Title: "Development of a Smart Agricultural Chatbot for Enhanced Farming"

Agriculture plays a vital role in ensuring global food security and economic sustainability. However, modern agriculture faces numerous challenges, including resource constraints, environmental concerns, and the need for increased productivity.

In the existing system they have used Knowledge based techniques, Machine learning techniques, hybrid technology, image recognition technology, Natural language processing techniques. These techniques have the disadvantages of user experience, decision support, Language limitations, ambiguities, Limited to visual data, data dependency, accuracy and conflict development.

Hence the proposed system uses AI and Data science techniques like Transfer learning, Reinforcement learning, Multilingual support& Sensor integration technique to design and develop a smart agricultural chatbot and deploy in pilot farms to collect data on crop health, weather conditions, soil quality and other pertinent parameters & also engage the farmers in surveys, interviews, and observations to measure the impact on their decision-making, productivity, and sustainability efforts.

The advantage of this system is Improved agricultural productivity through real-time data-driven insights, leading to optimized resource allocation, crop management, irrigation Management, Pest & Disease Monitoring, Soil quality analysis, Mobile accessibility, Enhanced communication & information exchange between farmers and the Smart Agricultural Chatbot, enabling more informed decisions.

This research proposal results to contribute to the advancement of smart agriculture by developing an intelligent chatbot that leverages AI and data science techniques to empower farmers with real-time decision support for precision farming.