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## Role of IT in Rural Development



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### INTRODUCTION:-

In this model we are trying to show how information technology is developing the rural areas by developing agriculture production, agriculture marketing, communication medium, banking etc.

### OBJECTIVES:-

To enhance agriculture production . vast agriculture marketing . Fast communication . Easy banking IT in Agriculture Agriculture production:- In the past the agriculture was not well developed, because the farmers had inadequate knowledge about agriculture. But now agriculture has entered a post green revolution stage. Information technology is playing an important role in

agriculture extension. The Government of Maharashtra has initiated Computerisation of Agriculture Department in 1992. Presently required hardware are available upto Block level offices. The infrastructure of hardware within the Agriculture Department includes 786 Computers, 696 Printers, 605 UPS, 48 CVT, 324 Modems and 60 Scanners. The computers installed at various offices are used for local data management, usage of software, preparing training material for farmers, e-mail connectivity, Internet access, reporting and correspondence. V-SAT was installed in the Commissionerate in the year 1998. The main purpose of installation was to establish connectivity between field offices. At present e-mail fa-

cility is available upto Block level offices, which is being effectively used for transferring data and reports. For effective operation of computers, about 5000 technical and non-technical staff have undergone training in website designing, software usage and hardware maintenance. The above staff has also acquired diploma in Information Technology. In addition, specific need based training in related areas was conducted at National Informatics Centre (NIC), Pune. NIC is assisting the agriculture department in developing application softwares, procuring

hardware, website development and implementation of the IT Project. Major softwares developed with assistance from NIC include software for daily rainfall reporting, horticulture estimates, preparation of plans and estimates of water harvesting structures, quality control of insecticides, issuing and updating licenses, horticulture nursery management, estimation of horticulture crops under EGS, crop estimation survey, Agriculture census, monthly progress report, personal information system, etc.

For wider dissemination of information, the Agriculture Department with the help from NIC has launched a website [www.agri.mah.nic.in](http://www.agri.mah.nic.in). The website covers information on cultivation of important crops, agriculture statistics, schemes, technologies, events, news and rainfall data. The results of the samples tested in the laboratory are also made available on the website on the same day. This facility has been found useful in initiating legal action against suppliers of substandard inputs in the market thus protecting the farmer from losses. The Agriculture Department has produced interactive video CDs on IPM of cotton, drip irrigation, watershed management, Integrated nutrient management, Biotechnology, National Crop Insurance Scheme and Crop technology which are used for farmer's training programmes. The various multimedia effects used while preparing the CD makes the topic more interesting for the farmers. The CDs being interactive, the user can get access to the topic of his interest. Regional Remote Sensing Centre, Nagpur is assisting the Department in developing GIS based pilot project for land and water resources development in watershed areas and digitization of soil survey maps. Pilot project for generation of land and water resources development plan through Remote Sensing and GIS techniques on village level has been initiated with the assistance from MRSAC and RRSSC.

#### **Agricultural Marketing:**

Farmers have increasingly begun to perceive marketing rather than production as the major constraints to enhancing farm incomes. Due to major thrust of extension agencies on production techniques, marketing extension so far has not received the attention it deserves. This assumes a greater significance in the light of the new inter-

national trading regime under the WTO and the export opportunities being opened up.

#### **Marketing information**

In past the farmers used to carry their products to the foodgrain market for selling. Here due to lack of knowledge about the correct price of their products they were not getting profit but Presently the Agriculture Department has established 21 Market Information Centers and 9 IT shops under NATP. The objective of these centers is to provide information on market rates, agriculture technology, input availability, weather updates, etc. Similarly the Marketing Board proposes to provide Market Information through its 13 APMCs. Several Central Institutions set up by the Government of India like NCDC, NAFED, TRIFED, NDDB, NHB, APEDA are directly involved in implementing programmes to strengthen agricultural marketing and to help farmers in the process of marketing agricultural produce.

#### **Agro Cyber Cafes**

There are many information centers through which we can get information regarding agriculture production & marketing. But website is the effective media for getting all this information. Use of Information Technology for dissemination of information through these agencies such as Cooperatives, NGOs and Farmers' organization has been found very effective. These agencies can promote 'Agro Cyber Cafes' at village level specially operated by unemployed Agricultural Graduates in the manner of PCO/STD booths. The infrastructure and the hardware should be provided by the agency while the Government should provide assistance in the form of CDs and software so as to have access to suitable information available at the district KVKs, line departments and markets. Such information should be dispensed by the agency to the farmers and farmer groups on payment. The ideal situation would be to have 'Agro Cyber Cafes' in each village.

Wireless in Local Loop Technology developed by n-Logue Communications, Chennai has been found very effective in providing and operating telecom and internet services in rural areas. In this model the village kiosk are operated by local entrepreneur who make variety of services available to the villagers are connected to local service provider (LSP). Each LSP operates an ac-

cess centre that covers a radius of 25 km spanning 300-400 villages and would be intermediate between the government, business and the customer at the kiosk. Each internet kiosk consists of a CorDECT Wall set with its accessories, a telephone, a telephone meter, multimedia personal computer with latest configurations, a UPS with four hour power back up, a dot-matrix printer, local languages software training manual, a Web camera and a speaker microphone. Each kiosk operator is given intensive training before commencing operation.

**E-post:**-In past if you want to send your mail from one place to another we had to put our mail in the post box but it was taking a lot of time to send or receive your mail. Now there is a service available in the post office .in this service one main office collects mail from another main office through internet and that main office distributes this mail in its particular rural area. This service has made the communication faster in rural areas.

**E-choupal**-ITC's e-choupal help the farmers to get current information about agriculture, agriculture marketing, rainfall data etc. ITC is planning to add 20,000 more e-Choupal kiosks and connect 10 million farmers to its network by 2010. Currently, ITC's e-Choupal network operates in six states with 6,400 kiosks in 40,000 villages, covering 400,000 farmers. After expanding its network, ITC will include 1 lakh villages in 15 states. ITC has tied up with 140-odd companies for selling their products at Choupal Sagar. The company is also in process of expanding the e-Choupal network in Andhra Pradesh, Karnataka, together with Punjab and Haryana.

**ATM VAN**-In the past the farmers used to take loan from the money lenders . but now many banks are providing facility of atm van in the villages.the atm machine loaded on the the van is winding its way through the dusty roads of the villages. this atm machine is linked wirelessly through the reliance infocomm's network to the backend server of the participating bank, which

includes syndicate bank and state bank of India. The software on the atm is simple in regional languages and very easy to decipher.with the help of this machine the farmers can open an account , request for a loan and be able to deposit as well as withdraw cash.Farmers in a remote village in honavar,600km away from banglore are using atm machines to open a bank account.this facility is available in nearly five villages and 22000 farmers are getting this facility.

**IT Education**-For penetration of the information technology at the grass root level it is essential that the extension staff and the farmers are computer literate. Massive program of computer literacy at various levels needs to be undertaken throughout the state. The existing staff with the agriculture department and universities have basic knowledge of computers. However those with further interest in these areas should be identified and given advanced training in computer application. Local NGOs and Institutions should be involved for imparting training in developing capacity of the farmers and women groups in IT usage.

**Virtual University**-A virtual university as a center of excellence should be set up to consolidate, process and disseminate information on various aspects of agriculture. It may be experience in agriculture, horticulture, soil and water conservation, post harvest management and marketing. In addition, technical staff with expertise in hardware and software management should be deputed to operate center. A suitable mechanism needs to be developed to ensure that the source of information being disseminated is authentic.

**CONCLUSION:-** Information technology can play a vital role in rural development. there should be requirement of technical expert staff. a center can be used as community learning center. it can also be used as a DTP center for economical upliftment for the center operator. Government as well as NGO should take initiatives in this regard. In this way we are showing in our model how information technology is helping in development of rural areas.

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## REFERENCE

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