Journal of Novel Applied Sciences
Available online at www.jnasci.org
©2014 JNAS Journal-2014-3-2/203-205
ISSN 2322-5149 ©2014 JNAS

The role of information technology in agricultural development

Khashayar Rigi[1*], Mohammad Farahmand[2], Sajad Sheikhpour[3], Hossein Moradi[4] and Abbas Keshtehgar[1]

1- Young Researchers and Elite Club, Zahedan Branch, Islamic Azad University, Zahedan, Iran
2- Master of Agriculture, Zahedan Branch, Islamic Azad University, Zahedan, Iran
3- Young Researchers and Elite Club, Kerman Branch, Islamic Azad University Kerman, Iran
4- Higher Educational Complex Of Saravan, Iran

***Corresponding author*:** Khashayar Rigi

ABSTRACT: Years ago, our country and the emphasis on the theme of agriculture oriented development witnessed extensive efforts to exit from the impasse and to achieve the goal of its sufficiency. But the lack of systematic and comprehensive understanding of the capacities and capabilities of future trends based on economic, political and social policies resulted in inaccurate and inconsistent effects of the structures of agriculture leave . The role of agriculture in sustainable development and the overall effect is one of the strategic pillars of the country is undeniable . Conducted by national and international planning and better use of the capacity of agriculture and the development of optimal use of available features unknown in this section requires a fundamental change of attitude to the phenomenon of information

Keywords: Agriculture, IT Development, Roles.

INTRODUCTION

On the eve of the third millennium, yet sustainable development, food security and related issues are the most important global challenges and the response has been encouraging them Cognitive Technologies innovations in the field of information should be used to ensure optimum effectiveness and efficiency In this area requirements. Agricultural development in the forefront of national development strategies in developing countries worldwide. Despite decades of activity in this field between developed and underdeveloped Between countries few exceptions, are more frequent. On the other hand, heterogeneity, even within the developed countries in the field of welfare and income Marginal Settlements Various improvements there is a major problem. Policies on economic development, industrial modernization, technology transfer, production and exports increased emphasis on the negative consequences of economic, social and environmental and general instability in many countries have been Agriculture. In most third world countries, increasing food imports has the troubling aspects (Bhavnani et al., 2008).

Definition of ICT (Information and Communication Technology)

ICT includes technologies that we are interested in recording, storing, processing, retrieving, transmitting and receiving information to help. Including the equipment that will be used for this purpose include computers, networks, communication equipment, electronic fax software are (Lucas, 2000).

Expertise and Agriculture

Although the information and communication technology can expand agriculture in all countries, based on their studies, the researchers found that lack sufficient expertise to use tools related technology has made remarkable results achieved in this area not to happen. it has succeeded in creating smart software technology for farmers, which largely eliminates the complexity. The intelligent software includes a database of details about the plants and their growth requirements, control methods and proper use of them in the database, the co-ordinator of the

software with the tastes of user. Although today many applications for industries related to agriculture production, but it should be noted that only a limited number of commands that the user does not have many features. Researchers have made a new software that allows users to add their own personal information (Caseli and Coleman, 2001).

Information transmitted through information technology to farmers

Information technology by providing information more accessible, more complete, more timely, and correct information at the right time for making important decisions by farmers to accelerate agricultural development. Examples of such decisions include what products the time to cultivate agricultural inputs Where to obtain the best price and when and how to use them, how to identify them to fight pests and diseases, such as the crises What do droughts, when and where the best price to sell their products, whether new technologies in the field of production, harvesting and processing of agricultural products is whether there agricultural credit programs and How can be used (Greenwald and Stiglitz, 1986).

Information technology and weather

Since the plant is seed sowing to harvesting which is affected by local climatic factors .still in warehouses and silos requires precise knowledge of the local climate. Just today, after owning agricultural land not suitable for agricultural production are both unique. Farmers can use information technology to achieve these important goals (Caseli and Coleman, 2001).

The role of information technology in the pre-implantation

Seed cultivars and their characteristics, introducing products that can be planted in different areas, the domestic and foreign markets for the products imported or exported t be informed of the policies and objectives in the agricultural sector, including service information technology is capable of doing (Maleki, 2005).

The role of information technology in the implants

Timely sowing of crops, planting methods, different parts of the climate change over the past years and projections of the future state of information technology services that can do them well (Maleki, 2005).

The role of information technology in the planting

Information about the application requirements and nutritional products, all kinds of toxins, motion time, the use of pesticides, biological control of appropriate education and information and communication technologies as it may quickly by the farmers are (Maleki, 2005).

The role of information technology in harvest time

Information about the right time to harvest crops, harvest training appropriate to prevent waste products, and the introduction of new machinery suitable for various crops by the farmers of this technology can be easily (Maleki, 2005).

MATERIALS AND METHODS

This paper is a review of the literature search on ISI, Scopus and the Information Center of Jahad and MAGIRAN SID is also abundant. Search library collection of books, reports, proceedings of the Congress was also performed. All efforts have been made to review articles and abstracts related to internal and external validity.

RESULTS AND DISCUSSION

These and many other challenges, obstacles need to adopt alternative strategies in order to increase efficiency and productivity, and optimizing production processes and large-scale agriculture, the implementation of agricultural and rural development have been inevitable. qualitative information and knowledge as the focus of development activities, are included. In fact, the value of information in all economic activities, including agriculture as an efficient tool to achieve the objectives of the industrial age is considered unrealized. As a result, IT can be a very important role in agricultural development.

REFERENCES

Bhavnani A, Won – Wai RC, Janakiramn S, Silarsky P. 2008. The role of mobile phones in sustainable rural poverty reduction, ICT policy division, global information and communication department.

Caseli F and Coleman WJ. 2001. Cross country technology diffusion: The Case study of Computers. NBER Working papers No. 8130, National Bureau of Economic Research.

Greenwald B and Stiglitz JE. 1986. Externalities in economies with imperfect information and incomplete markets, Quarterly Journal of Economics, 101: 229-264.

Lucas j. 2000. Information Technology for Management, McGraw Hill Book Co.

Maleki R. 2006. Information technology graduates in agriculture and employment, regional development conference on Application of Information and Communications Technology community development, Gharnabad Village.