



Disaster Risk Management in food and agriculture



©FAO/G. Napolitano

Enhancing the resilience of vulnerable communities

Disasters put agriculture and food security at risk. More than 230 million people were affected by disasters each year between 2000 and 2007. Nearly all of these disasters were due to floods, storms and drought with significant economic and social costs. Disasters tend to have the most severe consequences on vulnerable, poor and agriculturally dependent people. Food and agriculture sectors can play a key role in increasing the resilience of vulnerable populations to crises and help people recover.

FAO is a key player in Disaster Risk Management. FAO is the lead specialized agency in the UN system for agriculture and food security. FAO integrates operational capacity in emergencies and crises with long standing technical expertise and experience in sustainable development. FAO offers technical advice designed to integrate preparedness, prevention, mitigation, emergency response and recovery, and supports the transition from recovery to development, covering all phases of DRM.

FAO works to protect, restore and enhance livelihoods. FAO supports governments and partners in mainstreaming DRM into agriculture and food sectors, including livestock, forestry and fisheries. Proactive strategies are essential to reduce risk factors and strengthen the coping capacity of vulnerable communities to prepare, respond and recover from disaster.

FAO approach to Disaster Risk Management

FAO aims to reduce the vulnerability of people before, during and after disasters through risk assessment, risk reduction (preparedness, prevention and mitigation), emergency response and rehabilitation. After a disaster hits, FAO focuses on recovery and rehabilitation to increase community resilience to future hazards through longer-term interventions that facilitate the transition from relief to development. FAO Disaster Risk Management work contributes to the Hyogo Framework for Action, the global common platform to build the resilience of nations and communities to disasters. The FAO approach ensures that interventions in food and agriculture are effective, sustainable and focused on people.



©FAO/P. Singh



©FAO

Horn of Africa - Assessments for priority action. Over the past decade, the increased frequency and severity of droughts and floods in the region have severely affected vulnerable populations, particularly pastoralists. Conflict, rangeland degradation, land use pressures, livestock diseases, illiteracy and poor health conditions are additional factors that have resulted in chronic vulnerability. Given the complex nature of these crises, FAO and partner UN agencies adopted the Integrated Food Security Phase Classification (IPC) tool to identify potential food crises, prioritize action and coordinate response. The IPC is based on standard food security, nutrition and livelihood information.



©FAO

FAO applies a sustainable livelihoods approach to ensure more resilient food systems, diversify sources of income and reduce dependence on livestock.



©FAO/G. Bizziari

Caribbean Region - Good practices to mitigate impacts of climatic hazards. Following the destructive 2004-2005 hurricanes, the governments of Cuba, Grenada, Haiti and Jamaica requested FAO assistance to promote community-based prevention and mitigation strategies in agriculture. FAO assisted these countries in identifying and documenting good practices suitable for small farmers to reduce the effects of hurricanes, landslides, flooding and drought. Training, demonstrations and capacity building for extension staff and farmer groups were used to promote these good practices.



©FAO/F. Maricci

Contour farming, grass barriers and the hedgerow/alley technique are among the soil conservation good practices used in Grenada to prevent landslides and erosion in steep terrains during the rainy season.

FAO AT WORK

FOOD AND AGRICULTURE IN DISASTER RISK MANAGEMENT

Preparedness

Before a disaster occurs, governments, organizations, communities and individuals must be warned in time and get ready to respond to potential impacts. FAO helps institutions to be better prepared to respond to potential crises in food and agriculture by offering tools such as the Global Information and Early Warning System on Food and Agriculture (GIEWS), the Global Early Warning System for Transboundary Animal Diseases (GLEWS), the Livelihoods Assessment Tool-kit (LAT) and the Integrated Food Security Phase Classification (IPC) tool.



©FAO/A. Vitale



©FAO/J. Spaul



©FAO/Bahage



©FAO

Prevention and mitigation

Prevention and mitigation are the primary strategies that governments implement to minimize the impact of disasters. FAO assists governments and partners in DRM capacity building and planning, hazard mapping, food security and vulnerability assessments, risk reduction policies and sustainable natural resource management practices. As a member of the International Strategy for Disaster Reduction (ISDR), FAO also participates in UN system coordination mechanisms on disaster risk reduction.

Transition and links to development

Post-emergency situations need solutions that transition between relief and development. Post-disaster situations provide an opportunity to focus on increasing the resilience of communities to future hazards. FAO focused on building back better by helping rebuild the livelihoods of vulnerable fishing and farming families in Bangladesh after the devastation caused by cyclone Sidr. FAO is seeking new ways to help countries and partners benefit from lessons learned post-crisis.

Emergency response and rehabilitation

Even successful risk reduction strategies will never eliminate the need for emergency interventions. FAO aims to safeguard and rebuild agricultural and rural livelihoods as quickly as possible when the post-disaster coping capacity of communities is exceeded. This approach reduces vulnerability to future emergencies and supports early recovery. The FAO livelihood assessment approach was critical to supporting recovery after serious natural disasters in Indonesia, Pakistan and the Philippines.



©FAO



©FAO

As part of the One UN DRM Strategy in Pakistan, FAO is developing contingency plans for immediate livelihood recovery. Group discussions with communities are key in guiding this process.

Pakistan - Tools for improved response to natural disasters. After flooding in 2007, FAO developed a livelihood baseline and contingency plan approach for disaster-prone districts in Pakistan, in collaboration with the National Disaster Management Authority and as part of the One UN approach to DRM. This work was used to develop the FAO-ILO Livelihoods Assessment Tool-kit (LAT). The LAT approach was used to help formulate effective responses to the 2008 floods in Peshawar and Rajanpur. Currently, this livelihoods approach is being applied in other disaster prone districts.



©FAO

Indonesia - Building back better after the tsunami. FAO has assisted Indonesia since the 2004 tsunami. In 2007 a longer-term project for the rehabilitation and sustainable development of fisheries and aquaculture was launched in Aceh Province. The project is addressing critical natural resource issues that existed before the tsunami and were exacerbated by the disaster and the scale of reconstruction measures that followed. This transition initiative seeks to build the capacities of local and provincial authorities and vulnerable fishing communities to jointly manage coastal fisheries in a sustainable way, adopt best practices to reduce the negative environmental impacts of aquaculture, and improve aquaculture and fisheries post-harvest.

Disasters can also trigger positive change. Coastal communities now actively participate in decision-making and have a strong desire for information and capacity building on the latest techniques.



©FAO/A. Berry



©FAO/G. Bizziari

Myanmar - Lessons learned from the tsunami helped immediately restore farming, livelihoods and food security after the devastation caused by cyclone Nargis in 2008. FAO, as Agriculture Cluster Lead, coordinates the work of over 50 partners.



©COOP/IG, Govoni



©FAO/A. Vitale



©FAO

Looking forward: turning expertise into action

Integrated interventions to tackle chronic vulnerability. Climatic shocks, civil conflict, HIV/AIDS, volatile food and fuel prices, animal and plant pests and diseases, declining soil fertility and demographic pressure increase people's vulnerability to the negative effects of disasters. FAO will continue to take a proactive role in linking current disaster risk reduction interventions with long-term strategies to address impacts of climate change. FAO will maintain its focus beyond emergency operations to help longer-term recovery through livelihood diversification, the promotion of healthy food practices and coordinated interventions.

Cross-border collaboration and tools to manage and reduce risk. Coordination among countries, organizations and donors is critically important to manage transboundary water and contain the spread of plagues and diseases. The Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES) Desert Locust Component is one example of how FAO coordinates action in the field. FAO will also continue to be actively involved in promoting the application of methods and tools to prepare, prevent and respond to disasters. A collection of good practices is already available on-line at www.fao.org/emergencies/resources/tools.

Partnerships to complement work on disaster risk management. Meeting the needs of people affected by disaster often requires a sustained response beyond the mandate or capacity of any single UN agency. In ONE UN pilot countries, such as Tanzania, Mozambique, Pakistan and Indonesia, FAO takes main responsibility for coordinating food and agriculture interventions. FAO participates in the International Strategy for Disaster Reduction (ISDR) and partners with WFP, IFAD, UNDP, Global Facility for Disaster Reduction and Recovery (GFDRR), ProVention Consortium and Famine Early Warning Systems Network (FEWS NET).



©FAO/G. Diana



Disaster Risk Management
Working Group
FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

FAO - Viale delle Terme di Caracalla
00153 Rome - Italy

Disaster-Risk@fao.org
www.fao.org/emergencies