

## **Concept Note and Programme**

### **High-Level Forum on “Climate Change and Food Security in the Landlocked Developing Countries and Small Island Developing States in Asia and the Pacific Region”**

#### **Introduction**

Climate change caused by greenhouse gas emissions has become a defining event in human development issues of our times. The latest Intergovernmental Panel on Climate Change (IPCC 2013) unambiguously attributes climate change to human interventions, and further concludes that the change would be felt more severely in the tropics and subtropics. The impacts of climate change in the Asia-Pacific region have been observed in the past decades, and the projected forecasts for the future include: increase of temperature and rainfall variability across the region; retreat of glaciers and permafrost in snow mountains; decrease of freshwater availability in most of the region; increase of extreme weather events in many countries; and sea water intrusion and flood risks in small island countries and coastal areas.

Although some regions may gain from climate change, in the majority of cases, these perturbations are expected to have severe negative implications on agricultural crop yields and fisheries, leading to strong repercussions on food security. In this respect, climate change will likely have bearing on all the components food security, viz. availability, access, stability and utilization. With reduction in yields and changes in arable land, food production may decline. The resultant changes could impact food prices, which in turn can lead to reduction in access to food markets by the poorer households. With increase in malnutrition and decrease in availability of clean water and sanitation, the people would be more vulnerable to diseases. Overall, climate change is likely to make the livelihoods of people dependent on climate-sensitive activities highly risky, and could consign them into the vicious cycle of disease and hunger.

#### **Why LLDCs and SIDS matter?**

While climate change threatens most countries in the Asia-Pacific region, some are more vulnerable. As is often the case, the Landlocked Developing Countries (LLDCs) (which coincidentally also belong to the Least Developed Countries) and Small Island Developing States (SIDS) are worst off compared to the others. The irony of the situation is that LLDCs and SIDS are not big emitters of GHGs, and their contribution to climate change is negligible. Yet the people belonging to these two categories of countries will suffer considerably. Changing weather patterns, especially floods and droughts, will bring untold misery to millions of people in LLDCs, while the rising sea level, along with other climatic changes will threaten the very survival of many SIDS. It is estimated that globally, some 860 million people in LLDCs and SIDS will be affected, and most of them would become environmental refugees.

Considering LLDCs and SIDS are far more vulnerable to climate change impacts, the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) undertook a special study on the issue<sup>1</sup>. The study looked into the effects of climate change on LLDCs and SIDS, the

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<sup>1</sup> UN-OHRLLS (2009). The impact of climate change on the development prospects of the least developed countries and small island developing states.

environmental and socio-economic implications, and the adaptation strategies under the framework of UNFCCC. Considering these are the most vulnerable countries, although least contributors of Green House Gases, would need additional resources for adaptation and mitigation actions. In specific reference to food security (agriculture and fisheries), the study suggests that as a result of climate change, agricultural production, including access to food, is likely to become severely compromised. The areas suitable for agriculture, the length of the growing seasons, and yield potential are expected to decline. If the situation is allowed to deteriorate, many of these countries will become dependent on external aid, food security will be intensified, and their development goals will be severely affected. In the case of the SIDS, rising sea level will put an end to food production, and mass migrations may be the only option left. Adaptation to climate change is therefore imperative for these countries.

As a follow-up to the above global study, FAO/RAP is organizing a High-Level Forum. There are five landlocked countries in the Asia-Pacific region, Afghanistan, Bhutan, Lao PDR, Mongolia and Nepal. Except Mongolia, all of them are either mountainous or have significant mountainous areas and the majority of the population still lives in rural areas and depends on agriculture for their livelihoods. Mongolia consists largely of vast plains, but is now largely urban and classified as a middle income country.

All five countries are vulnerable to climate change. In the least developed countries of Afghanistan, Bhutan, Lao PDR and Nepal, where the majority of the population in each country is still dependent on agriculture, fragile ecosystems and challenges associated with their least developed country status make them particularly vulnerable to the impacts of climate change on food production. Increased variability of rainfall, with more frequent and more severe droughts (or extended dry seasons) and floods put pressure on average yields, as do unpredictable changes in seasonal temperature patterns. Agriculture, forestry, water resources and public health (through changes in disease vectors) will be the most seriously affected sectors. In the case of agriculture, drought most seriously affects rain-fed production, often leading to crop failure, while floods adversely affect both rainfed and irrigated agriculture. Added to this will be crop losses resulting from more frequent and intense extreme weather events, such as flash floods and storms. In all these cases household food security will be at serious risk. Mongolia, by contrast, is one of the most sparsely populated countries in the world and is classified as a middle income country. Unlike the other four landlocked countries, nearly two-thirds of the population lives in urban areas and no longer depends directly on animal husbandry or agriculture for their livelihoods. Nevertheless, Mongolia's food security is at high risk of being damaged by climate change. The country is prone to natural disasters including *dzud* (harsh winter disaster, such as the one that struck in the winter of 2009-10), forest fires, and floods. Climate change contributes to higher frequency of disasters while response mechanisms are still insufficient. The impact of climate change is exacerbated by the decline in the natural carrying capacity of pastures and of grasslands resulting from the increase in the number of livestock and constant grazing on light and thin soils.

The Pacific Island countries (PICs) because of their unique geophysical features, social, economic and unique cultural characteristics are particularly vulnerable to the effects of global warming, including more frequent and intense natural disasters, such as cyclones, floods and land droughts - as has recently been experienced. The SIDS in the Pacific region include: Cook Island, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Timor Leste, Tuvalu and Vanuatu. Maldives from the Indian Ocean is also undergoing similar climate change problems.

Climate change is already affecting Pacific Island countries. Climate variations and extremes have disrupted food production, water supply and economies of PICs. Climate projections for the future although coarse for islands, are bleak and will reduce food security especially at household level. The primary food sources (Agriculture, Fisheries and Forests) and water will all be impacted by climate change and in most cases, these impacts will be negative. The exact magnitude and nature of the climate change impacts on food sources are relatively unknown in PICs.

## **Objectives of Forum**

The overall objective of this forum is to address food security and poverty reduction in the face of climate change, with special reference to LLDCs and SIDS in the Asia-Pacific region. It attempts to bring to the fore food security threats associated with climate change in the food production and supply environments, as well as the broader livelihood and ecological changes that will occur as a consequence. Recognizing the different geographical regions in the Asia-Pacific region, and how developments in the more developed countries can provide opportunities and understanding for the lesser developed countries, this workshop is aimed at sharing knowledge of the current status of the countries, successful approaches that are in development, and how the countries can implement them with appropriate capacity development, institutional strengthening, and alignment of policies to enable such developments.

Key Objectives of the Forum are to:

- Knowledge and experience on the impact of climate change on food security in the countries shared and promoted;
- Promote successful climate change adaptation and mitigation interventions for ensuring food security in vulnerable areas;
- Identify effective policy options to minimize negative impacts of climate change and enhance food security; and
- Develop concrete recommendations and actions for climate change adaptation and mitigation for food security following sustainable development and blue and green growth pathways.

Based on those objectives, the expected outputs of the Forum are:

- Participants are able to exchange information on the status and preparedness of countries in their management of the impact of climate change on food security;
- Successful climate change adaptation and mitigation interventions for ensuring food security identified and discussed;
- Effective policy options and actions that would be taken to minimize the negative impacts of climate change and enhance food security identified and agreed;
- Key recommendations to reduce the negative impacts of climate change on food security in LLDCs and SIDS in Asia and the Pacific Region discussed and agreed; and
- A report summarizing the presentations and discussions at the Forum including conclusions and recommendations (elaborated after the Forum).

## **Date and Venue**

The one-day event is on 12<sup>th</sup> March 2014, starting from 08.30 till 15.30h, back-to-back with the 32<sup>nd</sup> Session of the FAO Regional Conference for Asia and the Pacific, in Ulaanbaatar, Mongolia. The Forum will be held at the Conference Room of the Ministry of Industry and Agriculture of Mongolia.

## **Participants**

The expected 30 participants will include senior ministry officials from the LLDCs and SIDS of the Asia-Pacific Region, other UN and International Agencies, regionally based development partners, non-governmental organizations.

## **Forum Agenda**

The agenda of the workshop (included below) is designed to engage participants in interactive discussions and to solicit their advice on the identifying the impacts of climate change on food security, and to recommend policies and strategic options.

## **Contact Details**

For detailed information regarding the workshop, please contact:  
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