



## Use of computer application in agriculture

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**Computer technology in agriculture field :** Agriculture is a most common occupation in India. More than 50 per cent people lived in villages and the most of the family depends on the agriculture. Indian GDP also depend on agriculture so as agriculture will grow as well as Indian GDP also grow. Today's are computer world as well as day passes new technology also introduce. So use of computer technologies in Agriculture are most important for the farmers. Many of the agriculture equipment's, machines and farmers tools fully programmed by the Computer PCBs.

The use of computer technologies make easy for the farmers to weather prediction, seed sowing, crop cultivation etc. there are some technology which is most frequently used in farmers fields and weather prediction.

**Weather forecasting :** Weather is the breath of agriculture. A good atmosphere conditions necessary for crops, vegetable and fruits. For as long as agriculture has existed, the success of the harvest has been driven by the weather. Ideally, crops will get the right amount of rain and sun to produce the highest yield. Since modernization of weather forecasting has come into play, predicting the weather has obviously become exponentially easier. Now-a-days, farmers have direct access to computerized weather forecasting. This allows them to properly manage their lots to maximize yield. The tools for predicting weather conditions in future is totally depends on current weather. The computer model based on previous states of weather. Collection of data of last few years makes a pattern for upcoming weather so the data collection and data analysis is done by the computer technology. Using data based on temperature, pressure, precipitation, and more, forecasters can run one of hundreds of computer models designed to predict what might happen. The models are based on past weather events as well as local geography. The farmers in turn use the forecast predicted by the computerized weather model to gauge how much rain will be coming in, as well as how dry the upcoming weather will be, amongst other factors.

**Use of GIS and remotesensing :** Geographic Information Systems (GIS) and remote sensing are being used for developing Classification systems that evaluate land and provide a site assessment to aid what is now

known as accurate agriculture. These hi-tech, interactive systems provide information based on a variety of factors such as soil conditions, drainage and slope conditions, soil pH and nutrient status, etc. In the past when these technique were not used farmers were unaware about soil output, and unpredictable weather conditions affecting crop quality and profitability. Now-a-days GIS and remote sensing technique frequently used and farmers are well known about the, fields, soil conditions etc. Accurate agriculture provides farmers with control by predicting vital information including fertilizer application and problems with drainage, insects, and weeds. Most government websites provide this kind of information free of cost, covering agricultural land. Global Positioning System (GPS) based technologies also help to monitor irrigation, field mapping, soil sampling, tractor guidance and crop scouting. This kind of technology equips farmers with enough information to increase crop yield in a manner that is consistent with the best environment practices for sustainable agriculture.

**Farm machinery :** In farm system there is widely used computer technology today. Many of the machine which is used in the field programming by the computer technology. Special purpose tractors, seed drill, laser leveler, harvester and bund maker are mainly used by the farmers on the field. Many central and state agricultural university also used these machine for teaching the student and modern agricultural systems



**Computer usefulness in agriculture field through information exchange over internet :** Farmer can get information regarding price, weather, temperature etc. Keeping financial record, Production record, online banking, Buy required resources through internet etc. The amount of water sprinkled in a balanced quantity is also computerized. Through forum and social networking site

farmers can get connect with other experts and exchange their views and other details .Farmers can get a lot of information on variety of agriculture topics by surfing .Farmers can get connect foreign customer which can help to improve their product and increase their production capacity. The production capacity in farming and animal husbandry has increase due to use of computer in agriculture field .There are less losses due to work are monitored by computer. By using computer in traditional field like agricultural field we can increase the productivity and minimize the error happen.

**Android/ Windows mobile application:** Using computer programing language there are several mobiles application software developed which helps to the farmer. Indian government also launched the mobile application which help the farmers for different kinds of agricultural information. Some mobile application are:

**Kisan Suvidha :** Kisan Suvidha mobile app has been developed to help farmers by providing relevant information on weather of current and next 5 days, dealers, market prices, agro advisories, plant protection, IPM Practices etc.



**Pusa Krishi :** Pusa Krishi app help farmers know the various types of crops and information about those.



**Mkisan application :** The android app allows farmers and all other



stakeholders to obtain advisories and information being sent by experts and government officials at different levels through mkisan portal without registering on the portal.

**Shetkari Masik Android App :** The app can be used to download ShetkariMasik magazine and can be read without internet connectivity. “Shetkari Masik” is one of the most popular monthly magazines in the Agriculture sector, under publication since 1965. It is published by Department of Agriculture, Maharashtra.



**Farm-o-pedia App :** The app is targeted for rural Gujarat and is useful for farmers and anyone involved in agriculture business. The app can be used to get suitable crops



as per soil and season, crop wise information, check whether in your area and manage your cattle.

**Crop Insurance Android App :** Crop insurance mobile app can be downloaded and used to calculate



the Insurance Premium for notified crops based on area, coverage amount and loan amount in case of loanee farmer. The app can also be used to get details of normal sum insured, extended sum insured, premium details and subsidy information of any notified crop in any notified area.

**AgriMarket :** AgriMarket mobile app can be used to get the market price of crops in the markets within 50 km of the device’s location capture by GPS. There is another option to get price of any market and any crop in case person does not want to use GPS location.



**Agro India :** The Agro India is an agriculture news application which gives you latest news regards agriculture. The main features of this app i.e.



You will get the Agriculture news. Fresh news reach at you today itself.

You will get all latest news from agriculture field with notification alert.

**Agri App :** AgriApp is a revolutionary Android based mobile application. It provides complete information on Crop Production, Crop Protection and all relevant agriculture allied services on your Smartphone. In addition to being an information portal, AgriApp is also an online market place bringing farmers, agri inputs, and retail and fulfillment services on a common digital platform.



**IFFCO Kisaan :** The Most Popular and No. 1 app for the Farming Community, The IFFCO Kisaan App is exclusively dedicated to farmers. “IFFCOKisaan” is an



Indian agriculture farmer suvidha App, which helps the Indian farmer/ Kisaan to take informed decisions by accessing customized agricultural information related to their need. Our agriculture suvidha app is for Kisansuvidha and provides the latest mandi prices, weather forecast.

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