Experts Meeting on Crop Monitoring for Improved Food Security

Summary

19 February

Background

- Objective

  To serve as a venue for exchanging experiences and ideas on how to improve crop monitoring in the region

- Organized by FAO RAP in collaboration with ADB

- 16 papers, 50 participants

Topics of Presentations

- On land use and crop area estimation
  - Use of Google Earth, basic sample design, highly automated selection and estimation processes
  - Objective area measurement
  - Areal views of crop area
  - Remote sensing
- On crop yield
  - Objective yield measurement through crop cutting
  - Remote sensing (leaf area index, NDVI)

Remote Sensing in Agricultural Statistics

- At experimental or pilot stage in many developing countries in the region.
- Offers timely, accurate and more frequent measurement.
- There are additional costs involved—
  - Satellite imagery
  - Software applications
  - Training and maintaining of skilled staff

Recommendations 1

- The use ICT like the GPS in smart phones, Google Earth imagery as data source of area sampling frame, space-based technology, computer software applications for automating data processing and estimation should be considered in improving crop monitoring.
- The mix of technology to adopt should be based on the desired output and outcome requirements, absorptive capacity of the institution, and the resources that are available.
- National statistical systems will greatly benefit from developing strong partnerships with local research institutions and space-technology agencies in institutionalizing data collection methods requiring ICT.

Recommendations 2

- In the long term, space-based technology and other ICT should be part of tertiary school's curriculum, so that future generation will have better understanding of these technologies.

- National statistical systems should be careful in adopting it as a full replacement of their existing data collection methods for crop monitoring.

- Beyond estimating land use statistics, crop area, production and yield, crop monitoring also involves understanding the perception of farmers, their economic and social profile. These data and information are better collected using traditional and tested methods.

Recommendations 3

- Research institutions, space technology agencies and national statistical systems should continue to regularly exchange ideas and experiences for improving crop monitoring.

- Technical papers and presentations on the methods that were discussed in the meeting should be widely disseminated.