

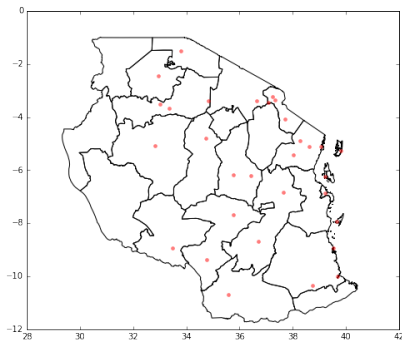
Weather Forecasting Model for Farmers in Arusha

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Background

- ▶ Weather forecast information in Tanzania is obtained online and radio stations
- ▶ 31 weather stations in Tanzania



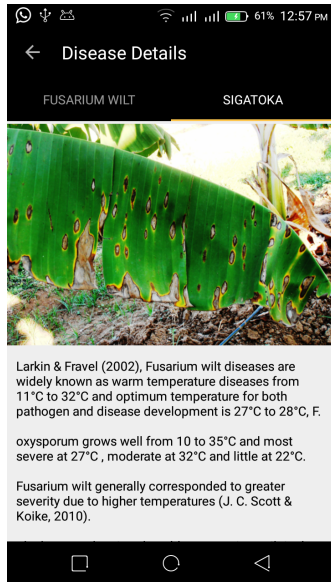
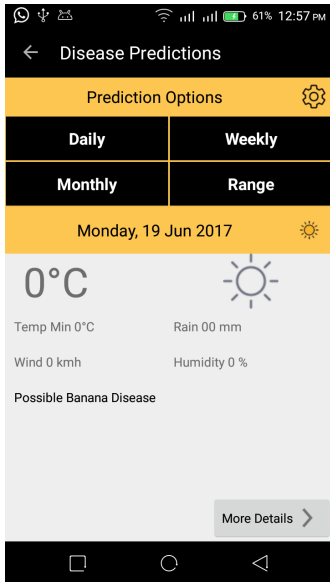
Motivation

- ▶ Agriculture extension officers are limited in numbers
 - Arumeru district 1:3000
- ▶ Lack resources to support farmers
- ▶ Explore the use of weather information for diseases prediction

Approach

- ▶ A model for weather forecast in Arusha
- ▶ A mobile application, a portal to deliver the weather information for diseases prediction
- ▶ Weather forecast can be accessed offline

Mobile Application



Data Sources

- ▶ NOAA Global Historical Climatology repository
 - Arusha historical climate data for 58 years (from 1960)
 - Datapoints: 6331
 - Missing data for 10 years (random)
- ▶ Tengeru Metreological Station
 - Arusha historical climate data for 7 years (from 2010 to 2016)
 - Datapoints: 2365

Way Forward

- ▶ Develop algorithm on the weather data
- ▶ Determine the relationship of weather information and banana diseases
- ▶ Deliver the weather forecast model on mobile application
- ▶ Updating the model

THANK YOU