

CLIMATE CHANGE

AND

NUTRITION

Climate change will increase the risk of hunger and under-nutrition

through different causal pathways

- Food availability, access, utilization
- Sanitation
- Water
- food safety
- Health
- maternal and child health care practices and
- many socioeconomic factors

Natural disasters are becoming more frequent and intense

GLOBAL FORECAST

Climate change will cause

- People at risk of hunger to increase by 10-20% because of climate change
- Reduced calorie availability in 2050 relative to 2000 levels throughout the developing world
- Malnourished children to increase by 24 million by the year 2050

Maternal and child under-nutrition

Underlying cause of

- 3.5 million deaths each year
- 35% of disease burden in under-5 children
- More than one billion suffer from hunger
- Human and socioeconomic cost of of under-nutrition is enormous
- Under-nutrition in turn undermines the resilience to shocks and coping mechanism of vulnerable populations

- **Mitigation is critical to limit impact of climate change on food security and nutrition in low and middle income countries in the future**
- **However, mitigation strategies should not increase food and nutrition insecurity**

Track I - Direct nutrition interventions to build resilience to climate change impacts

a package of highly cost-effective interventions

- Promotion of good nutrition and hygiene practices
- Micronutrient supplementation
- Prevention or treatment for moderate undernutrition and the treatment of severe undernutrition (“severe acute malnutrition”) with ready-to-use therapeutic foods

Track II - Multi-sectoral approach

Sustainable, climate-resilient and nutrition-sensitive agricultural development

- promoting better crop diversity and biodiversity for improved nutrition
- Integrated agro-forestry systems promoting the sustainable exploitation of nutrient-rich non-wood forest products
- Integrated farming systems increasing food production diversity
- Improved household food production and livelihoods

Access to maternal and child health care, safe water and sanitation systems and adequate, safe food

for minimizing health impacts from climate change

- strengthening of public health systems and basic clinical care systems
- enhancing local capacities to address public health emergencies
- strengthening surveillance systems of infectious disease; improving the use of early warning systems
- addressing known environmental risk factors and water-related diseases
- integrating nutrition and hygiene education in interventions for the treatment of severe malnutrition, diarrhoeal illness and other common childhood illnesses
- strengthening surveillance and control of food hazards and foodborne disease by food control and health authorities

Social protection schemes that have proven effective in addressing undernutrition

- climate-related shocks frequently force poor families to resort to negative coping strategies
- Social protection programmes are powerful instruments
 - to link risk reduction and immediate protection measures
 - to build long-term resilience amongst the most vulnerable groups
 - Food for work, cash for work, cash transfer, school base approaches

•Empowerment and social participation within climate-resilient and nutrition-sensitive community-based development

Nutrition-sensitive disaster risk reduction and management

- Participatory
 - nutrition-focused risk assessments and risk reduction plans
 - effective nutrition surveillance and early warning systems, coupled with early response mechanisms
 - disaster preparedness for effective response to adverse hazard events and capacity to address nutrition emergencies
 - contingency planning and stockpiling emergency nutrition supplies
 - building resilience of food and nutrition insecure communities to disasters

**MITIGATION: NUTRITION-SENSITIVE CLIMATE
CHANGE MITIGATION MEASURES**

**FINANCES: FINANCING NUTRITION, A
SOUND INVESTMENT FOR THE FUTURE**

**STRATEGIC CAPACITIES FOR POLICY
DEVELOPMENT, INSTITUTIONAL
ACCOUNTABILITY AND GOOD GOVERNANCE**

Those are only some high lights from the United Nations System Standing Committee on Nutrition - UNSCN's ...

convincing, evidence-based and compelling arguments to address nutrition security into the climate change agenda ...

for The United Nations Framework Convention on Climate Change (UNFCCC)

South East Asia Forecast

- The IPCC 4th Assessment Report states that **South East Asia is expected to be seriously affected by the adverse impacts of climate change** since most economies are relying on agriculture and natural resources.
- South East Asia is annually affected by climate extremes, particularly floods, droughts and tropical cyclones, while large areas of the region are highly prone to flooding and influenced by monsoons.
- Such climatic impacts will severely threaten the livelihood of poor people living in rural areas with limited adaptive capacity.
- Wu Bingyi 2005, B.N.Gowsami et.al 2005, M.R.R.Kumar et al 2009 described that Indian summer monsoon circulation underwent two weakening process in recent decades.

Myanmar Forecast

- (Annual, April, May) temperature of Myanmar will be increased throughout the 21st century.
- At the same time, Model projected Rainfall for SW Monsoon period also expected to increase for Myanmar during 21st Century.
- Late Onset will be at Deltaic area, Central Myanmar and Northern Myanmar and Early withdrawal from Whole country during 21st Century.
- Predicted Length of Rainy Season (L.R.S) showed that the L.R.S will be shorter than Normal(144 Days) during Early 21st Century, Middle 21st Century and End period of 21st Century.
- Monsoon Intensity will be generally moderate along Myanmar coast in 21st Century.

Expected Events

- Rainfall increasement & Shorter LRS indicated that the expected heavyfall in short period and expected to be flood.
- Temperature increasement may lead to more dryness and shortage of water.
- ENSO impact to Myanmar will be evident again during 21st Century.

