FARMER WELFARE AND ASSISTANCE WEB PORTAL

Harish Gorewar
Department of Information Technology
Karmaveer Dadasaheb Kannamwar
College of Engineering
Nagpur,Maharashtra, India
harishgorewar.it@kdkce.gmail.in

Tanmay Vaidya
Department of Information Technology
Karmaveer Dadasaheb Kannamwar
College of Engineering
Nagpur,Maharashtra, India
tanmayvaidya742@gmail.com

Harsh Desai
Department of Information Technology
Karmaveer Dadasaheb Kannamwar
College of Engineering
Nagpur,Maharashtra, India
desaiharsh183@gmail.com

Tarjan Bawankule
Department of Information Technology
Karmaveer Dadasaheb Kannamwar
College of Engineering
Nagpur,Maharashtra, India
tarjanbawankule1@mail.com

Somesh Jais
Department of Information Technology
Karmaveer Dadasaheb Kannamwar
College of Engineering
Nagpur,Maharashtra, India
jaissomesh@gmail.com

Abstract—Information Technologies (ITs) have made our life easy. ITs are playing valuable roles in a variety of technical and non-technical fields. So can also be used for farmers to help them to get more production and profit and awareness by this new farming schemes and awareness through this portal and centralized approach to view different government's agriculture schemes including the compensation schemes for farming. Getting availed to the required information related to disasters can be made possible through the SMS alert facility provided by the system. It helps to keep our beloved farmers technically updated about each new and old running schemes and benefits at one tap in their smartphones or at nearby internet centers. They can easily apply and track the current status for their applications at any time.

Keywords—Web Portal, Farm, Schemes, Weather forecast, fertilizer, farming, Alert System.

I. INTRODUCTION

This portal is developed to view the depth for reaching the farmers and to convey the current governmental schemes and benefits to end user that is farmers directly without and mediators or the third parties. The interference of such middlemen are responsible for poor lifestyle of the farmers since time immemorial. The development of such welfare portal will serve as a way for the farmers to stay alert and updated about all schemes and benefits running across the country. The portal helps the farmers in registering themselves easily through unique ids or phone number or

AADHAR number etc. Removing the intervention of the middlemen.

The Farm Portal ought to facilitate farmers to get updates relating to all the agriculture connected news and conjointly shows the climate of a selected space to that the farmer gets crop suggestion consequently. These results are within the variety of net and therefore the format are terribly compressed one that won't need additional cupboard space. The rest of the paper is organized as follows: Section 2 describes literature survey the Section 3 presents details of our Experimentation Details and Proposed Features. Finally,

we conclude our reference research papers with acknowledgement and conclusion in rest of Sections.

II. LITERATURE SURVEY

There are various reports surveys and also feedbacks with technologies are reviewed from existing papers and portal that are listed in the literature survey. The paper [1] describes a system that uses ITs and it is an android-based solution. The system supports a variety of features like updates of weather, news and different agricultural commodities but local language support is missing in this system. System described in paper [2] is developed by considering farmers from different states who may be illiterate. The base paper of this system is again Android based Solution for Indian Agriculture [1]. This system

tried to solve the complex interface problem that was there in the previous paper. The system in paper [2] provides a user-friendly iconic interface. However, the system [2] failed to provide multiple local language support and also only, a large screen interface is available in the system; a small screen interface is missing. The system in the paper [3] provides information of crop's rates in local as well as distant markets. The system also provides weather forecasting information.

This portal offers a variety of information related to agriculture and allied sectors for the benefit of farmers. An assessment of the impact was essential so as to determine whether the portal was meeting the objectives set forth initially. Impact assessment would also help in measuring the changes that have occurred due to the portal. Impact of this portal was studies in terms of five capitals that is natural capital, social capital, human capital, physical capital and financial capital outlined in the Sustainable Livelihood Framework used for the present study.

A. Government Reports studied

1. ANNUAL REPORT 2020-21, Department of

Agriculture, Cooperation & Farmers' Welfare, Ministry of Agriculture & Farmers' Welfare,

Government of India "Krishi-Bhawan" New Delhi-

110 001 www.agricoop.nic.in

2. Agricultural statistics 2017, Government of India Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation & Farmers Welfare Directorate of Economics & Statistics New Delhi

3. Agricultural Statistics at a Glance 2018 Government of India Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation & Farmers Welfare Directorate of Economics and Statistics New Delhi

4. Scheme Guidelines for CENTRAL SECTOR SCHEME of financing facility under 'Agriculture Infrastructure Fund' Revised Scheme Guidelines May 2022, Government of India, Ministry of

Agriculture & Farmers Welfare, Department of Agriculture, Cooperation & Farmers welfare Directorate of Economics & Statistics New Delhi

B. Other online Web Blogs and articles

Reference for Various online platforms are available which can be used by millions of people across the globe. Yet, the farmers are still not aware of the potential way of agricultural trading. Due to such gaps, the middlemen still continue to rule the marketing chain and as a result the reasonable profits are not obtained by the farmers.

III. EXPERIMENTATION DETAILS AND PROPOSED FEATURES

The Proposed Farmer's portal is a single gateway through which the governance supervised activity of implementations can be performed. The farmer's experience of the portal can be tailored according to the individual need that's the easiest and the simplest form. It is a single access point i.e., everything is in a single place, the only thing needed is single login to approved users.

The system will be having only one User-name or unique ID and Password section on the front page, as per the user-name and password the system will know whether user is Farmer/Administrator/Gov. Officer. **Cases of Project:**

Case 1: Farmer

- Farmers can create new account, log-in to their existing accounts which will give them the authority to use the services provided by the system.
- Authenticated farmers can do enquiry, claim the compensation from government and can view his fund.
- If user select as farmer then there is option to select whether he wants to take information or if he is already familiar with online system then he can directly go to browse the platform.
- The Farmer can check their account on fund transfer.

Case 2: Government Officer

- Central authorities can log-in to their accounts as created by administrator.
- Authorities can access all the details of the market in all the different tehsil, district.
- They can view turnover of the daily funds as daily, weekly or monthly.
- Validate farmer's eligibility for compensation and schemes. ☐ Provide the valid reason why the application for schemes if has not been granted.
- Invoke proper activity in response to valid complaints about anyone related to farming.

Case 3: Administrator

- Create and monitor accounts of users.
- Maintain the website.
- Provide the username and authorities as per user.
- Update the website.

IV. FUTURE WORK

1. Language Translation API for the website.

2. Dataset to bet regular appended from the user after their individual experience for an efficient algorithm.

3. Customized timeline for each user according to all the district and approaches of he/she locations.

4. Inspirational movements for quick urban terrace farming.

5. A local buy and sell Zero-Merchant online Grains/ Vegetables/ Fruits mart for a better income to the local farmers.

V. APPLICATIONS ☐

Assistance alerts and recommendations

- News.

- Weather report

- Government policies.

- User feedback

VI. CONCLUSION

The system "Farmer Welfare and Assistance Web Portal" is able to solve key problems of farmers. The interface of the system is simple because farmers can access useful information regarding their crops, market rates, government schemes, and weather easily. Farmers can sell their output at fair rates as they would find the current rates of crops in the market on their phone itself. In this system farmers would find a good platform where they can sell their output or buy agriculture machineries and other stuff related to farming. It is concluded that farmers can use the system efficiently without even logging in, if they know basic knowledge of using a Smartphone. If they want to sell or buy something then only they are required to log in. It is also concluded that the system will prove to be an important bridge between consumer and producer of crops, agricultural machineries and other agricultural stuff. However, the current system is developed only in Marathi language but to extend the use of the system in a variety of different states in India, the system can be extended in other languages also. In future, we will focus on improving this system by adding other local Indian languages.

VII. ACKNOWLEDGMENT

We would like to thank our guide Prof. H. V. Gorewar and head of the department Prof. Sunnanda Khandiat mam for the encouragement and support that they have extended. We would also like to thank the anonymous reviewers who provided helpful feedback on our projectscript.

VIII. REFERENCES

[1].Rahul Talreja, Rohan Chouksey, Sushma Verma," A Study of Blockchain Technology in Farmer's Portal" Department of Computer Science and Engineering Medi-Caps University Indore, India. Proceedings of the Second
International Conference on Inventive Research in Computing Applications (ICIRCA-2020) IEEE xplorer Part Number: CFP20N67-ART; ISBN: 978-1-7281-5374-2 [2].Raghu Raman D, Saravanan D, Nivedha R," An Efficacious E-Portal for Rancher to Buy Seeds and Humus" International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-1S5, June 2019.

[3].Vinod Singh and V.L.V. Kameswari,"A Study on Impact of ICT Enabled Web Portal (Krishinet) on Farmers" International Journal of Agriculture, Environment and Biotechnology Citation: IJAEB: 12(2): 163-174, June 2019. DOI: 10.30954/0974-1712.06.2019.13

[4].Pranita Chikhale 1, Manasi Gunjal2, Anand Khatri3 "Farmer Portal – A Machine Learning Based Portal"International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 08 Issue: 12 | Dec 2021 www.irjet.net p-ISSN: 2395-0072 (2002) The IEEE website. [Online]. Available: http://www.ieee.org/

[5].Vimal Kumar and Vijay Kumar Sharma, Department of Computer Science and Engineering, Meerut Institute of Engineering and Technology, Meerut, U.P, India. International Journal of Advanced Science and Technology Vol. 29, No. 6, (2020), pp. 4783 - 4786FLEXChip Signal Processor (MC68175/D), Motorola, 1996.

[6].Sneha Iyer R 1, Shruthi R2, Shruthhi K3, Madhumathi R4 1,2,3,4Department of Computer Science and Engineering, Sri Ramakrishna Engineering College, Coimbatore, India.2021 7th International Conference on Advanced Computing & Communication Systems (ICACCS).

[7].Megha Nayak et al, "E-Commerce Site for Agriculture Products", International Research Journal of Engineering and Technology, vol. 6, pp. 347-349, 2019.Agro Products (2020). Origin of Agriculture. [Online] Available from:http://www.agriculturalproductsindia.com/agro/history. html [Accessed April 2020].

[8].Punchihewa, Devaka J., and Prasad Wimalaratne. "Towards an ICT Enabled Farming Community." [Online] Available from: https://www.aesanetwork.org/wpcontent/uploads/2018/02/0000Towards-anICT-EnabledFarming-Community.pdf [Accessed April 2020].

[9].Shital Chaudhari, Vaishnavi Mhatre, Pooja Patil, Sandeep Chavan, "Smart Farm Application: A Modern Farming Technique Using Android Application", International Research Journal of Engineering and Technology, volume 5, issue 2, 2018, 318-320p.

[10].Dharmateja M, Sriraman Kothuri and Kuna Venkateshwararao, "E-Application and Dss for Farmers to Sell Food Crops through E-Auction", International Journal of Engineering and Technology, vol. 4 pp. 101-103, 2018.

[11].AgriBot - An intelligent interactive interface to assist farmers in agricultural activities 2019 IEEE Bombay Section Signature Conference (IBSSC).

[12].Gyanappa A. Walikar, AnkitaSuhasKadam, ApurvaMahadevPowar, SandhyaraneeVijay Vijaykumar Pol, ShraddhaKashinathPhule, "Mobile Applications Used For Farmers: A Survey" International Journal of Engineering Science Invention (IJESI), APRIL-2018.

[13] Manav Singhal, Kshitij Verma, Anupam Shukla, "Krishi Ville-Android based solution for Indian agriculture". 2011 Fifth IEEE International Conference on Advanced

Telecommunication Systems and Networks (ANTS), 18-21 Dec. 2011, Bangalore, India.

[14] Soumalya Ghosh, A. B. Garg, Sayan Sarcar, P.S.V.S Sridhar, Ojasvi Maleyvar, and Raveesh kapoor,"Krishi-Bharati: An Interface for Indian Farmer", Proceedings of the 2014 IEEE Students' Technology Symposium, 28 Feb.-2 March 2014, Kharagpur, India.

[15] Shankar M. Patil, Monika Jadhav, Vishakha Jagtap, "Android Application for Farmers", International Research Journal of Engineering and Technology, volume 6, issue 4, 2019, 4200-4202.