Annex 1: Humanitarian Climate Risk Management Workshop Concept Paper

HUMANITARIAN CLIMATE RISK MANAGEMENT WORKSHOP

Nairobi, Kenya 23-24 February 2009

The East African humanitarian community is looking for ways to better respond to the challenges presented by climate change, but is struggling to access appropriate and targeted scientific data that can inform their operations. Recent advances in science and technology have produced a variety of new tools for humanitarian organizations working on climate risk management. Examples include satellite data to monitor extreme hazard events in real time, as well as predictions ranging from short-term weather events, to seasonal precipitation amounts, to long-term climate change trends. Humanitarian actors have enormous opportunity to utilize these tools to inform risk reduction, preparedness and contingency planning, as well as program implementation.

Recent efforts to build relationships and to establish joint initiatives between climate information producers and humanitarian actors within the Greater Horn of Africa region have enabled significant progress toward reducing the impacts of climate-related disasters and to address the challenges posed by climate change. For example, IGAD's Climate Prediction and Applications Centre (ICPAC) has facilitated activities involving Regional and National Meteorological Services and Red Cross/Red Crescent National Societies, with a view toward increasing regional collaboration with scientific institutions to bridge the gap between climate science and disaster risk reduction, preparedness, and response.

Such initiatives are imperative to successful climate risk management, as the amount and the complexity of current monitoring, predictions, and projections has often limited practical use within many humanitarian settings; climate information must be tailored to specific needs and presented in formats which are readily accessible to such users. At the same time, humanitarian actors need to evaluate how such information can usefully inform their decision-making at various timescales. Thus, direct and sustained communication between these sectors must continue, to ensure the integration of feedback provided by end-users within the research and development of new prediction technology and tools. Forums that enable and promote mutual learning and constructive dialogue will be necessary in order for climate information to achieve its full potential as a means of improving disaster risk reduction efforts.

This workshop will be designed to build upon existing regional partnerships and to bring together a broader spectrum of humanitarian practitioners and climate specialists to discuss the current needs, challenges, and opportunities for using information on current climate variability and future climate change scenarios in E.A. It will also be a forum to present best practice and to review what state of the art climate services can currently provide in terms of actionable information.

Participants from the humanitarian sector will include the United Nations Office for the Coordination of Humanitarian Affairs, the International Federation of the Red Cross and Red Crescent Societies, and other regional non- and inter-governmental entities, including members of the Interagency Working Group for Disaster Preparedness for Central and East Africa. Primary participants from the climate science community will include ICPAC and the International Research Institute for Climate and Society, with the possible attendance of other regional and international climate centres, including other Regional and National Meteorological Services from the East Africa region.

The workshop will be a 2-day event. This will include technical training sessions, to be hosted by the climate science and humanitarian communities, as well as interactive sessions to apply knowledge gained. This will include cross-sectoral working groups, simulation of climate informed humanitarian decision-making processes, and provision of joint recommendations and next steps.

Major goals of the workshop include:

- Better understanding of the climate information needs of the humanitarian community to inform refinement of existing tools and development of future tools
- Improved knowledge of available climate information tools and how they might be applicable to humanitarian operations
- Better understanding of cutting edge climate prediction science and what this may offer the humanitarian community now and in the future
- Exploration of platforms for information dissemination which are appropriate across institutional scales and in inter-agency settings
- Exploration of the implications of the use of probabilistic and uncertain information within humanitarian decision-making across temporal and geographic scales
- Development of joint recommendations for next steps to improve communication, delivery, and utilization of climate information in humanitarian contexts

This workshop is sponsored by the United Nations Office for the Coordination of Humanitarian Affairs. Additional support is provided by the International Federation of the Red Cross and Red Crescent Societies – East Africa Regional Office, the Red Cross/Red Crescent Climate Centre, IGAD Climate and Prediction Applications Centre, and the International Research Institute for Climate and Society.

Annex 2: Workshop Schedule

HUMANITARIAN CLIMATE RISK MANAGEMENT WORKSHOP 23-24 February 2010

Day/Time	Session/Activity	Speakers/Facilitators
DAY 1: Technical Sessions		
23 February		
8:00 am	Welcome	Pierre Gelas (OCHA) Dennis Johnson (IFRC)
8:10 am	Linking Climate Science and Humanitarian Action Introduction and game	Simon Mason (IRI) Meaghan Daly (Red Cross/Red Crescent Climate Centre)
8:30 am	Ask the Climate Experts: Frequently Asked Questions from the Humanitarian Community Expert panel	Samuel Mwangi (Kenya Meteorological Department) Joseph Mutemi (University of Nairobi) Simon Mason (IRI)
10:00 am	Tea Break	
10:30 am	Building a Climate Information Toolbox: Training Session Small group training session	Peter Omeny (Kenya Meteorological Department) Samuel Mwangi (Kenya Meteorological Department) Joseph Mutemi (University of Nairobi)
12:00 pm 12:30 pm	Climate and Health: Early Warning and Impacts Lunch	David Gikungu (Kenya Meteorological Department)
1:30 pm	Climate Informed Contingency Planning (Part 1) <i>Group work</i>	Meaghan Daly (Red Cross/Red Crescent Climate Centre) Nancy Balfour (IFRC)
3:00 pm	Tea Break	
3:15 pm	Climate Informed Contingency Planning (Part 2) <i>Group work and debrief</i>	
4:30 pm	Debrief and wrap-up	Meaghan Daly (Red Cross/Red Crescent Climate Centre)
5:00 pm	Break for day	

DAY 2:		
Informational		
Sessions		
24 February		
8:00 am	Daily welcome	
8:10 am	ABetterClimateforDisasterManagement:ClimateandSocietyPublicationPresentation and Q&A	Molly Hellmuth (IRI)
8:30 am	Putting Climate Information to Work:	
	Current Efforts and Practice	
	 Presentation and Q&A IFRC and ACMAD: Early Warning, Early Action in 2008 Floods OCHA: Lessons from South Africa 	Meaghan Daly (Red Cross/Red Crescent Climate Centre) Laurent Dufour (OCHA)
	• ICPAC: Partnerships with Humanitarians for Disaster Risk Reduction in East Africa	Zachary Atheru (ICPAC)
	 FEWS NET: Science for Decision- making 	Gideon Galu (FEWS NET)
	PIROI: Getting the Early Warning Message Out	Eric Sam-Vah (French Red Cross)
9:45 am	Tea Break	
10:15 am	Bridging the Gap: Identifying Barriers to Use and Provision of Climate Information <i>Working groups, facilitated discussion,</i> <i>solution mapping</i>	Meaghan Daly (Red Cross/Red Crescent Climate Centre)
11:30 am	Developing Demand-driven Tools for Climate Risk Management Presentation and Q&A	
	Meeting in the Middle: How Climate Scientists and Humanitarians Can Work Together	Meaghan Daly (Red Cross/Red Crescent Climate Centre)
	Predicting Seasonal Extremes	Simon Mason (IRI)
	Near-term Climate Change Projections	Brad Lyon (IRI) via video presentation
12:45 pm 1:00 pm	Concluding Remarks Break for Day	

Annex 3: Climate Science Questions from the Humanitarian Community

Questions:

- How can climate prediction at local and grassroots level be enhanced?
- How can the concept of climate change be communicated at the community level?
- What are some basic strategies to adapt to the long-term impacts of climate change?
- What are the main impacts of climate change on health?
- How difficult is it to predict slow-onset disasters, including severity and length, and how can this be communicated at the community level to inform preparedness?
- Can climate scientists provide information for near-term variability (next 10-20 years) of temperature and precipitation in East Africa?
- How will climate change impact the frequency of El Niño events?

What areas of climate science would you be interested to learn more about?

Responses:

natural climate variability	42.9%
climate change	71.4%
extreme events	28.6%
seasonal climate predictions	57.1%
long term climate projections	57.1%
Show replies Other (please specify)	28.6%

Are there any specific areas of climate science or climate information that are particularly difficult to interpret for humanitarian operations?

Responses:

- Prediction of extreme events
- Health hazards
- Interpretation of seasonal predictions to estimate impacts
- Implications of climate information for adaptation strategies (particularly at the community level)

Annex 4: Workshop Activities – Climate Informed Contingency Planning

ACTIVITY 1

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CLIMATE INFORMED

CONTINGENCY PLANNING

ACTIVITY 1: CLIMATE INFORMED CONTINGENCY PLANNING

ACTIVITY TIMING

3 hours

OBJECTIVE(S)

- Utilize various sources of climate information within contingency planning and scenario development
- Develop an understanding of the various types of climate information available across time scales and how they might inform humanitarian planning, preparedness, and response

ACTIVITY OUTLINE AND DESCRIPTION

This session will have 3 parts. Participants will break into groups of 4-5 people. (Participants may choose to self-select groups according to their specific sectoral interests.)

During Part 1, groups will be presented with a packet of materials to plan for the upcoming rainy season (October, November, December), including seasonal forecasts and frameworks to undertake hazard, vulnerability, and risk analyses, to be used in worst case scenario development, resource identification, and evaluation of early warning, early action strategies.

In Parts 2 and 3, groups will receive brief updates on weather conditions in the region, as well as updated climate information. Groups will need to decide what actions are necessary given the new information and whether or not contingency plans should be updated.

Thus, the session follows the following outline:

- Introduction and instructions (5 minutes)
- Part 1: Risk Analysis, Scenario Development, and Early Action (Group work: 1 hour, Debrief: 30 minutes)
- Part 2: Reassessment of Risks, Scenario, and Early Action (#1) (Group work: 15 minutes, Debrief: 15 minutes)
- Part 3: Reassessment of Risks, Scenario, and Early Action (#2) (Group work: 15 minutes, Debrief: 15 minutes)

• Exercise packet (in 3 parts)

ACTIVITY INSTRUCTIONS: CLIMATE INFORMED CONTINGENCY PLANNING

PART 1: RISK ANALYSIS, SCENARIO DEVELOPMENT, AND EARLY ACTION

TIME: 2 hours

It is September and you are preparing for the upcoming rainy season. Given the flooding events that occurred last year, you have decided that you want to try to more effectively utilize various sources of climate and weather information to inform your planning.

Sections 1-4: Using the forecasts, maps, and information provided, analyze the hazards, vulnerability, and risks facing Kenya in the upcoming season October, November, and December. You will need to evaluate what sources of climate information will be relevant to your planning and decide how to incorporate them within your contingency plan.

Sections 5-6: Based on your findings, develop a scenario for the worst-case outcome and identify what resources are available.

Section 6-7: Review your analysis and scenarios to identify gaps in resources to better evaluate and prioritize early warning, early action strategies.

CLIMATE INFORMATION: SOURCE A

What Information: Seasonal Precipitation Forecast (Greater Horn of Africa Consensus Climate Outlook for September to December)

Issued When: August

Issued by Who: IGAD Climate Predication and Applications Centre (ICPAC)



Zone I: This zone is generally dry and covers northern parts of Ethiopia, Eritrea, and Djibouti as well as central parts of the Sudan northwards.

- **Zone II:** Increased likelihood of near normal rainfall. This zone includes central parts the Sudan, central and southern Ethiopia, the Rift Valley areas of Kenya, northern and central parts of Tanzania.
- **Zone III:** Increased likelihood above normal rainfall. This zone covers western sectors around Lake Victoria basin and adjacent countries of Burundi, Rwanda, Uganda, southern Sudan and western Kenya.
- **Zone IV:** Increased likelihood above normal rainfall. This zone covers parts of east and coastal Kenya, coasts of Somalia, Kenya and Tanzania.
- **Zone IV:** Increased likelihood of below normal rainfall. This zone covers southern and southwestern Tanzania.

CLIMATE INFORMATION: SOURCE B

What Information: Medium-term Food Security Outlook, October through March Issued When: August Issued by Who: FEWS NET



No Data

CLIMATE INFORMATION: SOURCE C

What Information: Seasonal Precipitation Forecast for Kenya (October, November,

December)

Issued When: September

Issued by Who: Kenya Meteorological Department



SECTION 1: ANALYSIS OF HAZARDS

WHAT ARE THE POTENTIAL HAZARDS?
What area is likely to be affected and what is the geographical scale?
What is (are) the time frame(s)?
What are the most important hazard(s)? (e.g. flooding, cyclones, drought, landslide)
What is the likelihood of the hazard(s) occurring?
What is the potential magnitude of damage/losses?
What percentage of the population is likely to be affected?
How might other environmental change (e.g. deforestation) interact with these hazards?
What other institutions can be partnered with to enhance access to relevant information?

SECTION 2: VULNERABILITY ANALYSIS

WHAT ARE	THE	VULNERA	BIL	ITIES?						
What ar	e the	conditions	of	exposure	and	vulnerabi	lity?	(i.e.	physical	l, social,
economi	e, culti	ural, liveliho	od)	-			-			
			,							
How doe	s the <i>t</i>	<i>iming</i> of the	for ntin	ecast help	you to	o assess if	popu	latior	ns are mo	re or less
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What ot exposure	her in and v	dicators and ulnerability?	d ir	nformation	are	available	to h	elp c	uantify	levels of
1		2								

SECTION 3: RISK ANALYSIS

What geographic zones or areas are most exposed to risk? Which areas should be prioritized?
Approximate number of people at risk:
Potential impacts:
Summary of risks (please provide 4-5 sentences):

SECTION 4: SCENARIO

	WORST CASE
Scenario summary	
Scenario assumptions	
and indicators	
Scenario Analysis	
Probability	

SECTION 5: RESOURCE IDENTIFICATION AND MOBILIZATION

WHAT ARE THE CAPACITIES AT DIFFERENT LEVELS?
Local:
National
National.
Regional and International:
External Institutions.
Other Partner Agreements:
Generalized climate considerations (e.g. it is usually dry during January and
February):

WHAT ARE THE LIKELY GENERALIZED NEEDS?

Local:

National:

Regional:

WHAT RESOURCES ARE IMMEDIATELY AVAILABLE? WHAT RESOURCES CAN BE MOBILIZED?

What resources, to serve how many people, for how long?

How could community capacity be increased?

What staff or volunteers can be made available in the case of a disaster?

What resources are needed that are not available?

What plans exist for receiving and managing resources and assistance?

Is there a gap between needs and resources? If yes, what additional resources will be needed?

SECTION 6: EARLY WARNING, EARLY ACTION

What are early actions that can be undertaken to prepare for the risks identified above? What activities should be undertaken immediately, and which should be undertaken later, when more information is available, based on current forecasts?

Given the forecast tools available, use the framework below to consider what actions can be taken and for which time scale, to fill in the chart above.

Emergency Assessment

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

Rescue and Medical Assistance

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

If not, what part of the forecast would need change to undertake these activities? (i.e. predicted impact, lead time, geographic location)

Health Services

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

Water, Sanitation, and Hygiene

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

If not, what part of the forecast would need change to undertake these activities? (i.e. predicted impact, lead time, geographic location)

Food and Nutrition

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

Shelter

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake immediate early action? What action?

If not, what part of the forecast would need change to undertake these activities? (i.e. predicted impact, lead time, geographic location)

Logistics and Transport

How long does it take to mobilize the necessary resources to undertake this activity?

Does the forecast provide enough advanced warning to initiate early action for better preparedness?

Is the probability of the events occurring sufficient to undertake early action to prepare at this time? What action?

What are the consequences if early action is taken, but the worst-case scenario does not
materialise?

What are the consequences if the worst-case scenario occurs, but **no** early action was taken? How does this compare with the consequences above?

Which areas of preparedness and response are the most difficult to undertake using the climate information provided?

Which of these activities would be considered "no regrets" strategies and what area of preparedness could they be undertaken for?

Based on this, what would be your 3 priority early actions to prepare for the upcoming season? (this can include monitoring shorter term forecasts)

- 1.
- 2.

3.

TIME: 30 minutes

It is now October. You developed your contingency plan for the upcoming season in September. Since then, there has been very little rainfall in most of the country and now, one month later, updated forecasts and information are available.

Using the maps provided, roughly reassess the hazards, vulnerability, and risks facing Kenya during the remainder of the season, at the various time scales presented. Determine what (if any) areas of your contingency plan should be adjusted or if other action should be undertaken. (Section 8)

CLIMATE INFORMATION: SOURCE D

What Information: Seasonal Precipitation Forecast (November, December, January) Issued When: October

Issued by Who: IRI



CLIMATE INFORMATION: SOURCE E What Information: 10 Day Precipitation Outlook Issued When: 15 October Issued by Who: Kenya Meteorological Department



CLIMATE INFORMATION: SOURCE F What Information: Six Day Forecast for Heavy Rainfall Issued When: 15 October Issued by Who: IRI



Recommended action for areas in any of the three shades of blue: check local forecasts immediately for confirmation of timing and severity of rainfall. Floods associated with heavy rainfall may be possible any time within the next 6 days.

CLIMATE INFORMATION: SOURCE G

What Information: Four-Day Weather Forecast for Kenya Issued When: 18 October Issued by Who: Kenya Meteorological Department

FORECAST FOR THE NEXT FOUR DAYS FROM 15–19 OCTOBER

The Lake Victoria basin, Highlands west of the Rift Valley and Central Rift Valley (Kitale,

Kakamega, Kisumu, Kisii, Kericho, Eldoret, Nakuru, Narok, Nyahururu, etc) will experience afternoon showers and thunderstorms over few places increasing to several places.

The Northwestern districts (Lodwar, Lokitaung, Lokichoggio, etc), will experience mainly sunny conditions throughout the forecast period.

The Central highlands including Nairobi area (Nyeri, Meru, Dagoretti, Embu, etc) will experience morning rains and afternoon showers over few places occasionally increasing to several places.

The Northeastern districts (Marsabit, Moyale, Mandera, Wajir, Garissa etc) experience sunny conditions throughout the forecast period.

Southeastern lowlands (Voi, Makindu, Machakos etc) experience mainly sunny conditions with occasional morning rains and afternoon showers over few places.

The Coastal region (Mombasa, Kilifi, Malindi, Lamu etc) will experience mainly sunny intervals with occasional morning showers over few places.

N.B: This forecast should be used in conjunction with the daily 24-hour forecast.

CLIMATE INFORMATION: SOURCE H What Information: One-Day Weather Forecast for Kenya Issued When: 19 October Issued by Who: Kenya Meteorological Department

Town	Morning	Afternoon			
NAIROBI	Sunny intervals	Sunny intervals/Showers			
MOMBASA	Showers/Sunny intervals	Sunny intervals			
KISUMU	Sunny intervals	Showers and thunderstorms			
NAKURU	Sunny intervals	Showers and thunderstorms			
KAKAMEGA	Sunny intervals	Showers and thunderstorms			
ELDORET	Sunny intervals	Showers and thunderstorms			
NYERI	Light rains/Sunny intervals	Sunny intervals/ Showers			
MALINDI	Sunny intervals	Sunny intervals			
νοι	Sunny intervals	Sunny intervals			
LODWAR	Sunny intervals	Showers and thunderstorms			
MARSABIT	Rains/Sunny intervals	Sunny intervals			
GARISSA	Sunny intervals	Sunny intervals			
MOYALE	Rains/Sunny intervals	Sunny intervals			

SECTION 8: ADJUSTING EARLY ACTION AND CONTINGENCY PLANS

Does the new information provided warrant immediate action?

Does the new information provided warrant adjusting the contingency plan?

What actions and at what timescales should be considered? What actions outlined in the original contingency plan, if any, are no longer necessary?

Is the information useful to making this decision? What additional information would be needed to make a decision about what action is necessary?

TIME: 30 minutes

It is now November. During the second half of October, there was significant rainfall in most parts of the country. There are now updated forecasts and information available.

Again, using the maps provided, roughly reassess the hazards, vulnerability, and risks facing Kenya during the remainder of the season, at the various time scales presented. Determine what (if any) areas of your contingency plan should be adjusted or if other action should be taken. (Section 9)

CLIMATE INFORMATION: SOURCE I

What Information: Seasonal Precipitation Forecast (December, January, February) Issued When: 5 November



CLIMATE INFORMATION: SOURCE J

What Information: Rainfall Severity Index: Observed Conditions during October Issued When: 6 November Issued by Who: ICPAC



Rainfall severity indices are derived by considering all observations which are less than 25% (first quartile) of the ranked historical records to be dry while those which are more than 75% (third quartile) are considered wet.

CLIMATE INFORMATION: SOURCE K What Information: Six-Day Forecast of Heavy Rainfall Issued When: 15 November Issued by Who: IRI



Recommended action for areas in any of the three shades of blue: check local forecasts <u>immediately</u> for confirmation of timing and severity of rainfall. Floods associated with heavy rainfall may be possible any time within the next 6 days.

SECTION 9: ADJUSTING EARLY ACTION AND CONTINGENCY PLANS

Does the new information provided warrant immediate action?

Does the new information provided warrant adjusting the contingency plan?

What actions and at what timescales should be considered? What actions outlined in the original contingency plan, if any, are no longer necessary?

Is the information useful to making this decision? What additional information would be needed to make a decision about what action is necessary?

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IDENTIFYING BARRIERS TO USE AND PROVISION OF CLIMATE INFORMATION

ACTIVITY2: IDENTIFYING BARRIERS TO THE USE OF CLIMATE INFORMATION

ACTIVITY TIMING

2 hours

OBJECTIVE(S)

- Identify main sources of regional and sub-regional climate information is available and relevant to decision makers in the humanitarian and disaster risk management sectors and their limitations to informing humanitarian planning, preparedness, and response
- Identify primary barriers to the use of climate information with humanitarian planning, preparedness, and response
- Formulate primary actions that can be undertaken to overcome institutional barriers to the integration of climate information within humanitarian operations

ACTIVITY OUTLINE AND DESCRIPTION

This session provides the basic groundwork for determining what information decision makers need and when for both policy dialogue as well as specific interventions for humanitarian response and disaster management operations. The session will have 3 parts. For all parts, participants will break into groups of 4-5 people, (ideally, these will be the same groups they formed for the contingency planning exercise.).

During Part 1, participants will conduct a critical thinking exercise to examine existing climate information. In Part 2, participants will remain in groups to critically examine the capacity of humanitarian organizations to absorb, integrate, and act upon climate information. In part 3, participants will identify next steps to overcome prominent barriers identified.

Thus, the session follows the following outline:

- Introduction and instructions (5 minutes)
- Thinking Critically About Climate Information (group work: 30 minutes, debrief and mapping: 15 minutes)
- Thinking Critically About Humanitarian Capacity (group work: 30 minutes, debrief and mapping: 15 minutes)
- Building a Road Map (25 minutes)

During the introductory presentation the facilitator should stress the following points:

- Effective decision-making is driven both by the availability of information as well as the time required to organize action.
- Thus, the best time to answer questions are not always the best time to give the answer

The activity instructions for this activity provide specific detail on how the activity will be implemented and managed.

ACTIVITY INSTRUCTIONS: IDENTIFYING AND ADDRESSING BARRIERS TO THE USE OF CLIMATE INFORMATION

PART 1: THINKING CRITICALLY ABOUT CLIMATE INFORMATION

TIME: 45 Minutes

Form groups of 4-5 people. If possible, these should be the same groups undertaken for the contingency planning exercise.

Refer to your contingency planning exercise packet. For each of the maps provided in the contingency exercise for the upcoming short rainy season, take 30 minutes to address the following questions with your group. Based on your individual answers, reach a group consensus for each answer. Write the answer on the note card/sticky note provided. Bring the cards to the facilitator.

A 15-minute debrief, based on answers provided, will follow.

Is the information provided in this map easily comprehensible?

If yes, what information are you able to extract?

If no, what is not comprehensible?

What early actions were identified as desirable during the contingency planning exercise? Is the climate information in the maps relevant to the decisions available during the contingency exercise?

Is the information provided in the maps useful and relevant to other areas of humanitarian practice? If so, what areas?

If not, why? What could be done to improve the usefulness of the information provided in the forecasts?

PART 2: THINKING CRITICALLY ABOUT HUMANITARIAN CAPACITY

TIME: 45 Minutes

Form groups of 4-5 people. If possible, these should be the same groups undertaken for the contingency planning exercise.

Refer to your contingency planning exercise packet. Consider the early warning, early action activities identified address the following questions. Based on your individual answers, reach a group consensus for each question. Write the answer on the note card/sticky note provided. Bring the cards to the facilitator.

A 15-minute debrief, based on answers provided, will follow.

Are the necessary institutions, structures, or systems in place to effectively enact the early warning, early action activities identified?

If yes, list which institutions, structures, and systems are currently place to enact early warning, early action strategies identified?

If no, what institutions, structures, or systems would be necessary to enable early warning, early action strategies identified?

PART 3: SOLUTION MAPPING

TIME: 45 Minutes

Form groups of 4-5 people. If possible, these should be the same groups undertaken for the contingency planning exercise.

Using the note cards/sticky notes that have been submitted from Part 1 and 2 of the exercise, the facilitator will work with participants to identify informational and institutional barriers into issues that can be addressed in the near future, those that will take significant time to address, and those for which no solution is readily available.

For each of the obstacles that can potentially be addressed in the near term, brainstorm immediate actions that can be taken to initiate solutions and who might undertake these activities. For longer-term issues, participants will brainstorm future activities that could be undertaken to initiate solutions. Issues for which no solution was readily identified will be tabled, but recorded.

The outcomes of the brainstorming session will be used to formulate a rough action plan and synthesis statement for delivery at the Greater Horn of Africa Climate Outlook Forum.

Annex 5: Workshop Participant List

Last Name	First Name	Company
Kituku	Stephen	Caritas
Malesi	Samson	Caritas
Kithikii	Agnes	Catholic Agency for Overseas Development
Owitwi	Jack	CHF International
Mohammed	Omar	Christian-Aid
Kiragu	Ephraim	Church World Service
Mutua	Sammy	Church World Service
Galu	Gideon	FEWSNET
Savi	Gabrielle	French Red Cross
Sam-Vah	Eric	French Red Cross
Balangio	Lilian	German Agro Action
Mung'oni	Moses	German Red Cross
Oyundi Nehondo	Thomas	HelpAge
Ouma	Marion	HelpAge
Atheru	Zachary	ICPAC
Mesureur	Bruno	ICRC
Balfour	Nancy	IFRC
Kariuki	Nychomba	International Institute of Rural Reconstruction
Ningome	Miriam	International Institute of Rural Reconstruction
Mgece	Nicholas	International Institute of Rural Reconstruction
Tjossem	Kurt	International Rescue Committee
Mason	Simon	International Research Institute for Climate and Society
Hellmuth	Molly	International Research Institute for Climate and Society
Khanbabai	Anoucheh	IOM
Pecourt	Sophie	IPPF/SPRINT
Mwangi	Samuel	Kenya Meteorological Department
Omeny	Peter	Kenya Meteorological Department
Gikungu	David	Kenya Meteorological Department
Lukania	Charles	Oasis of Hope
Nerlander	Lina	Red Cross/Red Crescent Climate Centre
Keiru	Bilha Joy	Tearfund
Mutiso	Stephen	Trocaire
Emoru	Francis	Trocaire
Myendo	Elizabeth	Trocaire
Theuri	Mwangi	UNEP
Lugadiru	Alex	UNEP - DEPHA
Kangethe	Jackson	UNFAO
Olesambu	Emmanuella	UNFAO
Kisoyan	Philip	UNFAO
Nyambane	Thomas	UNFAO
Shah	Khalid	UNHCR
Abdisa	Yodit	UNICEF
Lafferty	Helene	UNISDR
Oludhe	Christopher	University of Nairobi
Mutemi	Joseph	University of Nairobi
Cooper	Jeanine	UNOCHA

Laurent	UNOCHA
Pierre	UNOCHA
Ayub	UNOCHA
Thomas	UNOCHA
Cristiano	UNWFP
James	WHO
Wilfred	WHO
Edward	World Vision International
Francis	World Vision International
	Laurent Pierre Ayub Thomas Cristiano James Wilfred Edward Francis