

Final Report

ADDRESSING THE HUMANITARIAN CHALLENGES OF CLIMATE CHANGE

Regional and National Perspectives

IASC Task Force on Climate Change

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Endorsed by IASC Principals

FINAL REPORT



Addressing the Humanitarian Challenges of Climate Change Regional and National Perspectives

FINDINGS FROM THE IASC REGIONAL
AND NATIONAL CONSULTATIONS
MAY-JUNE, 2009

IASC

Inter-Agency
Standing Committee

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SUMMARY

CLIMATE CHANGE REQUIRES URGENT SOLUTIONS

Climate change is one of the major global challenges for humanity in the 21st Century. It is changing the disaster risk profile of countries across the globe and threatens to overwhelm the current capacity of the humanitarian system to respond effectively by increasing hazards, vulnerabilities and response costs. Yet it is only in the last few years that the “human face” or humanitarian impacts of climate change have been fully acknowledged.

Collective effort is required to help vulnerable communities and groups adapt to the growing threat of climate change. Humanitarian practitioners, and the communities they work with, already have considerable disaster risk reduction experience, which will be essential for advancing adaptation to climate change, and minimising the potentially massive increase in humanitarian need in the short term. At the same time, humanitarian practitioners will need to address underlying risk factors that make people and their livelihoods vulnerable to more intense and frequent extreme events and the new emerging risks associated with climate change.

Climate change is not new; neither are the solutions. Climate change adaptation has been a reality for a long time. However climate variability and change are accelerating and becoming more widespread. Humanitarian practitioners therefore need to combine their collective experience and expertise built over recent years and collaborate with a range of actors across sectors to build community resilience and reduce vulnerability to climate change.

FROM DIALOGUE TO ACTION

The Inter-Agency Standing Committee (IASC) Task Force on Climate Change, with the United Nations International Strategy for Disaster Reduction (UNISDR) organised regional and national consultations among the IASC agencies. These consultations were designed to bring IASC practitioners together to reflect upon the humanitarian challenges of climate change and to discuss good practice and next steps. The regional and national consultations were held between May and early June 2009, and solicited feedback from more than 250 practitioners from approximately 80 organisations and institutions, across seven regions and eight countries. The engagement and commitment of these practitioners to the consultation process is testimony to their readiness to urgently address climate change.

The findings from ‘Regional and National Perspectives’ demonstrate that progress is being made by IASC agencies across the regions to address climate change. In particular, practitioners are:

- > **integrating climate knowledge** into their work and anticipating climate risk by drawing upon new resources and networks;
 - > **raising internal agency awareness** of climate risks, updating their policies and strategies, and expanding the scope of their work to integrate climate risk management;
 - > **scaling up advocacy work** to mainstream climate change adaptation and disaster risk reduction into national and international agendas and to raise the profile of the “human face” of climate change;
 - > **developing partnerships** with other agencies, knowledge centres, local research institutions, development and environmental actors;
-

- > **building operational capacity** to prepare for the increasing number and intensity of climate disasters and rising community vulnerabilities;
- > **adapting existing tools and mechanisms** to integrate climate risk;
- > **strengthening existing community based disaster preparedness and enhancing climate change knowledge at a local level** to address climate related risk in advance of disasters; and
- > **piloting community adaptation approaches**, primarily livelihood enhancing, structural and awareness based solutions, to build resilience to future climate change.

PROGRESS VARIES ACROSS REGIONS

Advances are most evident in the Pacific, the Latin America and Caribbean and Asia regions. Recent disasters have increased awareness and mobilised human and financial resources in these areas. Similarly, civil society engagement combined with an enabling framework and local level partnerships, have translated into a number of mechanisms and planning processes that are fostering the integration of disaster risk reduction with climate change adaptation and initiating action. Practitioners from these regions showcased a number of innovative community based projects that focus on building preparedness and community resilience by offering location specific adaptation options. The challenge for regional practitioners is to identify more opportunities for collaboration and to systematically scale up and implement climate change adaptation and disaster risk reduction as a coherent set of programmes.

In the Middle East and African regions, the foundations for addressing climate change at the local level are being established. Most commonly, humanitarian practitioners are implementing awareness raising activities, initiating dialogue with non-traditional actors, mapping hazards and vulnerabilities and building capacity. Although some early success stories have emerged, particularly in relation to preparedness activities, more systematic integration of disaster risk reduction and climate change adaptation is required.

The main obstacles identified by practitioners are to: 1) routinely use climate knowledge as part of ongoing operations; 2) predict and understand the location-specific humanitarian impacts of climate change; 3) raise awareness of the “human face” of climate change; 4) ensure more systematic and coherent involvement in national planning processes for climate change adaptation and disaster risk reduction; 5) bridge the divide between humanitarian and development work or short and long-term action; 6) ensure agency policy signals translate into resource mobilisation for capacity building and programming; 7) strengthen existing tools and streamline coordination mechanisms; and most importantly 8) replicate community level preparedness and adaptation success stories.

PRIORITIES FOR THE NEXT THREE YEARS

Practitioners identified a number of cross-cutting priorities for agencies over the coming years. These are summarised below.

- > **Enhance climate knowledge** through partnerships with knowledge centres and workshops exposing practitioners to the latest climate information; by translating and simplifying climate data; and using traditional knowledge to validate climate science.
- > **Build agency awareness and understanding** of location-specific humanitarian impacts and vulnerabilities including gaps relating to climate induced migration and displacement; and by **collaborating** with local research institutes to secure technical advice.
- > **Build operational capacity** through inter-agency training across a range of stakeholders to help prevent, prepare, respond and adapt to climate change; and by enhancing capacity on specialist issues such as migration and displacement.
- > **Advocate for wider recognition of the “human” face of climate change** by developing **regional** advocacy strategies; researching the consequences of climate change; and by preparing awareness raising material for different audiences.
- > **Strengthen disaster risk reduction and adaptation policy frameworks** such as the Hyogo Framework of Action by using climate change as an entry point for dialogue with national governments; and promoting inter-agency collaboration to strengthen and enrich the advice and support given.
- > **Enhance dialogue, networking and coordination** by consolidating and strengthening existing regional networks; creating opportunities for greater coordination between humanitarian, development and environmental actors; and by exploring opportunities to link with new partners.
- > **Coordinate and consolidate information exchange** by strengthening existing regional and inter-regional mechanisms.
- > **Jointly advocate for sufficient funds for DRR/CCA activities** by increasing engagement with non-humanitarian donors; exploring mechanisms for integrated approaches to funding; and ensuring funds are invested in disaster preparedness.
- > **Amend and share tools** by conducting a mapping exercise of international, regional and national skills and tools; preparing an amended inter-agency toolkit; and by adapting existing tools to integrate climate risk and assess humanitarian impacts.
- > **Strengthen preparedness, early action and response, and initiatives addressing underlying vulnerability** by establishing more strategic, structured, coordinated and integrated approaches to **community** based DRR/CCA; compiling and assessing best practice; scaling up and replicating pilot projects; and ensuring the participation of local communities in assessing and implementing location-specific solutions.

A CALL FOR CONTINUED ACTION

The IASC regional and national consultations have been an extremely positive start of a continuing process to engage and strengthen action on disaster risk reduction and climate change adaptation. Ongoing dialogue will provide further opportunities for sharing good practice and experience, for forging new partnerships, and most of all, for developing concrete solutions on the ground.

1 INTRODUCTION



“Putting a human face on climate change issues means taking into consideration the needs of individual men, women and children, especially the most vulnerable groups in society including the very young, the very old and the frail” (United Nations Population Fund (UNFPA), Latin America and Caribbean).

1.1 THE “HUMAN FACE” OF CLIMATE CHANGE

Climate change is one of the major global challenges for humanity in the 21st century. Yet it is only in the last few years that the “human face” of climate change has been fully acknowledged. While climate change has global repercussions, the most vulnerable communities and groups will experience the greatest impacts; climate change is endangering the lives and livelihoods of these communities, eroding their resilience and undermining opportunities for sustainable development. As a result, climate change threatens to overwhelm the current capacity of the humanitarian system to respond effectively by increasing hazards, vulnerabilities and response costs.

Adaptation to climate change needs collective effort to succeed. Adaptation to the shifting risk and uncertainty associated with climate change necessitates a wide range of actions and responses to enable communities and vulnerable groups to cope with change. These can include: 1) preparedness activities, such as early warning systems to proactively alert communities to expected and unexpected threats; 2) structural measures, for example raising houses on stilts in response to flooding; 3) actions to address underlying vulnerability, in particular strengthening and diversifying livelihoods; 4) awareness based solutions, notably changing behaviours and practices; 5) the introduction of safety nets through insurance and other savings schemes; and 6) supporting mobility in case people need to move either temporarily or permanently.

Humanitarian practitioners have considerable disaster risk reduction (1) experience, which can advance adaptation action. Disaster risk reduction (DRR) is essential for avoiding the potentially massive increase in humanitarian need in the short term, while building adaptation capacity and DRR strategies to reduce vulnerability to extreme events in the long term: *“risk reduction aims to reduce the odds of disaster consequences by doing everything possible before the event to protect life, limit damage and strengthen a vulnerable community’s ability to survive and bounce back quickly”* (International Federation of Red Cross and Red Crescent (IFRC), 2007). DRR is therefore a key element of climate change adaptation (CCA).

1. DRR is defined as: *“the conceptual framework of elements considered with the possibilities to minimise 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”* (United Nations International Strategy for Disaster Reduction (UNISDR), 2009).

1.2 A CALL FOR URGENT ACTION

The time to act is now; climate change is clearly happening and is increasing the frequency and intensity of disasters. The challenge is to urgently adapt and scale up local DRR efforts and incorporate climate risk into humanitarian, recovery and development planning. There is no “one size fits all” approach to climate change adaptation – rather it requires a community-led process incorporating multiple perspectives to identify locally relevant solutions.

The solutions are not new; humanitarian practitioners have experience in preventing, preparing and responding to disasters. They have been undertaking DRR activities for years, through enhancing preparedness, contingency planning and Early Warning-Early Action (EWEA), building on the Hyogo Framework of Action (HFA) (2). Similarly, although not necessarily labelled as such, practitioners have been helping communities adapt for many years through inter alia natural resource management and economic diversification.

Protecting vulnerable communities (3) is the common entry point for humanitarian and development practitioners. DRR is the common agenda, although at times not fully developed or integrated into either humanitarian action (4) or development strategies. Historically, there has been a division of tasks and responsibilities between agencies responding to hazards and those creating an enabling environment for development. Over the past several years however, both communities have focused on addressing the underlying risk factors that make people and their livelihoods more vulnerable to both slow and rapid onset disasters. Today, climate change is identified as one of the main underlying risk factors for disasters and sustainable development.

On a global level, it is now widely recognised that DRR and CCA are inextricably linked (5) – both in terms of the types of climate hazards they address, and the responses needed to reduce vulnerability and build resilience. Responding to the humanitarian challenges of climate change and addressing the root causes of vulnerability will therefore require greater coordination between humanitarian, development and climate change actors building upon their combined experience and the community level activities already underway.

National and local actors will be fundamental to achieving real impact on the ground. It is vital to listen to their experiences to date in implementing solutions; to understand the challenges that practitioners face and identify steps to negotiate these; to raise awareness and mobilise action where progress has been limited; to collaborate with other actors, notably government and communities to ensure actions are coordinated, appropriate and sustainable; and most of all to replicate good practice.

2. The ‘Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to disasters’ (see UNISDR, 2005).

3. Vulnerability is defined as “the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards” (UNISDR, 2009).

4. The General Assembly Resolution 46/182 identifies “prevention”, “preparedness” and “standby capacity to respond” as the three pillars of humanitarian work (1991).

5. At the 13th Session of the UNFCCC Conference of the Parties (COP 13) held in Bali, December 2007, governments formally recognised the importance of DRR for adaptation in the Bali Action Plan, which calls for international cooperation to support the implementation of adaptation actions and in particular DRR strategies.

1.3 AN INTER-AGENCY COORDINATED RESPONSE

Climate change demands a multi-faceted, coherent and coordinated response at all levels. The key humanitarian partners of the Inter-Agency Standing Committee (IASC) (6) encompassing the main UN, Non Governmental Organisations (NGOs) and Red Cross/Red Crescent actors are working together to address this challenge.

Many members of the IASC are part of the International Strategy for Disaster Reduction (ISDR). The latter explicitly supports policy and capacity development around DRR commitments as agreed by Governments worldwide in the Hyogo Framework for Action (HFA, 2005). The agencies of the IASC are actively working with the UNISDR Secretariat to strengthen disaster risk reduction as a key component of climate change adaptation.

To raise awareness of the humanitarian implications of climate change and to promote action, the IASC established a Task Force on Climate Change in June, 2008.

Mandate and Activities of the IASC Task Force on Climate Change

Mandate:

- > Lead the preparation of high-quality analytical inputs to the United Nations Framework Convention on Climate Change (UNFCCC) process.
- > Provide guidance as appropriate to the IASC on integrating climate risk management into agency policies, operations and relevant guidelines and tools.

Activities:

- > Raise awareness of the humanitarian impacts of climate change, taking into account the long-term consequences for example on health, food security, livelihoods, migration and displacement.
- > Provide information and technical advice to the negotiators at the UNFCCC sessions in the lead up to the United Nations Climate Conference of the Parties in Copenhagen (COP15) in December, 2009.
- > Promote action at the regional, national and local levels through the provision of technical guidance and dissemination of best practice on how to address the humanitarian implications of climate change.

The IASC Task Force on Climate Change together with the UNISDR, is participating in the UNFCCC negotiations and actively engaging in international discussions to promote a stronger link between DRR and CCA (7). Concomitantly, in response to growing momentum to develop policies and practices at national and local levels, they initiated this process of regional and national consultations among the IASC agencies.

6. The IASC is the primary mechanism for inter-agency coordination of humanitarian assistance. For more information see www.humanitarianinfo.org/iasc

7. See submission paper by the IASC Task Force on Climate Change to the UNFCCC 'Disaster Risk Reduction Strategies and Risk Management Practices: Critical Elements for Adaptation to Climate Change' (2008).

2 COLLECTING REGIONAL AND NATIONAL PERSPECTIVES



‘Regional and National Perspectives’ is a **participatory process** designed to bring the main humanitarian practitioners together to reflect and discuss **progress, challenges and priorities** associated with the humanitarian implications of climate change.

The consultation process has solicited feedback from more than 250 practitioners from approximately 80 organisations across seven regions and eight countries. This report represents a “snapshot” of some of the ongoing work by IASC agencies and identifies priorities for the next three years.

2.1 THE PURPOSE OF CONSULTATION

The IASC Task Force on Climate Change in consultation with the UNISDR initiated this regional and national level consultation process to engender dialogue among the IASC agencies, to reflect upon the humanitarian challenges of climate change.

The consultations served to:

- > support the development of policies and operations at the regional, national and local level and inform action at the global level;
- > promote cooperation linkages between humanitarian and development actors engaged in climate change adaptation;
- > encourage an integrated approach to DRR and CCA and create a space for dialogue on these issues;
- > collect examples of ongoing activities and share success stories demonstrating the potential role of humanitarian practitioners in regional, national and local CCA;
- > identify key priority issues to address in the coming three years (until 2012) and the role of the IASC in facilitating these.

In most regions, humanitarian agencies have been working on DRR and disaster preparedness, building on the HFA. Nevertheless, in some regions, the consultations were the first step towards stimulating an interest and discussion on the humanitarian impacts of climate change and promoting action to integrate and mainstream DRR and CCA. These initial discussions therefore constitute a springboard for further action and engagement on climate change. In other regions, agencies are already taking steps to address the humanitarian impacts of climate change and the consultations represent a “stocktaking” of some of the work in progress.

2.2 CONSULTATIONS IN SEVEN REGIONS AND EIGHT COUNTRIES

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the International Federation of Red Cross and Red Crescent Societies (IFRC) and the World Food Programme (WFP), in collaboration with the IASC Task Force on Climate Change and the UNISDR, organised regional workshops in seven regions: Central and East Africa (Nairobi); Southern Africa (Johannesburg); West Africa (Dakar); Asia (Bangkok); the Pacific (Fiji); Latin America and the Caribbean (Panama); and the Middle East and North Africa (Cairo).

In parallel, the IFRC started a national consultation process in eleven countries with meetings held in eight countries during the reporting period meetings: Colombia; the Cook Islands; the Democratic Republic of Congo (DRC); Gambia; Niger; Nigeria; the Solomon Islands; and Yemen.⁽¹⁾

The consultations were held over a six week period, between May and early June 2009 and existing platforms were used to bring IASC practitioners together. This report, which was preceded by a preliminary report,⁽²⁾ documents the consultation findings including feedback from pre-consultation questionnaires and follow-up reporting from each region and country. It is accompanied by a second volume, which details the case studies showcased by practitioners during the consultations.

To monitor the consultation and reporting processes, the IASC Taskforce collectively established a Technical Support Group comprising staff from OCHA, WFP, IFRC, World Health Organisation (WHO), UNISDR, Actions by Churches Together (ACT) International, and the United Nations Food and Agriculture Organisation (FAO).

A wide range of agencies and practitioners participated in the consultation meetings and workshops (see *Annex B* for a full list of agencies). Although the consultations specifically focused on understanding challenges faced by humanitarian practitioners, much of the response was mixed between humanitarian and development approaches. This is in part a reflection of the wide range of IASC practitioners involved in the consultation meetings, the combined mandate of some agencies, but also may indicate that the gap is closing between these two areas of practice.

Finally, it should be acknowledged that the findings elaborated here are not necessarily held by all participants consulted nor indeed are they representative of all humanitarian practitioners in these localities.

¹. The countries were selected using the following criteria. Firstly, countries where national Red Crescent/Red Cross Societies have been engaged in similar dialogue in the past and therefore '*National and Regional Perspectives*' is an update of an ongoing process; secondly countries where National Societies have previously shown an interest in initiating dialogue, but no actions have yet been taken; and thirdly, countries with high climate change risk and where the consultations offer an opportunity to initiate discussion both within and outside of the Red Cross/Red Crescent.

². See '*Addressing the Humanitarian Challenges of Climate Change: Regional and National Perspectives – Preliminary Findings from the IASC Regional and National Consultations, June 2009.*'

2.3 A POSITIVE START OF AN ONGOING PROCESS

The preliminary findings from the consultation meetings were shared in a special side event at the *'Global Platform for Disaster Risk Reduction, 2009.'* The event provided an opportunity for IASC practitioners from across the regions to discuss practical examples of how policies and programmes can integrate DRR and CCA.

It is evident that there is a great deal of interest in the humanitarian impacts of climate change. Humanitarian practitioners clearly are committed to addressing this challenge. The challenge now is to translate these discussions into concrete actions on the ground. The purpose of this report is therefore to support this evolving process by documenting good practice shared by IASC practitioners as part of the consultations and by identifying progress, challenges and priorities for action.

3 GLOBAL PERSPECTIVES



“It is important not to sell climate change adaptation as a new thing, but explain that it’s something that has already been done and is now simply being properly acknowledged” (Oxfam, Pacific).

This chapter documents common themes emerging from the regional and national consultations in terms of *progress* towards incorporating climate risk management into humanitarian work and *challenges* that are being encountered along the way. It reports practitioner views along three themes:

- > **transitioning from knowledge to action;**
- > **establishing the institutional framework for action;** and
- > **implementing action on the ground.**

More detailed case studies are provided in the accompanying volume: *‘Case Studies on Climate Change Adaptation: IASC Regional and National Consultations, May-June, 2009’.*

3.1 FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

“Anyone with internet has access, but the main problem is the plethora of information out there so it becomes labyrinthine even for people who understand CCA and DRR” (the United Nations Children’s Fund (UNICEF), Latin America and Caribbean region).

PROGRESS

- > **Practitioners are starting to use and share climate knowledge to better prepare for climate change (1).** For instance, some practitioners are using seasonal forecasts to enhance early warning of climate risks and combining this knowledge with community-based Vulnerability and Capacity Assessments (VCAs) to identify appropriate DRR/CCA measures. The experience of the Red Cross in West Africa demonstrates how practitioners used climate information on a range of timescales to strengthen preparedness activities (see Case Studies). Similarly, the FAO work in Bangladesh shows how climate change scenarios and modelling can be translated into an understanding of potential local impacts and livelihood adaptation priorities (see Case Studies).

1. Also known as “climate foresight” i.e. the ability to use climate projections to plan activities and investments.

- > **Practitioners are starting to integrate scientific data with local knowledge to better understand climate change impacts.** For example, the Solomon Islands have few meteorological records; most were destroyed during times of unrest. To compensate, the Solomon Islands Red Cross (SIRC) has been documenting traditional knowledge, notably the knowledge of elders, to substantiate the impacts of climate change. Similarly, Oxfam has been interviewing some of the poorest people in Nepal to identify how climate change is affecting their lives (see Case Studies).
- > **Practitioners are translating climate information to suit local audiences.** In Samoa, the Red Cross is working with the Meteorological Office to repackage scientific information into simple climate change messages in the Samoan language for local communities.

CHALLENGES

- > **The main obstacle identified by practitioners is the routine use of climate knowledge as part of ongoing operations.** Practitioners need practical tools to integrate climate information into their daily work. They are struggling with the high levels of uncertainty surrounding future predictions given the non-linear nature of climate change and the potential for “surprises”. Climate change scenarios and models are reportedly too general and uncertain to inform effective humanitarian action.
- > **Access to relevant and user-friendly regional, national and local climate information is reportedly patchy.** On the one hand, there is information overload, with information available via e-bulletins and web-sites including the World Meteorological Organisation (WMO) and national meteorological offices. On the other hand, the availability of information that is user-friendly and downscaled to a local level is perceived to be limited with variable access between and within regions.
- > **Language, perception and culture constitute barriers to communicating with communities on climate change.** Practitioners in Colombia highlighted the difficulty of gaining the trust of communities, when predictions for future climate changes did not relate to past community experiences. The challenge is therefore to translate and tailor scientific information and predictions to local realities via more user-friendly terminologies that connect with local perceptions and realities. Practitioners from Central and East Africa proposed that Community Based Organisations (CBOs) could play an important role by ensuring local communities have access to long-term information.
- > **Traditional knowledge, including gender specific information, could routinely be used to validate climate science.** Traditional knowledge has been compiled over centuries and can provide important insights, even when confronted with “non-traditional” problems associated with climate change and particularly, if combined with scientific projections or scenarios. The challenge is to capitalise on existing indigenous knowledge and the experience of both men and women ⁽²⁾ by securing community participation and involvement in data gathering and decision making.
- > **Collaboration between climate change knowledge centres and humanitarian practitioners could be improved.** Poor communication between the scientific and humanitarian communities can limit the routine use and integration of climate change knowledge into decision making, planning and programming. This challenge was consistently recognised by practitioners in each region.

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² The importance of gender-specific knowledge for extending current understanding of climate change was also highlighted by practitioners in the Pacific and the Latin America and Caribbean regions (see Lane and McNaught, 2009 for more information).

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AGENCY AWARENESS RAISING AND RESEARCH

“As we all know, climate change is not new, nor are many of the solutions... perhaps some of the confusion and lack of integrated response is due to the fact that CCA and DRR are being presented as something new” (WFP, West Africa).

PROGRESS

- > **Some practitioners reported that they are working to raise internal agency awareness of climate risk at all levels.** For example, Oxfam has been providing information sessions with staff in the Solomon Islands, Papua New Guinea and Vanuatu. These aim to improve understanding of climate change, identify how future climate change can be linked to the disaster management plans in these countries and develop ideas on how to integrate both DRR and CCA into existing programmes.
- > **Practitioners are also linking with research organisations and commissioning research to close gaps in their understanding of climate change and related humanitarian impacts.** For example, the Pacific Regional office of the United Nations High Commissioner for Refugees (UNHCR) is scoping the links between climate change, human rights, conflict and forced displacement in vulnerable Pacific Island States.

CHALLENGES

- > **Practitioners highlighted the importance of further research on local humanitarian impacts** including the links between climate change and food security, human rights, human security, achievement of the Millennium Development Goals (MDGs) and trends such as population growth, urbanisation, poverty and rising vulnerability.
- > **Practitioners identified climate induced migration and displacement (3) as a key humanitarian challenge and an opportunity that requires further research.** There is a reported paucity of evidence and/or local models for predicting the scale, pattern, nature and impacts of climate-induced migration (whether forced, voluntary, the result of state resettlement, internal or cross-border) resulting from slow or sudden onset disasters (4).
- > **A gap consistently identified across the regions is the legal framework/operating policy for protecting displaced populations crossing international borders.** Existing guidance does exist for the protection of populations *internally* displaced by climate change (5). However, practitioners agreed that more needs to be done to enhance understanding and provide guidance on *cross-border* migration and statelessness induced by climate change including short and long-term measures to prevent and/or prepare for displacement, for example education and labour migration schemes (6).

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3. A recent study suggests that over 20 million people were displaced by climate related disasters in 2008 (OCHA-IDMC, 2009).

4. The First Assessment Report of the Inter-governmental Panel on Climate Change (IPCC) released in 1990 indicated that migration and displacement could be the “*greatest single impact of climate change*” (cited in IOM et al., 2008).

5. Specifically: ‘*Guiding Principles on Internally Displaced People (IDPs)*’ and the ‘*Operational Guidelines on Human Rights and Natural Disasters*’ (2008).

6. See IOM, UNHCR et al., (2008) on statelessness.

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- > **Collaboration with research organisations, local universities and institutes could be improved.** More inclusive approaches can bring about creative solutions. In Southern Africa, the “missing link” with agricultural and academic organisations, such as the Disaster Management Training Centre was noted as a challenge and a missed opportunity in view of the extensive research and training they already provide. Better participatory, practical learning and action research with communities and local research organisations can help develop and replicate innovative adaptation solutions (see FAO in Bangladesh and Nepal, Case Studies).

3.2 ESTABLISHING THE INSTITUTIONAL FRAMEWORK

ADVOCACY TO PROMOTE THE “HUMAN FACE” OF CLIMATE CHANGE

“The human face of climate change should be visible and utilised in advocacy”
(Caritas Internationalis, Asia).

PROGRESS

- > **Practitioners are increasingly involved in advocacy work to raise the profile of the “human face” of climate change and mainstream DRR and CCA into government agendas.** At the global level, agencies are focusing on advocacy for the United Nations Climate Change Conference in Copenhagen, 2009 (7). At a national level, this includes initiating dialogue on the humanitarian impacts of climate change, for example, the work of WFP in Egypt to initiate a dialogue on climate change and food security (see Case Studies).

CHALLENGES

- > **There is a clear need to improve understanding of the humanitarian impacts of climate change to help mainstream and integrate DRR/CCA.** A fundamental challenge is the limited involvement of the humanitarian community in key political discussions on climate change.
- > **The “human face” of climate change is not always on government agendas.** Rather, the focus tends to be on the impacts on natural systems and measures to mitigate greenhouse gases. As a consequence, practitioners highlighted the importance of strengthening engagement and building better linkages with governments and regional institutions.
- > **Governments in some regions and in particular Africa are prioritising what are perceived to be more immediate priorities.** However, governments are starting to recognise linkages between their current priorities and climate change. Furthermore, practitioners note that extreme weather events and their associated humanitarian impacts can be drawn upon to galvanise action.

7. See submission papers with UNISDR.

STRENGTHENING NATIONAL POLICY FRAMEWORKS FOR DISASTER RISK REDUCTION AND CLIMATE CHANGE ADAPTATION

“The main obstacle for DRR is to demonstrate to governments, donors and other partners that investment in prevention is better than response,” (OCHA, Latin America and Caribbean).

PROGRESS

- > **Humanitarian practitioners are increasingly working with governments to support the development of climate change policy frameworks.** For example, the Kenyan Climate Change Working Group (KCCWG) was showcased as an effective partnership to support climate change advocacy and the formulation of a national climate change policy (see Case Studies). Likewise, the Solomon Islands Red Cross, as part of the Climate Change Country Team comprising government and non-government stakeholders, is working on the development of the National Adaptation Programmes of Action (NAPA)⁸. Further, WFP is collaborating with the governments of Bangladesh and Bhutan by sharing the results of its vulnerability analysis in order to help identify priority areas of action for their respective NAPAs.
- > **Humanitarian practitioners are also supporting the development of policy frameworks for DRR.** For example, World Vision is providing input in the DRR National Action Plan for Swaziland and the UNISDR is bringing together key stakeholders in the Asia and Pacific regions through workshops and meetings to develop, resource and implement Strategic National Plans for DRR. The purpose is to map, prioritise and consolidate DRR activities in the context of the Hyogo Framework for Action (HFA).

CHALLENGES

- > **Climate change discussions at the policy level are often led by different focal points mostly embedded in environmental institutions.** Thus IASC practitioners are finding it difficult to identify entry points for their work. In addition, climate change adaptation tends to be institutionally isolated from the poverty reduction, sustainable development and DRR communities, which in some cases has led to the development of parallel national dialogues for DRR and CCA. As a result, relevant policy documents such as national development strategies, NAPAs, and sectoral policies tend to reflect this institutional disconnect.
- > **Current efforts to engage with governments are at times piecemeal and lack coherence.** More systematic involvement in national planning, budgeting and implementation of DRR/CCA policies, strategies and programmes will therefore demand a more coordinated approach and could, as one practitioner observed, include greater cooperation with the United Nations Development Programme (UNDP), the lead UN agency in relation to Poverty Reduction Strategy Papers (PRSPs) and usually NAPAs.
- > **Ongoing activities to support implementation of the HFA need to be strengthened.** Practitioners discussed the importance of supporting governments in the implementation of existing mechanisms most notably the HFA. The latter provides an international framework for action on DRR, seeks stronger recognition of climate change in DRR, and the associated regional and national Platforms have created opportunities for dialogue on these issues.

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⁸. NAPAs are defined as a “process for Least Developed Countries (LDCs) to identify priority activities that respond to their **urgent** and **immediate** needs to adapt to climate change – those for which further delay would increase vulnerability and/or costs at a later stage.” (www://unfccc.int/national_reports/napa).

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NETWORKING, COORDINATION AND INFORMATION EXCHANGE

“Both humanitarian and development actors can find some common ground in addressing climate change through the angle of vulnerability of the affected populations” (IOM, Latin America and Caribbean).

PROGRESS

- > **A number of good networks and exchange mechanisms are in place and facilitate inter-agency dialogue and information exchange between humanitarian practitioners.** This is particularly evident in the Pacific and the Latin America and Caribbean regions. For example, the Regional Humanitarian Information Network Project (Redhum) is a virtual sharing tool for practitioners in the Latin America and Caribbean region. It identifies the main humanitarian practitioners and organisations, and ensures access to regional humanitarian information in Spanish given that the majority of literature is only available in English (9).
- > **In some regions, humanitarian and development communities are interacting on the cross-cutting issue of climate change.** The ongoing integration of work to reduce and manage risk, adapt to climate change and alleviate poverty has involved increasing coordination with a wide range of actors at all levels using a common framework. In the Pacific region, the Pacific Humanitarian Team (PHT) serves as a platform for humanitarian and development actors to engage on CCA, particularly during early recovery. In East Africa, the ongoing work to support pastoralists adapt to climate change has required new cross-agency and cross-regional partnerships (see Case Studies).

CHALLENGES

- > **Regional coordination structures to support inter-agency dialogue and engagement exist, but these need to be extended to include climate change issues.** Where strong DRR exchange mechanisms and platforms exist, these should integrate CCA and open membership to other actors. For example, practitioners in Central and East Africa identified an opportunity to extend the existing DRR Working Group to incorporate CCA and provide integrated support and guidance to country level activities. Further, practitioners in Latin America and the Caribbean, and Central and East Africa suggested that the HFA could be used to ensure that the DRR and CCA communities operate within the same framework. In regions where climate change mechanisms are working successfully to coordinate new adaptation funding these should be used as entry points for better DRR.
- > **Existing regional information exchange mechanisms need to be consolidated and strengthened.** Practitioners from the Pacific and the Latin America and Caribbean regions noted that there are too many mechanisms and platforms in place. The opportunity lies in streamlining and strengthening existing mechanisms.
- > **Ongoing regional reviews of past and present work on DRR and CCA need to be coordinated.** In most regions, agencies have been working on DRR and CCA for many years (although not necessarily labelled as such). It is important to reflect upon these experiences to feed into future work. However, a number of parallel national and/or regional reviews of DRR and CCA programmes and projects are already taking place in some regions; the priority is to coordinate these alongside international mapping efforts, for example the UNISDR Global Assessment Report.

9. See www.redhum.org. This virtual tool was established by the inter-agency regional platform ‘Risk, Emergency and Disasters Task Force’ of the Regional Inter Agency Standing Committee (REDLAC).

- > **Humanitarian and development actors need to work together to strengthen the bridge between short and long-term actions and to address underlying causes and vulnerabilities as part of response and recovery.** DRR and recovery are transition areas, traditionally falling between the cracks of development and humanitarian agendas. Climate change therefore provides an opportunity to develop early recovery strategies integrated with DRR (i.e. “build back better”) by incorporating a sustainable livelihoods approach.
- > **Humanitarian practitioners increasingly need to work with environmental actors.** This would ensure sustainable humanitarian responses to climate related disasters (10) by encouraging humanitarian practitioners to take into account the environmental impacts of their work (for example resource use, solid waste disposal, water pollution). Similarly, the breakdown of natural resource dependent livelihoods is reported to be the biggest driver of long-term migration and therefore humanitarian workers will need to engage with environmental and development actors to strengthen and diversify natural resource dependent livelihoods.

BUILDING OPERATIONAL AND FINANCIAL CAPACITY

“Capacity building is necessary for better understanding of the key issues related to climate change and DRR, and to best address its consequences within the mandates of various actors including UN agencies, NGOs and governments” (OCHA, Asia).

PROGRESS

- > **Agencies are reinforcing internal capacity and expertise to cope with changing climate risk and associated challenges.** For example, UNDP Samoa has established an internal climate change team to support the integration of DRR and CCA.
- > **Preparedness workshops are being used to develop local capacities and enhance climate understanding.** The regional flood preparedness workshop in West and Central Africa for Red Cross staff and “training of trainers” on disaster management for volunteers in Togo provide important examples (see Case Studies).
- > **Advances are being made to respond to slow onset disasters.** FAO showcased their work in the Near East to build capacity on slow onset disasters through workshops on drought mitigation and preparedness planning (see Case Studies).
- > **Agencies are working to mobilise communities and enhance local capacity to deal with climate change.** For example, FAO is working in Bangladesh and Nepal with farmers and local research organisations to increase awareness and capacity to proactively address climate change before impacts are felt (see Case Studies).
- > **Practitioners are exploring more innovative approaches to funding.** In particular, the IFRC’s pre-emptive appeal to fund preparedness activities in West Africa before the predicted floods in 2008, paves the way for similar appeals in the future, although *“advocacy to change wider donor procedures for pre-disaster relief will inevitably take time”* (Red Cross, West Africa).

CHALLENGES

- > **Agency policy and planning is not always translating into resource flows and capacity building at the local level.** Practitioners consistently reported a shortage of funding and capacity, which in turn limits their ability to turn efforts at linking DRR and CCA into practical local action.

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10. The work of the UNHCR, including its *“Environmental Guidelines”* provides some important considerations for humanitarian actors (2005) and the Norwegian Refugee Council (NRC) shared examples of how it routinely considers both the environmental impacts of its operations and the vulnerability of displaced persons to climate change (see *Volume II*).

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- > **The mobilisation of funding for DRR and CCA is reportedly difficult.** Firstly, emergency funding is prioritised and DRR is more “difficult to sell.” However climate change provides an opportunity to demonstrate to donors and governments the cost effectiveness of DRR and its links to the poverty/development agenda. Secondly, funding pools for response and recovery are separated.
- > **Progress is constrained by a reported lack of capacity, mainly a shortage of CCA staff, training opportunities and high staff turnover.** Yet there is an increasing need to scale up response capacity to cope with the likely impacts of climate change. Capacity building to guide CCA interventions, particularly at the local level and including government counterparts, is clearly one of the most urgent requirements.

3.3 IMPLEMENTING ACTION ON THE GROUND

AMENDING AND SHARING TOOLS

“Humanitarian actors do not need to reinvent the wheel; but rather make better use of their existing strengths, practices, tools and mechanisms and build on the added value they bring to climate change adaptation” (OCHA, Global Platform for DRR, 2009).

PROGRESS

- > **Agencies are mainstreaming climate risk into existing tools.** There is a clear opportunity to use existing tools, standards, guidelines, preparedness and response mechanisms as the basis for integrating CCA. Practitioners are therefore increasingly incorporating climate risk into existing hazard and vulnerability toolkits. Several such toolkits exist or are in planning, for example IFRC’s ‘*Vulnerability Assessment Tool Box*’ (see Case Studies for its application in Samoa) and Tearfund’s ‘*Climate Change and Environmental Degradation Risk and Adaptation Assessment*’ (CEDRA).
- > **Adapted tools and techniques are increasingly being applied to identify communities and populations most at risk from climate change.** In some cases, agencies are using maps to locate priority risk “hotspots” (11). On a national level, for example WFP is using Geographical Information Systems (GIS) and remote sensing to identify areas sensitive to flooding and landslides in Tajikistan and Kyrgyzstan. These maps are combined with food insecurity maps to identify insecure groups vulnerable to emergencies caused by climate change. In a separate project, WFP is identifying emergency preparedness responses through food and climate change vulnerability analysis in Syria and Egypt (see Case Studies).
- > **Progress is being made to raise community awareness of climate risks using a variety of media and awareness raising tools.** For example, the Solomon Islands Red Cross (SIRC) is working to keep communities updated on climate knowledge using information materials (posters, pamphlets, t-shirts, film) and awareness raising activities (radio talk-back shows and school competitions). Likewise, the Red Cross/Red Crescent Climate Centre in cooperation with the South Pacific Regional Environmental Programme prepared a series of posters for use in Fiji, Tonga, the Solomon Islands, Samoa, Vanuatu, Kiribati and Papua New Guinea. These have been designed with the local communities, to share key messages and provide practical daily examples of what communities can do to prepare for the range of climate change impacts.

11. The work by Care International and Maplecroft to identify hotspots of high humanitarian risk under changing climatic conditions using GIS was referenced by practitioners in the Pacific. The “hotspots” study identified the most likely implications of climate change for the next 20-30 years and used GIS to map specific hazards associated with climate change – floods, cyclones and droughts in relation to factors influencing vulnerability. It does not cover all geographical areas such as the Pacific (see Warner *et al.*, 2009).

CHALLENGES

- > **A clear challenge is to avoid duplication** and to consolidate and coordinate ongoing efforts to amend existing tools.
- > **There is a need to draw upon existing and new tools and technologies (e.g. satellite imagery), which could add value to the work of humanitarian practitioners.** This could include Economic Assessment tools to value the benefits of pre-emptive action and Social Impact Assessment tools to enhance understanding of vulnerability. Additional examples shared by practitioners include the Integrated Food Security Phase Classification (IPC) which is being developed by a proactive multi-agency partnership to promote a common language to characterise food security situations drawing upon a toolkit of maps and other visual aids (12).

STRENGTHENING PREPAREDNESS, EARLY ACTION AND RESPONSE

“The introduction of the climate change concept is not something new happening in the region; it is just more of the same” (OCHA, Latin America and Caribbean).

PROGRESS

- > **Operational actors with strong community links are building upon existing preparedness activities in most regions (13).** The work of the Red Cross/Red Crescent National Societies with the Red Cross/Red Crescent Climate Centre provides an important example of community based preparedness. In 40 countries, they have been: 1) holding national level workshops with climate experts to identify climate change risks; 2) prioritising climate risks in the context of national priorities and programs; 3) building capacity to support climate change resilient programs; and 4) implementing climate change resilient programs (see Case Studies). Similarly, the work of Oxfam in the highlands of Peru provides a successful example of a shift from post disaster reconstruction to preventive action by helping build resilience to existing risks *and* to the effects of climate change in the medium and long term (see Case Studies).
- > **Early-warning systems are being enhanced for current and future hazards (14).** Agencies are drawing upon global and regional improved capacity for detecting and forecasting climate hazards, to ensure that warnings reach vulnerable communities. This is particularly salient given that “traditional warning systems” (15) are becoming less reliable as a result of climate change. Although much of the work to date reportedly focuses on early warning systems, which respond to current climate variability/disaster risk, progress is being made to incorporate the changing hazard from sudden and slow onset disasters associated with climate change.

For example, the work of the Red Cross in West Africa includes partnerships with climate scientists to improve knowledge of flooding hazards under climate change, launching pre-emptive appeals for disaster funding on this basis, pre-positioning of relief stocks, and the development of contingency plans (see Case Studies). Similarly, WFP has developed an Early Warning System (SATCA) for the Latin America and Caribbean region, to support emergency preparedness and disaster risk management regionally and nationally (see Case Studies).

12. See www.ipcinfo.org

13. Preparedness is defined as “activities and measures taken in advance to ensure effective response to the impacts of hazards including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations” (UNISDR, 2009).

14. Early warning systems are defined as “the provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response” (UNISDR, 2009).

15. For example, the traditional priest from the Sogabiri tribe usually predict the arrival of the strong “komburu” winds in the Solomon Islands by observing when nuts from the *ngali* trees have fallen. However, these winds are becoming less reliable and predictable as a result of climate change (Lane and McNaught, 2009).

- > **Enhancing response capacity in light of climate change.** To cope with the anticipated increase in disasters, agencies are undertaking preparedness activities such as: contingency planning for rapid deployment of staff, equipment and food; mobilising and training the volunteer base at all levels; and ensuring emergency funding. For example, at a global level the UNHCR has developed a four-fold response capacity, which comprises emergency staffing, stockpiles of non-food items, accelerated internal financial surge procedures and early-warning and preparedness including training and capacity building.

CHALLENGES

- > **The overarching challenge is to scale up community-level preparedness actions and build flexibility** to prepare for the increasing number and intensity of climate related disasters. The solutions are not new; what is new is the urgent need to collectively manage the increasing climate risk.
- > **Humanitarian practitioners need to better prepare for slow onset disasters, small-scale localised disasters and new emerging risks.** Most of the preparedness work showcased as part of the consultations is responding to sudden onset disasters. Practitioners from the Middle East and North Africa noted that the impacts of climate change have been underestimated in the region given the tendency to focus on rapid onset disasters.
- > **While preparing for immediate risks, humanitarian practitioners need to take into account future climate change variability.** Particularly in regions with high poverty and limited adaptive capacity, there will be a need to focus on immediate risk including cyclical or expected disasters. An important lesson emerging from the work of FAO in Bangladesh is to focus initial efforts to support community based adaptation on current variability (in this case rainfall) as an entry-point to understand and build resilience to future risks (e.g. drought) (see Case Studies).
- > **Humanitarian practitioners need to prepare for “surprises”.** It is essential that humanitarian work includes critical thinking and climate foresight to review the adequacy of current interventions and to prevent mal-adaptation. Specifically, more needs to be done to invest in, and develop, longer-term warning systems for future climate variability. This was particularly important for practitioners from the Middle East and North Africa and the Latin America and Caribbean regions.

BUILDING RESILIENCE BY ADDRESSING UNDERLYING RISK FACTORS

“Humanitarian actors must help the shift from food aid to the provision of seeds and fertilisers where appropriate” (IFRC, Central and East Africa).

PROGRESS

- > **By addressing vulnerability, practitioners have been responding to climate change for years.** Building resilience to future climate risk requires practices that help vulnerable communities protect their existing livelihoods, change or diversify livelihood strategies or migrate if this is the best option. A livelihood perspective was identified by FAO as a helpful approach to improving the adaptive capacity of farmers, by increasing household access to a range of assets and services in Bangladesh and Nepal (see Case Studies).

- > **A wide range of case studies shared by practitioners focus on livelihood enhancing adaptation projects, mostly in the agricultural or water sectors.** Climate change has significant impacts on agricultural production, and therefore diversifying and strengthening livelihoods to better withstand shocks and ensuring access to sustained sources of food and water will be essential (see WFP in Ethiopia and FAO in Southern Africa, Case Studies). For example, Actions by Churches Together (ACT) is working in Indonesia with a local farmers' union to distribute salt-tolerant traditional paddy varieties from India. Similarly, FAO is piloting a project in Bangladesh to improve the adaptive capacities of rural populations and enhance resilience to drought and other climate change impacts (see Case Studies).
- > **A number of case studies discussed by practitioners demonstrate the importance of structural or physical adaptation measures to avoid or limit disasters.** Many of these are supporting natural resource management such as tree planting (see NRC case study in East Africa, and the Red Cross in Guatemala). For example, in Bali, the Indonesia Red Cross has been working with community action teams to identify measures to reduce risk and climate proof assets. Communities identified the need for coastal protection from the effects of intense cyclones and coastal erosion, exacerbated by climate change. Over 30,000 mangroves have been planted in these areas to date, and fishermen are already reporting improved incomes from the sale of shrimp and fish.
- > **Most case studies identified awareness based adaptation and community empowerment as key components of successful CCA.** For example, WHO and partners have been working to educate farmers on the effects of climate change on health (particularly vector-borne diseases in irrigated rice environments), and the Red Cross in the Solomon Islands has been promoting hygiene, including food safety, in combination with more structural measures such as the rainwater-harvesting equipment (see Case Studies).

CHALLENGES

- > **The challenge is to build upon the community-based adaptation activities already underway by scaling up and replicating pilot projects.** Practitioners noted that emergency response continues to divert resources from building capacity and community resilience to adapt to future climate risk. For example, it was highlighted that in Colombia, the hurricane season and new natural events have delayed internal planning and the implementation of long-term projects.
 - > **More effort needs to be made to draw upon traditional coping mechanisms used by both men and women to inform adaptation responses.** Research in the Pacific demonstrates that traditional practices, in particular the management of natural resources, have been successfully used to mitigate disasters and adapt to climate change. More needs to be done to harness this knowledge base and combine it with local research to identify locally relevant adaptation options.
 - > **There is no “one size fits all” approach to adaptation and locally specific adaptation requires the participation of vulnerable communities.** Even if regional partnerships are required to implement locally derived solutions, it is clear that adaptation should be grounded in local realities and based on local priorities.
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4 REGIONAL AND NATIONAL PERSPECTIVES



This chapter documents practitioner perspectives on regional and national progress and challenges in addressing the humanitarian impacts of climate change.

Progress is most evident in the Pacific, the Latin America and Caribbean, and Asia regions where recent disasters have increased awareness of climate change and mobilised human and financial resources. Civil society determination to address these issues, in part a result of exposure to recent disasters, combined with an enabling policy framework and local level partnerships (government, civil society, community) have translated into concrete actions on the ground. In Latin America and the Caribbean, regional and sub-regional organisations are an important driver for strengthening preparedness and building community resilience to future climate variability and change. The challenge for practitioners in these regions is to consolidate ongoing regional activity.

Conversely, in Africa and the Middle East, the consultations have promoted dialogue and engagement between humanitarian practitioners on climate change. In these regions, activity is very much focused on building awareness of the humanitarian consequences of climate change, the role of DRR in advancing adaptation, developing internal agency systems (policies, strategies and capacity) and stimulating dialogue and partnerships at all levels. However, it is vital that these discussions translate into increased action at the local level. In Africa and the Middle East, fewer community based CCA projects are reportedly being piloted by humanitarian practitioners.

For all regions, however, the overarching challenge is to ensure that DRR and CCA are systematically implemented and scaled up as a coherent set of coordinated and sustainable programmes. This requires strengthened inter-agency coordination, consolidation of existing regional activity on CCA, systematic appraisal of success stories and collaboration across a range of stakeholders and practice areas.

4.1 CENTRAL AND EAST AFRICA



“Communities have been adapting already for some time, and this has been based on traditional knowledge and building on past experiences. In the future, humanitarian actors and communities are expecting more of the same. Agencies should continue building the resilience of vulnerable communities and capitalise on their current strengths. The region is not looking at new threats per se but trying to do better at what they have done before” (IFRC).

THE CLIMATE CHANGE CHALLENGE

Africa is one of the regions most vulnerable to climate variability and change as a result of multiple stresses including poverty, weak institutions, poor governance, low levels of education and health care, population growth and limited access to resources compounded by low adaptive capacity. As a result of climate change, the African climate is predicted to become more variable, with more frequent and severe extreme weather events. The projected impacts on communities are numerous: by 2020, between 75 and 250 million people will potentially be exposed to increased water stress, and yields from rain-fed agriculture could be reduced by up to 50 percent, adversely affecting food security and exacerbating

malnutrition (Inter-Governmental Panel on Climate Change (IPCC), 2007a). The geographical distribution of disease vectors, such as malaria, is likely to change, and will interact with pre-existing vulnerabilities including illnesses such as HIV and AIDS (UNFCCC, 2007). The cost of adaptation to projected sea level rise could amount to at least five to ten percent of Gross Domestic Product (GDP) (IPCC, 2007a).

In Central and East Africa, it is predicted that climate change will result in more frequent and severe weather events and changes in disease vectors; previously malaria-free highland areas in Ethiopia, Kenya, Rwanda, Uganda and Burundi could experience modest changes to stable malaria by the 2050s, and potentially rapid transmission by the 2080s. The region is also vulnerable to ecosystem impacts, including a reduction in mountain biodiversity and fisheries in some major East African lakes (Boko *et al.*, 2007).

SUMMARY OF FINDINGS

The feedback from Central and East Africa suggests that some work is being done on climate change and vulnerability, in particular drought and related impacts on pastoralist livelihoods. Good information sources, information exchange networks, and collaboration are reported; yet, participants noted that these activities and global and regional discussions are not translating into coordinated action at a community level.

It was further reported that the successful and widespread integration of DRR and CCA is less evident; they are not being implemented as a coherent set of programmes. This is in part a reflection of the separation of DRR and CCA in national level discussions, insufficient tailored climate information for decision making, and the fact that most regional and national level discussions on climate change generally focus on the important issue of pastoralism.

Regional priorities identified by practitioners for the next three years focus on: 1) increasing information exchange; 2) capacity building through training and workshops; 3) replicating and scaling up some of the existing good work being done in part by conducting advocacy; 4) increasing the engagement of non-humanitarian practitioners; and 5) extending the existing regional DRR working group to include CCA.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

Practitioners noted that the identification of climate change impacts, integrated risk assessment and contingency planning for climate risk remain a challenge as a result of a shortage of relevant regional information. Furthermore projections for longer-term scenarios to support decision making are reportedly unavailable in the region. Information sources were discussed by practitioners, for example the Famine and Early Warning System (FEWS NET) and the Inter-governmental Authority on Development – Climate Prediction and Applications Centre (IGAD-CPAC). Similarly, the WFP Vulnerability and Analysis Mapping group (VAM) has been attempting to measure and model household and livelihood vulnerability to “environmental shocks” such as drought and flooding and integrate these new methodologies into the three to five year Comprehensive Food Security and Vulnerability Assessment (CFSVA).

ESTABLISHING THE INSTITUTIONAL FRAMEWORK

ADVOCACY ON NATIONAL POLICY AND PLANNING

Advocacy is an essential activity for regional practitioners. For example, the Kenyan Climate Change Working Group is working to strengthen the “African” position and voice of civil society ahead of the United Nations Climate Change conference in December, 2009 (see Case Studies). OCHA and the United Nations Environment Programme (UNEP) are presently collaborating with UNISDR to support the Pan-African Parliamentarians for Climate Change Adaptation for Africa, in preparation for the conference.

A key challenge for the region is to ensure that institutionally separate national focal points and parallel national level dialogue on DRR and CCA are bridged. It was reported that DRR/CCA focal points at government level rarely work together and that there is a disconnect between central and local government. The UNISDR discussed the recent African Regional Platform as a good example of progress towards raising government awareness on DRR and CCA.

AGENCY COORDINATION AND INFORMATION EXCHANGE

There are several coordination networks for linking humanitarian practitioners in the region but the challenge is to consolidate these and enhance their effectiveness. For example, various working groups, such as the Food Security and Nutrition Working Group and the Emergency Preparedness and Policy Working Group, as well as the Vulnerability Assessment Committee and the Regional Hunger and Vulnerability Programme are facilitating regional information exchange and coordination between humanitarian practitioners, with overall strategic regional decisions made by the Regional Humanitarian Partnership Team (RHPT).

The participants were clear that new platforms for climate change should be avoided, and that the regional DRR Working Group should be extended to incorporate CCA and assist for example in disseminating best practices and providing guidance at the country level. Inter-regional mechanisms to support learning were proposed as a mechanism for facilitating ongoing work in addition to increasing national/field exchange and in particular dissemination of climate knowledge with communities. Finally, it was suggested that the Red Cross/ Red Crescent could act as a champion bringing together different communities of practice at a national level.

However, it was highlighted that these networks are not necessarily translating into activities at the local level. While information exchanges are helpful in the region, it was agreed that there is a clear need to go beyond “passive” information dissemination towards a situation where regional discussions are manifesting in country level activities.

DIALOGUE, COLLABORATION AND PARTNERSHIPS

Collaboration between humanitarian and *development* actors in the region is reportedly good, with both working on emergency, short term programmes and longer term/recovery. Existing work is perceived to provide a good basis for close cooperation. It was agreed that greater coordination is required to ensure that responsibility for priorities, targets, benchmarks and identifying gaps and progress is established and to bridge the divide between relief and recovery.

Collaboration between humanitarian and *environmental* actors could be reinforced, in particular to address the specific regional issue of pastoralism and cross border movements associated with climate change and its indirect impacts, such as conflict. For example, UNEP discussed the Global Adaptation Network (GAN) attempts to establish dialogue in the region and highlighted the importance of drawing upon the GAN mapping of regional activities to avoid duplication of adaptation efforts. The OCHA Kenya field office is working with a range of agencies on the Common Country Assessment/United Nations Development Assistance Framework (CCA/UNDAF) process; and is also participating in UNEP's CCA Network for Africa. It was however proposed that existing platforms would benefit from expanding their scope beyond the issues of pastoralism, drylands and drought.

OPERATIONAL AND FINANCIAL CAPACITY

Practitioners discussed the importance of building financial capacity and soliciting funds for DRR and CCA. This was reportedly essential given that emergency activities in the region currently attract more funding and that government funding for DRR/CCA is not prioritised. It was identified that advocacy with government is required to promote a forward planning perspective, which would allow the development of longer-term activities. Practitioners further suggested the following: 1) capacity building and training or workshops on combining DRR/CCA in practical terms; 2) engagement with non-humanitarian donors; 3) strengthening the bridge between long term and short term actions in order to address structural causes and vulnerabilities; and 4) linking funding for DRR/CCA to poverty and development funding.

IMPLEMENTING ACTION ON THE GROUND

Despite relatively good information exchange, programmes for DRR and CCA are not coordinated or coherent. Practitioners highlighted the importance of formalising and consolidating existing processes and dialogue on DRR and CCA in the region and to replicate existing work (e.g. the Kenya UNDAF work). Some successful examples of programming from the region were shared:

- > WFP's food-for-work programmes have helped strengthen household and community adaptation to climate change. Activities include: 1) water harvesting and storage, for example charcoal dams in Tanzania; 2) irrigation and drainage ditches in Zambia; 3) land rehabilitation, for example community land fencing in Ethiopia; 4) land reforestation in Zambia; 5) terracing, for example in Ethiopia; and 6) carbon credit and adaptation, for example in Uganda (see Case Studies). Similarly, through the Managing Environmental Resources to Enable Transitions to More Sustainable Livelihoods (MERET) project, WFP in Ethiopia has introduced a number of physical (e.g. land enclosures) and biological measures (e.g. gully rehabilitation) to support community-based adaptation through sustainable land management activities in food-secure areas (see Case Studies).

- > OCHA is currently facilitating inter-agency consultations on the humanitarian impact of climate change on pastoralist communities in Central and East Africa. Specific goals are to: 1) promote preparedness and prevention; 2) reduce future vulnerability; 3) advocate for increasing capacity, for both the humanitarian and pastoralist communities; 4) predict, monitor and respond to impacts; 5) advocate for regional cross border-mobility as a CCA strategy; and 6) develop regional mechanisms for promoting cross-border security (see Case Studies).
- > UNISDR discussed the recent African Regional Platform to highlight the importance of existing mechanisms for facilitating consultation on DRR/CCA. Meeting outcomes included inter alia the need for multi-stakeholder platforms, new national platforms, increased integration of DRR, PRSP and CCA agendas, more civil society involvement, and synergies for DRR/CCA from an African perspective.ú

DEMOCRATIC REPUBLIC OF CONGO (DRC)

Climate change is a real and significant challenge for the DRC. Potential impacts are wide ranging and already include: 1) excessive rainfall resulting in floods, mudslides, damage to agricultural areas, water-borne diseases and erosion; 2) drought with associated losses in crops and cattle (and indirect impacts on food security); 3) changes in the agricultural calendar; 4) intensification of extreme weather events such as tornados; and 5) increasing number of pests. As a result, thousands of families every year are temporarily displaced by floods and mudslides, agricultural productivity is decreasing with a concomitant increase in food insecurity, and diseases are spreading more rapidly.

However, in the DRC, climate change mitigation takes precedence, with the issue of deforestation of the nation's tropical forests taking centre stage. The “human face” of climate change is not a priority, nor well understood and linkages between humanitarian and development actors are reportedly very limited. This situation reflects the realities of this country, which as one of the poorest – and one of the most in debt in Africa (it is eleventh from the bottom of the UNDP's Human Development Index) – is grappling with the complex issues of conflict, poverty, hunger and economic insecurity. However, early consultation findings suggest that there is an opportunity to build upon the political will, awareness and determination of a wide range of stakeholders (government, scientific community, climate specialists, and humanitarian and development actors) to work together.

Progress is being made; a multi-sectoral technical group on climate change which includes the IFRC was convened in May, 2009. As part of its initial consultation phase, the group is identifying and assessing national climate change issues and ultimately will develop CCA programmes to support vulnerable communities, including a small initial project. This aside, DRR programmes are not well established and activities relating to community based preparedness and risk reduction are notably absent.

Linking with Knowledge Centres in the DRC

A small project was initiated in May 2009, after the second meeting of the CCA Reference Group. The latter includes the National Meteorological Agency, the Department for Environment and Rural Affairs, the Higher Institute of Applied Techniques, the National Pedagogical University and the Red Cross Society of the DRC. The project draws upon the Red Cross network to inform local communities, using information from the Meteorological Offices, on when the rainy season actually starts. Before the project, local communities were sowing seeds after the first rain showers, but these were not always associated with the real rainy season and seeds often dried prior to germination.

Specific challenges for practitioners working in DRC are the promotion of a culture of risk reduction (including community based DRR), limited resources (specifically funding, staff and materials), high levels of poverty (which diverts human and financial resources and yet increases the vulnerability of community members to climate change) and the need to build linkages between actors.

It is clear that participants see climate change as an excellent opportunity to strengthen DRR programmes and ensure local level ownership. DRR programmes are being implemented by UN agencies, international and national NGOs, but coordination is limited and governments and donors need to scale up their involvement and adopt a regional approach. Practitioner recommendations for moving forward this agenda over the coming years are inter alia to: 1) develop a national climate change strategy; 2) enhance operational capacity for the newly formed technical group; 3) build on synergies between humanitarian, development, government and community actors; 4) mobilise resources to prepare and conceptualise Standardised Monitoring and Assessment of Relief and Transitions (SMART) programmes; and 5) carry out Vulnerability and Capacity Assessments (VCA) to support community adaptation to climate change.

4.2 SOUTHERN AFRICA



“Overall, practitioners are taking a holistic approach towards DRR through the integration of health, food security and livelihoods in their ‘package’ of humanitarian assistance, according to organisational mandates and value-adds” (OCHA).

THE CLIMATE CHANGE CHALLENGE

The humanitarian impacts of climate change are already evident in Southern Africa. For example, assessments of water availability, including water stress and water drainage, show that parts of Southern Africa are already highly vulnerable to climate variability and change with possible heightened water stress in some river basins. Malaria is projected to expand southward. Food security, already a humanitarian crisis in the region, is likely to be further aggravated by climate variability and change, and exacerbated by HIV and AIDS, poor governance and limited adaptation (Boko *et al.*, 2007).

SUMMARY OF FINDINGS

The consultation findings demonstrate that a fair amount of research is being done on climate change impacts in the region, particularly by research institutes and academics. However, linkages with these organisations are poor, and climate information that can inform humanitarian work is not systematically shared or used. Agencies are taking a holistic approach towards integrating climate change and disaster risk into their humanitarian work, but this would greatly benefit from strengthened inter-agency collaboration. The other key regional challenge highlighted by practitioners is a lack of prioritisation of climate and disaster issues by governments and communities, due to significant and pressing concerns such as HIV and AIDS.

Regional recommendations proposed by practitioners for the next three years are inter alia: 1) for the recently established Regional Information Management Working Group to support and develop a repository of who is doing what in the region; 2) to identify best practice; 3) develop a regional strategy; 4) initiate research on regional impacts of climate change with local academic institutes; and 5) undertake targeted lobbying with donors.

PRACTITIONER FEEDBACK

ENHANCING CLIMATE KNOWLEDGE

Climate risk information is available but not always tailored to aid decision-making. Information is reportedly provided via a range of products published by various agencies, specifically newsletters, bulletins and reports. *Climate information* resources include the Global Information and Early Warning System on Food and Agriculture (GIEWS); FEWS NET; IOM Emergency and Post Conflict bulletin; and the Regional Inter-Agency Coordinating Support Office’s (RIASCO’s) Food Security Matrix Update. *Risk information* sources include the Regional Vulnerability Assessment Committee (RVAC) and the Crop and Food Supply Assessment Mission (CFSAM). *Contingency planning information* sources include the Southern Africa Regional Climate Outlook Forum’s (SARCOF) bulletin and annual meteorological meeting; and OCHA’s annual Regional Emergency Preparedness and Response Workshop for floods/cyclones with regional disaster managers. Finally, early warning reports include those developed by World Vision (with input from the Southern African Development Community (SADC) and Departments of Meteorology), OCHA’s EWEA and Disaster Risk Quarterly bulletin and UNICEF’s EWEA report.

FROM KNOWLEDGE TO ACTION

**ESTABLISHING
THE INSTITUTIONAL
FRAMEWORK**

AGENCY AWARENESS RAISING

Practitioners identified specific gaps in their understanding, in particular regional climate change impacts. These include impacts on regional migration patterns and links with ongoing challenges such as HIV and AIDS, and urbanisation. A gap in the legal protection framework for migrants displaced as a result of climate change was further discussed. These need to be researched in order to enhance agency awareness and understanding of these issues. However, it was highlighted by regional practitioners that there is a missing link with research institutes and academics, which are already doing extensive research and training relevant for humanitarian practitioners.

ADVOCACY ON NATIONAL POLICY AND PLANNING

Climate change is reportedly not a government or community priority in the region, and greater advocacy is required to strengthen the climate change mandate. There is a reported “lack of political will” to address climate change, given the current regional focus on other key issues such as poverty and service delivery. Similarly, local community capacity to deal with climate change issues was identified in some cases to be limited by HIV and AIDS. However, there is work underway, for example by Oxfam, to increase national civil society awareness of climate change and adaptation, enabling civil society to shape future national policies. Furthermore, it was identified that humanitarian practitioners need to strengthen engagement with governments. They are currently not part of the NAPA process and need to be involved in policy development and with regional institutions such as SADC, the African Union (AU) and the New Partnership for Africa’s Development (NEPAD) to support advocacy on the integration of DRR and climate change. Therefore, a proposed priority for the region is to develop a regional strategy and to identify key issues and messages to inform advocacy and promote resource mobilisation.

AGENCY COORDINATION AND INFORMATION EXCHANGE

Interagency collaboration needs to be strengthened. Regional coordination structures for humanitarian practitioners include the Regional Directors Team (RDT) Cluster on Emergency Preparedness and Response and the RIASCO, a forum of NGOs, UN agencies, donors and the government of South Africa, hosted by OCHA. RIASCO provides support to national efforts to address the “triple threat” of food insecurity, weakened capacity for governments and HIV and AIDS. It ensures cohesion and complementary effort at a regional level. The challenge is to integrate climate change into these existing fora.

The Regional Information Management Working Group (RIMWG) was recently established to identify interactions between natural hazards and vulnerabilities. OCHA is providing information management support, acting as a repository of existing programmes, capacities and analysis for the region to facilitate linkages and information sharing between humanitarian practitioners. A practitioner priority for the RIMWG is to develop an inventory or repository of existing climate change programmes and resources to identify best practices and gaps, and determine the comparative advantages of each agency.

DIALOGUE, COOPERATION AND PARTNERSHIPS

Ways to link humanitarian and development actors should be identified. Although practitioners are reportedly linked into the Regional Humanitarian Partnership Team (RHPT), there is still a need to integrate DRR including climate change into the Common Country Assessment/United Nations Development Assistance Framework (CCA/UNDAF). This would provide a mechanism for joint programming between UN agencies and national authorities. Finally, it was suggested that closer collaboration with SADC was required to mainstream climate change in the region.

**IMPLEMENTING
ACTION ON
THE GROUND****OPERATIONAL AND FINANCIAL CAPACITY**

Funding is reportedly an issue for the region, and essential for expanding pilot projects and supporting the newly formed regional information system. It was proposed that humanitarian and development partners need to be strategic in how they build preparedness into response. Practitioners discussed the importance of concerted lobbying with donors for integrated funding and suggested that a round table should be organised with donors to allow them to link with partners and share information that would inform funding decisions. Local government capacity in the region is reportedly limited and needs to be enhanced to provide a supportive institutional framework for integration.

Overall, agencies are taking a holistic approach towards DRR through the integration of health, food security, nutrition, and livelihoods into their “package” of humanitarian assistance. For example, IFRC is focusing on building community resilience drawing upon its strong network of volunteers; WFP is mostly focused on adaptation activities implemented with partners as food for work/asset programmes and IOM and UNHABITAT are working on providing shelter that is disaster resilient and potentially exploring the option of relocating communities from hazardous locations (e.g. river banks). Case studies showcased during the workshop demonstrate that some progress is being made to share information on climate issues and scale up DRR and adaptation programmes.

- > IFRC recently launched a DRR programme, the Zambezi River Basin Initiative, which has helped more than 600,000 inhabitants of villages and towns located in the river basin in Angola, Botswana, Malawi, Mozambique, Namibia, Zambia and Zimbabwe prepare and build resilience to floods and droughts. The programme is designed to address broader vulnerability issues including HIV and exposure to water and vector borne diseases and the “compounding aggravation of weakened community structures”.
- > FAO is working to document, analyse and disseminate past and on-going conservation agriculture (CA) practices and experiences to support scaling-up of this practice in order to reduce community vulnerability to increasing drought as a result of climate change (see Case Studies).
- > Oxfam is integrating DRR into the recovery phase of cyclical emergencies such as in the lower Zambezi Valley, Mozambique, Malawi and western and southern provinces of Zambia.
- > UNICEF is focusing on integrating DRR into its core programs including child protection, health, and nutrition in emergencies and is focusing on organisational early warning and emergency preparedness including training and disaster simulations. Specifically, it is promoting DRR through education (safe school buildings, emergency preparedness plans, school curricula) in almost all countries in the region. Furthermore, it has taken steps to include DRR in the revised International Network on Education in Emergencies (INEE) minimum standards.
- > IOM is the implementing partner in the UN Disaster Risk Reduction Joint Programme in Mozambique. The purpose of the programme is to disseminate information on climate risk via the radio and provide technical assistance to improve transmitting capacity. The programme aims to increase the awareness of vulnerable communities to the risk of climate-influenced disasters, to better mitigate their effects, and to improve links between government and communities.
- > World Vision is using the Climate Vulnerability and Capacity Assessment (CVCA) tool, developed by Care International to incorporate climate risk into their projects in Swaziland. The CVCA generates more detailed information on local livelihoods, climate risks and adaptation capacities and makes it easier for community members to understand climate change and its consequences.

4.3 WEST AFRICA



“As weather related or climate induced shocks seem to be increasing, this is really an auspicious time to advocate for greater coordination and coherence on the part of all actors in order to achieve greater scale of activities and sustainable impact. Going forward, it will also be important to reflect upon the lessons learnt through 30 or so years of activities to increase success and sustainability” (WFP).

THE CLIMATE CHANGE CHALLENGE

The Sahel has faced climate variability and change since the droughts of the mid-1970’s and mid 1980’s and impacts are only likely to increase. The agricultural impacts associated with climate change are projected to be significant in West Africa, with possible agricultural GDP losses ranging from two to four percent. Communities living in coastal settlements could be affected by projected rises in sea level and flooding. Furthermore, changes in coastal environments, notably damage to mangroves and coastal degradation, could have negative impacts on fisheries and tourism

(Boko *et al.*, 2007). Floods have killed thousands of inhabitants in West Africa over the past few years and in 2007, the region suffered the worst flood disaster for decades (IFRC, 2009).

SUMMARY OF FINDINGS

Climate change adaptation activities are not new to West Africa; organisations such as the Red Cross and WFP are already actively involved in DRR programmes, which address current climate variability and have been engaged in building regional community-level capacities for a long. Although these activities have not been explicitly labelled as DRR or CCA, they constitute a strong foundation from which to expand current and future activities. Conversely, other actors are expanding their scope of work to include DRR and CCA. However, what is needed is a coherent and coordinated set of projects that addresses the humanitarian challenges of climate change.

Practitioners noted that climate information is patchy, information exchange mechanisms require strengthening and coordination between actors is limited. Practitioners are struggling with the challenge of integrating climate change into a DRR system that is reportedly at a national level not well established. The climate change debate is dominated by mitigation rather than adaptation and different focal points at national levels are leading discussions across the region. The challenge for regional practitioners is therefore to raise the profile of the “human face” of climate change, whilst building institutional capacity to implement DRR.

Specific regional priorities for agencies in the next three years amongst other activities are to: 1) develop a regional action plan to coordinate the ongoing work of humanitarian practitioners to integrate DRR and CCA; 2) establish information management mechanisms to share information on climate change and compile best practice; 3) determine existing capacity and provide training on emergency preparedness, response and adaptation; and 4) encourage donors and government to scale up involvement and support.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

Climate information is increasingly available in the region, for example through the African Centre for Meteorological Applications to Development (ACMAD), but there is reportedly limited consolidated analysis and dissemination. Practitioners have concerns over the reliability of information, the limited capacity to analyse these data, and the fact that climate change discussions are couched in scientific terms often not accessible to decision makers and the general public.

AGENCY AWARENESS RAISING

Practitioners identified a need to raise awareness of the climate change challenge within the IASC and UN Country Teams. Practitioners demonstrated that work is ongoing to reinforce internal capacity on DRR and climate change, but that in some agencies there is a need to coordinate with Headquarters to ensure access to modern technologies such as satellite imagery.

ESTABLISHING THE INSTITUTIONAL FRAMEWORK

ADVOCACY ON NATIONAL POLICY AND PLANNING

Practitioners suggested that it is vital that the “human face” of climate change centred on communities is highlighted. The focus of regional climate change strategies and policies has been on greenhouse gas (GHG) mitigation measures and quantifying environmental impacts. For example, Niger’s National Environmental Action Plan makes little reference to the humanitarian consequences related to disasters, although it does cover food security. There are signs of change, for example the Economic Community of West African States (ECOWAS), with support from regional IASC agencies, is organising a regional ministerial conference with West African states on climate change adaptation in the run-up to COP15.

Climate change discussions are being led by different focal points, and humanitarian actors are not yet involved in national level CCA processes. National consultation in the region identified four different focal points leading on climate change from the four sample African countries: ‘Biodiversity’, ‘Meteorological Services’, ‘Water Resources Management’ and ‘Drought, Deforestation and Desertification’. Furthermore, National Disaster Management bodies need to be better connected with climate change discussions both nationally and internationally. This was highlighted in the recent regional consultations on flood preparedness; the majority of National Disaster Management Officers were not even aware of the existence of NAPAs in their respective countries.

AGENCY COORDINATION AND INFORMATION EXCHANGE

Practitioners agreed that coordination of humanitarian practitioners needs to be strengthened, and that information exchange mechanisms between agencies should be reinforced and developed. Regional coordination structures include the senior level Regional IASC Humanitarian Coordination meeting, various thematic working groups, the Regional Platform on Natural Disasters and DRR, and the annual Regional Consultation on Natural Disasters between UN agencies, Red Cross Movement, INGOs, and West African states. These need to be strengthened and coordination bodies established at the regional and national level to encourage regular regional dialogue, consolidate information management and information exchange. For example, a regional information management database (hosted by OCHA) was proposed for compiling and assessing best practice, harmonising indicators and methodologies and sharing lessons learnt.

DIALOGUE, COLLABORATION AND PARTNERSHIPS

It was reported that the link between humanitarian and development agencies “*is weak and needs particular attention*”. One suggestion was for humanitarian practitioners to participate in UN country team and regional joint planning to enhance linkages. Another was for sectoral organisations to share relevant information on risk management with humanitarian practitioners.

OPERATIONAL AND FINANCIAL CAPACITY

A coordinated approach to building capacity of national and regional entities was proposed by practitioners. Practitioners noted that a shortage of human and financial resources prevents participation in relevant fora at a regional level and that a comprehensive capacity assessment of regional and national agencies was required. Finally, it was proposed that regional training was provided on emergency preparedness, response and adaptation and that a regional funding pool was established through *inter alia* resource mobilisation campaigns.

IMPLEMENTING ACTION ON THE GROUND

Practitioners are clearly struggling with the challenge of integrating climate change into a DRR system which is not yet well established in the region. Participants noted that humanitarian response dominates and as a consequence, DRR programmes are not fully functional in the field. Therefore integrating a new risk like climate change into a DRR system that is not well developed is a significant challenge.

- > IFRC has made significant progress since the 2007 floods in enhancing community based EWEA through, amongst other activities, mobilising volunteers, training volunteers and officers, establishing communications systems, developing relations with national meteorological societies and contingency planning (see Case Studies).
- > UNHCR has: 1) developed disaster management plans (adapted to specific regional needs) aimed at saving lives and ensuring continuity of essential services (e.g. water, food, health, sanitation, shelter); 2) established contingency measures to respond to disasters in and around refugee camps as well as preparedness and capacity-building activities as part of disaster management plans; and 3) supported the Emergency Response Team of ECOWAS.

GAMBIA, NIGER AND NIGERIA

Countries in West Africa are already experiencing climate change, including unusually severe flooding, particularly in coastal areas, and more frequent and prolonged dry periods. Environmental and socio-economic impacts are wide ranging and reportedly include soil degradation, desertification and dust storms, changes in agricultural production systems, drying out of irrigation systems, respiratory diseases, food insecurity and malnutrition, migration to urban areas, the emergence of new diseases and inter-community conflicts.

The consultation meetings in these countries were the first step in an ongoing process to raise the profile of the humanitarian consequences of climate change and disaster risk reduction. All participants confirmed their interest in reinforcing CCA aspects in National Adaptation Policies and related discussions and the importance of understanding and responding to the “human” face of climate change.

To date, the focus of CCA discussions in these countries has been on GHG emissions and environmental consequences. For example, in the Gambia, studies are being conducted on carbon dioxide emissions, rather than the “human face” of climate change. Humanitarian practitioners are not yet fully involved in global discussions on the humanitarian consequences of climate change and reportedly have limited weight to influence the decision making process.

Furthermore, climate change tends to be institutionally isolated from the DRR agenda and links between climate change, humanitarian and development actors are reportedly very weak. In Niger, the National Environmental Council for Sustainable Development is the focal point for climate change and sits within the Office of the Prime-Minister – also the location of the Early Warning/Disaster Response Coordination team. Yet, practitioners report that there is at present little dialogue between these two sets of actors and that closer coordination between both communities/focal points is essential.

Operational agencies are well positioned to support governments, to build upon the community-level activities already underway and to advocate for increased action to achieve greater impact and avert future disasters. Consultation meetings in these countries are ongoing and will continue to work towards raising the profile of the “human” face of climate change and expanding DRR capacity. The challenge for these countries is to ensure that these initial discussions result in more action on the ground.

4.4 ASIA



“There is not necessarily a similar distinction or disconnect between CCA and DRR at the operational level in the same way as at the global/policy level. For instance in Bangladesh, CCA has been done for years, although it has not been called this but rather seen as DRR” (OCHA, Asia).

THE CLIMATE CHANGE CHALLENGE

Asia is highly susceptible to natural hazards and there is strong evidence that these are increasing in both intensity and frequency. Furthermore, climate change is predicted to affect many sectors, in particular water, agriculture and food security, and human health. For example, coastal areas and heavily populated mega delta regions in South, East and South-East Asia, will be at greatest risk due to increased flooding from the sea and, in some cases, flooding from the rivers. Endemic morbidity and mortality resulting from diarrhoeal disease primarily associated with floods and droughts are expected to rise in the region due to projected changes in the hydrological cycle. By the 2050s, freshwater availability in the region, particularly in large river basins, is projected to decrease (IPCC, 2007a). Melting of Himalayan glaciers, which is predicted by some scientists within the next 30 years, could impact over 1.3 billion people across the region and 500 million in South Asia alone (Oxfam, 2009b, p.ii). Furthermore, in Central and South Asia, crop yields are predicted to fall by up to 30 per cent, creating a very high risk of food insecurity in several countries (UNFCCC, 2007).

Adaptive capacity varies between countries. It is increasing in some areas, particularly as a result of investment following significant weather-related disasters, but is still constrained due to a poor resource base, inequalities in income, weak institutions and limited technology (UNFCCC, 2007). Climate change is projected to compound regional pressures on natural resources and the environment associated with rapid urbanisation, industrialisation and economic development (IPCC, 2007a).

SUMMARY OF FINDINGS

At a macro-level, humanitarian agencies are reportedly not yet comprehensively engaging with CCA. Similarly, although practitioners have understood for some time the need to invest more funds in disaster preparedness in the region and to scale up emergency response capacity to cope with climate risk, change is slow and linked to macro-level flows of money. There is, however, evidence of progress. Regional practitioners are beginning to address DRR and CCA in a number of ways, primarily by enhancing internal awareness and amending policies and plans, but also by increasing DRR activities and response capacities. In addition, climate change is being integrated into regional action plans, its implications are being assessed, and work is underway, albeit on a small scale, to identify vulnerabilities, scale-up DRR activities and pilot adaptation projects.

Key challenges for practitioners in the region are to: 1) advocate for the “human face” of climate change; 2) support integration of DRR and CCA (which reportedly inhabit separate “silos” in the region); 3) build actions to support an “evidence based approach;” 4) strengthen links between actors; and 5) promote action at the community level. Specific priorities identified by practitioners over the next three years are very much focused on improving regional understanding of climate change and its environmental and socio-economic impacts and identifying ways to incorporate climate knowledge and long-term perspectives into community based work.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

Practitioners noted that access to climate information varies between countries in the region but that generally there is insufficient data to support an “evidence-based approach.” Practitioners further reported that it is not always clear how to effectively and routinely integrate the evidence on climate change into their daily work, nor is there consensus as to what information is required. For example, although practitioners have access to Pacific Cyclone forecasts, it is not always apparent how this helps response in the field. A regional priority is therefore to reduce gaps in climate information and “leverage credible multi-disciplinary input and form alliances with scientists and meteorologists to achieve a grounded analysis” (Save the Children-UK).

Furthermore, it was reported that vulnerable communities with the greatest need for climate change information have the least access to relevant data. There have reportedly been few attempts to work with communities to identify their information needs or to translate climate data into local languages to help decision making by vulnerable communities. One example is the work of Oxfam in Nepal to combine local testimonies of climate change impacts with scientific knowledge (see Case Studies). A regional priority is therefore to identify ways to incorporate climate change information when working with communities in emergencies and to improve the linkages between stakeholders at all levels.

AGENCY AWARENESS RAISING

Current activities include developing internal agency understanding of climate change impacts and mapping risk. For example, UNFPA is working with other agencies to build future population scenarios and is using geographical tools to highlight key risk locations. Participants further noted that although the regional focus is on rapid onset disasters and their impacts, it is important that actors better understand and prepare for slow onset droughts, environmental disasters and changing disease patterns.

ESTABLISHING THE INSTITUTIONAL FRAMEWORK

AGENCY POLICY AND PLANNING

Work is currently underway to collect information from all regional agencies on agency policy and planning to determine progress. WHO noted that they are working in the region to integrate climate change into its existing plans through the development of an internal regional action plan and a framework for action. It has already established a regional network for health and climate change practitioners, and country level working groups on relevant environmental issues. The Indonesian Red Cross/Red Crescent Society convened a national workshop in 2008 to define a strategy to reduce the risks and impacts of disaster through climate change adaptation and has since been working to integrate climate change adaptation into its existing strategic plans, policies and training materials.

ADVOCACY ON NATIONAL POLICY AND PLANNING

Practitioners confirmed that there was a disconnect between DRR and CCA particularly at the national level. Government DRR actors reportedly do not “relate to environmental issues” and planning, allocation of funds and implementation during disasters were carried out by humanitarian practitioners in isolation from climate change and environmental experts. Participants also noted that climate change is often associated with inaccessible terminology or “jargon” not always understood at the government level. Similarly, it was noted that advocacy should be supported by more systematically researched information, rather than anecdotal evidence. Across the region, practitioners have reportedly had limited involvement in climate change processes and policy framework discussions led by the United Nations Economic and

Social Commission for Asia and the Pacific (UNESCAP). A regional priority is therefore to increase the involvement of DRR practitioners in the development of NAPAs and to identify a concerted approach across the region.

AGENCY COORDINATION AND INFORMATION EXCHANGE

Practitioners agreed that communication between humanitarian practitioners is currently limited and that agencies need to connect information flows at the global, regional and national levels. Regional coordination structures for humanitarian practitioners include the Regional Humanitarian Network for Asia-Pacific, which was established in Bangkok in 2006. This is an informal platform for improved coordination and information exchange, more focused on rapid onset disasters and the related mandates of regional actors. The first consultation meeting on climate change was held with this group as part of *'National and Regional Perspectives'*. Priorities for the region are to link regional coordination mechanisms with country level structures and conduct a detailed stocktaking of regional activities to identify gaps, synergies and funding opportunities.

DIALOGUE, COLLABORATION AND PARTNERSHIPS

The divide between humanitarian and development actors is still evident. Although identified as a high priority, DRR still sits on the fence between humanitarian and development work. Practitioners recommended that a long term perspective is required when considering humanitarian action. It was further suggested that conservation and environmental NGOs could play a role in bridging this divide.

Information exchange between humanitarian and environmental actors on climate change is reportedly limited. Specifically, practitioners identified the importance of participating in environmental/climate change working groups coordinated by the UNESCAP and other regional climate change mechanisms. In particular, it was identified that at the macro level IASC agencies do not always link with the work of environmental actors such as UNEP. Similarly, at the local level, conservation NGOs are working separately from humanitarian practitioners. Regional participants concluded that it was vital that regional humanitarian practitioners increase engagement with environmental experts.

OPERATIONAL AND FINANCIAL CAPACITY

A fundamental challenge raised by practitioners is the difficulty in obtaining funding for DRR/CCA given that emergency activities are prioritised in the region. The limited evidence base for linking disasters with climate change reportedly contributes to the difficulty in mobilising funds for DRR/CCA. Furthermore, attribution for unusually rapid onset disasters (e.g. Cyclone Nargis) is still debated in the region and means that investment in risk reduction is difficult. Similarly, funding streams are not always sufficiently flexible to recognise the need to link DRR, response and recovery. A recommendation emerging from the consultations was the inclusion of DRR elements in Flash Appeals to ensure that emergency responses have a DRR component.

Practitioners agreed that capacity building was required in the region on specialist adaptation issues such as relocation and environmental migration and more generally to enhance capacity for writing CCA proposals and provide guidance on CCA interventions. This would include supporting practitioners to re-appraise whether their interventions are simply “building-back risk” (i.e. should practitioners be advocating for agricultural practices in difficult locations or supporting livelihoods in areas likely to be flood inundated) and where alternative activities may need to be considered.

**IMPLEMENTING
ACTION ON
THE GROUND**

Practitioners are clearly building capacity and community preparedness to respond to climate change in the region.

- > WHO together with FAO and UNEP are using farmer field schools in Sri Lanka to enhance adaptation through education on the effects of climate change on health (see Case Studies). Furthermore, WHO is developing a tool to better understand the links between climate change and human health and has developed extensive awareness and training materials.
 - > ACT is working to support mangrove planting and watershed management along the Irrawaddy River in Myanmar with local NGO Forest Resource Environment Development and Conservation Association; and recently initiated a risk mapping exercise as a first step in a DRR project in flood-prone and cyclone areas in Bangladesh with implementing agency Prodiplan.
 - > FAO is working in Bangladesh to improve adaptive capacity of rural populations and their resilience to drought and other climate change threats through participatory action research (see Case Studies). Similarly, in Nepal, FAO is working through a Farmer Climate Field School to raise awareness on climate change and disaster risk reduction and to demonstrate location-specific technologies for climate and disaster risk management.
 - > IOM in Cambodia is carrying out Hazard, Vulnerability and Capacity Assessments (HVCA) in 52 villages to identify the vulnerability of indigenous communities in Ratanakiri and Mondulakiri provinces to natural hazards. This is helping IOM prepare for, and mitigate climate change impacts and assess whether migration can be a response solution.
 - > Caritas reserves ten percent of emergency funding for DRR and is piloting adaptation processes and projects. As a result of a recent paradigm shift from simply providing relief aid to increasingly empowering affected communities, Caritas will continue to give relief aid in the aftermath of a disaster, but after a few weeks of doing so it will shift to empowering the affected communities to start livelihood programs.
 - > UNHCR is routinely preparing for climate impacts in operational areas susceptible to the impact of severe weather. For example, annual budgets for UNHCR operations in Bangladesh have financial allocation for refugee shelters in preparation for possible damage to camps caused by cyclone. To support local operations, UNHCR has also strengthened its central response capacity.
 - > The Indonesian Red Cross Society has been working on a unique disaster preparedness and risk reduction programme with more than 100,000 people living in the slum areas of Jakarta. These areas are subject to regular flooding, which is likely to deteriorate in the future as a result of climate change and other factors such as environmental degradation. Not only are current and future climate risks taken into account in the programme, but beneficiaries are also offered microfinance opportunities to provide them with an improved “safety net” in the event of a disaster. Communities are made aware of the factors that contribute to increasing risk, such as poor waste management, and trained in emergency first aid, evacuation and early warning. Information on climate change is also integrated into training. Red Cross volunteers are further trained on mobilising, supporting and motivating self-help groups in these areas.
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LAO PEOPLE'S DEMOCRATIC REPUBLIC (LAO PDR)

Climate change is already being felt in Lao PDR. Over the past decades, observed trends include a rise in temperature, an increase in extreme rainfall, a decrease in precipitation in some areas of the country, and more extreme events such as droughts and floods. The latter in particular are impacting communities living in high-risk central and southern parts of the country, notably in the low lying floodplains of the Mekong River and its tributaries. Humanitarian consequences include severe impacts on agriculture (threatening food security), human health and natural resources, and coastal and urban livelihoods. These impacts are only likely to increase.

It was not possible to organise a workshop over the consultation period (mid May to early June 2009) and therefore the findings below are limited to IFRC observations and information from the NAPA. To date, the workshop held as part of the Lao Red Cross Preparedness for Climate Change project has been the only discussion on climate change involving humanitarian practitioners.

In the past, no government agency in Lao PDR has dealt specifically with climate change. Indeed, the government identified a lack of capacity, limited access to information and poor coordination amongst different stakeholders as major constraints to integrating the climate change agenda. The NAPA, however, identifies a number of CCA initiatives in disaster preparedness and response carried out by IASC agencies to address risks associated with climate change including work by the Lao Red Cross. However due to limited resources and capacity there are no continuous coordination mechanisms for IASC members.

Lao Red Cross: Preparedness for Climate Change Programme

As part of its Preparedness for Climate Change Programme, the Lao Red Cross has prepared an Action Plan (2006-2010) which prioritises the following concrete priority actions selected by communities as a result of Vulnerability and Capacity Assessments: 1) establish Early-Warning Systems (using radio and loud speakers), awareness campaigns and training in flood prone areas, and improve community understanding of climate change and use of early warnings; 2) construct water supply systems in five targeted villages to assist in times of drought; 3) build household latrines in five targeted communities to minimise potential outbreaks of illness or disease likely to flourish in warmer conditions such as diarrhoea and typhoid; and 4) develop climate change adaptation awareness materials for the public (e.g. posters, brochures).

Source: Lao Red Cross Society (Step 4)

Lao is ranked one of the poorest and most vulnerable countries of South East Asia according to the UNDP Global Human Development Index (HDI); the challenge moving forward is therefore to mobilise resources and capacity to address future climate variability and change and to improve coordination.

Many opportunities exist for increasing collaboration and mobilising resources. Lao Red Cross is cooperating with humanitarian practitioners to share tools developed under its climate change preparedness project to access DRR and CCA funding. Moving forward, priorities for the region are therefore to build upon these initial community based initiatives and promote dialogue and joint partnerships to mobilise resources and replicate community based DRR/CCA.

4.5 PACIFIC



“More attention needs to be paid to the role of traditional knowledge in validating climate science. Currently at the local level, there are many examples within the Pacific Region of adaptation programmes... All of these initiatives have contributed much innovation in terms of identifying structural and awareness based adaptation options that validate local perspectives of, and local solutions to adapting to climate change. In spite of these initiatives however, there are still many gaps and opportunities for collaboration” (UNDP Pacific Centre).

THE CLIMATE CHANGE CHALLENGE

The Pacific largely comprises Small Island Developing States (SIDS), which are highly vulnerable to the impacts of climate change. Sea level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure, settlements and facilities that support the livelihood of island communities. By 2050, it is estimated that approximately 75 million people in the region could be forced to abandon their homes in response to climate change (Oxfam, 2009). In small island states such as Kiribati, which comprise mostly low-lying coral atolls with limited adaptation capacity, displacement/relocation is a very real threat. Deterioration, in coastal conditions, for example through erosion of beaches and coral bleaching, is expected to affect local resources. By mid-century, climate change is expected to reduce water resources in many small islands in the Pacific, to the point where they become insufficient to meet demand during low-rainfall periods (IPCC, 2007a). Climate change, including the predicted increase in natural disasters in the region, is likely to further reduce the resilience of communities (and small isolated populations in particular) already vulnerable due to the low availability of resources (specifically financial and technical), rapid and unplanned urbanisation (UNFCCC, 2007) and overall dependency on donors for adaptation and disaster response.

SUMMARY OF FINDINGS

Progress in the Pacific region is evident; there are many existing mechanisms and planning processes in the region and a regional climate change centre is being planned. At the local level, there are numerous examples of innovative adaptation programmes, which focus on local solutions to CCA.

Recent disasters, most notably the Solomon Islands Tsunami and Cyclone Guba in Papua New Guinea (both in 2007), which caused a large number of deaths and internally displaced people, have in part driven this progress and contributed to increasing regional awareness of the growing vulnerabilities and increasing risks from climate change in the region. These and more recent disasters, for instance extensive flooding in Fiji (January, 2009), have also helped mobilise both human and financial resources. The challenges facing practitioners in the region include: 1) weak linkages with knowledge centres; 2) the separation of planning/policy, information sharing and funding for DRR/CCA; 3) improving understanding of climate change drawing upon empirical evidence; 4) streamlining information exchange structures for climate change; 5) promoting more dialogue and collaboration between the development, humanitarian and adaptation actors; 6) building capacity; and 7) addressing the fundamental challenge of migration and displacement resulting from climate change.

Specific priorities identified by practitioners for the next three years focus on consolidating existing networks and activity, and ensuring that progress to date is carried through to completion and replicated.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

Climate information is reportedly available from a number of sources in the region, although practitioners disagree on its quality and usefulness. Information sources include the Council of Regional Organisations in the Pacific (CROP) agencies, local government ministries (via web-sites, e-mails) and Early Warning information provided by the WMO and National Meteorological Offices. Practitioners noted that they have insufficient understanding of regional climate change impacts as a result of the limited “quality” and availability of baseline data on regional risks. A study is being carried out by the IFRC to review the range of climate change information available to decision makers, with a particular focus on how this could be used in programming in the Pacific. The study will also identify: 1) how linkages can be built between the Cook Islands’ Meteorological Office and humanitarian stakeholders; 2) how climate data can be translated for programming purposes; and 3) how the Red Cross can work with communities on disaster preparedness and adaptation.

Practitioners feel that scientific data need to be translated to ensure accessibility for decision makers in the region. This requires that linkages between knowledge centres and decision makers are strengthened and in some cases the capacity of national meteorological centres enhanced. Similarly, practitioners suggested that it was important to better integrate DRR and CCA into education, simplify technical language, develop a standard set of terminologies and scale down modelling to make it more useful at the local level. An interesting example is the combined work of the Red Cross Samoa and the Meteorological Office to interpret scientific information to help communities understand the science behind climate change.

Collaboration between knowledge centres and practitioners is essential. For example, the IFRC, in partnership with the World Wildlife Fund (WWF) and the UNDP, convened the Pacific Communities and Climate Forum (in 2007), which brought together climate change experts and disaster risk reduction practitioners from the region. The purpose of the forum was to expose people working with communities to the latest climate information and to discuss fresh ideas for community-based activities in the Pacific Islands region. It also enabled representatives of the disaster management, health, climate change and environmental sectors to identify opportunities for partnership and information sharing.

There was a further call in the region to use traditional knowledge more effectively to validate climate science and offer local solutions to CCA, and for the IASC agencies specifically to advocate for the acceptance of traditional knowledge to support and inform CCA activities. It is reported that community elders have knowledge of changes to coastlines, forest and water resources and practical adaptation solutions such as food sources in times of disaster (Oxfam). Practitioners are starting to draw-upon this knowledge. For example the WWF’s Climate Witness Tool box and the mapping exercises have been useful for compiling baseline climate data for Fiji, drawing upon local experience and identifying climate risk.

A number of gaps in regional understanding of climate change impacts were identified and need to be addressed through research. For example, research has been initiated on the linkages between development and climate change culminating in a recent report by the UNDP Pacific Centre examining climate change and the potential for conflict in the region (particularly as a result of disaster induced population displacement). This work is in response to one of the main regional concerns – the paucity of the evidence base for climate induced migration and displacement. An additional area identified for further research is the linkage between poverty and vulnerability to climate change and resulting best practice in targeting root causes.

**ESTABLISHING
THE INSTITUTIONAL
FRAMEWORK****AGENCY AWARENESS RAISING**

Internal awareness raising and ongoing research to support humanitarian action were identified as important activities for the region. For example, Oxfam is providing internal information sessions on climate change for staff in the Solomon Islands, Papua New Guinea and Vanuatu (see *Section 3.2.2*). Similarly, the UNHCR is currently scoping the links between climate change, human rights and forced displacement focusing on grassroots consultation with affected communities. Similarly, regional National Red Cross Societies (e.g. Cook Islands, Solomon Islands, Tonga and Kiribati) have been raising internal awareness on climate change and the implications of climate change for National Society programmes. The UNESCO/Asia Pacific Migration Research Network and the University of the South Pacific jointly hosted a two-day workshop in May 2009 on 'Climate Change Related Migration in the Pacific'. The workshop brought together over 30 leading Pacific experts in the fields of climate change and migration and representatives from key Pacific regional institutions and universities.

AGENCY POLICY AND PLANNING

Work is ongoing in the region to integrate DRR and CCA into agency policy and planning. For example, UNDP Samoa is incorporating DRR and CCA as two key practice areas in the Country Programme Action Plans and UNISDR is developing a sub-regional strategy for supporting integration in the Pacific.

ADVOCACY ON NATIONAL POLICY AND PLANNING

The national level separation of planning, policy, information sharing and funding for DRR and CCA was highlighted as a problem for regional practitioners. It was agreed that integration and adaptation were more likely to be successful if regional and national level mechanisms for information sharing and frameworks for policy and planning are integrated. Practitioners proposed that the Pacific Humanitarian Team (PHT) comprising UN agencies, regional organisations, international and national non-governmental organisations and donors could provide an opportunity for humanitarian practitioners to contribute to the development of CCA strategies, policies and programmes, including those on migration and displacement.

Practitioners unanimously agreed that humanitarian practitioners need to be more involved in the CCA planning process (e.g. for NAPAs). Although in some countries humanitarian practitioners are involved in the development of the NAPA, for example the Solomon Red Cross, the regional priority is to ensure more coordination and collaborative involvement of humanitarian practitioners in these processes.

It was noted that the DRR planning process should be more inclusive and involve a wider range of actors. Although humanitarian practitioners can contribute significantly, it is reported that they are, in some cases, doing so in a piecemeal way. More collaborative effort would strengthen the nature of advice and support. However, progress is clearly evident for example the Pacific Disaster Risk Management (DRM) Partnership Network coordinated by SOPAC is supporting the development and implementation of DRM National Action Plans (completed for the Cook Islands, Vanuatu and the Marshall Islands). Furthermore, the Pacific Platform for DRM includes a meeting of Ministers of Finance and Planning, which aims to raise awareness of the importance of mainstreaming DRR into national level policy and planning.

AGENCY COORDINATION AND INFORMATION EXCHANGE

The PHT currently serves as a platform for humanitarian and development agencies to engage. Yet, it is reported that more coordination of interventions is needed, the PHT's mandate needs to be revised to reflect CCA, and capacity building on preparedness needs to be enhanced.

Information exchange mechanisms and planning processes are numerous, but not always utilised effectively. They include the Annual Round Table for Climate Change, the proposed regional climate change platform, the Pacific Platform for DRM and the Pacific Disaster Network. These and associated planning processes were identified as suitable platforms for integrating DRR and CCA. A regional priority is to consolidate these existing regional mechanisms for information sharing on DRR and CCA. It was also noted that existing mechanisms are more like annual events than ongoing commitments to integrate.

DIALOGUE, COLLABORATION AND PARTNERSHIPS

Practitioners suggested that contingency and preparedness workshops could be used to engage development actors. Similarly, it was proposed that humanitarian practitioners should develop a community of practice to help development actors understand the relevance of CCA to humanitarian work. A perceived lack of evidence (or mechanisms for interpreting and sharing) on climate change impacts was identified as an obstacle to efforts to engage development actors on DRR and CCA. It was agreed that humanitarian practitioners need to increase investment in recovery and expertise in the region to ensure they support the sustainability of short-term action and this could be facilitated by fostering links with the development community.

Finally, a reported regional priority for the coming years is to increase networking between DRR, CCA and development actors to encourage mainstreaming. For example, the UNHCR organised a workshop in December 2008 that brought together community representatives, donors, climate change and housing experts to ensure that policy and legal framework discussions are rooted in the reality of affected communities. Similarly, OCHA Pacific is undertaking in-country inter-agency contingency planning workshops, which to date have been conducted in Samoa, the Solomon Islands and Vanuatu. These bring government agencies, NGO’s and international organisations together. OCHA is also facilitating discussion between the developmental Pacific Water Sanitation and Hygiene (WASH) Coalition and the humanitarian Pacific WASH cluster, so as to combine expertise on El Niño-Southern Oscillation, drought, etc. from both sides to formulate relevant actions.

OPERATIONAL AND FINANCIAL CAPACITY

There is a reported lack of implementation capacity for DRR and CCA programmes in the region and this is compounded by limited funding available for capacity building. The Solomon Islands Red Cross has conducted awareness raising activities to familiarise staff, board members and volunteers with the concepts of climate change and to initiate dialogue with various actors working on climate change. It was proposed that such activities need to become more widespread.

A number of success stories were showcased by practitioners demonstrating new or amended DRR and preparedness projects and some innovative projects to “climate proof” communities and build resilience through community based structural and awareness based solutions.

- > The Samoa Red Cross Society is working and coordinating with the Ministry of Natural Resources, the Ministry of Health and the National Disaster Management Office in Samoa to conduct Vulnerability and Capacity Assessments, which incorporate a consideration of vulnerability to both climate change and disaster. Similarly as part of their Community Based Health and First Aid Programme, the Red Cross are working with communities from the Solomon Islands on a range of issues including disaster preparedness and climate change (see Case Studies).

**IMPLEMENTING
ACTION ON
THE GROUND**



- > The Tuvalu Red Cross Society is working with government and civil society to address climate change by *inter alia* improving response capacity, training volunteers, distributing satellite phones (the “Talking Briefcase”) to facilitate emergency coordination, and establishing awareness raising programmes for school children (see Case Studies).
- > Oxfam has been collecting regional climate “stories.” This includes ‘*Climate-proofing Communities in Fiji*’ which discusses how communities are working to climate-proof their livelihood and homes by: trialing salt resistant varieties of staple foods such as taro; planting mangroves, native grasses and other trees to limit coastal erosion; protecting freshwater wells from salt-water intrusion; and relocating homes and community buildings away from vulnerable coastlines. Current efforts at climate adaptation build on previous community initiatives, for example creating marine reserves to control overfishing (see Oxfam, 2009).

SOLOMON ISLANDS

The Solomon Islands lie close to the Inter-Tropical Convergence Zone and the Pacific Volcanic belt. This makes its population extremely susceptible to disasters particularly tropical cyclones, earthquakes and volcanic eruptions. Climate change will only add to the existing risk and poses real and potentially devastating threats to vulnerable communities on the islands. Already, communities are experiencing sea level rises, salt water intrusion, contamination of freshwater aquifers and shoreline erosion (Solomon Islands Red Cross Society, 2008). In 2009, a natural disaster was declared after 13 people died and seven were injured following torrential rain and flooding on the main island of Guadalcanal.

The consultation meetings organised as part of ‘Regional and National Perspectives’ represent part of ongoing discussions and work on the Solomon Islands to respond to climate change and integrate DRR and CCA. The recently established Climate Change Division under the Ministry of Environment, Conservation and Meteorology, has provided an avenue for dialogue on climate change between a wide range of organisations including the National Disaster Management Office and humanitarian practitioners and will work on a national policy for climate change.

Government and humanitarian actors are aware of the threats and challenges of climate change for inhabitants including the potential issue of relocation in response to sea-level rise and work is underway to raise awareness with other actors, in particular young people. However, it was highlighted that more work is required in communities already suffering from the effects of climate change. Outlying communities, which are difficult and expensive to reach, and yet are the most vulnerable to the effects of climate change, are not receiving the same level of support as communities that are more accessible but less vulnerable. In these outlying atolls or artificial islands, sea level rise poses a very real threat and combined with tectonic plate movement may lead to the displacement of a large number of inhabitants.

There is evidence of good practice, and some humanitarian practitioners have already had success in mainstreaming climate change awareness and adaptation as a cross cutting theme into existing programme work, most notably the Solomon Islands Red Cross (SIRC). SIRC has undertaken activities since 2006 notably as part of its Preparedness for Climate Change Programme. Initiatives include community awareness, VCAs, radio talk shows, school competitions and production of awareness information materials such as posters, pamphlets, and t-shirts. SIRC is currently working on a film documentary on the impacts of climate change on the Solomon Islands. As a result of government, Red Cross and other organisation activities, valuable baseline country data have been collected through community based consultations and assessments.

Mainstreaming Climate Change into Health Promotion and Disaster Risk Reduction

The Solomon Islands Red Cross (SIRC) has road-tested a participatory assessment, called the *Frontline Community Toolkit*, in order to address both current and future climate risk. The aim is to research community vulnerabilities to the impacts of climate change and disasters, and to identify activities for addressing priority needs and strengthening coping mechanisms. It has been using this approach to increase community awareness of the public health risks associated with climate change and promote adaptive behaviour. The programme is run on a peer-to-peer information exchange model, and involves training of 'health dissemination volunteers' and community discussions to identify issues associated with a changing climate (for example new cases of malaria and water borne diseases) and agree solutions (such as mosquito nets and sanitation) (see Case Studies).

Practitioners in the region identified a number of challenges in their ongoing work to address climate change in particular funding, communication with communities and reluctance by some communities to participate. Priority areas for humanitarian practitioners working on the islands include the following:

- > **continued involvement of all relevant stakeholders** in national strategies, policies, programmes and documents;
- > **inclusion of affected communities** in the development of climate change strategies, policies and programmes;
- > **better research and understanding of traditional coping mechanisms;** and
- > **identification of ways to address the issue of sea-level rise** on settlement, migration and displacement.

Best practice, in particular the community based work of the SIRC, could be replicated across the region but participants noted that this requires inter alia: 1) technical assistance and guidance in the development and use of simple tools to initiate community discussions and determine adaptation strategies; 2) a coordinated approach with clear roles identified for all actors; 3) financial resources to enable practitioners to continue to expand their climate change awareness and adaptation programs, particularly in less accessible, vulnerable communities; and 4) a regional advocacy strategy, which identifies financial and technical support for adaptation programmes.

COOK ISLANDS

The Cook Islands are already experiencing climate change; the increasing severity and frequency of tropical cyclones is testimony to this new challenge. In 2005, five cyclones struck the islands within a one-month period, never before experienced in recorded history. High dependency on natural resources (farming, pearl fishing, agriculture, fisheries), the location of communities on coastal low-lying atolls, and increasing vulnerability as a result of socio-economic factors (e.g. poverty and substandard housing) means that climate change impacts (specifically impacts on health, agricultural productivity, water availability and coastal livelihoods) are likely to be particularly devastating (Cook Islands Red Cross, 2008).

The considerable DRR legislative and policy architecture on the Islands is in part a reflection of the plans to strengthen DRR following the cyclones of 2005. There is also ongoing work to align existing climate change frameworks, and plans for integration of the National Action Plan for DRM and the NAPA. However overarching coordination of these two areas is lacking and clear plans for implementation are required.

Progress on collaborative projects on DRR could be scaled up. For example the National Environment Services (NES) and the Cook Islands Red Cross are conducting VCAs on one of the outer Islands. This could be replicated elsewhere. Similarly, NES is collaborating with the University of the South Pacific on the development of a Vulnerability and Assessment course to build a stronger skills base for adaptation to climate change in the Cook Islands, drawing upon Red Cross volunteers to facilitate the process. Furthermore, the Climate Action Network is planning a meeting in the lead up to the 2009 UN climate change conference and this could provide an additional forum for humanitarian practitioners to become more involved in climate change planning.

Addressing Waste Management to Enhance Community Resilience

In its *Plan of Action* for the Cook Islands, the Red Cross identifies a number of opportunities to address climate change. These include: 1) increasing the number of National Society staff trained in VCA to scale up community based risk reduction; 2) developing awareness materials for communities such as brochures and stickers; 3) recruiting more volunteers to scale up awareness raising activities; and 4) a food preservation video for use by communities on the outer islands. However, the foremost priority project was the Mauke Island community resilience project to address waste management from livestock, which was identified through a VCA assessment held on the island. Current waste management procedures are reportedly exacerbating the impacts of climate change on the island by polluting water (with indirect health and safety impacts) and soils with subsequent damage to crops). The project aim is therefore to build community capacity in appropriate waste management and preparedness for climate change activities through workshops and awareness raising.

Source: Step 4, Preparedness for Climate Change Project (Cook Islands Red Cross)

Although there has been substantial funding for recovery and rehabilitation since the 2005 cyclones and recognition of the need to “build back better” to reduce future risks, plans largely focus on protecting infrastructure, rather than measures to reduce vulnerability such as food security and health. Plans and processes to incorporate climate change and DRR reportedly lack coordination and are hampered by limited financial and human resources (notably a lack of CCA skills) and weak institutional capacity available for mainstreaming and local level adaptation. Overall there is a limited understanding of the linkages between DRR/CCA and the development agenda and more advocacy is required at a national level to increase resources being allocated to mainstreaming.

Moving forward, practitioners identified a number of priority areas:

- > integrate and operationalise NAPAs with sector planning;
 - > develop and strengthen the capacity of agencies (e.g. Red Cross, NES) to conduct national and local level climate assessments;
 - > develop clear implementation strategies for existing plans and policies and involve all relevant stakeholders in the process;
 - > develop clear indicators for adaptation to climate change; and
 - > examine re-insurance as an option.
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4.6 LATIN AMERICA AND THE CARIBBEAN REGION



“The introduction of the climate change concept is not something new happening in the region, it is just more of the same” (OCHA).

THE CLIMATE CHANGE CHALLENGE

The Latin America and Caribbean region is characterised by a long history of weather-related disasters. The region has already been experiencing climate related changes notably increasing intensity and frequency of extreme events, particularly those linked to El Niño events. The water, agriculture and health sectors are particularly vulnerable to climate change. Specifically, productivity of key crops and livestock is projected to decrease, with adverse consequences for food security and projected increases in the number of people at risk of hunger. By the 2050s, 50 percent of agricultural land is very likely to be impacted by desertification and salinisation (UNFCCC, 2007). These impacts will be further compounded by changes in precipitation patterns and the retreat of glaciers, which will significantly affect water availability for human consumption, agriculture and energy generation (IPCC, 2007a).

SUMMARY OF FINDINGS

Progress is clearly being made in this region to integrate climate change risk into ongoing humanitarian activities and this has in part been driven by practitioners’ experience of recent disasters, for example the 1997 El Niño event and Hurricane Mitch (1998). Practitioners also discussed their ongoing work, which incorporates: 1) community based DRR and CCA, including EWEA activities; 2) advocacy for integration of climate change into policies and plans, including institutional preparation to understand climate change issues; 3) advocacy to ensure vulnerable communities have a voice on climate change; and 4) public awareness activities, for instance work in schools and community education on climate risks and protective measures.

Practitioners were keen to illustrate national level success stories. In particular, Cuba was suggested as an example of where progress is being made to address the challenges of climate change. Despite the frequent and devastating hurricanes, the number of deaths registered has been minimal for the past few years. This is attributed to education and clear communication between key stakeholders including the meteorological office and the media alongside nation-wide training days on risk reduction complete with simulation exercises (UNFPA). In Haiti the combined effort of Civil Defence, technical, and financial partners has resulted in significant progress in DRR over the past four years. This was reflected in the decrease in the number of casualties: from 3,000 in 2004 after hurricane Jeanne, to 793 confirmed deaths and 310 disappearances following hurricanes Fay, Gustav, Hanna and Ike in 2008 (see UNDP, 2008).

However, it is clear that the DRR, CCA and development communities remain largely separate in the region and that there are insufficient exchange mechanisms for CCA and poor coordination of CCA initiatives. Further, more work needs to be done in the region to engage with local government and shift emphasis from reactionary responses to building resilience before a disaster. This requires consolidation and coordination of work on DRR and implementation of the HFA. A specific challenge reported for the region is that recent disasters have delayed the implementation of projects.

Regional priorities for practitioners revolve around improving linkages by creating inter-agency platforms to link the humanitarian and development communities and enhancing information flows, particularly in terms of lessons learnt on community-based preparedness/DRR.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

While practitioners reported good access to climate information, it is not always in a form suitable for decision-making. A large number of information sources are available such as the WMO; the National Meteorological Services; the International Research Centre on El Niño (CIIFEN); the Water Centre for the Humid Tropics (CATHLAC); the National Hurricane Center; the National Oceanic and Atmospheric Administration; the Regional Committee on Hydrological Resources (CRRH); the Central American Commission on Environment and Development; and the WFP Early Warning System for Central America (SATCA Web). With regards to the latter, WFP is working at a regional level with CRRH to produce daily early warning services and a model for measuring the potential impacts of floods in Central America during the hurricane season (see Case Studies). The next step will be to integrate specific climate change related information and monitoring data into existing platforms to better share with humanitarian practitioners.

Practitioners have a number of concerns in relation to the use of climate information: 1) it is very technical; 2) there is insufficient data on the incidence of climate change on climate variability to identify risk hotspots; 3) there is a shortage of data to link the macro level with the community level; 4) data timescales are not always relevant notably for preparedness and contingency planning; 5) information must be regularly updated; 6) the availability of vulnerability information is limited; and 7) the capacity to analyse scientific data is not always available.

Given the range of information available from regional and national level meteorology services, the challenge for humanitarian practitioners is to identify how and when to use this information and to build on pilot initiatives between agencies and some scientific institutions to ensure routine use of climate data in programming decisions. Practitioners further noted the difficulties in communicating predictions for future change to communities when these do not match past experience. A priority in relation to communities was to collect and share traditional knowledge.

AGENCY AWARENESS RAISING

Practitioners in the region are reportedly developing research agendas to build understanding of the climate change challenge for their mandates and raise awareness. For example, IOM is trying to better understand links between population movements and climate change and is currently developing projects for increasing resilience.

ESTABLISHING THE INSTITUTIONAL FRAMEWORK

AGENCY POLICY AND PLANNING

Practitioners note that they are still trying to agree agency strategies on climate change. UNICEF is currently preparing a regional strategy on climate change in addition to work to dovetail CCA education into existing DRR and environmental education programmes, undertaking a regional situation analysis to map DRR/CCA efforts, and building a network to track regional activities.

ADVOCACY ON NATIONAL POLICY AND PLANNING

One of the main regional challenges identified by practitioners was to better articulate with government the importance of DRR and prevention as integral to humanitarian action: “the main obstacle for DRR is to demonstrate to donors, governments and other partners that investment in prevention is better than response” (OCHA). Practitioners also confirmed a need to support the development of National Action Plans for DRR, and implementation of HFA and CCA plans/strategies. It was recommended that media presentations were prepared for different audiences, using GIS to help visualise the consequences of climate change and to support advocacy.

AGENCY COORDINATION AND INFORMATION EXCHANGE

Practitioners discussed a variety of good regional networks for coordination and information exchange on DRR but not for CCA. Regional DRR coordination structures include most notably the sub-regional Risk, Emergency and Disasters Taskforce (REDLAC), which was created in 2004 as a regional inter-agency platform for information exchange, reflection and organisation of joint efforts to optimise preparedness and response. Further, the Regional Humanitarian Information Network (Redhum) provides contact details, information on projects, activities, major actors and good practices on regional disasters to facilitate web-site based information sharing. The challenge is to integrate climate change into these existing regional information and coordination systems through integrating new sources and developing new partnerships.

Nevertheless, participants still called for greater coordination of work-plans, common practices, methods and tools and the need to integrate DRR into every sector rather than view it as a separate sector. Finally, participants noted a need for humanitarian practitioners to: 1) systematically collect and share case studies/best practice and experience (particularly lessons learnt on community-based programmes); 2) create networks for information sharing on CCA (newsletters, websites); 3) integrate climate change information and monitoring data into existing DRR platforms; 4) support and strengthen institutional frameworks and platforms to facilitate knowledge exchange; 5) create a regional information system for climate change (but avoid duplication of action); and 6) identify an institution to lead the climate change debate at the regional level.

IMPLEMENTING ACTION ON THE GROUND

DIALOGUE, COLLABORATION AND PARTNERSHIPS

Humanitarian and development actors were reported to inhabit “different worlds”. A number of opportunities were proposed for building bridges including: inter-agency information exchange and workshops; capacity development plans for humanitarian practitioners and their roles in relation to other actors; strategic partnerships at regional level; and inter-agency platforms to link regional humanitarian and development communities. It was also recommended that humanitarian practitioners should develop partnerships with non traditional actors, for example the private sector.

OPERATIONAL AND FINANCIAL CAPACITY

Funding was identified by practitioners as “one of the main obstacles” to integration and mainstreaming. Specifically, practitioners find it difficult to demonstrate that investment in prevention is better than response and there are reported limitations to donor funding for integrating DRR issues into humanitarian response activities. Finally, it was acknowledged that more CCA funds need to be channeled towards local actors.

Furthermore, practitioners are concerned that capacity is constrained by existing programming priorities at the country level, compounded by high staff turnover and a shortage of specialised staff for CCA. Priority actions include training and capacity building of institutions and actors on DRR/CCA concepts, methods and tools, and specifically inter-agency training to facilitate linkages between actors.

A large number of success stories were showcased as part of the consultation meeting. Progress is evidently being made and practitioners are addressing DRR and CCA in a variety of ways most notably by scaling up and amending existing preparedness activities to take into account the challenge of climate change. However, as OCHA notes, humanitarian practitioners have been preparing for natural disasters for years and establishing linkages between national and international mechanisms.

- > Oxfam is working in a coalition of NGOs in Bolivia to identify concrete impacts and community adaptation mechanisms. Oxfam is also working with alpaca raising communities in the Peruvian highlands to address both existing risks, as well as build resilience to the medium and long-term effects of climate variability on their livelihoods. The focus of the program has evolved from post disaster reconstruction to preventative action in the context of increasing climate variability and change (see Case Studies).
- > WFP is working on a project in El Salvador that: firstly strengthens local climate related risk management at the community level by both contingency planning and implementation of a crop monitoring system, given the impacts of potential drought/floods on food security; and secondly promotes interaction with development agencies through joint implementation (UNDP, development NGOs and municipalities are all key participants). Similarly, WFP's Protracted Relief and Recovery Operations in Central America, specifically in Bolivia and Haiti, involve tackling climate change through adaptation.
- > The Guatemalan Red Cross has been working with the community of Chiquimula to plant trees near the community schools with the dual purpose of reducing climate change risks by strengthening local capacities to respond to disasters and by raising awareness of the effects of climate change (see Case Studies).
- > The Argentine Red Cross is working to integrate local knowledge of risks and vulnerabilities affecting communities. Notably, it is working with elders to incorporate their experience of historical climate change, past extreme events, and community adaptation responses.
- > Care International is working on a number of specific disaster projects and is including preparedness activities within existing development programmes. Further, strategic planning for its development programmes is now taking DRR/CCA into account.

COLOMBIA

Colombia's geographical diversity makes it vulnerable to a wide range of impacts. Its high Andean ecosystems, specifically its fragile moorlands, are particularly vulnerable. Changes in precipitation and temperature are already taking place in these regions, affecting livelihoods and exposing communities to disease amongst other impacts. Sea level changes in Colombia's Caribbean insular areas are increasingly associated with flooding, affecting infrastructure, public services and livelihoods and saline intrusion of aquifer-based freshwater supplies.

Colombia is one of the few countries that has designed both DRR and climate change policies. The latter does not encompass adaptation, although work is in progress to rectify this. There is also a need for Colombia's National Disaster System to engage with the climate change agenda. Civil society (in particular young people) is reportedly active in driving policy change, "*community demands are the engine of the process*," perhaps a reflection of growing public awareness following recent disasters. It was however, noted that climate change is not a new issue for the country and that indigenous and Afro-American communities have been successfully adapting to climate change in the region for a very long time.

There is a risk management system by law, but the perception is that risk reduction organisations are active mostly during emergencies and are not part of the prevention process. Humanitarian practitioners confirmed the importance of increasing preparedness and DRR activities to respond to the proliferating threat of climate change.

Humanitarian practitioners are making progress towards mainstreaming climate change. For example, the Colombian Red Cross has spearheaded the ‘Climate Change National Table’ an outcome of which has been the publication: *Analysis of Climate Change in the Country and Colombian Red Cross Actions to Reduce Risk.* Alliances with public and private research organisations are developing the research base and ability to predict future scenarios on climate change to support community adaptation: “we have the scientific base being taken to communities and at the same time, this information is being fed by traditional adaptation knowledge, to be taken to science” (Colombia Red Cross).

In total, the Colombian Red Cross reports that it has carried out more than 150 forums and/or meetings and two specific climate change projects (in Guajira and Magdalena) and wants to continue to be the “mediator and translator of scientific information to a community language; strengthening community capacities and allowing actors a full understanding of the threats, risks and vulnerabilities to climate change.” Projects designed to build community resilience are generally in the early stages but most importantly are being driven by inter-agency collaboration to address the cross-cutting nature of climate change.

Adaptation to Climate Change in Colombia

UNICEF, UNDP, FAO and WHO have initiated a joint programme *Integration of Ecosystems and Adaptation to Climate Change in Colombia.* The purpose of the programme is to strengthen institutions at the national and local levels so that they can take more responsibility for sustainable development, management and climate change adaptation in the strategic eco-region of the Colombian Massif. Socio-economic studies on vulnerability will be conducted alongside the implementation of concrete climate change adaptation initiatives for specific vulnerability scenarios. Example initiatives are likely to include, agricultural production processes that guarantee food security such as pilots for new crops and new forms of production.

In general, joint programmes seem to be more successful and there is growing awareness of the need for collaborative involvement of the public, private and community sectors to secure success. Most work to date has been carried out independently by the different agencies. There is therefore a need for a more integrated approach. Information communication systems exist to link actors, but use of these existing networks could be strengthened.

At the agency level, practitioners identified that there is a need to integrate climate change into all humanitarian agency operations by analysing threats, vulnerabilities, capacities and risks. There is also a need to strengthen the multi-sector and multi-level Climate Change Table to share experience and good practice (research, adaptation, advocacy), ensure integrated planning, develop a generic plan of action and ultimately to develop pilot projects.

In summary, the Climate Change National Table, promoted and developed by the Colombian Red Cross, has demonstrated that it is possible to stimulate dialogue and engagement on these issues as a precursor to multi-sectoral, multi-threat and multi-level action.

4.7 MIDDLE EAST AND NORTH AFRICA



“Resources become available once a disaster strikes, even in areas affected by recurring disasters. Preventative measures, which are costly, but cost-efficient, are not prioritised and rarely put in place in the region” (IOM).

THE CLIMATE CHANGE CHALLENGE

Climate change is projected to result in a decrease in rainfall and length of growing period in the region, with a concomitant reduction in mixed rain-fed and semi-arid systems, most notably on the margins of the Sahel. By 2050, parts of North Africa and Egypt in particular, are likely to suffer from increased water stress resulting from a reduction in surface runoff (Boko *et al.*, 2007).

Storm surges impacting coastal areas are also likely to be particularly significant for Egypt, Saudi Arabia and Libya, with potential risk to many millions of people. As part of the consultation meetings, practitioners discussed a range of climate changes that they had personally experienced in the region. These included the first snowfall in Baghdad, Iraq; early arrival of watermelons in Jordan as a result of temperature changes, and two heavy sandstorms in Riyadh, Saudi Arabia, of a magnitude not experienced over the past 100 years.

SUMMARY OF FINDINGS

Participants noted that because countries in the region are mainly affected by slow onset disasters, actors tend to underestimate the impact of climate change on the region. This is in part the reason why progress towards addressing the humanitarian challenge of climate change and linking DRR with CCA has been limited to date. However, the consultation meeting represented an important step in galvanising action on these issues and building upon the limited number of success stories shared as part of ‘Regional and National’ perspectives.

There is evidence of a general shift in thinking from reacting to pre-empting disasters, an emerging consensus on the need to develop better early warning systems in areas impacted by recurrent disasters (for example regions of Yemen), and to prioritise prevention measures. Practitioners noted that more action is needed on the ground supported by improved information flows *“the gaps are huge; not only is legislation lagging behind but also operational capacity to handle the issues needs strengthening”* (FAO).

Hence, priorities for the region revolve around: 1) enhancing stakeholder, including community awareness and understanding of climate effects; 2) building synergies between DRR and CCA; 3) developing capacity including response capacity and expertise to handle new emergencies; and 4) exchanging lessons learnt from pilot activities in Egypt, Syria, Yemen and Morocco.

PRACTITIONER FEEDBACK

FROM KNOWLEDGE TO ACTION

ENHANCING CLIMATE KNOWLEDGE

A key challenge for practitioners in the region is accessing information. One participant noted that only actors who can pay are able to access climate information. Similarly, it was suggested that relevant data, for example on food insecurity, are not shared in all countries. Participants identified firstly a need to translate climate information into Arabic and into non-technical terms, and secondly to improve information flow between the global and local levels. Practitioners confirmed that because climate change has been underestimated in the region, efforts to access climate information have only recently been made and a more systematic and coordinated approach is required.

There is reportedly some local research on climate change, but a priority for the region is to build a stronger evidence base for the incidence of climate change on climate variability notably rainfall patterns, extreme events and socio-economic impacts, to help identify high-risk areas, prepare resources and to act in a timely fashion. Practitioners proposed building better links with local universities and other research organisations to facilitate this. It was agreed that a better understanding of impacts in the region (including a database to support information sharing) could result in more resources allocated for CCA.

AGENCY AWARENESS RAISING

Practitioners themselves are at present trying to understand the risks associated with climate change whilst simultaneously raising public awareness of the impacts. There is a reported need to investigate the human security implications of climate change, for example the impacts of reduced access to natural resources and increased migratory pressure and to develop local models to predict migration and displacement resulting from climate change in the region.

AGENCY POLICY AND PLANNING

First steps towards action are being taken in the region. For example, the IFRC is planning to identify vulnerable communities in the region to help determine appropriate responses and hold an internal meeting to agree work plans for the region. A priority for the region is to develop capacity to operationalise policies and to integrate climate change into existing tools.

ADVOCACY ON NATIONAL POLICY AND PLANNING

It is reported that decision makers and actors are focusing on short-term interventions rather than developing long-term adaptation strategies. Further, practitioners agreed that humanitarian practitioners must better link with existing processes (the UNDAF, PRSP and NAPA processes) in the region. It was proposed that humanitarian practitioners advocate for governments to take a greater interest in CCA, implement the HFA and enhance stakeholder understanding of the synergies between DRR and CCA.

A key challenge identified by participants is that preventative measures are not prioritised in the region and are rarely put in place even when cost effective: *“fire extinguishing approaches must be complemented by long-term approaches”* (WFP). This is because DRR (preparedness planning, contingency planning for disaster prevention and mitigation) is reported to require expensive infrastructure, for example the equipment and software associated with early warning systems. Practitioners agreed that a regional priority over the next three years is to develop better early warning systems in particular in areas affected by recurring disasters such as Yemen where flooding is a major concern, and to develop and implement early recovery strategies integrated with DRR.

ESTABLISHING THE INSTITUTIONAL FRAMEWORK

AGENCY COORDINATION AND INFORMATION EXCHANGE

Regional coordination structures for humanitarian agencies include the regional Inter-Agency Coordination Network on Emergency Preparedness and Response, and the newly formed Regional Centre for Risk Reduction. The centre's mandate includes climate change and should therefore be a useful mechanism for bridging the gap between research and activities on the ground. However, there is a reported weakness in information flow between global and local levels, a potential role for regional partners and the centre. Practitioners noted that more networking is required to encourage more information sharing on DRR and CCA, to identify what other agencies are doing, to ascertain overlaps and gaps, and to exchange lessons learnt from pilot activities in Egypt, Syria, Yemen and Morocco. IOM has recently appointed an environmental focal point to enhance inter-agency coordination at both the regional and national levels.

DIALOGUE, COLLABORATION AND PARTNERSHIPS

Practitioners identified a need to merge short-term with long-term activities in the region and suggested that this requires more joint programming, and acknowledgement and clarification of the roles of other actors, specifically local communities and the private sector. It is hoped that the newly formed regional centre will help bring different actors together. At the national level, it was proposed by one practitioner in Palestine that climate change sector working groups, composed of key governmental bodies, NGOs, research bodies, international organisations and donors is established to prepare a national strategy and action plan on climate change.

OPERATIONAL AND FINANCIAL CAPACITY

Practitioners highlighted the limited regional capacity in particular a shortage of response capacity and expertise to handle new types of emergencies. It was also reported that there are inadequate institutional capacities to realise NAPA commitments. Regional priorities proposed by practitioners, therefore include the provision of training on adaptation and related key issues, for example migration management and drought preparedness planning.

IMPLEMENTING ACTION ON THE GROUND

Practitioners agreed that after initial discussions in the region, more action on the ground was needed including the development of better pilot projects, improved early warning systems, increased advocacy, better sharing of case studies and integrating climate change into existing tools.

- > WFP shared a number of proposed adaptation projects. In Syria, work is being initiated to identify an emergency preparedness response through food and climate change vulnerability analysis. Furthermore, WFP plans to identify the most vulnerable zones/communities in terms of household food security through mapping and field assessments in Egypt (see Case Studies).
- > FAO presented its approach to drought management and preparedness as an alternative to the more widespread crisis management. FAO has prepared a Drought Preparedness Manual for the Near-East providing best practice for pro-active drought management in the region. It has been used as a basis for training and capacity building for drought risk reduction and drought mitigation (see Case Studies).

YEMEN

Yemen is categorised as a Least Developed Country (LDC) and is therefore highly vulnerable to climate change related impacts notably drought, extreme flooding, changes to rainfall patterns, increased storm frequency and severity and sea level rise; with subsequent impacts for health, infrastructure and livelihoods (see NAPA for further information).

The ‘*Regional and National Perspectives*’ consultation meeting brought together representatives from various ministries, UN Agencies, International Organisations and local NGOs to: 1) share knowledge and experience in DRR and recovery in the context of CCA; 2) increase awareness of DRR; 3) work towards a common understanding of CCA and a national plan for DRR; and 4) identify challenges and possible solutions. To ensure a common platform for engagement, a large part of the consultation meeting included presentations on climate change, recent disasters in Yemen, disaster response experience, the need for “*adaptation with a culture of prevention*” and an overview of the current work of knowledge centres (mapping, remote sensing, GIS).

Participants highlighted numerous challenges including more general environmental issues associated with climate change, notably deforestation and desertification. Challenges of specific relevance to the humanitarian community were also identified and include ineffective warning systems, lack of reliable information systems, limited public awareness and advocacy, weak disaster preparedness and response operations and insufficient coordination between concerned parties.

The priority for practitioners in Yemen is to ensure that the appropriate institutional framework is in place to deal with climate change on a sustainable basis. Key recommendations identified by participants and elaborated by the IFRC are as follows.

- > **Learn from experience** from within Yemen and elsewhere given that CCA is a relatively new field. It was further noted needs support from for example a centre of excellence, to ensure that learning is synthesised and shared as widely as possible.
- > **More inclusive participation** of all stakeholders and coordination to develop research to support long-term solutions to climate change impacts.
- > **Awareness campaigns on disaster reduction and climate change** including community awareness. Although this was reported as the most widespread activity, it was identified that standard messages and education material are still required.
- > **A comprehensive study on early warning systems and dissemination mechanisms.** Practitioners further emphasised the importance of a strong institutional coordination framework to define and harmonise organisational roles and responsibilities.
- > **Investment in the development of risk mapping.** This was identified as fundamental to the development of national and community contingency plans, which also assumes a high level of inter-agency coordination.
- > **Capacity building at all levels** including training on disaster management. Given low technical and material capacities in Yemen, capacity building on DRR and CCA were highlighted as a priority, notably the mobilisation of indigenous technical adaptation knowledge at the local level.
- > **Development of national and local preparedness plans** such as community contingency plans and stocks. It was noted that: “*effective CCA requires a conscious shift towards disaster risk reduction at the local level which, in turn, calls for adaptive capacities as part of the development of national and local level preparedness*” (IFRC).

5 PRACTITIONER PRIORITIES

This chapter summarises practitioner priorities for the next three years and early observations made by practitioners during the consultation meetings on the potential next steps for scaling up and strengthening action on the ground.

Improve Understanding of Climate Change and Associated Humanitarian Impacts

Enhance understanding, use and dissemination of climate change knowledge

- > **Create and strengthen partnerships between humanitarian practitioners and knowledge centres** in order to make climate related data available for planning and decision-making at all levels.
- > **Support improved data gathering, downscaling and modelling** of climate change hazards, vulnerabilities and impacts.
- > **Initiate efforts to repackage data** for local actors, to support effective decision making, and to put into operation activities that are resilient to anticipated climate changes.
- > **Initiate research** to complete gaps in our understanding of location-specific climate change impacts, particularly migration, displacement, poverty, health, human rights, traditional coping mechanisms and links with urbanisation.
- > **Incorporate climate change information** into existing coordination platforms to enhance sharing amongst humanitarian actors.
- > **Enhance the role of Community Based Organisations (CBOs)** as an intermediary between all actors.
- > **Promote community involvement** and the use of traditional knowledge to validate climate science and ensure appropriate solutions.

Develop training and capacity

- > **Training of trainers** on the linkages between climate change adaptation, emergency preparedness, response/ recovery, and adaptation.
- > **Develop training to build capacity on specialist adaptation issues** such as relocation, environmental migration/displacement and slow onset disasters (e.g. drought and changing disease patterns).

Promote Wider Recognition of the “Human Face” of Climate Change

Improve understanding of the CCA policy framework and support the mainstreaming of DRR

- > **Develop regional strategies** to identify key issues and messages to inform advocacy and mobilise resources; to ensure that the “human face” is recognised; and to strengthen partnerships to support advocacy.
- > **Prepare operational guidelines** to inform and equip agency actors on how to actively influence national processes, building upon past advocacy experiences.
- > **Ensure the consequences of climate change are visualised and defined through research** on a national basis to support communication to civil society, decision makers, and local/vulnerable communities.
- > **Prepare awareness raising materials (e.g. short videos, posters) for different audiences** (e.g. governments, communities).

Advocate for increased funding

Jointly advocate with funding organisations to ensure sufficient funds for DRR/CCA activities

- > **Organise a round table with donors to:** help actors link with partners; to facilitate joint lobbying for funding; and to allow donors to share guidelines for funding.
- > **Increase engagement with non-humanitarian donors.**
- > **Investigate mechanisms for integrated approaches to funding,** opportunities within adaptation funds, PRSPs etc.
- > **Promote awareness raising with donors** through scientific and economic studies.
- > **Ensure that funds are invested in disaster preparedness** for example through pre-emptive funding appeals or inclusion of DRR in emergency appeals.

Build Better Linkages and Improve Communication to Facilitate Coordinated Action

Enhance dialogue, networking and cooperation

- > **Strengthen inter-agency platforms (e.g. DRR/CCA Working Groups for both humanitarian and development actors)** on DRR issues and develop common CCA adaptation activities to encourage mainstreaming.
- > **Use contingency planning and preparedness workshops** as an opportunity to engage development actors in a humanitarian context.
- > **Integrate DRR/CCA into UN Development Assistance Frameworks** providing a potential mechanism for greater collaboration/joint programmes.

Build Better Linkages and Improve Communication to Facilitate Coordinated Action

Formalise and streamline mechanisms for information exchange and implementation

- > **Strengthen existing working groups** to support linkages between DRR/CCA and to facilitate regional information exchange by *inter alia*: 1) developing regional action plans; 2) regular advocacy; 3) preparing capacity development plans; 4) channelling funds; and 5) creating strategic partnerships.
- > **Establish a Regional Information System** to develop inventory on 3w (who is doing, what, where), to identify best practice, tools, experiences, indicators, methodologies, research, gaps and the relative advantages of each agency.
- > **Develop inter-regional mechanisms and consolidate/streamline existing regional mechanisms** for information sharing and mainstreaming on DRR and CCA.

Develop and Amend Standards/Tools	
Build upon and adapt existing standards, guidelines, tools, preparedness and response mechanisms	<ul style="list-style-type: none"> > Adapt existing tools and resources for example the Sphere handbook, Vulnerability Assessments, Economic Assessments, and Social Impact Assessments. > Conduct a mapping exercise of regional skills and tools used by humanitarian actors to identify initiatives that are underway. > Develop clear indicators for adaptation to climate change.
Replicate Good Practice	
Expand existing preparedness activities and scale up activities to address vulnerability	<ul style="list-style-type: none"> > Use climate change as an opportunity to strengthen DRR programmes and integrate climate risk. > Establish more strategic, structured and integrated approaches to community based DRR/CCA for instance through integrating climate risk into existing programmes. > Compile and assess best practices at a regional level to identify activities for replicating, and areas where further work is required. > Scale up pilot projects to reach more communities.
The Ongoing Role of the IASC: Initial observations	
Ensure that there is sufficient information to inform agency work	<ul style="list-style-type: none"> > Facilitate workshops and information sharing. > Identify gaps in knowledge and capacity and provide guidance on best practice. > Support regional tools mapping and sharing of good practice.
Strengthen inter-agency collaboration	<ul style="list-style-type: none"> > Identify the need for regional guidelines to support coherence and facilitate cooperation. > Strengthen linkages between global and regional IASC agencies taking into account differences.
Support regional, national and local level action	<ul style="list-style-type: none"> > Promote high level advocacy. > Facilitate training for advocacy, institutional capacity building and strengthening, situational preparedness and response.



6 CONCLUSION



'REGIONAL AND NATIONAL PERSPECTIVES' IS ONLY THE BEGINNING

It is the first step in an ongoing process to reflect on the “human face” of climate change and to identify how practitioners can best address the associated humanitarian challenges. The findings from the first round of consultation clearly demonstrate that humanitarian practitioners are already confronting these challenges.

The consultation findings show that progress is being made across the regions to address climate change. Humanitarian practitioners are incorporating climate knowledge into their work, amending internal policies and strategies, integrating climate risk into existing platforms and information exchange mechanisms, developing partnerships with non-traditional partners, and expanding their expertise to deal with these issues.

The most widespread approach to programming is to strengthen community based disaster preparedness by raising local awareness to climate change impacts and by identifying “risk hotspots.” Some practitioners are also addressing the underlying risk factors of climate change, in order to reduce vulnerability and build resilience to climate change. The challenge is to scale up and replicate these early success stories.

MORE SYSTEMATIC AND COORDINATED ACTION IS REQUIRED

The systematic integration of DRR and CCA into IASC agency decision-making, planning, programming, and fundraising is not yet taking place. Current activities are often reportedly ad hoc and dependent upon the availability of financial resources. Addressing climate change will require a more integrated and coordinated approach.

Inter-agency collaboration and coordination with a range of actors are priorities. Humanitarian practitioners will need to collaborate with governments on contingency planning; form partnerships with knowledge centres to ensure the routine use and integration of user friendly and relevant climate knowledge into decision making and programming; work with development and environmental actors to ensure long term and sustainable solutions; link with local level research institutes to develop local, practical and innovative solutions for adaptation; and work closely with local communities to identify priorities and agree solutions based on local realities.

More systematic cooperation and sharing of experience and good practice at all levels will provide a basis for more consolidated and coordinated regional activity thereby ensuring that DRR and CCA are systematically implemented and scaled up as a coherent set of sustainable programmes.



NO NEED TO REINVENT THE WHEEL

Humanitarian practitioners already have considerable experience in helping communities adapt to current climate variability and build resilience to change. This has been built up over many years. However, there is no “one size fits all” approach to adaptation. Humanitarian practitioners will need to work closely with communities and vulnerable groups to identify local solutions tailored to changing local realities. Community experience and traditional coping mechanisms will be an essential starting point for sustainable adaptation to climate change.

Humanitarian practitioners also have considerable disaster risk reduction experience, which will be essential for advancing adaptation to climate change. It is vital that practitioners capitalise on this experience and identify best practice as “a first line of defence” against climate change, to avoid costly and wasteful parallel processes or “reinventing the wheel”.

A CALL FOR CONTINUED ACTION

The IASC regional and country consultations provided a “snapshot” of current work in progress to strengthen action on disaster risk reduction and climate change adaptation. The active participation and support of so many agencies in the consultation process is testament to the importance of these issues and the urgent need to integrate climate change adaptation into all humanitarian activities.

Humanitarian actors are well positioned to build upon the community-level activities already underway and to advocate for more action to achieve greater impact and avert future disaster. They have the resources, skills and experience to address the challenges of climate change. The foundations are already in place; the challenge now is to build upon these.

ANNEXES

ANNEX A: ACKNOWLEDGEMENTS

This report is the output of a collective consultation process in the context of the Inter-Agency Standing Committee (IASC) Task Force on Climate Change. It was only made possible as a result of the involvement and dedication of a wide range of organisations and individuals. In particular:

- > OCHA, WFP and IFRC, and the IASC agencies in the regions responsible for organising the consultation process and supporting regional and national report production.
 - > The 250 Regional and National Practitioners from IASC agencies, international, national and local NGOs, regional and national meteorological institutes, national environment services, government ministries, regional organisations and universities for their participation in the consultation process and their dedicated input and support (see Annex B for a full list).
 - > The Technical Support Group for their substantial input: Anton Santanen and Jenty Kirsch-Wood (OCHA); Bhupinder Tomar (IFRC); Madeleen Helmer (Red Cross/Red Crescent Climate Centre); Carlo Scaramella and Maria de Mar Requena Quesada (WFP); Peter Rotach (ACT International); Glenn Dolcemascolo (UNISDR); Jonathan Abrahams (WHO); Jeff Tschirley (FAO); and Jette Michelsen and Anna Zinecker (IASC Task Force on Climate Change Secretariat).
 - > Chair and Speakers at the Special Event for the Global Platform for Disaster Risk Reduction, 2009: Kasidis Rochanakorn (OCHA); Walter Cotte (Colombian Red Cross); Abbas Zabarrah (Yemen Red Crescent Society); Carlo Scaramella (World Food Programme); and Choice Okoro (OCHA).
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ANNEX B: REGIONAL AND NATIONAL CONSULTATION DETAILS

REGIONAL CONSULTATION DETAILS

Region	Date of Meeting	Location of Meeting	Regional Coordinators and Report Authors	Participants and Consultation Questionnaire Respondents
AFRICA – Central and Eastern	26 May, 2009	Nairobi	Anton Santanen, Pierre Gelas and Laurent Dufour (OCHA)	CARE; IFRC (Regional and Zone Offices); IOM; OCHA (Regional Office and Kenya Field Office); Caritas-Trocaire; UNEP; UNICEF; UNISDR; and WVI (16 participants).
AFRICA – Southern Africa	21 May, 2009	Johannesburg	Odile Bulten and Michelle Thulkanam (OCHA)	Department of Foreign Affairs (DICO); IFRC; FAO; IOM; RHCP; WFP; WVI; UNAIDS; UNICEF; and OCHA (17 participants).
AFRICA – West and Central Africa	2 June, 2009	Dakar	Odette Sarr Bolly and Yvon Edoumou (OCHA) and Youcef Aitchel-louche (IFRC)	FAO; IFRC; WFP; UNHCR; UNICEF; OCHA (15 participants).
ASIA	29 May, 2009	Bangkok	Anton Santanen (OCHA)	Caritas; Church World Service; Habitat for Humanity; IFRC; IOM; Plan International; UNDP; UNHCR; UNFPA; UNHABITAT; OCHA; Save the Children UK; WFP; and WHO (25 participants).
ASIA-Pacific	26 May, 2009	Fiji	Ruth Lane (IFRC)	AusAID; IFRC; Oxfam; Samoa Red Cross; United Nations Department of Social Security (UNDSS); United Nations Development Fund for Women (UNIFEM); UNDP; UNDP Pacific Centre; UN Fiji Multi-Country Office; UNFPA; UNISDR; OCHA; United Nations Office of High Commissioner for Human Rights (UNOHCR); UN Resident Coordinator's Office; and University of the South Pacific (20 participants).
Latin America and the Caribbean	27 May, 2009	Panama	Gerard Gomez and Douglas Reimer (OCHA); Nelson Castano (IFRC); and Magnolia Santamaría Díaz (consultant)	ECHO; IFRC; IOM; Oxfam; Pan American Health Organisation (PAHO/WHO); UNFPA; UNISDR; UNICEF; OCHA; and WFP (18 participants).
Middle East- North Africa	4 June, 2009	Cairo	Asif Niazi (WFP); and Martin Faller (IFRC).	Action Against Hunger (ACF) Spain; CARE; FAO; IFRC; IOM; Save the Children; Qatar Red Crescent; UNFPA; UNICEF; UNISDR; OCHA; WFP; and WHO (20 participants).

NATIONAL CONSULTATION DETAILS

Country	Date(s) of Meeting(s)	Coordinators and Report Authors	Participants
Democratic Republic of Congo (Africa)	22 May, 2009	Jean Théodore Efolote (IFRC)	Ministry of the Interior; National Pedagogy University (UPN); National Weather and Hydrological Services (METTELSAT); Advance School of Applied Science (ISTA); DRC Red Cross Society; and the International Federation of the Companies of the Red Cross/Red Crescent in DRC (FICR) (13 participants) (1).
Gambia (Africa)	2 April, 2009	Youcef Aitchellouche (IFRC)	Action Aid; Concern Universal; Department for Soils and Water Resource Management; Red Cross Gambia; and WFP (6 participants).
Niger (Africa)	20 May, 2009	Youcef Aitchellouche (IFRC)	IFRC; the National Environment Council for Sustainable Development; Red Cross Niger; Ministry of Agriculture and Rural Development; the International Committee of the Red Cross; OCHA; Ministry of Breeding and Animal Industries; National Agricultural Research Institute of Niger; Faculty of Agronomy (University Abdou Moumouni); African Centre of Meteorological Applications for Development; Alliance Niger Nature; Energy and Environment for Rural Development (EDER); Community Research and Development Centre; and Confederation of NGOs/Women's Associations in Niger (CONFAGEN) (20 participants).
Nigeria (Africa)	17-20 March, 2009	Youcef Aitchellouche (IFRC)	Humanitarian Department of the Economic Community of West African States (ECOWAS)
Cook Islands (Pacific)	May and June, 2009	Ruth Lane (IFRC)	Cook Islands Red Cross; IFRC and the National Environment Services (NES) (5 participants).
Solomon Islands (Pacific)	Last week of May, 2009	George Baragamu (IFRC)	Ministry of Environment and Meteorology (Climate Change Division); National Disaster Management Office (NDMO); Oxfam; Solomon Islands Red Cross (SIRC); and Australian Red Cross (9 participants).
Colombia (Latin America) (2)	29 May, 2009	Carlos Ivan Margquez and Nelson Castano (IFRC)	American Red Cross; Netherlands Red Cross; Ecorescate; Madre Tierra Foundation; Institute of Hydrology, Meteorology and Environmental Studies; Maloka Interactive Centre/Museum; Regional Government Department of Cundinamarca; Environment, Housing and Territorial Development Ministry; OCHA, UNDP; National Police; La Salle University; National University; USAID; and WWF Colombia (28 participants).
Yemen (Middle East)	10 June, 2009	Dr Abbas Ali, Zabarah, Tenna Mengistu (IFRC)	Ministry of Water and Environment; Yemen Red Cross Society (YRCS); IFRC; Yemeni Centre for Remote Sensing; Al Saleh Foundation; Ministry of Public Health and Population; Ministry of Water and Environment; Geological Survey Authority; Danish Red Cross; Civil Defence Authority; UNDP; Yemeni Women's Union; and Elsaleh Society and Welfare Charity (37 participants) (3).

1. The Norwegian Refugee Council commented and provided input at a later stage.

2. Although not full consultation, IFRC also provided an overview report for the Latin America and Caribbean region with a focus on Argentina and Colombia.

3. Additional, more limited consultation was carried out in Syria and Occupied Palestinian Territory by WFP. Consultees from the latter included the Applied Research Institute (ARIT) and the Environmental Quality Authority.

ANNEX C: LIST OF ACRONYMS

ACF	Action Against Hunger
ACT	Action by Churches Together
AU	African Union
AWG-LCA	Ad Hoc Working Group on Long-Term Cooperative Action
CA	Conservation Agriculture
CATHLAC	Water Centre for the Humid Tropics (Latin America and Caribbean)
CBO	Community Based Organisation
CCA	Climate Change Adaptation
DRC	Democratic Republic of Congo
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ECOWAS	Economic Community of West African States
EWEA	Early Warning Early Action
FAO	United Nations Food and Agriculture Organization
FEWS NET	Famine and Early Warning System (Africa)
GHG	Greenhouse Gases
GIEWS	Global Information and Warning System on Food and Agriculture
GIS	Geographic Information System
HFA	Hyogo Framework for Action
IASC	Inter-Agency Standing Committee
IDP	Internally Displaced Person
IFRC	International Federation of Red Cross and Red Crescent Societies
IOM	International Organization for Migration
IPCC	Inter-governmental Panel on Climate Change
NAPA	National Adaptation Programme of Action
NGO	Non-Governmental Organisation
NRC	Norwegian Refugee Council
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PRSP	Poverty Reduction Strategy Paper
RC/RC	Red Cross/Red Crescent
RIASCO	Regional Inter-Agency Coordinating Support Office (Southern Africa)
SADC	Southern Africa Development Community
SIDS	Small Island Developing States
SIRC	Solomon Islands Red Cross Society
UNAIDS	United Nations Joint Programme on HIV and AIDS
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNHABITAT	United Nations Human Settlements Programme

UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNISDR	United Nations International Strategy for Disaster Reduction
OHCHR	United Nations Office of High Commissioner for Human Rights
UNU	United Nations University
VCA	Vulnerability and Capacity Assessment
WFP	World Food Programme
WHO	World Health Organisation
WMO	World Meteorological Organisation
WVI	World Vision International
WWF	World Wildlife Fund

ANNEX D: REFERENCES

ARTICLES, BRIEFING NOTES AND REPORTS

- Baas, S., Ramasamy, S., Dey DePryck, J., and Battista, F. (2008) *Disaster Risk Management Systems Analysis: A Guide Book*, Rome: FAO.
- Baas, S., and Ramasamy, S. (2008) *Community Based Adaptation Action: A Case Study from Bangladesh*, Rome, UNFAO.
- Boko, M., Niang, I., Nyong, A., Vogel, C., Githeko, A., Medany, M., Osman-Elasha, B., Tabo, R., and Yanda, P. (2007) 'Africa – Climate Change 2007: Impacts, Adaptation and Vulnerability.' *In: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Parry, M. L., Canziani, O.F., Palutikof, J. P., Van der Linden, P.J., and Hanson, C. H., (Eds.) Cambridge University Press, Cambridge UK, 433-467.
- Christoplos, I. (2008) Oslo Policy Forum: *Changing the Way We Develop: Dealing with Disasters and Climate Change*, Report on the findings from the Conference, Norwegian Ministry of Foreign Affairs, ProVention Consortium, and UNDP.
- Commission on Climate Change and Development (2009) *Closing the Gaps*, Sweden: Ministry of Foreign Affairs.
- Ehrhart, C., Thow, A., Blois, M. and Warhurst, A. (2008) *Humanitarian Implications of Climate Change: Mapping Emerging Trends and Risk Hotspots*, UK: CARE International, Maplecroft and OCHA.
- Few, A., Osbahr, H., Bouwer, L.M., Viner, D., and Sperling, F. (2006) *Linking Climate Change Adaptation and Disaster Risk Management for Sustainable Development*, Synthesis Report VARG (World Bank) and EU.
- FAO (2008a) *Climate Change and Food Security: A Framework Document*, Rome: FAO.
- FAO (2008b) *Climate Change and Food Security in Pacific Island Countries*, Rome: FAO.
- FAO (2008c) *Climate Change and Food Production*, Rome: FAO.
- Global Network (2009) 'Clouds but little rain... Views from the Frontline: A Local Perspective of Progress towards Implementation of the Hyogo Framework for Action,' United Kingdom: Global Network of Civil Society Organisations for Disaster Risk.
- Humanitarian Policy Group (2009) *Pastoralism and Climate Change: Enabling Adaptive Capacity*, London: Overseas Development Institute.
- IASC (2009) *Addressing the Humanitarian Challenges of Climate Change, Regional and National Perspectives: Preliminary Findings from the IASC Regional and National Level Consultations*, Geneva: IFRC, OCHA and WFP.
- IASC Informal Working Group on Migration/Displacement and Climate Change (2008) *Climate Change, Migration and Displacement: Who will be affected*, Working Paper, UNFCCC.
- IASC and UNISDR (2008a) *Disaster Risk Reduction Strategies and Risk Management Practices: Critical Elements for Adaptation to Climate Change*, Submission to the AWG-LCA of the UNFCCC, <http://unfccc.int/resource/docs/2008/smsn/igo/020.pdf>.
- IFRC (2009) *Early Warning, Early Action: The Experience of West African Floods 2007-2008*, The Netherlands: Red Cross/Red Crescent Climate Centre.
- Red Cross/Red Crescent Climate Centre (2007) *Climate Guide*, The Netherlands.
- IFRC and ProVention Consortium (2009) *Climate Change Adaptation Strategies for Local Impact*.
-

IOM, UNHCR, UNU, NRC, RSG (2008) *Climate Change, Migration, and Displacement: Impacts, Vulnerability, and Adaptation Options*, Submission to the AWG-LCA of the UNFCCC, <http://unfccc.int/resource/docs/2008/smsn/igo/031.pdf>.

IPCC (2007a) 'Summary for Policymakers'. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Solomon, S., Qin, D., Manning, M., Z. Chen, Z., Marquis, M., Averyt, K. B., Tignor, M. and Miller, H.L., (eds.). UK, Cambridge: Cambridge University Press, and New York, USA.

IPCC (2007b) 'Summary for Policymakers'. In: *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., UK, Cambridge: Cambridge University Press, 7-22.

Lane, R., and McNaught, R. (2009) 'Building Gendered Approaches to Adaptation in the Pacific', *Gender and Development*, 17:1 67-80.

OCHA-IDMC (2009) *Natural Disasters and Forced Displacement in the Context of Climate Change*, forthcoming.

Oxfam International (2009a) *Suffering the Science: Climate Change, People, and Poverty*, Oxfam Briefing Paper 130.

Oxfam International (2009b) *Even the Himalayas have Stopped Smiling: Climate Change, Poverty and Adaptation in Nepal* (Gum, W., Sing, P. M., and Emmett, B).

Oxfam International (2008) *Survival of the Fittest: Pastoralism and Climate Change in East Africa*, Oxfam Briefing Paper 116.

Maclellan, N. (2009) *The Future is Here: Climate Change in the Pacific*, Australia and New Zealand: Oxfam.

McKenzie-Hedger, M., Mitchell, T., Leavy, J., Greeley, M., Downe, A., and Horrocks, L. (2008) *Desk Review: Evaluation of Adaptation to Climate Change from a Development Perspective*, UK: Institute of Development Studies,

Mitchell, T., and Van Aalst, M. (2008) *Convergence of Disaster Risk Reduction and Climate Change Adaptation*, a review for the Department for International Development (DFID): UK.

Schuemer-Cross, T., and Heaven Taylor, B. (2009) *The Right to Survive: The Humanitarian Challenge for the Twenty-first Century*, Oxford: Oxfam International.

Sustainable Development Network (2007) *International Development Association and Climate Change: Making Climate Action Work for Development*.

UNDP (2008a) *The Bali Action Plan: Key Issues in the Climate Negotiations*; Summary for Policy Makers.

UNDP (2008b) *Rapport d'évaluation des Besoins après Désastre Cyclones Fay, Gustav, Hanna et Ike*, World Bank, United Nations and European Commission. (<http://www.ht.undp.org/public/publicationdetails.php?idpublication=35>).

UNFCCC (2008a) *The Nairobi Work Programme; Second Phase*.

UNFCCC (2008b) *Integrating Practices, Tools and Systems for Climate Risk Assessment and Management Strategies for Disaster Risk Reduction into National Policies and Programmes*, (FCCC/TP/2008/4).

UNFCCC (2007) *Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries*, Bonn: Germany.

UNHCR, IOM and NRC (2009a) *Climate Change and Statelessness: An overview*, Submission to the AWG-LCA of the UNFCCC, <http://unfccc.int/resource/docs/2009/smsn/igo/048.pdf>.

UNHCR (2009b) *Briefing Note: The Management of Humanitarian Emergencies Caused by Extreme Climate Events*, Geneva: UNHCR Emergency Preparedness and Response.

UNHCR (2008) *Climate Change, Natural Disasters and Human Displacement: A UNHCR Perspective*, Geneva.

UNISDR (2009) *Global assessment report on disaster risk reduction*.

UNISDR (2008a) *Proposals for the AWG-LCA Chair's Assembly Document on Enhanced Action on Adaptation*, UNFCCC.

UNISDR (2008b) *Climate Change and Disaster Risk Reduction: Briefing Note*, Geneva: United Nations.

UNISDR (2007) *Words into Action: A Guide for Implementing the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters* (www.unisdr.org/eng/hfa/docs/words-into-action).

UNISDR (2005) *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*. World Conference on Disaster Reduction 18-22 January 2005, Kobe, Hyogo, Japan.

Venton, P., and La Trobe, S. (2008) *Linking Climate Change Adaptation and Disaster Risk Reduction*, UK: Tearfund and Institute of Development Studies (IDS).

Warner, K., Ehrhart C., and Adamo, S. (2009) *In Search of Shelter: Mapping the Potential Affects of Climate Change on Human Migration*, Draft Paper, CARE International and Maplecroft, UNOCHA

WHO, WV, UNHCR and IFRC (2009) *Protecting the Health of Vulnerable People from the Humanitarian Consequences of Climate Change and Climate Related Disasters*, Submission to the AWG-LCA of the UNFCCC, <http://unfccc.int/resource/docs/2009/smsn/igo/047.pdf>.

World Bank, UNISDR and SIDA (2007) *Stockholm Plan of Action for Integrating Disaster Risks and Climate Change Impacts in Poverty Reduction*, Stockholm: Sweden.

Wiggins, S. (2009) *CEDRA: Climate Change and Environmental Degradation Risk and Adaptation Assessment*, UK: Tearfund.

WEBSITES

IASC: (www.humanitarianinfo.org/iasc).

UNISDR definitions: (www.unisdr.org/eng/terminology/terminology-2004-eng.html).

UNFCCC NAPAs: (http://unfccc.int/national_reports/napa/items/2719.php).

POLICIES AND GUIDELINES

Human Rights and Natural Disasters (2008) *Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disasters*, Washington: Brookings-Bern.

Guiding Principles on Internal Displacement, Internal Displacement Monitoring Centre (www.internal-displacement.org/guidingprinciples).

UNHCR (2005) *Environmental Guidelines*, Geneva: UNHCR.