Agrifarming: Friend to the Farmer Using Android

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Abstract: *Now a days everyone is using the smart phone for different purposes. The complete information about Agriculture is one of the most important occupations in India. This is in practice since from ancient times and farmers are treated as food providers and given highest degree of respect. As the time changed technology has changed and there are many advanced ways have been evolved in agriculture with reduces the man power and increased the profits. But our farmers are not able to get that information at right time. "AgriFarming", provides the support to the farmers at every phase like what crop to be choose, in which type of soil, and what are the fertilizers and pesticides to be used and technological methods are used in farming will be given to the farmer through our project. It acts as a guide to the farmers in agriculture activities and solves every problem that arises in the process of agriculture and also provides how a problem may occur and the process to overcome it all in all the project agrifarming acts as a "Friend to the farmer".*

1. Introduction

Agriculture is the most important occupation for most of the Indian families. In India, agriculture contributes about sixteen percent (16%) of total GDP and ten percent (10%) of total exports. India's agriculture is composed of many crops, with the foremost food staples being rice and wheat. Indian farmers also grow pulses, potatoes, sugarcane, oilseeds, and such non-food items as cotton, tea, coffee, rubber, and jute (a glossy fiber used to make burlap and twine). **Economic Growth:** Agriculture is the backbone of Indian economy. Though, with the growth of other sectors, the overall share of agriculture on GDP of the country has decreased. Still, Agriculture continues to play a dominant part in the overall economic scenario of India. Besides agriculture with a commercial bias, subsistence agriculture with its emphasis on the production of food for the cultivator's family is widespread. Traditionally, Agriculture is followed as the simplest method of obtaining food for the family. Agriculture in India is more a 'way of life' then a 'mode of business'.

2. Related Work

Project Feasibility
In Preliminary Investigation have got the result that Agrifarming system is feasible because this application can be run on Android mobile.

Operational feasibility
Proposed projects are beneficial only if they will meet the organization's operating requirements. Simply stated, this test of feasibility asks if the system will work when it is developed and installed. Issues that appear to be relatively minor in the beginning have ways of growing into major problems after implementation. Therefore all operational aspects must be considered carefully. Operational Feasibility means the project should be supported by users. It should not cause any problems to users after implementation.

Technical feasibility
Technical Feasibility is nothing but implementing the project with existing technology. The queries to be answered when we take up this feasibility are the present technology sufficient to do the project? Does the proposed equipment have the technical capacity to hold the data required to use the new system? Are the technical guarantees of accuracy, reliability, ease of access and data security?

Economical feasibility
The budget and this can be achieved because most of the technologies used are freely available. The current system is developed within the budget. Only the customized products have to be purchased.

3. Problem Analysis

3.1 Existing Problem

The existing system consist of the agriculture websites which are not having the information in the localized form i.e., if the farmer who is in local village can only get the information in state level or country level he will not have any use with that information.

Limitations of Existing System
- Information is not localized.
- Functionality of application are complex.
- Proper modules are not categorized.
- Proper images are not depicted.
- No collective information.

3.2 Proposed System

The information retrieval process is very simple most of users can understand how to get the information which creates a complete and a proper use within the application. Proper image prediction is also used which gives understandability with the application.

Advantages
- Information is localized.
- Functionality of application is simple.
- Information is categorized into proper modules.
- Proper images are depicted to understand the information easily.
- Collective information is presented.

4. Implementation

The Functionalities of each module described below

- Soils
- crops
- Help lines

Soils:

Chances are that you haven't thought a lot about the soil under your feet, but you may be surprised at the complexity of soil. Soil varies in its composition and the structure of its particles, and these factors are closely examined by farmers, who need appropriate soil for planting crops, as well as engineers who may need to understand how soil is going to hold up under different demands.

Crops:

A crop is a plant or animal product that can be grown and harvested extensively for profit or subsistence. Most crops are cultivated in agriculture or aquaculture. A crop is usually expanded to include macroscopic fungus or agriculture. Most crops are harvested as food for humans or livestock.

Help Lines:

A center call centre has been established which takes queries of farmers .The MIS software captures caller details and specifications of the query which helps in analyzing area wise and crop-wise details with in a time space framework and provides preventive, advance action solutions.

5. Conclusion

The agricultural sector is of vital importance for the region. It is undergoing a process of transition to a market economy, with substantial changes in the social, legal, structural, productive and supply set-ups, as is the case with all other sectors of the economy. These changes have been accompanied by a decline in agricultural production for most countries, and have affected also the national seed supply sectors of the region. The practical issues and the opportunities that are around the farmers and the education and the resources which can be adopted from the countries which lead them to minimum profits are explained in the project "AGRIFARMING" which proves as the "FRIEND OF A FARMER".

6. Further Enhancements

In future we have a lot of scope to extend this application we have done it only to the district level it can be extended up to the central level and by updating the data at regular intervals it can be the best agricultural site in India. We can arrange the interactions of agricultural scientists with the farmers through the application and they can guide and give necessary instructions to the farmers. We can invite the agricultural scientists to the villages to have the interactions with the farmers and have the interactions with them and we can depict the videos of advanced technologies in the field of agriculture and we can explain about the new methods that can be adopted in the agriculture and that can be used in the agricultural sectors.

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