iJRASET

International Journal For Research in
Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 7 Issue: XI Month of publication: November 2019

DOI: <http://doi.org/10.22214/ijraset.2019.11002>

www.ijraset.com

Call: 08813907089

E-mail ID: ijraset@gmail.com

Agroproducts Solution Application

Nayna Potdukhe¹, Shweta Harode², Shibani Kosare³, Ruchika Wankhede⁴, Arti Sonkusare⁵

^{1, 2, 3, 4, 5}Dept. of Information Technology, KDK College of Engineering, Nagpur

Abstract: Agriculture is the Prime Occupation in India in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Automated machines and Advanced techniques which are leading the world to new heights, is been lagging when it is concerned to Farming, either the lack of awareness of the advanced facilities or the unavailability leads to the poverty in Farming. In today's market the farmers are cheated by the Agents, leading to the poverty. Agromarketing would make all the things automatic which make easier serving as a best solution to all the problems.

Agroproducts solution Application will serve as a way for the farmers to get their products across the country just with some basic knowledge about how to use the website. The site will guide the farmers in all the aspects, the current market rate of different products, availability of product in shop and also provide shop details. And also access to the new farming techniques through elearning and centralized approach to view different government's agriculture schemes including the compensation schemes for farming. Getting availed to the required information related to the markets and different products and different Techniques of farming can be made possible through the Video facility provided by the Professionals in System.

Keyword: Agriculture, Security, Ratings, Agriculture marketing, Collaborative Filtering, Videos, E-learning

I. INTRODUCTION

A. Overview

India is an agriculture based country, where more than 50% of population is depend on agriculture. Farming is the most important sector of indian economy. Farmers are the lifeblood of the nation. Agriculture is mainly concerned with farming products. Agroweb is the platform that provide the agricultural products information system to its users(farmers) and researches to get online information about crop products such as pesticides, seeds, herbisides, etc. The trends of the crop products so that these will be pretty important to the users who access the agricultural products information via Internet an local host statistical details. The main features of the information system includes information retrieval facilities for users from anywhere in the form of obtaining statistical information about crop products available in shops. In addition with this provides individual information about Intercrops related to main crop products. The system allows the information retrieving facilities but also the updating facilities to the video and text regarding products and relevant materials and allow them to work on

agriculture according to modern technologies under the guidance of agricultural professionals . The global food system contributes to each aspects of demand for food. Agriculture sector is an important economic development to every country. India has its greater percentage of its economic development on the Agriculture sector. The global food sector is not efficient to provide food to all people which leads to Malnutrition and greater demand for the food. E- Farming platform have supported a lot to the farmers to sell their food products .Farmers are now also depend on the products requirement to do the farming .Therefore, the E-platform will help the farmer to get the product requirement essential to do farming..

II. LITERATURE REVIEW

A. Background Survey

In Agricultural marketing covers the services involved in moving an agricultural product and services from the farm to the consumer. Chemical crop protection products is commonly referred to as agrochemical products or pesticides. Chemical crop protection products or "pesticides" help control weeds, fungi, insects, diseases and other undesirable pests. The commitment of agriculture business in the national income in India is all the more, subsequently, it is said that agriculture in India is a backbone for Indian Economy. The contribution of agriculture in two decades towards the national output is between 48% and 60%.The needs of farmers are changing as a result of new pressures and emerging opportunities. As the farm sector evolves, Government services must also evolve. The department is responding by reshaping and strengthening many services to support the farm sector

to be productive, competitive and sustainable. To deliver better services to farmers, we collaborate with other service providers, as well as industry and community groups, which are well placed to meet the needs of farmers. The farmers who are very serious about their Agriculture business must exploit these application. Previous researches have worked on the technologies that was providing services to the farmers such as government aided schemes, movement of agricultural product directly to consumers or retailers. To provide the best and required agricultural services that is beneficial to the farmers in addition with the above services, there is need of implementing the application that will provide agricultural information about farming crop products such as seeds, pesticides, herbicides etc available in shops.

The advantage of agricultural innovation goes to farmers and consumers. There are no such e-platform which will be useful to the farmers to get the components and the products essential to do the farming. Farmers usually go to the shop and purchase the products where they spend too much of time and money. The farmers also do not get the required products in the shop where they visit. They spend more time in searching the shops for their required products. Moreover farmers buy the products which are not essential products to do the farming. The farmers living in the village areas which are too much far from the cities face more problems to get the proper required agricultural products to do the farming. For the farmers money keeps too much of importance and they spend much more of their own money in purchasing their essential required products for the farming.

B. Related Work

Many platforms had contributed the farmers to sell their agricultural products which have helped them to sell the food products. There are few schemes run by the government to sell and buy the products required for the farming. There was no such a door step platform which will help the farmers to get the required product to do the farming.

Peter Namisiko et al [3], 2013 have proposed as: A study which is conducted at majority of farmers in Kenya who are not able to sell their produce at market price due to lack of sufficient information available. Also the farming productivity is being lessened due to the lack of information and resistance developed by the agricultural universities. For such farmers to produce and sell their products at market based competitive prices, information communication technologies (ICT) tools have been available to them. This is because the development of agriculture is dependent on how fast and relevant information is provided to the end users. The study concentrated in Trans Nzoia County since it is the heart of Kenya. A lot of research has been conducted in this area, but no research has been to ascertain the awareness, adoption, legislative and regulatory framework, therefore it is must to determine the current research trends in the use and adoption of e-agriculture of e-Agriculture in TransNzoia County.

Sushant Wavhal, Nishtha Tiloo[2], Ruturaj Haral3, Pragati Tekawade4, 2017: We live in a country where agriculture accounts for almost 7.68% of total global agriculture output. Agriculture is mainly concerned with the farming industry. Almost half of the population is directly or indirectly dependent on this industry. This includes agricultural labourers and farmers. As a lot of manpower is involved in farming, government of India launches schemes and allowances for the economic and social welfare of farmers. Even though a large number of workforces are involved in this industry, there is no proper way of maintaining their records and also, not every eligible person is able to get benefits of these schemes. In this paper we are suggesting a prototype which provides facilities to maintain the records of farmers and agricultural laborers and notifying them with the latest government schemes.

Sumitha Thankachan1, Dr. S.Kirubakaran2, 2014: Technological importance have been a great support for making decisions in various fields especially in agriculture. The development of agriculture has been on under development for the past few years due to lack of Agriculture knowledge and environmental changes. The main aim of this paper is to reach farmers for their awareness, usage and perception in Agropduct. The study are used in statistical survey design technique to collect data from farmers for their awareness in e-Commerce. Online Agriculture is a platform for supporting marketing of agricultural products.

Thus, the agricultural information system provides its users and researches to get online information about crop product, The trends of the crop product act so that these will be pretty important to the users who access these via the Internet and local host statistical details. The main features of the information system includes information retrieval facilities for users from anywhere in the form of obtaining statistical information about crop product. In addition this provides individual information about Inter-crops related to main crops product.

III. PROPOSED SYSTEM

We are going to develop an AGROPRODUCTS Solution application that will fulfil all the agricultural needs of the farmer. Our system is an Web application which will have multiple sections like login for farmer/people to use it in their own way. This application will guide the farmers in all the aspects, the current market rate of different products, availability of product in shop and also provide shop details. Our main goal is to help the farmer who is in trouble and give him a user friendly application.

A. Advantages

- 1) *Help Farmer For Managing His Expenses And Schedule:* Using this application farmer can get approximate budget for planting crops. Farmer can get the details like area of land owned, type of soil, and month of plantation. This application will guide the farmers in all the aspects, the current market rate of different products, availability of product in shop and also provide shop details.
- 2) *Latest Government Policies are Easily Available:* Farmers will be notified about the latest government policies related to agriculture. Government policies available on Ministry of Agriculture web-site, but a fellow farmer cannot have the resources to access the website thus a handy solution.
- 3) *Provide New Strategies and Technologies For Farming:* This application will provide new strategies in plantation and upcoming technologies for better production of crop using uploaded Videos by professional . For example, plantation technique, amount of irrigation to be done, type and amount of fertilizers to be used in plantation.

IV. AIM & OBJECTIVE

To build such a predictive model that will be capable of providing agricultural services as statistical agricultural information about farming crop products such as agrochemicals like pesticides, herbicides, fertilizers, chemical growth hormones for crops growth and seeds, etc. available in shops, also the professional's guidance to the farmers related to latest modern techniques that can be used in agriculture and also will provide the platform for the shop dealer to earn the benefit by providing information about availability of crop products and by promoting their latest new products by uploading videos of crop products .

Farmers will get the guidance from agricultural professionals and using that guidance farmer will be able to do farming according to modern techniques for the better yield of the crops.

Farmers will get to know about the availability of the farming products that are available in the shops that are required in farming for better growth of crops and better economy.

A best crop always provides impetus towards a planned economic development of the country by creating a better business climate for the transport system, manufacturing industries, internal trade etc. A best crop also brings a good amount of finance to the Government for meeting its planned expenditure.

A. Statistical Data Consisting Of Agriculture Information

To Build a platform where farmer will get known to the statistical information consisting of Agricultural information about farming, crop products being available in shop, irrigation product and the scientific knowledge required for the farming an agricultural land. The Statistical information will be helpful for the farmers to know whether which crop is to be beneficial to yield and will be cost effective.

B. Guidance From The Agricultural Professionals

To provide a platform which will be helpful to the farmers to get the knowledge from the professionals and will be guided such that the farmer will get the proper knowledge which will be helpful for the farmer to take the decision regarding whether which crop is to be yield on their agricultural land.

C. Generating An Employment By Promoting Business

To build a platform for the shop dealers to earn the benefits by providing information about the crop products and to sell the agriculture products required for the farmers. Shop dealers will directly sell the products required directly to the farmers.

D. An Educational Platform To Get The Knowledge Regarding New Technologies In Farming

To build a platform for the farmers to get the knowledge regarding the farming. Farmers will be guided from the professionals and the farmer will be able to take the decisions whether which crop is to be yield and which not such that farmer will be able to produce more food on agricultural land and will be able to do farming which will be cost effective and can be done at low cost.

V. METHODOLOGY USED

A. Data Retrieval Algorithm(DRA)

Data retrieval algorithm is used for finding material (usually documents) of an unstructured nature (usually text) that satisfies an information need from within large collections (usually stored on computers). Information retrieval is a problem-oriented discipline, concerned with the problem of the effective and efficient transfer of desired information between human generator and human user. The indexing and retrieval of textual documents. Concerned firstly with retrieving relevant documents to a query. Concerned secondly with retrieving from large sets of documents efficiently.

The evaluation of an information retrieval system' is the process of assessing how well a system meets the information needs of its users. In general, measurement considers a collection of documents to be searched and a search query. Depending on the application the data objects may be, for example, text documents, images, audio, mind maps or videos. Often the documents themselves are not kept or stored directly in the IR system, but are instead represented in the system by document surrogates or metadata

VI. MODULES AND DESCRIPTION

A. Registration Module

This presents a great opportunity to capture and acquire access information related to farmers, agricultural professionals, shop owner. Farmers(users), agricultural professionals, shop owner firstly have to register themselves. After creating the accounts farmers(users) will be able to access the information related to agricultural services as statistical agricultural information about farming crop products like pesticides, seeds, herbicides, etc. available in shops, also the professional's guidance to the farmers related to latest modern techniques that can be used in agriculture. Agricultural professionals will upload the videos related to modern technologies that can be used in farming and will provide guidance to farmers and their queries. Shop owner will be benefited by providing information about availability of agricultural crop products and by promoting their latest new products by uploading videos of crop products. So in order to access the services farmers, agricultural professionals, shop owner have to register themselves first.

B. Login Module

In the login page farmers(users), agricultural professionals, shop owner will be able to login using username and password.

C. Farmers(User) Module

After login farmers(users) will get services like chatbot. After clicking on chatbot there will be a searching bar where farmers can search about the agricultural shops name and will get to know the quantity of the agricultural products available in shops. And also farmers will be guided under agricultural professionals.

D. Shop Owner Module

Shop owner will login using username and password. Shop owner will provide all the statistical information about availability of the agricultural crop products like pesticides, herbicides, seeds, etc. Also shop owner will be benefited by providing information about availability of

agricultural crop products and by promoting their latest new products by uploading videos of agricultural crop products.

E. Professionals Module

After creating account agricultural professionals will login using username and password. Agricultural professionals will upload the videos related to modern technologies that can be used in farming and will provide guidance to farmers and their queries.

VII. CONCLUSION

The Farmer will be able to get the essential required products at their door step and the farmer will get the proper knowledge whether which product should they buy and also will help to save money of farmer. The shop dealers will have the usage of the platform to grow up their own business and generate the employment.

REFERENCES

- [1] G. Abhishiek, M. Bharatwaj, L. Bhagyalaxmi. "Agriculture Marketing using web and mobile based technologies", 2016.
- [2] Sushant Wavhal, Nishtha Tiloo, Ruturaj Haral, Pragati Tekawade. "Farmer Friendly application for resource mapping of village with Government aided schemes", 2017.
- [3] Peter Namisiko and Moses Aballo "Current Status of E-Agriculture and Global trends: A Survey Conducted in TransNzoia Country, Kenya" in International Journal of Science and Research. Volume 2 Issue 7, 2013.
- [4] Gold, M. (July 2009). What is sustainable agriculture. Yifan Bo, H. W. (2011). The application of cloud computing and the internet of things in agriculture and forestry. 2011 International Joint Conference on Service Sciences (pp. 168-172). IEEE.
- [5] S. C. Mittal, "Role of Information Technology in agriculture and its Scope in India", [www.iffco.nic.in/applications/brihaspat.nsf/0/.../\\$FILE/it_fai.pdf](http://www.iffco.nic.in/applications/brihaspat.nsf/0/.../$FILE/it_fai.pdf), (2012).
- [6] P. Sharma, "Necessity of education and awareness in farmers: the basis of agricultural progress in developing and underdeveloped nations", *Agriculture and Biology Journal of North America*, (2010), pp. 387-390.
- [7] Shitala Prasad¹, Sateesh K. Peddoju² and Debashis Ghosh³, "Agro Mobile: A Cloud-Based Framework for Agriculturists on Mobile Platform", *International Journal of Advanced Science and Technology* Vol.59, (2013), pp.41-52.
- [8] Wang Ping, Liu Xiang-nan, Huang Fang, "Research on Mobile Mapping System and its Application in Precision Agriculture", *Map Asia* (2004).
- [9] Shweta Sharan, Kamini and Neha Mahajan, "Tech Productivity - An Android Based Solution for Indian Agriculture", *ORIENTAL JOURNAL OF COMPUTER SCIENCE & TECHNOLOGY*, ISSN: 0974-6471, March 2013, Vol.6, No. (1): Pgs. 125-129.
- [10] Pem Prakash Jayaraman, D. P. (7-9 April 2015). Do-it-Yourself Digital Agriculture Applications with Semantically Enhanced IoT Platform. 2015 IEEE Tenth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP) Singapore (pp. 1-6). IEEE.
- [11] Tesoriero, L.A., Chambers, G., Srivastava, M., Smith, S., Conde, B., Tran-Nguyen, L.T.T., 2016. First report of cucumber green mottle mosaic virus in Australia. *Aust Plant Dis Notes* 11,1.

10.22214/IJRASET

45.98

IMPACT FACTOR:
7.129

IMPACT FACTOR:
7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)