

Mywefarm-Farmer's Portal

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Abstract : *Portal for Farmers to sell the produce at a far better rate we've a spectrum of farmers available in our society with a majority of farmers as small scale farmers. Farmers need to affect logistics delay of markets available, insurances, government schemes. Small scale farmers are the foremost vulnerable entities of chain. we'd like to supply them with instant gratification in order that even they get best prices for his or her produce. Accurate predicting of future demands with assured prices remains a dream for long tails of the chain. Lack of intelligent platforms which may support people with meagre education to avail these opportunities provided by government and external agents. Decision taking platform instead of a offer showing one.*

Keywords: *Farmer, future demands, web based app, general*

1. INTRODUCTION

We have many Online players like Big Basket, Grofers, ZopNow, Reliance fresh, Nature's Basket, Bazaar Cart. BigBasket handles 60,000-70,000 orders each day with every 8 out of 10 orders are for raw materials required for whole course meal like vegetables, roots, dal etc. Swiggy a web food delivery app quite 300,000 food-delivery orders each day in India, as per industry estimates. of these hotel requirements are often integrated on our portal. UberEats, Zomato and 5 other major player in line. Herbal Medicinal Giants like Dabur, Himalaya Herbals, Hamdard Laboratories etc. acquire 10,22,500 tonnes of produce per annum . So are the numbers synchronous(8,78,200 tonnes) with other medicinal fields where companies like Serum, Hindustan Antibiotics, Piramal pharma, Sun pharma etc. An example of Pune. a number of the large companies like Cognizant(capacity 3,500), IBM(capacity 3000), TCS(3,500) there are almost 50 such MNC from just IT sector in various parts like hinjewadi, baner, aundh, SB road etc who provide canteen services. There are 12,000 industrial MIDC units, 811 colleges and to not list out the never ending list of Hotels. Serving 120,000,000 children in over 1,265,000 schools and Education Guarantee Scheme centers, Midday meal is that the largest of its kind within the world. With 270 grams of food provided per student every day. There are many other major sectors which demand huge amounts of produce in different forms. For food Indian Railways, Darbo , ITC, Barilla grp. Etc. Latex cultivation for tires etc.

1.1 WORKING

We opted to make mobile version of our project on Cordova instead of android studio or flutter since our primary aim was to make the app available on multiple mobile platforms which would have been tiresome if we had used the latter IDEs. So unlike native mobile apps, our application is a hybrid mobile app developed with web technologies like HTML5, CSS3 and JavaScript. Adobe System acquired PhoneGap and rebranded it as Cordova in 2011. Mobile app developers use Cordova Framework as an open source framework for developing hybrid mobile apps.

A Cordova app can be installed from the Play store or App Store like native mobile apps despite being developed with web technologies. Simplified user experience by providing a support altogether regional languages. Segregation of farmers supported their ability. The Cordova Framework supports popular platforms like iOS, Android, Windows, OS X, Blackberry 10 and Ubuntu. Therefore a developer can use the Cordova framework to build a single mobile app for several mobile platforms. The app delivers native user experience by accessing native device functionality like camera, GPS, Bluetooth and Contacts. because of the devices installer formats. The UI of a Cordova application technically acts like WebView since it is made using web technologies like HTML5, CSS3 and JavaScript. The UI runs in the native container, while occupying the screen of the mobile device. The Cordova libraries make the app deliver native user experience by interacting with the native framework of each individual mobile OS. Developers can link JavaScript code to the native code running in the backend through various plug-ins. For example, the cordova-universal-links-plugin can be used to make the application support deep links on Android devices and universal links on iPhones. They can also use the app security API to avail the security properties of the underlying platform. The developers can easily extend the open source app development framework and create mobile apps by using popular tools like Ionic Frameworks, Drupal and IDEs like Visual Studio. The latest update to Visual Studio provides a set of tools for Apache Cordova — easy-to-use installer, code editor, code debugging, app testing, and app experience personalization.

We have used drupal for our project. Drupal is a free and flexible Content Management System. It is based on The LAMP stack. It has a modular design and various features can be added and removed by installing and uninstalling modules. Extending functionality and gaining complete control over the design can be accomplished through a robust collection of add-ons in the form of modules and themes. Drupal has amazing collection of modules allowing development of any and every type of site. It also allows changing the look and feel of the website by installing and uninstalling themes. Drupal Core contains the PHP scripts which are required to run the basic CMS functionality, many optional modules and themes and many JavaScript and CSS files. It also incorporates other great web

technologies, such as CKEditor, Twig, jQuery, Backbone.js, and Guzzle. Drupal has one of the best page loading efficiency and speed because of BigPipe and other caching optimization modules.

It is the first platform where the branching players can bid to supply services to the present chain. Pooling of farmers so on avail better opportunities from big players. Using blockchain to supply transparency in financial transactions with quality assurance of the produce at each step. Thoroughly scrutinized login process. Providing ratings of farmers through their past records. Providing rating of produce with the assistance of NGOs like DHAN.

Meddling a 3rd party to take care of the standard and reduce corruption. Payment module are going to be done at the top of the chain through our portal which might function an escrow service. and therefore the tracks of the amounts to tend to every a part of the chain are going to be done by using blockchain. Thereby reducing commissions which could be added in every a part of the chain. Providing instant visibility in regional market and direct business with the most important players of the e-commerce like Big Basket, Grofers, ZopNow etc. Additional constant support from dominant retailers like DMart, WalMart, BigBazaar, star Bazaar etc. to not forget the varied college canteens, cafeterias in malls and corporations, midday meal programs.

The dominant players can even export to international markets and retailers like Amazon Pantry. This smart portal asks for the issues faced by farmers and segregates and sorts the simplest schemes provided by the government(similar to coupon getting availed for particular offer). This provides a moment gratification and proper utilisation of the resources available within the ecosystem. Smart suggestions supported inputs of soil quality tests, weather predictions, market demands.

1.2 ADVANTAGES

Our main motive is to uplift the dilapidated condition of our long-tail farmers. By increasing their spread of network and providing better price. Most farmers of these section are uneducated. They are in dire need of the schemes provided by the government but due to lack resources, education or skills they are not able to avail it. Our platform even solves these problem for the ones who mostly deserve these schemes. We have also inculcated a portion where we can take many activities like exhibitions of scientific farming which can be conducted in various villages, some companies can test their prototypes and devices on these farmlands. Educating them about shifting to commercial crops. Modern advancement to predict the climatic conditions will help decide the crop schedule, transportation dates, pre scheduling and managing warehouses etc. Use of modern techniques can be helpful not only to farming but also it can make this supply chain more stable. All these points will be available on the portal apart from the actual trade.

1.3 LIMITATIONS

We are using the online portals which requires internet which can be sometimes inconsistent. If a person is uneducated he may or may not know how to work an electronic device. In rural area people may face a difficulty as we have to depend on internet connectivity and device compatibility. The portal is a several years old, because vendor come and out of portals every month. Licensing vendor selection is a high risk.

The decision of a portal strategy requires careful analysis of long-term and long-term needs. Careful analysis of security always exists when we talk about online portals.

2. Figures and Tables

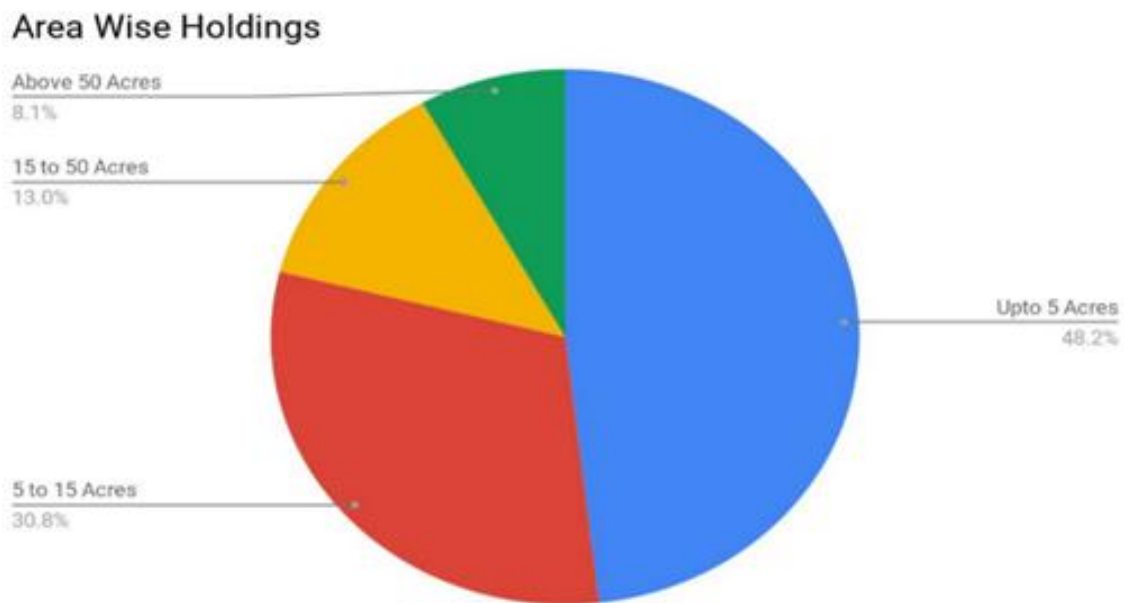


Fig 1: Area wise holding of Indian farmers



Fig 2: Overview layout of app

3. CONCLUSION & FUTURE SCOPE

Finally efforts should be made in terms of setting up proper marketing infrastructure that will facilitate the market participants to carry out the trading activities and also provide awareness, training, practical experiences, support needed to small, marginal and medium farmers at village/rural areas in terms of newer ways of agriculture marketing channels so that every farmer will be able to adopt better marketing techniques like common online platforms for selling their produce and get the remunerative prices for the same.

We can add regional languages because people are more comfortable with their mother tongue. We want to add machine learning to map out most efficient route to travel for product delivery and pick up. Agriculture is vast field by size of land, by number of farmers, by number of crops and number of stake holders. Nobody can be disconnected from the relevance of agriculture and hence from the agricultural marketing. So the scope for further research in relation to agricultural marketing is very wide. The researchers can choose topics pertaining to particular crops, particular areas, particular marketing methods or import/export etc , and also the marketing of agricultural produce is a dynamic topic which is bound to provide more and more new opportunities to the future researchers .

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REFERENCES

- [1] Gengdi, Wang wei, Liu xiaoyang, "The Study of Security of E-commerce System", IEEE CCTAE 2010, May 2010, pp 20-23.
- [2] Saurabha A,Ghogare, Priyanka M Monga 2015 'EAgriculture Introduction and Figuration of its Application' International Journal of Advanced Research in Computer Science and Software Engineering,2006, vol 5, issue no 1, ppno.44–47. 2012
- [3] Pathak N, "Contribution of Agriculture to the Development of Indian Economy", The Journal of Indian Management and strategy, 2009 vol 14, issue no 1, pp.no 52- 56,
- [4] Weibin Zhang, "Research on E-commerce Mode of Food Enterprises", IEEE, June 2010, pp 464-467.
- [5] Tripathi, A., & Prasad, A. R. (2009). agricultural development in India since in determinants: a study on progress, progress, performance and determinants. Journal of Emerging Knowledge on Emerging Markets, 1(1), 63-92.
- [6] Wolfert, J., Verdouw, C.N., Verloop,, C.M., Beulens, A.J.M., 2010. Organizing information integration in agri-food—A method based on a service-oriented architecture and living lab approach. Computers and Electronics in Agriculture, Volume 70, Issue 2, March 2010, Pages 389-405