

INDIAN-FARMERS-HELPER

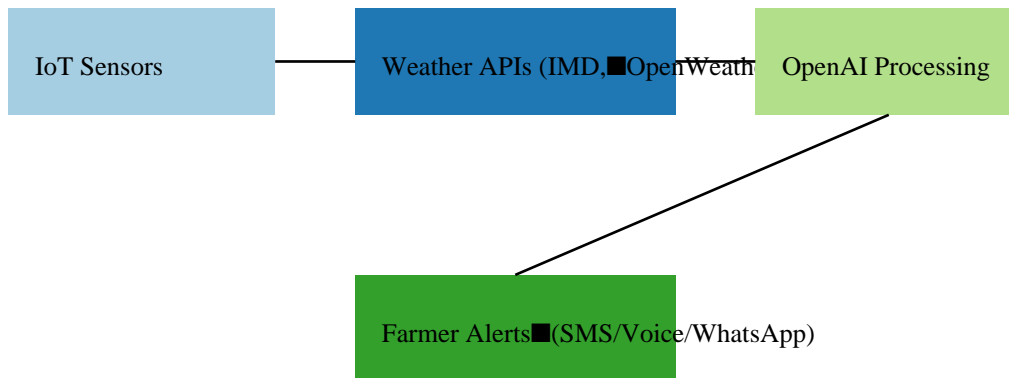
By: SHAIK YACOOB

NRI INSTITUTE OF TECHNOLOGY

India is not only the land of diversity but also the land of prosperity in agriculture — being the world's largest producer of milk, spices, pulses, and the second-largest producer of rice, wheat, fruits, and vegetables. The backbone of this prosperity is the Indian farmer. However, farmers face huge challenges due to sudden climate changes, especially during the rainy season with heavy rains and strong winds causing crop damage.

Our project 'INDIAN-FARMERS-HELPER' proposes an AI + IoT-based solution to protect farmers from sudden climatic impacts. By using affordable IoT sensors (temperature, humidity, soil moisture, wind speed) and integrating with OpenAI APIs, we can analyze, summarize, and translate weather data into local languages. Alerts and recommendations will be sent to farmers through SMS, WhatsApp, or voice messages, ensuring timely action like covering crops during heavy rains.

System Workflow Diagram:



****Benefits of the Project:**** - Reduces farmer stress and financial losses. - Encourages adoption of digital agriculture in rural India. - Protects crops → improves food security. - Can run on basic smartphones with SMS/voice support.

****Implementation Plan:**** - ****1–2 weeks**** → Buildathon prototype: IoT sensor + OpenAI summarizer + SMS alert demo. - ****3–6 months**** → Pilot deployment at village level with 50–100 farmers. - ****1–2 years**** → Scale-up at state/national level with government/private partnerships.