A mind map for ICT in Agriculture
Main phases in the agriculture sector

Pre-cultivation
- Crop selection
- Land selection
- Calendar definition
- Access to credit

Crop cultivation and harvesting
- Land preparation
- Sowing
- Input management
- Water management
- Fertilization
- Pest management

Post harvest
- Marketing
- Transportation
- Packaging
- Food processing
Information produced/needed

**Pre-cultivation**
- Crop selection
- Land selection
- Calendar definition
- Access to credit

**Crop cultivation and harvesting**
- Land preparation
- Sowing
- Input management
- Water management
- Fertilization
- Pest management

**Post harvest**
- Marketing
- Transportation
- Packaging
- Food processing

**Information for the selection of the best crop according to their land, access to input and credit, market (Cost-Benefit), etc.**

**Information for the sound management of the whole cropping activities, including the resilience to natural (e.g. weather) and anthropogenic shocks**

**Information related to post-harvest techniques and tools, marketing and transportation infrastructures, etc.**
Application of ICT

Pre-cultivation
- Crop selection
- Land selection
- Calendar definition
- Access to credit

- Decision Support System (DSS), modeling software, e/m-learning, e/m-consulting, Knowledge Management Systems (KMS)
- DSS, GIS, Remote sensing, e/m-consulting, KMS, sampling devices connected to networking tools
- KMS, e/m-consulting, e/m-learning, DSS, GIS
- Networking tools (mobile phones, radios, wireless networks), Management Information System (MIS), e-commerce and mobile commerce
Application of ICT

Crop cultivation and harvesting
- Land preparation
- Sowing
- Input management
- Water management
- Fertilization
- Pest management

KMS, e/m-learning, e/m-consulting, GPS, GIS, computer controlled devices, machine2machine communication and sensor networks

GPS, GIS, e/m-learning, e/m-consulting, computer controlled devices, m2m communication, sensor networks

DSS, MIS, GPS/GIS, e/m-learning

DSS, GIS, MIS, sensor networks, m2m communication

DSS, GIS, MIS, sensor networks, m2m communication

DSS, GIS, management information system, sensor networks, m2m communication
Application of ICT

- Post harvest
  - Marketing
- Transportation
- Packaging
- Food processing

Networking tools (mobile phones, lo-fi technologies) for broadcast

- GPS, GIS, MIS, DBMS, tracing devices, m2m communication

- Tracing devices, KMS, e/m-learning, e/m-consulting, GPS, GIS

- Farm to fork tracing tools – GPS, RFID, GIS, DBMS, MIS, KMS, e/m-learning, e/m-consulting, machine2machine communication
Mind map for ICT in Agriculture

- **Pre-cultivation**
  - Crop selection
  - Land selection
  - Calendar definition
  - Access to credit

- **Crop cultivation and harvesting**
  - Land preparation
  - Sowing
  - Input management
  - Water management
  - Fertilization
  - Pest management

- **Post harvest**
  - Marketing
  - Transportation
  - Packaging
  - Food processing

- **DSS, GIS, MIS, GPS/GIS, e/m-consulting**

- **Networking tools**
  - Mobile phones, Lo-fi technologies

- **GPS, GIS, MIS, DBMS, tracing devices, m2m communication**

- **Tracing devices**
  - KMS, e/m-learning, e/m-consulting, GPS, GIS

- **Farm to fork tracing tools**
  - GPS, RFID, GIS, DBMS, MIS, KMS, e/m-learning, e/m-consulting, machine2machine communication