

YOUTH CLIMATHON

*INNOVATIVE SOLUTIONS FOR THE ACCELERATION OF CLIMATE ACTION
IN ASIA & THE PACIFIC*

Terra Grow

Climate Smart Agriculture

Problem

Southeast Asia Braces for More Droughts and Haze

Editor
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13 July 2023 11:08 WIB



A woman takes water from a water spring in a farming area, Weninggalih village, Jonggol, Bogor regency, Sunday, September 13, 2020. ANTARA/Yulius Satria Wijaya

reliefweb

SEARCH UPDATES COUNTRIES DISASTERS ORGANIZATIONS TOPICS JOBS TRAINING

Informing humanitarians worldwide 24/7 — a service provided by OCHA

World

FAO and partners join forces to mitigate the impact of El Niño in the ASEAN region

News and Press Release • Source: [FAO](#) • Posted: 15 Dec 2023 • Originally published: 15 Dec 2023 • Origin: [View original](#)

15/12/2023 Bangkok

El Niño has made its presence felt in Southeast Asia and is projected to persist for at least the next three months. In July, the World Meteorological Organization (WMO) officially declared the presence of El Niño conditions for the first time in seven years, setting the stage for a surge in global temperatures and disruptive weather and climate patterns.

The next three to six months are critical as the region braces for the full potential impact, it is crucial to emphasize the imperative use of early warnings to enable anticipatory action for potential dry conditions associated with this climate phenomenon. This has prompted governments to mobilize preparations and limit impacts on health, agrifood systems, and economies.

Primary country:

[World](#)

Source:

[Food and Agriculture Organization of the United Nations](#)

Format:

[News and Press Release](#)

Theme:

[Disaster Management](#)

Problem



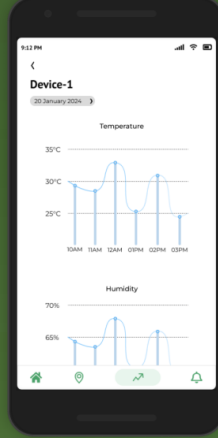
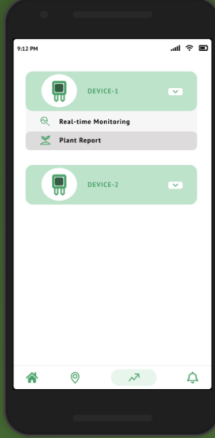
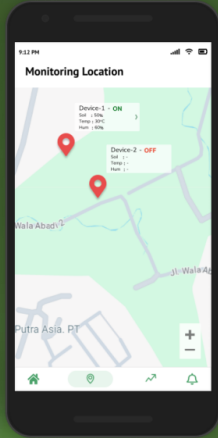
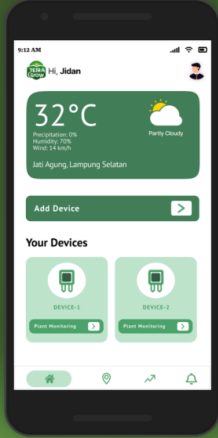
Dialogue and discussion session with local farmers in
Lubang Island, Philippines

Smart Farming Technology is Cool, but it's **EXPENSIVE** and **COMPLEX** to use and maintain for most peoples.



TERRA GROW

Smarter and Greener Tomorrow



Temperature and humidity sensor inside equipped with WiFi module for remote monitoring from TerraGrow App.



Screen display

Soil moisture sensor

Target Audience



Suburban Generational Farmers:

Reliant on Agriculture • Middle-Low Income Households



Possible Pilot Site: Municipality of Lubang in Occidental Mindoro, Philippines where **traditional farming techniques exhaust the land** with rice, garlic, onion, and peanut cultivation.

“Given that a significant percentage of crops grown on the island are for human consumption, assistance is crucial to support Lubang’s agricultural development and marketing initiatives.”

- Hon. Mike Orayani, Municipal Mayor of Lubang



Environmental Impact



Water Conservation

Decreased water waste in farming through precision agriculture



CO2 Sequestration

Enhanced crop growth leading to increased CO2 capture



Sustainable Land Use

Improved land sustainability and consistent plant production through efficient farming practices

Social Impact

At least 25
farmers use real-
time data from
the sensors

At least 75%
technological
adoption rate

At least 30%
improved
resource
efficiency in
farming practices

20% Increase in the Community
Livelihood Enhancement
Index within the First Year
of Project Implementation

Next, let's go through our **FINANCIAL STATUS**

Cost Structure

Fixed Cost	Budget (USD)/ Quarter	Variable Cost	Budget (USD)/ Quarter
Renting Warehouse	300	Material Cost	5x450
R&D	600	Labor Cost	600
MKT	300	Commission	200
Utilities	150	Shipping	300
Total	1350	Total	3350

Revenue

	08.01.2024	09.01.2024	10.1.2024
Unit Sale	120	150	180
Revenue (USD)	1800	2250	2700

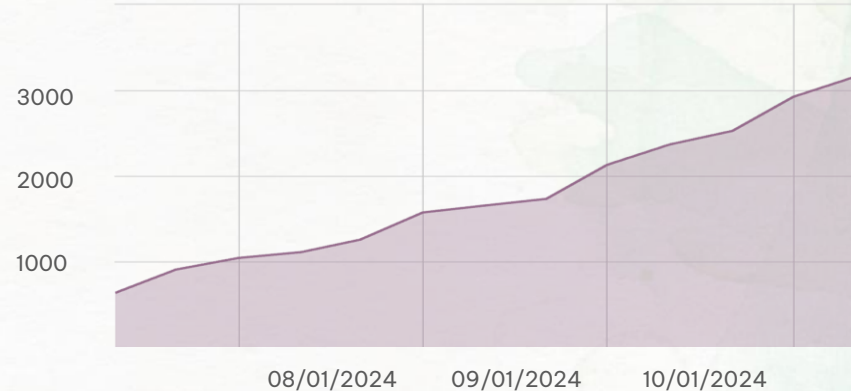
BEP

CM%	Unit
50.4%	179



1.2 month

Expected Revenue In One Year

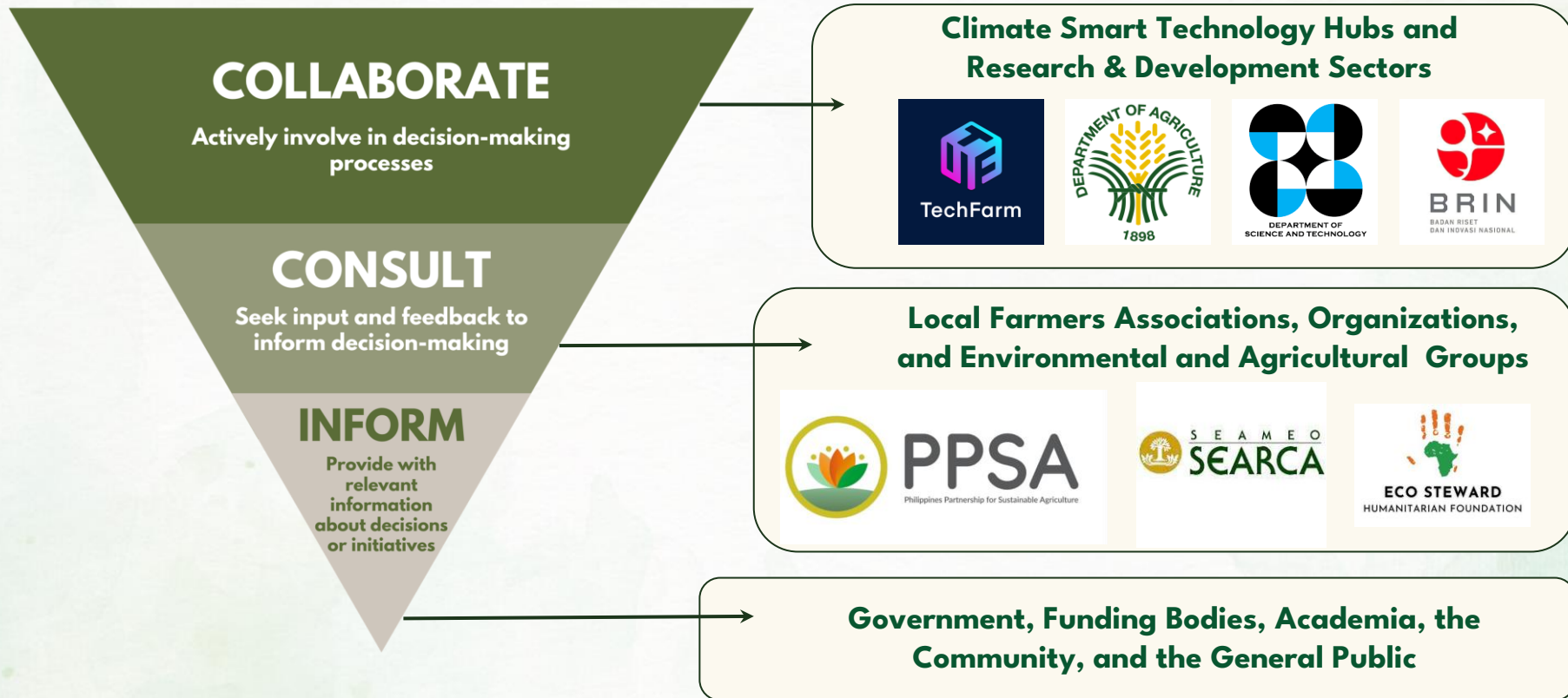


Sale price:\$15/ unit

Where do we see ourselves in the market?



Stakeholder Engagement Plan



to deliver the
best values,
we **PLACED**
FOCUS ON

Tailored Training Programs

Community Engagement Events

Demonstration Farms

Interactive Learning Materials

Peer-to-Peer Learning



Implementation Plan

Partnership
and
Fundraising

MAY 2024

Product
Launch and
Campaign

DEC 2024

Product
Expansion in
SEA Region

DEC 2027

Regional
Impact in
ASIA

DEC 2030

Project Proponents

Jidan Fikri



Technical Solution Head

Background: **Electrical Engineering**

Experiences: Research assistance in National Research and Innovation Agency of Indonesia (BRIN); Machine Learning mentor at Bangkit by Google, GoTo, & Traveloka.

Ngoc Quynh Anh Dao



Business Implementation Head

Background: **International Business Economics**

Experiences: Member of Social Work Club FTU2; Project with SchoolabxLEGO; Trainee at Jolie Siam

Noelle Cubacub



Social Impact Implementation Head

Background: **Sociology and Anthropology**

Experiences: Project Manager for Climate and Green Tech Initiatives; Researcher-Consultant for Environment and Public Health Projects



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THANK YOU

Pilot Site: Municipality of Lubang, Occidental Mindoro



Poverty Incidence: 9.5% (PSA, 2018)

Agricultural Products: Rice, Garlic, Onion, Mango, and Peanuts

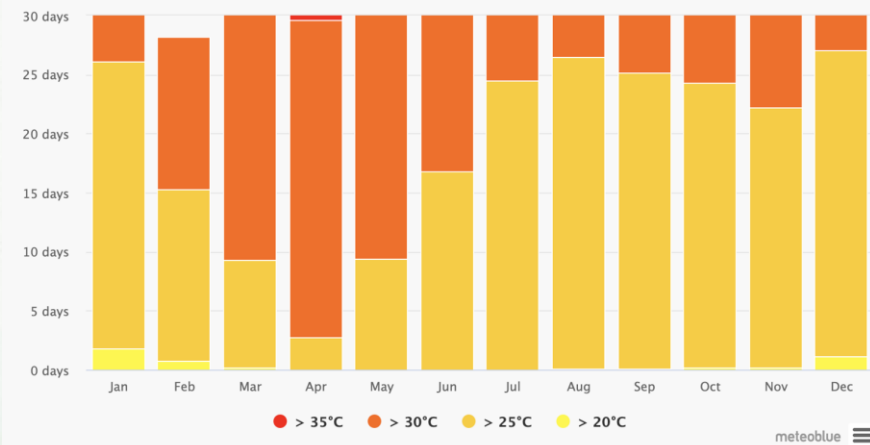
No available data on municipal agricultural industry

Income Class	Population (2020 Census)
4th	17437

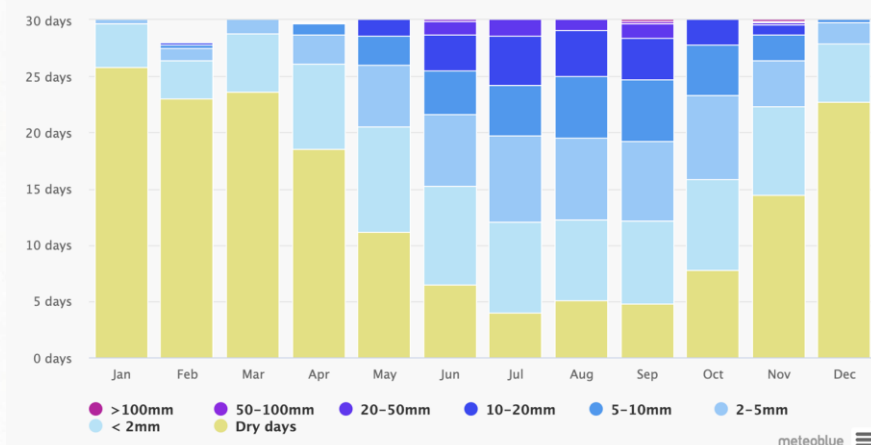


Pilot Site: Municipality of Lubang, Occidental Mindoro

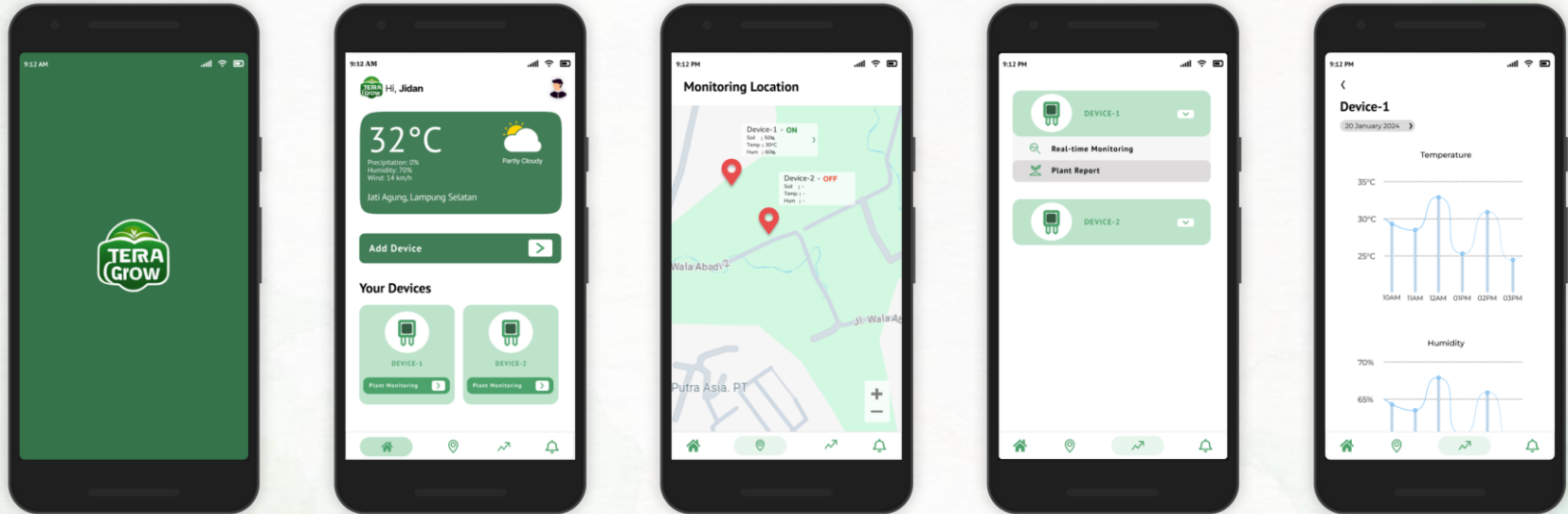
Maximum temperatures



Precipitation amounts



TERRA GROW APP DESIGN & FEATURES



*) still in development