

# Quality Analysis & Product Management of Agriculture Field using Cloud Computing

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**Abstract**— Developed countries are using Management Information System to assist different task for their end users or clients. One of the ancient fields in India which plays a major role in our economic development is agriculture domain. However our ancient techniques are still prevalent in India which is a main hurdle for fast development. Keeping this scenario in view we developed a agricultural information system to maintain the agricultural crops details on cloud. The agricultural information system provides facility to farmer to upload upto date crops details on cloud and its users and researches get online information about the crops. This will provides direct communication between farmer and user. So, that there is no intermediate person in between farmer and user. Cloud will act as an intermediate in this. This Information System provides the external users, the ability to obtain summarized information in a preferred format. Cloud will provide comparative output to the users. The comparison will take on certain factor like quality, rate, quantity, nearest location, etc.

**Keywords**- *Cloud computing, data mining, agricultural economy, eAgriculture*

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## I. INTRODUCTION

In recent years, many challenges have been faced by agriculture industry. In a country like India, where much of the population depends on agriculture for survival, crops monitoring is critical and the demand for environmental monitoring and remote controlling in agriculture is rapidly growing. However, there has been little research on sensor network applications for agriculture. An agricultural monitoring system provides monitoring services, and thus maintains the crop-growing environment in an optimal status. This system also improves the convenience to and productivity of users. However, existing agricultural monitoring systems are mostly applied and utilized in closed agricultural environments such as greenhouses, cattle sheds, etc., as it is difficult to apply agricultural monitoring systems in outdoor locations because of lack of IT infrastructure. In addition, when a user want to verify the monitored information in an existing monitoring system, the user must manually check the status through installed sensors or terminals installed in the agriculture facilities.

The agricultural information system provides its users and researches to get online information about, the crop, statistical details and new tendencies. The trends of the crops act so, that these will be pretty important to the users who access these via the Internet. The main features of the information system includes information retrieval facilities for users from anywhere in the form of obtaining statistical information about fertilizer, quantity available, price, suitable soil concentration for the corresponding crops and etc. This application requires cloud system; both farmer and user need to register by providing some essential information. Then farmer can upload his crop detail like quality, quantity, etc. After that, registered user can see the crop information and farmer details of the farmer.

## II. LITERATURE SURVEY

In Indian agriculture field uptill now no such techniques is used to improve the current status of our agriculture field. Traditional methods are used for improving the economy, these causes the down fall of the Indian agriculture economy. Government introduces and promotes various information and communication techniques but there is no such development is happened.

In [2], how to manage agriculture product storage information using cloud computing technology as there is vast amount of crops, online cloud storage agricultural economy information is done. By using these technique early warning is produced if there is lack of crops. and this will manage the storage product.

In [3], describes the implementation of sensor applications for agriculture, such as measurement of soil humidity, luminosity and temperature etc. The proposed agricultural embedded controlled system collects the soil information through sensors. But using sensors is limited for small range of area.

In [4], author discuss about “Agri-assistat” cloud deployment model, which is used for farmer who is living in rural area. Which provide agricultural information to that farmer. By using this model farmer will get solution to their problems.

In [6] the prospect of cloud computing technology’s application in the agriculture geospatial research field, which is used to monitor the crop condition.

## III. PROPOSED APPROACH

Developing a user friendly agricultural Information System for the worldwide web which fulfill the Agriculture Interested People’s requirements and in past no such system is developed, so that customer and farmer can communicate directly.

Proposed approach require Database updating which can be done by authenticated users through Internet, providing an easy and direct way for purchasing the Crops. Importers, exporters, researchers will have access to up to date information. Monitoring and Baking up Database and Users details for future use. Ex. Data mining and analyzing purposes in Cloud.

Any user can retrieve data from the Information System. Authenticated users in each are given permission to insert information though the internet but not to delete. Only data administrator can delete unnecessary information and modify the database.

#### IV. PROJECT SCOPE

This system will be helpful for getting full details regarding the Crops, Pulses, and Grains for quality and quantity. It will also provide facility to get the complete details regarding the Soil Concentration, Fertilizers, Pesticides and Assumed Production.

#### V. CONCLUSION

This project is an initial proposal to show that this kind of information system and Shopping Agricultural Product System is feasible. The real benefit of this type of information system to agricultural based country such as India can be seen when it become operational as planters, importers, exporters. Researchers will have access to up to date information. In addition to that all the major Institute should be provided with internet access and the necessary human recourse personals to make this project a reality. This project under implementation and work is under process.

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