# WFP information on climate change activities and views on risk assessment and adaptation strategies

### Background

The UN World Food Programme (WFP) is the largest food aid agency of the UN providing humanitarian food assistance to millions of poor and vulnerable households and communities whose food security and livelihoods are threatened by a variety of disasters including climatic shocks. The poorest and most vulnerable communities are heavily dependent on climate sensitive sectors such as agriculture, livestock, water resources and health and are vulnerable to climate change.

Climate change is linked with increased frequency and magnitude of extreme weather events such as droughts and floods. At the same time there will be changes in the climate pattern (trends) for example a shift in the start of the growing season, the length of the growing season, the amount of rainfall in the season, increased temperature causing the spread of malaria to areas previously malaria free. The combination of these factors will increase vulnerability to the risk of food insecurity resulting in emergencies that threaten the lives and livelihoods of their families.

Food crisis and emergencies if not addressed properly could lead to increased environmental degradation, deforestation and possible conflicts over resources triggering political instability. This re-enforces vulnerability to disasters. Many developing countries lack the necessary emergency response and preparedness capacities and financial means to protect their populations from natural disasters and economic shocks.

# **Emergency Response – the first step for building resilience and adaptation**

In the absence of functioning safety nets and rural financial mechanisms poor households will be unable to cope with climate change induced shocks while continuing to engage in sustainable economic activities. To cope with acute food shortages, households may be compelled to engage in economic activities and strategies that focus on meeting the immediate food requirements of their families. The strategies my include: divesting productive assets such as livestock and exchange their land for food; fire wood sale increasing deforestation; consume their seeds; pull children out of school; migrate looking for jobs often in less productive sectors. In extreme cases households may abandon their villages and mass migrate to urban centers and refugee camps.

In summary, food emergencies not only threaten lives but also have a devastating impact on the livelihoods of the affected households. Long-term exposure to multiple-risks of food insecurity erodes households' ability to manage their adverse

effects, leading to situations of chronic crisis, whereby households regularly face shortages in food and income. Household vulnerability to future risks increases and they become trapped in poverty and hunger. As a result of droughts, competition for natural resources may increase triggering conflicts. Under such circumstances, even a minor climatic shock could have a major impact on the food security status of rural people. For populations in such circumstances adaptation to climate change becomes an unrealistic dream.

Humanitarian assistance has become a necessity to address major food crises. However the unpredictability and unreliability of financing humanitarian responses is a major problem in implementing appropriate emergency programmes. The appeal based emergency financing which is widely used in the current humanitarian response model is not efficient when addressing predictable emergencies such as those caused by climate related hazards such as droughts. There is need to introduce objective methods of assessing humanitarian needs coupled with new financial mechanisms to raise the necessary emergency contingency funds. With predictable resources to address emergencies could we then promote programmes that support longer term adaptation process to climate change.

#### Climate risk assessment (Strengthening humanitarian risk identification)

To provide appropriate and effective assistance to vulnerable populations, governments and the donor community require timely and reliable information that enable the identification of populations and communities at risk and understanding of the risks that threaten their livelihood security. Appropriate intervention modalities can only be planned with a comprehensive understanding of the factors that determine household food insecurity and the risks involved.

Assessments of risks require systematic collection and analysis of various data sets and should take into account the dynamics and variability of natural hazards and vulnerabilities from processes such as climate change/variability, rural land-use change, environmental degradation and urbanization as well as socio economic factors.

The Comprehensive Food Security and Vulnerability Analyses (CFSVAs) of WFP's Vulnerability Analysis and Mapping (VAM) service are specifically designed to obtain and analyse data pertaining to an assessment of vulnerability. These are the foundation for WFP programming at the country level. CFSVAs involve a sequence of activities ranging from reviewing existing literature and data to undertaking surveys to collect primary data. All CFSVAs include information on the food security situation within a particular country, the various risks facing particular groups or households, household livelihood strategies, the geographic areas where food insecurity is most severe, and the role of food assistance. Essentially CFSVAs would allow identification of the major risks to food insecurity and develop a strategy to monitor them. CFSVAs are conducted in close collaboration with the National Adaptation Plan of Action (NAPA) teams when they exist.

# **Development of livelihood profiles (identify climate risks)**

Information gathered can be presented in a *Livelihood Profiles* (Livelihood Atlas). Such an atlas can describe the vulnerability and hazard components of risk factors in a formal way through data, maps and analyses. Data would include environmental and political hazards and socio-economic vulnerabilities. Analysis of information would include attempts to understand how people make their living and what their capacities for dealing with risks are, thereby providing a better context for interpreting early warning information and the impact of shocks or hazards on transitory food insecurity. Livelihood zones and risk zones can then be established, along with composite vulnerability indices for geographic targeting of zones at risk. Together with hazard and vulnerability maps this would provide the basis for disaster preparedness strategies and developing adaptation programmes

A Livelihood Atlas can provide the platform upon which monitoring systems can be developed. Monitoring systems would be based on indicators – satellite data, social factors (such as market analysis) and environmental (such as drought). Indicators describe how systems should be monitored.

#### **Monitoring Platforms**

Monitoring the key factors affecting food security - notably risks and livelihood trends - allows WFP better to anticipate, prepare for and respond to future crises. VAM intends to pilot a series of Food Security Monitoring (FSM) initiatives in priority countries. VAM's approach to FSM will be partnership-driven at the regional and county levels.

Continuous monitoring of hazard parameters and precursors is necessary to generate accurate warnings in a timely fashion. Humanitarian risk identification for different hazards should be coordinated where possible to gain the benefit of shared institutional, procedural and communication networks. Creating hazard calendar maps is an important component of risk monitoring.

During the last several years climate monitoring and weather observation capacity has greatly improved due to latest developments in the field of meteorological modeling, increased satellite data availability and advancements in ICT. Similarly advances in crop modeling, improved cropped area estimation and enhanced vegetation monitoring capacity have contributed to improvements in agricultural monitoring. The ability to better monitor weather and agriculture means that major agricultural and pasture failures can be detected early and agricultural losses predicted several months before the end of the growing season. In this way humanitarian needs and resource requirements could be determined much earlier than is possible in the current system.

# **Capacity Building**

Building an effective food security and vulnerability information management system requires a considerable level of investment in capacity building. The approach advocates both the development and utilization of analytical skills in government, universities, NGOs, the private sector and civil society.

Developing and implementing effective humanitarian risk identification and monitoring platforms require the contribution and coordination of a wide range of individuals, institutions and partners. In this regard there is a need to develop a strategy that facilitates effective partnerships between national governments, regional institutions and international bodies on risk reduction and management activities. National governments must be made responsible for developing policies and frameworks that facilitate humanitarian risk identification systems and establishing monitoring systems.

WFP is collaborating with the African Union Commission (AUC) as well as NEPAD to integrate climate information as a key component in its food security and vulnerability monitoring systems.