

WIKILIMO

Unite Ideas OpenCI Platform Challenge 2019

Wikilimo is an online-offline platform for community driven climate resilient agriculture in Africa. There exists a potential in Sub-Saharan Africa to produce 2.5-3x more grains annually. Weather & Pest information is key in preventing crop failures and achieving higher production. Access to broadband internet is however limited only to urban areas.

To solve this problem, we built WIKILIMO - a platform to provide farmers with actionable agri insights, P2P chat, business and planning services. The Wikilimo app is small to install and easy & intuitive to use. Do everything from submitting pest reports to checking government schemes and planning your crops, all within the same app. You sign up with your contact number & name and submit a weather report and choose the severity. You can also report any pest attacks in your neighbourhood. Finally, forget high data costs and get all benefits of Wikilimo over SMS.

Some key features of the Wikilimo app:

- NO ADDITIONAL HARDWARE OR SENSORS NEEDED
- Lightweight app (less than 5MB) for quick install on low-end phones
- An SMS/USSD based Interface
- Actionable Insights for crop protection
- Support for Voice & Local Languages
- Community sourced Citizen Science Data
- Weather predictions & schemes sourced from reliable government channels

How does our entire technology pipeline work?

- We build our citizen science platform using Typeform
- The Crowd Sourced data is then analysed on Firebase through ML Kit
- We push actionable notifications through OpenWeatherMap and AfricasTalking
- Support for Local Languages is provided through Google Translate
- Using FarmChat & M-Pesa, we build the messaging & business service
- The app is minimal in UI and works with WhatsApp chat or using USSD

We are presently exploring and finalising strategic partnerships to launch in Africa as we prepare for our pilot runs in rural West Bengal in the Eastern part of India -

- Public-Private Partnerships with Meteorological & Agricultural Organizations
- Rural & Agricultural Banks for last mile financial inclusion and crop microfinancing
- Weather & Agri Insurance Services
- UNDP CIRDA & FAO

The github repo at <https://github.com/wikilimo/Wikilimo> contains the Wikilimo platform source code and all necessary instructions to build, install and test the app. More details are available at our website www.wikilimo.co and an explainer video is also available on YouTube [here](#). Our business plan for the challenge is hosted [here](#). Some screen demos from our app are available [here](#) and [here](#).

Team:

Roshni: Software Engineer affiliated to Harvard Medical School, previously at NASA working on GIS, Machine Learning, Weather Forecasting and Biospheric sciences.

Anurag: Quantum Engineer at [Atomionics](#), building better sensors. Previously at CQT NUS developing control for Quantum Simulators. Co-Founder of [Hamlit](#)..