Awareness about the Agriculture Needs through Interactive Web Application for Farmers

Mr. G. Rajaraman[1], R. Ragul Kulothungan[2], S. Sarukesh[3], K. Varun[4]

Assistant Professor, Department of Computer Science and Engineering[1]
Student, Department of Computer Science and Engineering[2,3,4]
Anjalai Ammal Mahalingam Engineering College, Thiruvarur, Tamil Nadu, India

Abstract: *Agriculture occupies an important position in the Indian economy. Indian farmers today are facing the problem of low income due to the lack of information about government schemes, fertilizers, farming equipment, etc. Some smallholders Agriculture occupies an important position in the Indian economy. Indian farmers today are facing the problem of low income due to the lack of information about government schemes, fertilizers, farming equipment, etc. Some smallholders and marginalized farmers have low awareness as most of them live in remote areas and don't have access to information about soil properties, seeds, recently used tools, fertilizers, etc. The document proposes an intelligent, portable system that uses natural language processing Agriculture occupies an important position in the Indian economy. Indian farmers today are facing the problem of low income due to the lack of information about government schemes, fertilizers, farming equipment etc. Some smallholders and marginalized farmers have low awareness as most of them live in remote areas and don't have access to information about soil properties, seeds, recently used tools, fertilizers, etc. The document proposes an intelligent, portable system that uses natural language processing methods to help farmers use different farming methods, and further help them to answer their queries and solve their basic and intermediate-level doubts using a chatbot which will save their time. To meet all the requirements of farmers, a chatbot is proposed using natural language processing technology. The system will act as an interactive virtual assistant for farmers, answering all queries related to agriculture. This paper will go through the implementation of the chatbot using the chatterweb bot libraries and the Django framework.*

Keywords: Artificial Intelligence

REFERENCES

[1]. Anandaraja, N., Sriram, N., Kathiresan, C., Shibi Sebastian and Vadivel, E., (2011). Linking the Farmers with Market through Web and Mobile. In: Saravanan, R., Kathiresan, C., and Indradevi, T., (Eds)

[2]. Baumuller. H. (2012). Facilitating agricultural technology adoption among the poor: The role of service delivery through mobile phones.

[3]. Muthiah, Ganesan, et al. "An exploratory study of mobile multimedia agricultural advisory system: challenges and lessons from TAMIL NADU, INDIA." *The Electronic Journal of Information Systems in Developing Countries* 56.1 (2013): 1-14.

[4]. Sanga, Camlius, et al. "On Search for Strategies to Increase the Coverage of Agricultural Extension Service: Web-based Farmers' Advisory Information System." *International Journal of Computing & ICT Research* 7.1 (2013).

[5]. Caine, Amanda, et al. "Mobile applications for weather and climate information: their use and potential for smallholder farmers." *CCAFS Working Paper* (2015).

[6]. Sneha Naraseeyappa and Shilpa Anakalaki, Analysis of agriculture data using data mining techniques: application of big data, Springer Journal, 2017

[7]. Kandagor, Jonathan C., Jason M. Githeko, and Arnold M. Opiyo. "Usability attributes influencing the adoption and use of mobile apps for dissemination of agricultural information." *International Journal of Agricultural Extension* 6.1 (2018): 33-41.

[8]. Kavita, and Pratistha Mathur. (2020) "Crop Yield Estimation in India Using Machine Learning." In 2020 IEEE 5th International Conference on Computing Communication and Automation (ICCCA), 220–224.

[9]. Vilas, Maria P., et al. "1622WQ: A web-based application to increase farmer awareness of the impact of agriculture on water quality." *Environmental Modelling & Software* 132 (2020).