mailto:climatecentre@redcross.nl)

1. Your National Society's Preparedness for Climate Change Background Documents (over 65 National Societies have produced one).
2. Regional Climate Summaries written by the Climate Centre and IRI
3. National Communication:  
[http://unfccc.int/national\\_reports/non-annex\\_i\\_natcom/items/2979.php](http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php)
4. National Adaptation Plans of Action (NAPA):  
[http://unfccc.int/cooperation\\_support/least\\_developed\\_countries\\_portal/submitted\\_napas/items/4585.php](http://unfccc.int/cooperation_support/least_developed_countries_portal/submitted_napas/items/4585.php)
5. UNDP Climate Change Country Profiles: <http://country-profiles.geog.ox.ac.uk/>

*10b. Is there a website where the most relevant forecast information for my country can be found?*

- To find your national meteorological service:  
[http://www.wmo.int/pages/members/members\\_en.html](http://www.wmo.int/pages/members/members_en.html)
- For guidance on interacting with your met service, and getting the forecast information you need in a timely and understandable manner, see:  
[http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders\\_FINAL\(21%204%2010\).pdf](http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders_FINAL(21%204%2010).pdf)

*10c. Are there other sources for medium and short-term forecast information?*

- Global Source:
  - International Research Institute for Climate and Society (IRI)
    - Seasonal forecasts: <http://iri.columbia.edu/ifrc/forecast/3munusualprecip>
    - For global forecasts on the likelihood of above average rainfall in the coming 6 days: <http://ingrid.ldeo.columbia.edu/maproom/IFRC/Forecasts/>
  - Regional Sources: Please see list available at:  
<http://www.climatecentre.org/downloads/File/IRI/InformationProviders>

*10d. What if I have questions about a forecast or the climate change projections for my country?*

The International Research Institute for Climate and Society (IRI) has a helpdesk set up to provide the RC/RC with assistance in interpreting climate information relevant to the RC/RC's work. To seek assistance from this source please e-mail your question to [ifrc@iri.columbia.edu](mailto:ifrc@iri.columbia.edu).

*10e. What to do if good quality climate model projections at locally relevant scales are not available?*

Local scale climate projections are often not available or reliable. However local scale climate change impacts can be assessed based on thinking through how large-scale projections could

interact with/exacerbate existing local vulnerabilities and climate and weather related risks. Becoming more resilient to the climate and weather risks communities currently face is a viable CCA strategy that has the benefit of protecting communities now and preparing them to manage enhanced levels of risk in the future.

**Box 3. What are the things that forecast information on different timescales can and cannot tell you?**

<b>Long-term (Century &amp; Decades)</b>	
<b>Forecast type</b>	Global climate change projections (out to 2100) and decadal predictions (for the next 10-30 years).
<b>What the forecast tells you</b>	General trends (e.g. drier, wetter, hotter, changes in extreme events, sea level rise, likely implications on health, livelihoods etc). Decadal predictions provide more information in terms of what is likely for a given region during the coming decade due to both climate variability and change.
<b>Limitations of the forecast</b>	Large uncertainty. Lack of specificity in terms of where and when impacts will occur.
<b>Potential actions using available information</b>	Identification of likely risks and vulnerabilities in your area. Coordination with partners and development of a long-term vision to expand capacity, reduce vulnerability and minimize risks.
<b>Medium-term (Seasonal)</b>	
<b>Forecast type</b>	Seasonal forecasts for temperature, precipitation and cyclone activity. Seasonal forecasts typically cover 3 to 4 month periods and do not normally extend beyond 12 months into the future. They should be checked for monthly updates.
<b>What the forecast tells you</b>	The chances that the coming season as a whole, and over a large geographic area might exhibit average temperatures / accumulated rainfall / numbers of storms that are normal, above-normal or below-normal. Some seasonal forecasts for extreme climate conditions are also available.
<b>Limitations of the forecast</b>	Seasonal forecasts are made at coarse resolutions, and thus do not tell you when and where, or even if, extreme weather events are likely to occur. Forecasts are not directly about individual extreme weather events, only about the general character of the coming few months. Forecast uncertainty remains large.
<b>Potential actions using available information</b>	Integrate the seasonal forecast with what you already know about your climate. (e.g. if the forecast is for increased chances of above-normal during the rainy season, it can be inferred that flood risk is heightened. If the forecast is for above-normal temperatures during the summer, it can be inferred that heat-wave risk is heightened etc). Ask what needs to happen to be prepared for these risks: do staff, volunteers and communities know what to do? Are plans in place? Are communications systems ready? Are supplies sufficient and accessible? Can early warning systems be set up beforehand? Are partner agencies informed and ready? AND at the same time, monitor on shorter timescales to anticipate where and when elevated risks might materialize into extreme events.
<b>Short-term (weeks, days and hours)</b>	
<b>Forecast type</b>	Weather forecasts and 'predictions in context' (which let you know how forecast rainfall/temperatures compare to what is normal for a given place and time).
<b>What the forecast tells you</b>	Where and when an extreme event is approaching.
<b>Limitations of the forecast</b>	Minimal advanced warning, prediction is still not 100% certain.
<b>Potential actions using available information</b>	Coordinate with partnering agencies. Mobilize human resources, and supplies. Activate contingency plans. Inform, and provide instructions on precautionary measures, to populations at risk. Set up shelters, evacuate etc.

### *11. Do I need to consider climate change in selecting an appropriate DRR/CCA project site?*

The Climate Centre does **not** advise National Societies to seek long-term climate change scenarios (generated from computer models) as criteria for DRR/CCA site-selection at the community level. We recommend staying focused on the most vulnerable communities and the risks they now face –helping vulnerable communities become more resilient to current risks (and any changes in risk they may be currently experiencing. This approach makes a difference for communities today and also helps them become more resilient to address impacts from climate-related changes in the future. It's a combination of getting good at managing current weather and climate risks, in an effort to become more resilient to climate and weather risks in the future.

In addition to the criteria referred to in the IFRC VCA Manual ('How to do a VCA'<sup>1</sup>) you may also consider:

- What are the existing climate risks?
- Are there any observed changes in weather in a specific community, that makes them more vulnerable than before?

As a general rule, it is important to develop a well-defined selection criteria, apply a participatory and consultative process, and carry out a thorough field assessment. National Society Headquarters need to develop a set of general site selection criteria which are properly communicated and clearly explained to the branches concerned. It is suggested that a technical officer with good knowledge of DRR and climate issues at the headquarters level be involved in the selection and the assessment of the locations.

### *12. How to integrate climate change understanding into Vulnerability and Capacity Assessment?*

Please find a guidance note provided by the Red Cross Red Crescent Climate Centre website: [http://www.climatecentre.org/downloads/File/VCA%20guidance/VCA&CC\\_forpractitioners\\_Oct2010.pdf](http://www.climatecentre.org/downloads/File/VCA%20guidance/VCA&CC_forpractitioners_Oct2010.pdf)

Some elements mentioned in this guidance note:

- a. **Collect information** from the national meteorological office and/or Environment Department on climate trends, if available. This information may provide good guidance on what questions to ask communities about (see link above).
- b. **Consider climate change in VCA tools.** Seasonal calendars, historical profiles/ calendars, risk maps, transect walks, interviews and focus group discussions are common VCA tools that can be easily adapted to consider changes in climate risks that may take place. Develop a number of guiding questions that could be used to identify and synthesize community's knowledge and local perceptions about climate risks and their impact.
- c. **Analyze** the information given by a community and cross reference this with secondary information you have gathered.
- d. **Discuss findings with community and validate** if scientific information matches up with community based information, develop an action plan, which identifies possible interventions aimed at effectively addressing these new risks.
- e. **Use the VCA process as a means to raise local awareness, for advocacy efforts and local action.**

---

<sup>1</sup> IFRC, *How to do a VCA*, <http://www.ifrc.org/Docs/pubs/disasters/resources/preparing-disasters/vca/how-to-do-vca-en.pdf>

## C. QUESTIONS ON IMPLEMENTATION

### *13. What are “no-regret” measures?*

No-regret measures are measures that will be of use regardless of how climate change will play out. In many locations, there is high uncertainty about the precise changes that global climate change will cause in local weather. In such a case “no regrets” measures, which focus on strengthening overall resilience and reducing vulnerability, should be considered. These measures may not necessarily be targeted at a specific hazard but help increase resilience to shocks at large, for instance by strengthening community livelihoods and capacities.

### *14. Can we only work in locations which are confronted with hydro-meteorological (weather related) hazards?*

In many locations communities face a multitude of hazards, including geological and man-made hazards. It is important in this regard that the NS is able to deal with all risk generating processes, even though some of these may not be climate related. Building overall resilience of communities through “no-regret” measures (see above) contributes to enhanced protection whatever the hazard may be. It is also important to note that geological or manmade disasters can often be worsened or affected by climate related ones. For instance in post-earthquake Haiti, even the slightest bit of rain was causing severe flooding due to blocked drainage systems, and certainly the rains enhanced vulnerability to disease with so many people homeless/living in tents.

### *15. Should DRR/CCA activities be mainly focused on structural (hard) or non-structural (soft) interventions?*

This is not either/or – you should do whatever is most useful in the local context. The most effective DRR and CCA interventions at the community level often combine “soft” interventions such as sensitization, early warning systems and preparedness training with “hard” small scale risk reduction measures, like building dykes, drainage and/or irrigation systems, storm resistant houses, terracing etc. It is therefore important to recognize that at-risk communities will request structural measures, even low-scale interventions, to complement non-structural measures. Increasingly the RC is called upon to play an advocacy role on behalf of the most vulnerable and intervene with the local authorities to provide durable protection.

### *16. How to develop effective awareness raising measures on CCA?*

For CCA sensitization efforts and trainings to be effective they need to directly involve communities, be made context specific, integrated into other sensitization efforts and continuous. One-off climate workshops and lecture style trainings are often ineffective in getting the desired results. Awareness raising efforts should not focus on climate change as a general issue, but should directly relate to the specific vulnerabilities and realities of the area (for example rather than going into a lot of complexity about greenhouse gases it is much better to base it on people’s understanding of climate already such as floods). It is also important to incorporate traditional or ancestral knowledge on climate issues when developing sensitization material for use at community level. In illiterate communities oral training that makes use of drawings has proven very effective. Also the use of innovative communication tools, such as participatory video and games, has proven valuable.

It is also found that awareness raising at the community level is most effective when external partners are involved and when the creative capacity of Red Cross volunteers (specifically including youth) is applied to designing communication messages, so that these are culturally adapted, appealing and kept short and simple. It is always a good idea to run these messages by the Climate Centre or a local climate expert to ensure messages are scientifically sound, focused on CCA and not overly sensationalized. Communities have their own learning processes, CCA awareness raising activities should understand how to integrate in those processes. Shortly

available on the [www.climatecentre.org](http://www.climatecentre.org): a catalogue containing examples of how National Societies have been communicating climate change over the past few years. Furthermore the Climate Centre is developing a Climate Training Kit, including a Module on ‘*how to communicate climate change effectively*’.

**17. How can we facilitate learning about climate-related issues between communities?**

Peer-to-peer and community-to-community learning are often very effective ways to share knowledge and information on climate issues. This can be done through exchange visits or through innovative approaches, such as participatory video. A good example is the video “Farmer-to-farmer learning in a changing climate” (see: <http://www.climatecentre.org/site/films-by-farmers> ). The use of video should not only be seen as a means to exchange experiences and information, but can also contribute to enhanced commitment and motivation of communities in engaging in climate adaptation activities.

**18. How to effectively link community health work with CCA?**

This could be realized through a greater engagement of the RC health colleagues or Ministry of Health staff in the program as well as through seeking advice of the RC/RC Climate Centre. Think through the health implications climate change might have on the populations you serve and get the advice of health experts to assess which of these are of highest concern. It’s not always just the most commonly talked about health risks such as vector-borne diseases (like malaria). It is important also necessary to consider broader health risks associated with extreme events, heat waves and impacts on water resources or food security. Please take a look at the factsheet on health and care for more operational guidance:

[http://www.climatecentre.org/downloads/File/Factsheets/factsheet\\_health\\_and\\_care.pdf](http://www.climatecentre.org/downloads/File/Factsheets/factsheet_health_and_care.pdf)

**D. QUESTIONS ON THE RC/RC ROLE**

**19. What does our international RC/RC Strategy 2020 say about Climate Change?**

The commitment to address climate change is included in the new Federation Strategy 2020. Strategy 2020 includes the obligation to contribute to reducing the Movement’s carbon footprint. The focus of this document, however, is mainly on the humanitarian aspects of climate change and striving to reduce vulnerability and to increase adaptive capacity. The Federation is currently investigating what role the RC/RC Movement can play in climate change mitigation (reducing greenhouse gas emission).

Sometimes the two agendas combine for win-win solutions. For example: a reforestation initiative to prevent landslides will result in new trees that absorb CO<sub>2</sub>. Our main target remains to prevent the landslide from happening and protect the most vulnerable.

**Box 4. Strategy 2020**

“Our climate change adaptation work is through scaling up disaster risk reduction measures and strengthening traditional methods of coping with disasters that are relevant in particular environmental contexts”

“We also contribute to mitigating the progression of climate change through advocacy and social mobilization to promote sustainable community development that optimizes communities’ carbon footprints”

**20. *How to introduce and embed climate change in NS work?***

The involvement of a NS in climate issues is often led by a few individuals. In one country the topic may be strongly supported by the Secretary General, in another country the Head of the DM Department may have a strong personal interest. For the program to have a durable impact, it is absolutely crucial that, besides having these champions, there is a substantive buy in for the program at all departments & levels: senior management, middle level staff, project officers and branches.

Although the Preparedness for Climate Change Programme is now closed, the use of the programme resources can be a helpful guide through the process of acquainting your national society with changing climate risks in your country, assessing priorities and developing actions. Online resources and support are still available through the RC/RC Climate Centre website at: <http://www.climatecentre.org/site/preparedness-for-climate-change-programme>.

**21. *How can we approach training programs on climate for local RC staff, and volunteers?***

Facilitators need to avoid presenting the climate topic too theoretically and scientifically. Instead of going into great detail on greenhouse gasses or the Kyoto Protocol, a good entry point proved to be talking about changes to rainfall and temperature or “funny” weather, which has recently been noticed. Building on these perceptions, climate change could then be “explained” enabling RC staff and volunteers to understand the key mechanisms that contribute to changing risks. As much as possible, make use of regular DM or health related training activities in the National Society to introduce and share knowledge on climate and related risks rather than organizing separate climate training events. Videos and games that could be used in such introductions (see [www.climatecentre.org](http://www.climatecentre.org) or ask advice at [climatecentre@redcross.nl](mailto:climatecentre@redcross.nl))

**E. QUESTIONS ON RELEVANT PARTNERSHIPS**

**22. *How to build a meaningful collaboration with meteorological offices?***

Strengthening collaboration between meteorological offices and RC societies faces a number of challenges. While NS are aware of the need for closer collaboration, they often need specific guidance on what specific weather data to ask for and how to interpret and apply these in project design and development. Collaboration needs to go beyond dialogue and it could be helpful in many cases formalize this through MoUs to ensure the sustainability of joint project interventions. As much as possible, NS should engage in DRR and CCA working groups and platforms in order to strengthen the collaboration with a variety of CC actors.

Please read the online guidance provided by the Red Cross Red Crescent Climate Centre, with guidance on what to ask and not to ask to Meteorological Offices, at:

[http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders\\_FINAL\(21%204%2010\).pdf](http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders_FINAL(21%204%2010).pdf)

**23. *How to engage on climate issues with other line Ministries and knowledge centres in my country?***

In addition to the Meteorology Departments, the Environment Department (or similar agency responsible for national climate policy) is often a useful contact on climate change. In addition, collaboration with government line departments dealing with sectors potentially affected by climate change, such as water resources, agriculture, forestry, coastal management, environment and health is important. These contacts should not be limited to the national level, but should also take place at regional (sub-national) and municipal level. It is also recommended, especially in view of a thorough understanding of the climate context of the project sites you are working, that collaboration with universities and research centers with specific climate expertise are sought and that these knowledge centers have a continuous engagement in the development of the projects.

Please read the online guidance provided by the Red Cross Red Crescent Climate Centre, which contains information on the things to ask and not to ask to different stakeholders, at:  
[http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders\\_FINAL\(21%204%2010\).pdf](http://www.climatecentre.org/downloads/File/programs/Questions%20to%20ask%20climate%20related%20stakeholders_FINAL(21%204%2010).pdf)

## GLOSSARY

### Climate

The statistics of weather over a period of time ranging from months to thousands or millions of years. The classical averaging period is 30 years, as defined by the World Meteorological Organization (WMO). Climates can be described as tropical, arid, polar etc. Characteristics of a climate are often described by seasons such as winter and summer, or the wet and dry times of year. In contrast, weather is the day-to-day experience of the climate, for example, a dry day during the rainy season.<sup>i</sup>

### Climate Change

A statistically significant change in measures of climate (such as temperature, precipitation, or wind) that persists for an extended period (decades or longer). The term *climate change* can be used to refer to climate change that results from both natural and man-made factors. However, the UNFCCC and this document uses the term to refer to the current human-induced climate change that is occurring, caused by human activities that are changing the composition of the atmosphere (e.g. through burning fossil fuels) and the land use change.

### Climate-Related

Usually the term climate-related is used in reference to natural hazards to differentiate them from geophysical hazards. For example, floods, storms and drought are all climate-related. The term climate-related can be used without specifying whether such a hazard is attributed to climate change, climate variability, or simply the climate.

### Climate Change Related

Climate change related refers to phenomenon related or attributable to climate change.

### Climate Variability

Variations in the state of the climate that can last from months to decades. Climate variability can result from natural and man-made process. However, this document uses the term to refer to natural processes. An example of such processes includes El Niño and La Niña.

### Climate Change Adaptation

Adjustments in response to actual or expected climate change, to reduce negative impacts or take advantage of opportunities.<sup>ii</sup>

### Climate Change Mitigation

Initiatives and measures to reduce the sources, or enhance the sinks, of greenhouse gases.<sup>iii</sup>

### Climate Risk Management

An approach to systematically manage climate-related risks affecting activities, strategies or investments, by taking account of the risk of current variability and extremes in weather as well as long-term climate change. From a Red Cross/Red Crescent perspective, climate risk management is doing what we have always done in terms of disaster management, health and care, food security and so on, but paying attention to (1) the way risks are changing, and (2) options to reduce the risks in addition to being prepared to respond after the event.<sup>iv</sup>

### Disaster Risk Reduction

The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.<sup>v</sup>

### **Seasonal Forecast**

Provides a general indication of the likely character of the season over the next 3 months – specifically what the chances are that temperature or precipitation is likely to be normal, above-normal and below-normal for the given place and time of year, based on conditions in the climate system. Seasonal forecasts indicate the likelihood of the general conditions for a particular season ahead and do not provide any information regarding day-to-day weather or extreme events.

### **Early Warning, Early Action**

Routinely taking humanitarian action before a disaster or health emergency happens, making full use of scientific information on all timescales (IFRC, 2008).

### **Vulnerability**

The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. For positive factors, which increase the ability of people to cope with hazards. (ISDR).

### **Weather**

Atmospheric condition at any given time or place. It is measured in terms of such things as wind, temperature, humidity, atmospheric pressure, cloudiness, and precipitation. In most places, weather can change from hour-to-hour, day-to-day, and season-to-season.<sup>vi</sup>

## END NOTES

---

<sup>i</sup> Glossary of Climate Change Terms. United States Environmental Protection Agency. Online: <http://www.epa.gov/climatechange/glossary.html#W>

<sup>ii</sup> Red Cross/Red Crescent Climate Guide. Glossary. Online: [http://www.climatecentre.org/downloads/File/reports/RCRC\\_climateguide.pdf](http://www.climatecentre.org/downloads/File/reports/RCRC_climateguide.pdf)

<sup>iii</sup> Annex 1, Glossary. Working Group I. Fourth Assessment Report. Intergovernmental Panel on Climate Change. Online at: <http://www1.ipcc.ch/pdf/glossary/ar4-wg1.pdf>

<sup>iv</sup> Red Cross/Red Crescent Climate Guide. Glossary. Online: [http://www.climatecentre.org/downloads/File/reports/RCRC\\_climateguide.pdf](http://www.climatecentre.org/downloads/File/reports/RCRC_climateguide.pdf)

<sup>v</sup> [Living With Risk: A Global Review of Disaster Reduction Initiatives](#), UNISDR, 2004; pg. 17

<sup>vi</sup> Glossary of Climate Change Terms. US EPA