

ABSTRACT

In the face of continuing obstacles for small-scale farmers, the creation of an AI-powered agricultural bot emerges as a game-changing answer. This revolutionary bot, which has voice chat capabilities, addresses concerns such as real-time soil testing, pests detection, and autonomous operations. The major purpose is to transform crop management, revenue, and food security, with the lofty goal of doubling agricultural productivity and income for small-scale farmers. The main features include real-time soil testing with sophisticated sensors and machine learning, pests identification with image recognition and AI algorithms, and autonomous operations for activities like planting and harvesting. The addition of voice chat features improves user accessibility, making the bot a useful tool for farmers with various levels of literacy. Furthermore, the bot expands its effect beyond farming by providing market links. Farmers gain vital information about market trends, price, and possible purchasers, allowing them to make more educated decisions for increased income creation. Anticipated outcomes include a completely interactive agri bot that offers real-time cultivation support and builds critical market links. This technical breakthrough has the potential to double agricultural productivity and revenue, offering a transformational answer for small-scale farming communities. "AI-Driven AgriBot" is a beacon of sustainable prosperity, transforming the future of small-scale agriculture.