



FOREWORD

Globally, the number of natural disasters, the number of people affected and the impact of disasters are increasing. More than 250 million people have been directly affected by disasters every year since 2000; the highest figures ever recorded, according to the Centre for Research on the Epidemiology of Disasters (CRED). Developing countries in Africa and Asia are particularly vulnerable to extreme atmospheric factors and climate-induced shocks. Recent major disasters, however, such as earthquakes in Java (2006) and Kashmir (2005), Hurricane Katrina in the United States (2005), the Indian Ocean tsunami (2004) and severe heat wave in Europe (2003), have shown how vulnerable any country in the world is to the loss of human life and livelihoods due to natural disaster.

FAO assists countries in reducing disaster-related risks by providing early warnings of food production emergencies and helping to restore food production systems in disaster-affected areas. Agricultural disaster impact analyses most often used to plan emergency relief operations are typically based on *in situ* empirical analysis, dependent upon access to the affected area and expert experience. The urgency of emergency situations, however, often prevents the collection of sufficient georeferenced information. The effectiveness of emergency assistance depends on timely and accurate assessments of disaster impacts, supported by sufficient quantitative information.

This publication introduces the Rapid Agricultural Disaster Assessment Routine (RADAR), a rapid disaster impact assessment tool for agriculture. The overall objective of RADAR is to provide a practical decision-support model for rapidly and accurately assessing the georeferenced area distribution of short- and long-term damage on agricultural systems due to natural disaster. Successful implementation of RADAR could improve disaster preparedness, facilitate timely relief operations and integrate risk and hazard awareness into longer-term agricultural development planning.

FAO believes that implementation of RADAR will help to understand more rapidly and accurately how specific geographic areas will be experiencing short- and long-term damage, due to natural disaster. RADAR is one example of the type of technical assistance necessary to improve preparedness and early warning systems to strengthen the resilience of vulnerable populations. We sincerely hope that RADAR will help improve the efficiency and timeliness of relief operations and reduce human suffering caused by natural disasters.



Tesfai Teclé
Assistant Director-General
Technical Cooperation Department



Alexander Müller
Assistant Director-General
Natural Resources Management
and Environment Department