

Survey of ICT Knowledge Based Agriculture Development System

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Abstract

E-agriculture gives to applying new things to use ICTs in the country, with the main heart on agricultural. ICT in Agriculture provides a wide range of solutions to some farming ideas. The rising field focuses on the development of agricultural and rural advance through improved information and communication. This time, ICT is used as around all information and communication developments including Android mobiles, IOT devices, communication networking devices, web services; this variety from original Internet-era technologies and sensors to other pre-accessible aids such as TV, satellites, and radios. This technique continues to evolve in scope as new ICT applications continue to be harnessed in the agriculture industries. It involves the concept, development, design, application, and evaluation of novel ways to use ICTs in the rural domain, with the main focus on cultivation. This includes principles, norms, methods, and apparatus as well as the growth of personality and institutional capacity, and policy hold is all key mechanism of e-agriculture.

Keywords: E-Agriculture, ICT, rural domain, Knowledge repository

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1. Introduction

ICT interventions contain developed and experienced around the world, with various degrees of innovations, to help agriculturists recover their livelihoods during enlarged undeveloped productivity and incomes, and lessening in difficulties. A few useful capitals for knowledge concerning e-agriculture in do the World Bank's e-sourcebook ICT in agriculture – between smallholder farmers to information, networks, and institutions. Achievement stories on information and communication methods for agriculture and rural development have recognized many cases of use of ICT in farming. Paper [1] illustrate Crop Rotation as a Better Sanitary Practice for the Sustainable Management of Litopenaeus van named Culture Information and communication technology (ICT) can participate serious role in facilitating rapid, efficient, and cost-effective knowledge organization. [2], [3] Development of Seaweed Liquid Fertilizer (SLF) Consortium for the Enhancement of Agriculturally Important Crop Plants. Though, ICT request in Ethiopia remains short in evaluation with some African countries. Additionally, mobile phone service is being used to distribute agricultural information to users.

2. Related Works

Database and data warehousing technologies can be used to store and recover a large amount of data and also can be fixed with Mobile and Internet Technologies to distribute information immediately to the public. Growth in ICTs has enabled the preservation of large and diversity of data (documents, text, image, voice, and video) database with insignificant downtime that can be rapidly extracted by millions of user parallel. Knowledge mining method is being used to extract useful knowledge from large and huge databases.

In agriculture, the benefit of the Global Positioning System gives geo_fencing, map making, and surveying. GPS receiver drops in price over the years, creation it trendier for civilian employ. With the use of GPS, civilians can construct simple yet extremely precise digitized map with no the assist of an expert cartographer.

Geographic information systems, or GIS, are widely used in farming, particularly in accuracy agricultural. The land is mapped digitally, and relevant geodetic data such as landscape and contour are joint with other numerical data for easier analysis of the earth. GIS is

worn in result production such as what to place and anywhere to plant using past data and variety.

Usual milking systems are computer controlled position alone systems that milk the dairy cattle lacking human labor. The whole mechanization of the milking procedure is forbidden by an agricultural robot, compound herd management software, and particular computers. Regular milking eliminates the cultivator from the real milking process, allowing for additional time for care of the farm and the group. Farmers can also progress group managing by using the data gathered by the Computer System using cloud computing as mentioned in [4, 5]. Fungal Cellulase for Extraction of Carrageenan and its Use in Antibiotics Amended Film Preparation [6].

A system for real-time monitoring of the climatologically situation of Agricultural ground for accuracy Agriculture using Sensor based Wireless Networks. The aggro Sense Wireless Data Logger is a self-restricted wireless unit with liveness to connect many sensors for monitoring diverse agricultural parameters of crop lands from a remote monitoring position. Sensor data from this unit is sometimes transmitted wirelessly to a remote monitoring location for providing optional service to the farmers for better crop supervision. The remote monitoring station can further be linked to the Internet for "anytime anywhere visibility" of sensor information

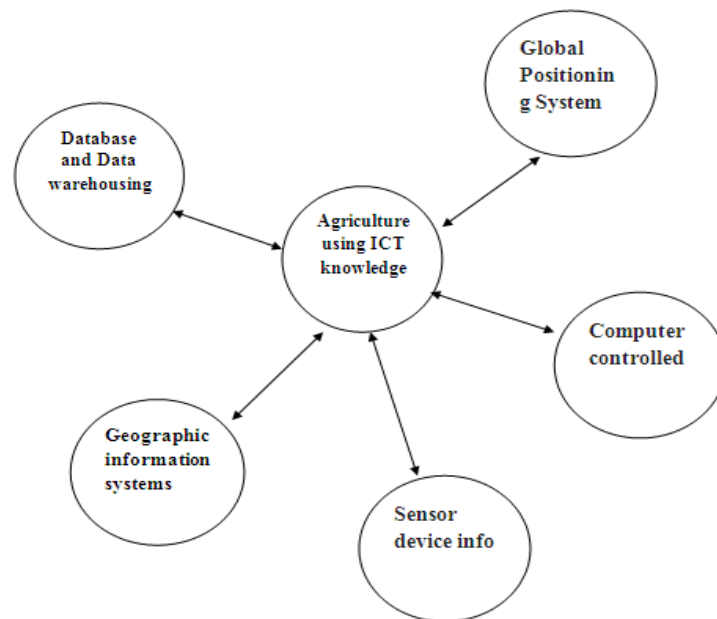


Figure 1. Block diagram of ICT-based Agriculture systems

3. Conclusion

Agriculture is a division with huge potential for humanizing rural living and eradicates poverty. Latent on this possible, the management seeks to twice agricultural manufacture through the GTP phase by scaling up best practices, incentivizing invention of towering value crops, and increasing irrigation growth and normal supply protection. This will be supported by interventions meant at transforming the agricultural method. In the various countries review, though, extra present and original ICT-based knowledge management systems have been completely embraced to make and broadcast agricultural information to stakeholders along the farming worth series.

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