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 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 highlights 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.

**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 increase and shorter LRS indicated that the expected heavy rainfall in short periods and expected to be flood.

• Temperature increase may lead to more dryness and shortage of water.

• ENSO impact to Myanmar will be evident again during the 21st Century.
Forecast, Warning, Bulletin and News issued by DMH

- Daily, Dekad, Monthly and Seasonal Weather & Water level forecast
- Aviation Weather Forecast
- Shipment Weather Forecast
- Squall Wind Weather Forecast
- Coastal Area Forecast
- Storm Warning
- Storm Surge Warning
- Untimely Rainfall Warning
- Fog Warning
- Heavy Rain Warning
- Agro-meteorological Bulletin
- Flood warnings & Flood Bulletin
- Minimum alert WL in Low flow period
- Tsunami Warning
- Earthquake News