

# K-RIAD

## Kiosk for Rural India Agricultural Development

### -Farmer to E-Farmer

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#### Abstract

*Rural population being the majority of Indian population has the potential of making India an economic superpower and a developed country but in the present scenario this majority is completely oblivious to the power and capability of Information technology. Hundreds of millions of people still live in abject poverty with limited prospects for social and economic development rural area. This Paper discusses how we can provide general information and technical information to the farmers through the usage present technologies like KIOSK where the farmer will have unique id they will get all the information regarding agriculture and technical doubts will be clarified by through experts and the working process we will see throughout this paper.*

**Keywords :** KIOSK, Rural India, Agriculture, Farmer.

## 1. Introduction

India has 72.2 % of population resides in the rural areas and villages. India's huge population has a great potential to make it an economic as well as an IT superpower but the major hindrance is the lack of awareness among going trends in the agriculture field for the development of the technical trends in agriculture that how amongst the people living in the rural areas and the villages. With the introduction of the new Kiosk these problems can be easily eliminated because it will be available to each and every village and the most important thing is information is in there regional languages so they can know easily about the information regarding agriculture updates and modern trends in it.

WHAT IS KIOSK?

An **Interactive Kiosk** is a computer terminal featuring specialized hardware and software designed within a public exhibit that provides access to information and applications for communication, commerce, entertainment, and education.

Early interactive kiosks sometimes resembled telephone booths, but can also be used while sitting on a bench or

chair. Interactive kiosks are typically placed in high foot traffic settings such as hotel lobbies or airports.

Integration of technology allows kiosks to perform a wide range of functions, evolving into self-service kiosks. For example, kiosks may enable users to enter a public utility bill account number in order to perform an online transaction, or collect cash in exchange for merchandise. Customized components such as coin hoppers, bill acceptors, card readers and thermal printers enable kiosks to meet the owner's specialized needs.

## 2. Proposal

The information concerning to different areas of agriculture already do exist on the websites. Even for an educated person, it is a time consuming task to obtain or search for required information. Now we can imagine how the situation of a farmer would be.

Now a day's children were unable to know which crop is seasonal, and they even don't know how to plant and take care of it. So in the upcoming years, the government is trying to introduce awareness programs and lessons to the school children.

The video clippings, images do not provide complete information say from sowing of the seeds to the marketing of the grain. Each and every child in the world wants to be an engineer or a doctor or to be in any other profession. Especially in our country such kind of decision making is more, but ours is an agricultural country and nobody is showing interest to this field. Only the older people know about the fields and how to cultivate them.

In order to get the present status in the market, we need to go to the market itself and know information which would be a time consuming task. But even then, the farmer is

unable to get the complete and correct information. For the farmer to get fertilizers, he need to search each and every shop for it, but by providing the information in the web, he can go to the specified shop and can get the fertilizers with ease. There are number of fertilizers available in the present day's market. All of them are not good, so correct fertilizer to a certain crop is to be suggested to the farmer, so that he may not take the chances of losing the crop. Same in the case of pesticides, feticides etc; they should contain good and non-harmful chemical to the human beings and to the fruits. It should kill the pests and insects and should not be a reason to stop crops growth.

Farmers are not professionals to know how to operate the keyboard. So as our system is touch screen, it is provided with many icons and images which are very attractive. So by seeing the images user can understand the content regarding that. So by placing these types of systems in the government offices, many people can use it, just like a touch screen systems (kiosks) available in the railway stations and ATM centers.

The main motive of this paper is placing the information related to various areas of agriculture helpful for the farmers on the kiosk system. So they can know the information within fraction of seconds by interacting with the kiosk system.

### 3. Methodology

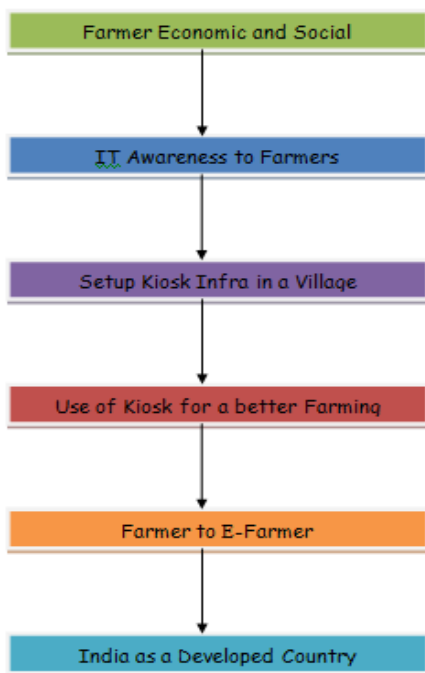


Fig 1. Methodology of K-RIAD

The Methodology of this paper is to make India as a developed country and our idea is projected in the Fig 1. Countries the back bone of countries development is majorly agriculture with the implementation and proper usage of K-RIAD the farmer will improve both economically and socially because this K-RIAD gives updated information in agriculture field under the technical expert guidance so the farmer will be more aware on present situations in the society. When the farmers improve their economic and social knowledge they have some IT awareness. All this will be possible only when we setup a kiosk in a village and proper usage of it for better farming then the farmer will become E-Farmer. When Farmer is aware of all the present trends and information we can see India as a developed country.

### 4. Model for Agriculture Kiosk to Rural India

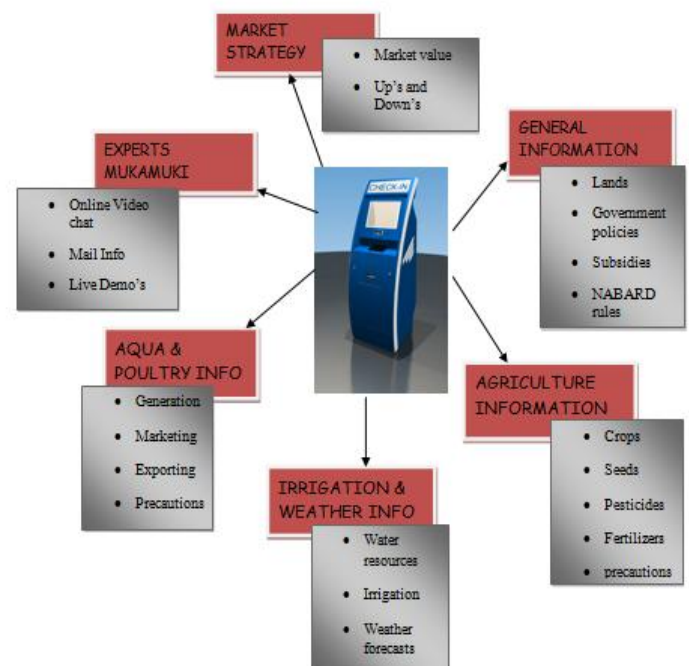


Fig 2. Agricultural Kiosk Model

We have presented a rough model for agriculture kiosk where it includes the information regarding different areas. We combined all of them and categorized into 6 different modules:

#### A. Market Strategy:

Here the famer will get the details about the present market trends that means market rates of different crops and seeds and up's and down's in the market from the past 3 months.

#### B. Experts mukamukhi:

In this module the farmer will be able to clarify their doubts lively by experts through online video chat and if suppose expert is not available at that time then the that will be directly forwarded to there and they will give the reply to our mail when they see. Live demos are also available to the farmers where they can each and every part in detail.

**C. Aqua and Poultry information:**

Here the farmer will get the details about the Aqua and Poultry farming which includes generation, marketing, exporting and precautions to be taken all these information will be get to Aqua and Poultry farmers.

**D. Irrigation and Weather information:**

In this module the farmer will get water resources available in their areas and what steps needs to be taken for irrigation of a particular crop. Four days weather forecasting information is also provided so that the farmer can aware of weather details and they can plan according to it.

**E. Agriculture information:**

Here the information related to the required crop; Seeds, Which are to be used, Fertilizers, type of fertilizers to be taken depending on the condition of the crop, type of Precautions to be taken and Time required to cultivate.

**F. General information:**

In this module the farmer will get details about lands and method need to taken to make fertile land, presently available government policies, subsidy rates to crops and pesticides and NABARD rules where it is a National Bank for Agriculture and Rural Development.

This system gives a clear description about all the required information with the images and videos.

**5.Implementation View**

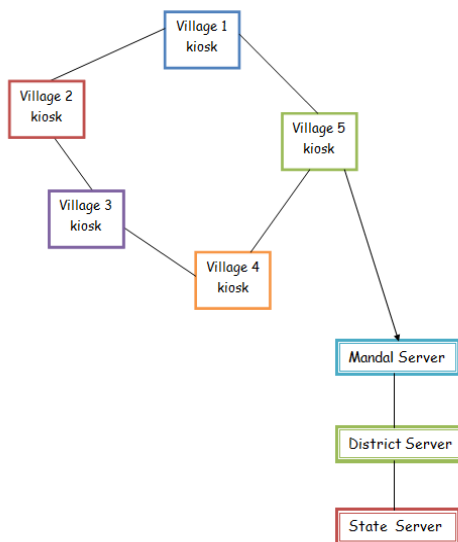


Fig 3. Idea of Placing Kiosks

We have presented a sample Idea of placing KIOSK in a state as shown in Fig 3 where all villages will be connected through mandal server, all the mandal servers will be connected to district head server and finally all the district servers will be connected to state main server.

We are presentation sample implementation of K-RIAD in regional language telugu the screen shots are shown below:

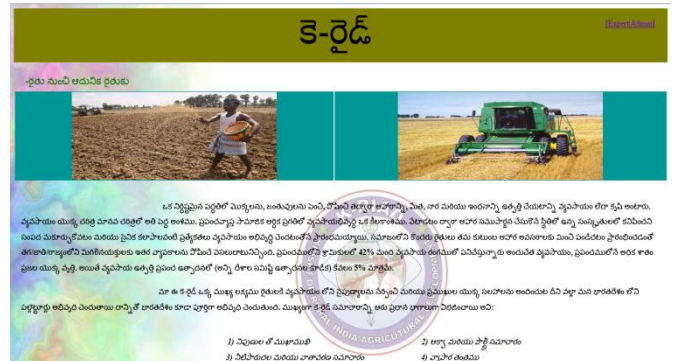


Fig 4 Start Page of K-RIAD in Telugu



Fig 5. Pin number entry Page of K-RIAD in Telugu



Fig 6. Main Modules Page of K-RIAD in Telugu

Fig 4 is start page of K-RIAD whenever the farmer inserts K-Card it shows Pin number entry page as shown in

Fig 5. K-Card is just like ATM card where unique farmer will be identified through this card. After the user enters their pin then farmer gets Main Modules page as shown in Fig 6.

## 6. Benefits

Overall benefits and main benefit K-RIAD purpose is shown in Fig 7. Some other main benefits of this model are listed below:

1. The main benefit of this model is we can see India as a developed country in future days if we implement it and used for better farming.
2. It will be more beneficial to farmers who are new to the farming field because they don't know how to farm with proper usage of this model they can easily know the further details.
3. Farmers can get daily and forecasted weather updates.
4. Farmers can know the present trends in the market so they can eliminate the middle men in the market finally farmers will get more benefited.

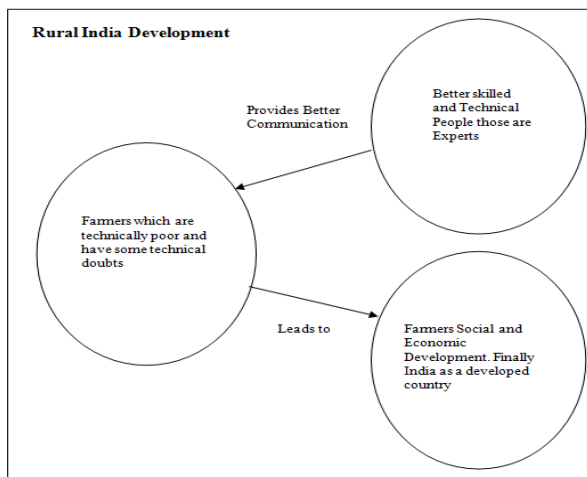


Fig 7 Overall benefit of K-RIAD

## 7. Conclusion

K-RIAD is a agriculture model which will be beneficial to farmers so Agricultural backbone countries like India it will be more useful by this farmers can aware of present trends and agriculture technological changes around the world and they can update them according to the changes by usage of K-RIAD efficiently and effectively. Finally when we implement these kind of models in every village

we can see India as a developed country. Let's hope for good.

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