AGRICULTURE INFORMATION SYSTEM

Building Provincial Capacity in Pakistan for Crop Estimation, Forecasting, and Reporting based on the integral use of Remotely Sensed Data GCP/PAK/125/USA

TRAINING COURSE: Use of Mapping Device-Change Analysis Tool (MAD-CAT) software - 18th-22nd May 2015 - Islamabad, Pakistan

The **Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)**, in collaboration with the **Food and Agriculture Organization of United Nations** (FAO) organized a training module to develop technical and methodological expertise on the use of Mapping Device for Change Analysis Tool (MAD-CAT), a powerful image interpretation software. This application provides a combination of fully integrated functions for land cover/ use mapping and land cover change analysis.

BACKGROUND

The main goal is to help the Government of Pakistan to integrate the use of remotely sensed data into existing data collection, analysis and dissemination systems to improve accuracy and timeliness of agricultural statistics. In the longer term, the project aims to develop national capacity for agricultural monitoring and disaster risk management in response to food insecurity.
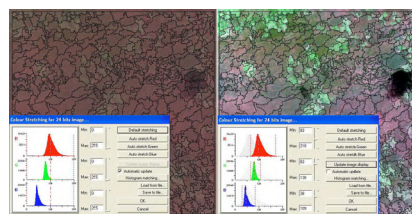

MAD-CAT SOFTWARE

MAD-CAT is a widely used and free image interpretation software developed by FAO.
This software allows users to:

- Generate vector based land cover datasets.
- Perform change detection in different modes.
- Digitize landmarks and identify patterns.

TRAINING FOCUS

- Software Introduction.
- Description of functions.
- Practice of different tools.
- Assisted exercises using high resolution satellite.
- Visual interpretation on SPOT5 satellite data.
- Development of vector based land cover/use geo-database.

PROJECT OBJECTIVE

- Improve CRSs (Punjab and Sindh) and universities capacity to estimate and forecast crop production through the use of remote sensing, field data, and other relevant information.
- Enhance the integral use of remotely sensed data into existing data collection, analysis, and dissemination mechanisms.
- Build capacity of CRSs (Punjab and Sindh) and universities to produce timely market-oriented reports.

COMPONENTS

- Capacity building of Provincial Crop Reporting Services & Universities
- Provision of Geospatial Systems
- Crop information portal
- Global Agricultural Monitoring (GLAM)
- Smart phone application (MAGIS)
- Area Frame Sampling System (AFSS) Automation Through Mobile Technology
- Land Cover database of Pakistan (LCCS)
- Crop Mask
- Area Frame Sampling system
- Market Outlook improvement
- Crop reporting