Food and Agriculture Organization of the United Nations



Project Highlights

INTER REGIONAL

Reducing risks of wheat rusts threatening livelihood of resource-poor farmers through monitoring and early warning

Project code: GCP /INT/193/IFA

Donor: International Fund for Agricultural Development

Contribution: USD 1.5 million

Implementation: June 2009 – December 2012

Target areas: Egypt, Eritrea, Ethiopia, Iran, Pakistan, the Sudan, Syria, Turkey and Yemen (countries at risk of

of wheat rust diseases)

Contact: Dominique Burgeon

Title: Director, Emergency and Rehabilitation Division, FAO

Email: Dominique.Burgeon@fao.org



Objective:

Reduce the risks of wheat rust diseases causing crop losses and threatening the livelihood of resource-poor farmers. This project was designed and implemented to provide technical and capacity building assistance to countries at risk of wheat rust epidemics. Specifically, the project objective was to establish an effective surveillance, monitoring and early warning system for wheat rust diseases in directly affected and some frontline countries.

Key partners:

Consultative Group on International Agricultural Research (CGIAR), International Wheat and Maize Research Centre (CIMMYT), International Centre for Agricultural Research in the Dry Areas (ICARDA), AARHUS University (Denmark) and Cornell University (USA).

Beneficiaries reached:

Countries at risk for emerging races of wheat rust diseases (particularly Ug99): Egypt, Eritrea, Ethiopia, Iran, Pakistan, the Sudan, Syria, Turkey and Yemen.

Activities implemented:

- A global wheat rust monitoring system was established involving an international network of institutions and specialists, as well as an online information collection, analysis and dissemination tool. The system was supported by the development of a real-time monitoring tool based on Short Message Service (SMS) network, which facilitated daily monitoring of wheat rust diseases in target regions and districts at field level.
- During all project activities, efforts have been made to employ innovative tools and approaches including advanced surveillance and information technologies, as well as utilization of proven techniques and tools such as Farmer Field Schools.

Impact:

- Affected countries have improved their seed production systems through the provision of rust resistant/tolerant seed varieties to farmers for variety replacement.
- The capability of countries has been improved in the fields of effective wheat rust disease management planning, surveillance, seed production and dissemination through training and capacity development efforts.
- The project provided capacity building support to target countries in the areas of early warning, race analysis, development and use of resistant cultivars, seed production, technology transfer and training of technical officers and farmers.
- Through the contribution of the global monitoring system, it was possible to conduct effective wheat rust disease surveys and alert the countries and international community about disease risks, including threats in the 2012-13 season.