

## Kisan Seva: A farmer's friend

(An easy to understand and user friendly platform for farmers to get all the information and help they need.)

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**Abstract-**In the present scenario the surroundings and many other technologies are being modernized. But some of the features are still lagging behind with a few drawbacks. In this paper one of the parameters of nature and an important aspect for living which is known as agriculture is being managed in a smart way. This paper illustrates the usage of updated technology in order to manage agriculture system in a smart way.

**Keywords:** Technology, Agriculture, Modernization, Kisan, Fertilizer,

marketing and shipping, notes held. The other key challenge is creating an online presence through websites and social media pages to connect with and sell to customers. Though these roadblocks are significant, there are benefits to overcoming them, such as an expanded customer reach and a lengthened selling season.

With the modernization in the field of agriculture there is still a lot of work and potential which can be harnessed by proper implementation of modern computing. The project is intended to bridge the gap between the economics, information, general wellbeing and agriculture sector.

### 1. INTRODUCTION

We have seen in the past, how farmer has to face lots of difficulties. They are not fully aware about the market. Most of the time buyers make them fool by giving false prices of their product and sometimes the farmers have to pay more than the actual cost of chemical fertilizer. Farmers are only concerned and aware about the agriculture.

Because of restrictions on in-person interactions, the pandemic has compelled many farmers to move online to sell their goods. This could turn out to be a long-term boost for farmers. This moment presents a powerful opportunity for individual producers and local food aggregators to scale up their online presence. One of the biggest challenges in agricultural marketing for many farmers is building business models to incorporate direct-to-customer

### 2. MAIN CONCEPT OF WEBSITE

The main idea behind the website is to help the backbone of our country i.e. "Farmers" in whatever way possible. Through this website we want to make farmers independent of the mediators to maximize their profit. The live price section makes farmers aware about the current market and help them to get the best price for their product.

Most of the farmers in our country are unaware of the government schemes. This website will help them in getting the news and updates regarding the latest Government schemes and helps. Here they get the step by step process of getting the benefit of any government schemes or helps. Which helps them saving the money they used to give as a bribe to the agriculture officers on Panchayat and upper levels.

A lot of farmers practice agriculture without knowing the exact and the scientific methods of agriculture. Here we have collected and compiled all such data which will help the farmers in practicing agriculture in an efficient way. Which will result in better yield and maintain the fertility of soil as well.

One of the common problem with farmers is that they practice agriculture and harvesting without knowing the weather. Which in turn results in financial loss. We have provided the feature of weather prediction for until the next 7 days.

This website is solely built for the wellbeing of the farmers across the country.

We have also provided a user manual keeping in mind that not all the farmers are technically educated. This makes the website very user friendly.

### 3. OPPORTUNITIES& Social Impact:

- With government targeting pan India digitalisation by building infrastructure to support digital needs by 2020, it is high time to include the farmer digitally and introduce them with the benefits and opportunities of going digital and using technology.
- Much hyped transparency can be achieved implying this solution.
- With the gradual development in this product, we are planning to introduce crop insurance, so as to provide the back to the farmers as per the governments schemes. So that they can be relieved from the tension of unexpected crop failure, which is of course the main reason of suicide.
- Will help in reducing farmer's suicide due to crop failures thus saving innocent and precious life.
- Lessen the hoarding of stock, which ultimately may reduce inflation of market price of stuff like vegetables, cereals etc.

- Bridge the gap between Farmer and government.

### 4. User Manual:

Since using a website requires technical knowledge, It is important to guide the Farmers who does not have good technical skill. So, we have provided a User manual for those who need any kind of assistant. The user manual is mentioned below:

- **Home page**  
This is the main page of the website. It contains some maps of India with the highest concentration of some specific crops. It also provides with the latest news.
- **Government schemes**  
This page contains the details about all the government schemes.
- **Mandi price**  
This page contains the latest price of different commodities along with the name of the state.
- **Weather broadcast**  
This page automatically detects your location and provide you with the weather prediction for the next seven days.
- **Seasonal crops**  
This page contains the information about the different seasonal crops grown in India.

### 5. RESEARCH TECHNIQUES

We used the following methods in our research:

- Choosing correct layout for website
- Designing webpages
- Collection of data from various portals for Farmers
- Functionality test
- Navigation selection
- Testing for any errors
- Combining all pages together

## 6. PRODUCT DEFINITION:

This product will be dealing with many aspects that are mentioned above as well as forthcoming challenges as well, from location of mandis to accurately predicting crops data everything will be given in it. This includes:

- Creating innovative agriculture solutions for improving agriculture practices of farmers.
- To create much easily accessible website for farmers from which they can get all the vital information.
- Information on seeds and their appropriate timing
- Accurate weather prediction
- Fertilizers details and manures
- Irrigation schemes and other beneficial government schemes

The Programming language used in this project are as follows:

- **HTML5:**

HTML5 is the latest evolution of the standard that defines HTML. The term represents two different concepts. It is a new version of the language HTML, with new elements, attributes, and behaviours, and a larger set of technologies that allows the building of more diverse and powerful Web sites and applications. The HTML 5 language has a "custom" HTML syntax that is compatible with HTML 4 and XHTML1 documents published on the Web, but is not compatible with the more esoteric SGML features of HTML 4.

HTML 5 does not have the same syntax rules as XHTML where we needed lower case tag names, quoting our attributes, an attribute had to have a value and to close all empty elements.

- **JAVASCRIPT:**

JavaScript is a programming language that adds interactivity to your website. This happens in games, in the behaviour of responses when buttons are pressed or with data entry on forms; with dynamic styling; with animation, etc. JavaScript is versatile and beginner-friendly. With more experience, you'll be able to create games,

animated 2D and 3D graphics, comprehensive database-driven apps, and much more.

JavaScript itself is relatively compact, yet very flexible. Developers have written a variety of tools on top of the core JavaScript language, unlocking a vast amount of functionality with minimum effort.

- **APIs(APPLICATION PROGRAMMING INTERFACE):**

API stands for Application Programming Interface. In basic terms, APIs are a set of functions and procedures that allow for the creation of applications that access data and features of other applications, services, or operating systems. The API is not the database or even the server, it is the code that governs the access point(s) for the server.

**7. CONCLUSION:** This web app will help the farmers of our country in several ways. Now it will be easy for a farmer to know about the latest scientific methods of farming and implement them in an efficient way. Farmers will be aware of the current price of their commodities. This will save a farmer economically. They will be aware of all the government schemes related to Agriculture and farming. They will also have a better understanding of their soil and water availability in their area.

The only remaining concern is that using this system requires some basic level of skill and as we know that not all farmers are technically educated in India. This is where the literacy comes in the picture. But still we have done our best by giving a user manual.

## 8. REFERENCE

[1] Weather Broadcast API, Mandi Price API & News API

[https://data.gov.in/ogpl\\_apis](https://data.gov.in/ogpl_apis).

[2] List of all the Government Schemes and Helps <https://www.pmkisan.gov.in/>.

[3] Scheme related information and other beneficial information,

<https://dbtagriculture.bihar.gov.in/>

[4] API for the live mandi price and the idea of design,

<https://www.commodityonline.com/mandiprices.>

[5] News and other information related to agriculture,

<https://icar.org.in/>.

[6] Information related to seasonal crop from Google, Wikipedia and some other

[7] Mr. Pradeep Kumar, Professor Lovely Professional University; In guiding through website building process

[8] Google images and some other websites for the images used in the website

[9] Data collection

<https://www.nabard.org/content1.aspx?id=23&catid=23&mid=530>

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