

Cyber extension

Wikipedia (2008), the term ICT

- is the broader term of Information Technology (IT), to explicitly include the field of electronic communication, in addition to IT.
- The term IT is defined as “the study, design, development, implementation, support or management of computer based **information systems**, particularly software applications and computer hardware.”
- IT deals with the use of computer software to convert, store, protect, process, transmit and retrieve **information**, securely

ICT or Information and Communications Technology

- The basket of technologies, which assist or support in storage, processing of Data/ Information, or in dissemination/ communication of **Data/ Information**, or both.
- ICT thus includes technologies such as desktop and laptop computers, software, peripherals and connection to the Internet that are intended to fulfill **information processing** and communication functions.

Data → Information → Knowledge

Processing of data:

Summarizing

Computing Averages

Graphing

Creating Charts

Visualizing Data

NEED FOR e-EXTENSION

1. To expand knowledge resource
2. To accelerate agricultural growth
3. To supplement inadequate technical manpower
4. For stronger Research – Extension – Client system linkage
5. To develop efficient feedback mechanism
6. For cost-effective extension delivery
7. To develop **knowledge managers**
8. To ensure gender equity in technology transfer process
9. To empower small and marginal farmers

Internet Based Agricultural Extension In India

1. Bhoomi
2. NIC's initiatives
3. aAQUA
4. i-kisan
5. IFFCO
6. Warana Wired Village
7. Agriwatch
8. e-Sagu

Bhoomi

- E-Governance project of the Government of Karnataka
- 20 million land records of 6.7 million land owners in 176 talukas of Karnataka have been computerized
- Total transparency in land records administration with added advantage of security and reliability
- Based on the overwhelming success of Bhoomiproject, computerisation of land records are now made mandatory for all the states in India

NIC initiatives

- **AGMARKNET: Providing effective information on market prices related to agricultural produce.**

aAQUA: Initiative of IIT Bombay

- aAQUA is an online multilingual, multimedia Agricultural portal for disseminating information from and to the grassroots of the Indian agricultural community.
- aAQUA-*almost All Questions Answered* is a farmer-expert Q&A database supporting Indian languages
- aAQUA integrates multiple databases-farmer, kiosk operator, expert and other user database, Q&A database, farmer feedback data, farmer schemes data, Price Information database (Bhav Puchiye), Crop Recommendations database, Crop Disease Images database and Q&A translations database.

- **Gyandoot:** Catering to the everyday needs of the masses such as commodity / mandi marketing information system, income certificate, domicile certificate, caste certificate, driving license, information regarding rural markets etc.

i-Kisan

- Comprehensive Agri Portal addressing the Information, Knowledge and Business requirements of farmers, trade channel partners and agri input / output companies.
- Provides online, detailed content on -crops, crop management techniques, fertilisers and pesticides and a host of other agriculture related material.
- Enable farmers to network with other farmers, suppliers and consumers across the world.

IFFCO www.iffco.nic.in

- ‘IFFCO’s agri-portal’-Sixteen states have been covered with information of relevance to farmers in local languages.
- User-friendly intuitive graphic based navigation is provided to facilitate viewing in touch screen environment.
- IFFCO has installed about 100 Farmers Information Kiosks in 16 states.
- Training programmes and farmers meetings are conducted to encourage farmers’ to use the facilities provided in farmers’ information kiosks.

Warana Wired Village

- Initiated in 1988 to increase the efficiency and productivity of sugarcane sector and also to provide a wide range of information and services to 70 villages around Warana.
- Comprises of 25 co-operative societies and a membership of over 20,000 farmers with a total turnover of over US \$ 130 Million.
- There are 54 functional village information kiosks which are open from 10 am to 6 pm and frequented by 30 to 100 farmers daily.
- Resulted in saving of US \$ 7,50,000 to the cooperatives.

Agriwatch

- agriwatch.com is the largest agribusiness portal in India.
- Enables access to a large amount of agribusiness related information covering more than 15 sub sectors within the Agricultural and Food Industry.
- The daily / weekly / fortnightly Agriwatch Trade Research Reports are published.

e-Sagu

- personalized agriculture extension system (eSagu)
- Agricultural experts get the information about the crop situation through Internet in the form of both text and image data, and then generate the appropriate advice which are sent to the farmer through the Internet

- Mobile apps kisan suvidha, Pusa Krishi App
...
- M-Krishi initiatives
- Expert Systems RKMP.....

Changing the future of Indian farmers